

Aprobat,
Reprezentant legal
Rățoi Viorel

Director proiect,
Cucoș Iulian

Nr. contract de finanțare: 260/ 17.06.2020

Axa prioritară 1 - Cercetare, dezvoltare tehnologica si inovare (CDI) în sprijinul competitivității economice și dezvoltării afacerilor

Acțiunea 1.2.1 Stimularea cererii întreprinderilor pentru inovare prin proiecte de CDI derulate de întreprinderi individual sau în parteneriat cu institutele de CD și universități, în scopul inovării de procese și de produse în sectoarele economice care prezintă potențial de creștere

Titlul proiectului: Instalație inovatoare pentru cimentare și operațiuni speciale la sondă destinată eficientizării extragerii resurselor energetice convenționale - INOCEM

ID: -

MySMIS: 120032

RAPORT INTERMEDIAR A 2.1

Perioada 01 Septembrie 2022 - 16 Noiembrie 2022

Activitatea A2. Activitati de dezvoltare experimentală

Subactivitatea A2.1 Intocmirea documentatiei tehnice pentru ansamblul echipament

17 Martie 2022 - 16 Noiembrie 2022

Lider S.C. PETAL S.A. Husi

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A. OBIECTIVELE PROIECTULUI

Obiectivul general al proiectului constă în realizarea unui produs inovativ complex, destinat exploatării eficiente a resurselor energetice convenționale, având caracteristici funcționale semnificativ îmbunătățite prin schimbări esențiale ale specificațiilor tehnice și ale componentelor și materialelor și printr-un proces inovativ de realizare.

Integrată domeniului de specializare inteligentă *ENERGIE, MEDIU ȘI SCHIMBĂRI CLIMATICE*, subdomeniul 3.1. *Energie*, respectiv 3.1.2. *Resurse energetice convenționale, neconvenționale și regenerabile*, instalația destinată operației de cimentare și altor operațiuni speciale la sondele de petrol și gaze naturale, cu performanțe unice pentru producția unui asemenea echipament în România, ce asigură exploatarea superioară a acestor resurse convenționale de energie, cu păstrarea mediului ambiant și care va contribui la creșterea calității și la diversificarea ofertei de produse moderne a liderului de proiect pe piața echipamentelor complexe destinate extracției de resurse de petrol și gaze.

Obiectivele specifice ale proiectului sunt:

1. Obținerea prin cercetare industrială de metode inovative pentru echipamentul de cimentare și operații speciale la sonde și stabilirea specificațiilor pentru subansambluri și echipamente;
2. Realizarea și testarea subansamblurilor inovative privind acționarea electrică în curent alternativ, antrenarea mecanică și componente de uzură ale pompelor;
3. Realizarea, pe baza documentației tehnice întocmite, a echipamentului pilot utilizabil comercial și testarea în medii reprezentative;
4. Investiții în vederea introducerii în producție a rezultatelor CD, prin achiziții de active corporale și necorporale;
5. Pregătirea fluxului de fabricație și a documentației de punere în fabricație;
6. Crearea a 4 noi locuri de muncă pe durata implementării proiectului, dintre care 2 femei.

B. OBIECTIVELE SUBACTIVITĂȚII A 2.1

Subactivitatea A2.1 „Intocmirea documentației tehnice pentru ansamblul echipament” prevăzută a se desfășura între 17 martie 2021 – 16 Aprilie 2022, are ca obiectiv realizarea Proiectului Tehnic și Tehnologic pentru ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă destinată eficientizării extragerii resurselor energetice convenționale.

Ansamblul echipament de cimentare și operații speciale la sonde cuprinde mai multe subansambluri , din care unele cu elemente inovatoare au fost proiectate, realizate și testate în activitățile anterioare ale proiectului. În această etapă, colectivele de cercetare și implementare proiect vor întocmi întreaga documentație tehnică pentru ansamblul proiect.

Aceasta va cuprinde:

- schema cinematică generală a echipamentului;
- desenul de ansamblu al echipamentului;
- tehnologia de montaj general;
- verificări și testări pe parcurs;
- documentația de verificare finală.

Vor fi indicate, de fiecare dată, prin fișa tehnologică a operației respective, tipul activității, scule și dispozitive necesare, calificare operator, mod de analiză a calității operației efectuate, cine supraveghează, măsuri de rezolvare a problemelor tehnologice ivite. Colectivele de cercetare analizează în final întreaga documentație și o avizează.

C. REZUMATUL SUBACTIVITĂȚII A 2.1

Raportarea 01 Septembrie 2022 - 16 Noiembrie 2022

Raportarea de față conține rezultatele activităților desfășurate de colectivul de implementare al SC PETAL SA referitoare la realizarea Proiectului Tehnic și Tehnologic pentru ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă destinată eficientizării extragerii resurselor energetice convenționale realizat de cercetătorii specialiști din PETAL SA.

Toate elementele ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă sunt proiectate pentru a realiza funcțiile de creare a presiunii înalte necesare operațiilor de cimentare și a celor speciale la sonde, cu asigurarea preparării și pomparii pastei de ciment, pomparea fluidelor de separare și a noroiului de refulare la operațiile de fisurare.

In Anexa nr. 1 la prezentul Raport intermediar se prezintă **Proiectul Tehnic** pentru echipamente inovative (sistemul hidraulic generalizat) realizat de cercetătorii specialiști din PETAL SA.

In Anexa nr. 2 la prezentul Raport intermediar se prezintă **Proiectul Tehnologic** pentru echipamente inovative (sistemul hidraulic generalizat) realizat de cercetătorii specialiști din PETAL SA.

Anexa nr 3 prezintă Documentația Tehnică electrică pentru Ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă

**D. DESCRIEREA ȘTIINȚIFICĂ ȘI TEHNICĂ A ACTIVITĂȚILOR DIN
PERIOADA PENTRU CARE SE REALIZEAZĂ PREDAREA
01 septembrie 2022 - 16 Noiembrie 2022**

Realizarea Proiectului Tehnic și Tehnologic, Documentatia Tehnica electrica pentru ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă

Livrabilul predat conține descrierea științifică și tehnică a activităților desfășurate, astfel:

- ▶ Finalizarea realizării Proiectului Tehnologic pentru ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă, colectivul de cercetare ale PETAL S.A. a finalizat toate desenele în format digital, verificate de specialiștii acestuia și puse în concordanță cu posibilitățile tehnologice existente.
- ▶ Pentru realizarea documentației tehnice colectivul de cercetare a definitivat, pe baza desenelor proiectate, necesitățile de materiale din punct de vedere cantitativ și al sortimentelor calitative și s-a finalizat lista acestora pentru documentația de licitație.
- ▶ Realizarea și testarea subansamblurilor inovative implică documentația tehnică reprezentată de desenele tehnice de execuție pentru toate subansamblurile mecanice și hidraulice și piesele componente ale acestora.

Sunt prezentate in continuare principalele desene ale ansamblul echipament Instalație inovatoare realizate de cercetătorii specialiști din PETAL SA.

In **Anexa nr. 1** prezintă Proiectul Tehnic pentru ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă realizate de cercetătorii specialiști din PETAL SA. (pentru analiza tehnologică) – Desene de proiectare – 135 planșe

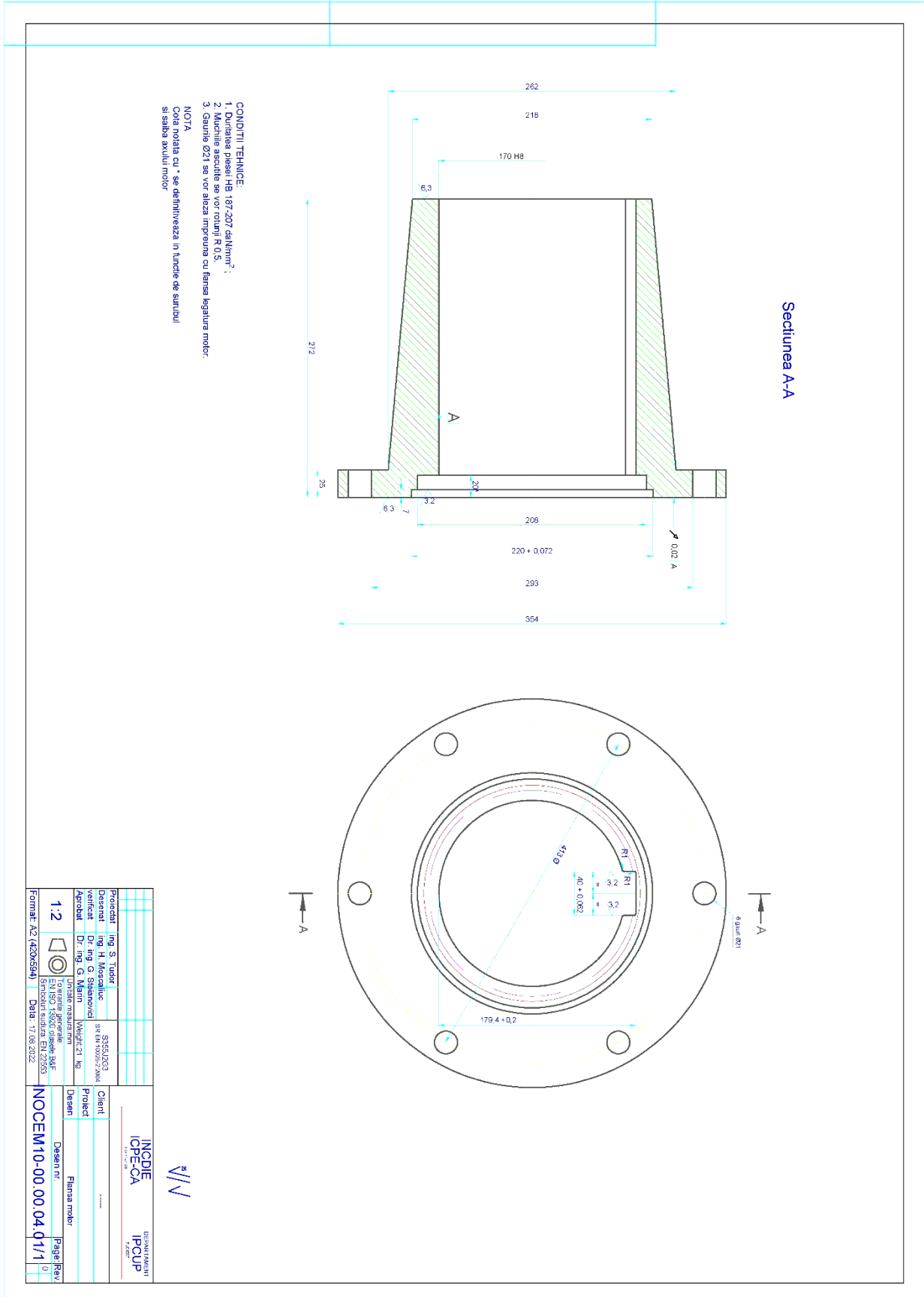
Anexa nr. 2 prezintă Proiectul Tehnologic pentru ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă realizat de PETAL SA – Desene tehnologice – 85 planșe

Anexa nr 3 prezintă Documentatia Tehnica electrica pentru Ansamblul echipament Instalație inovatoare pentru cimentare și operațiuni speciale la sondă

Tel: 0040235/481781
Fax: 0040235/481342

Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

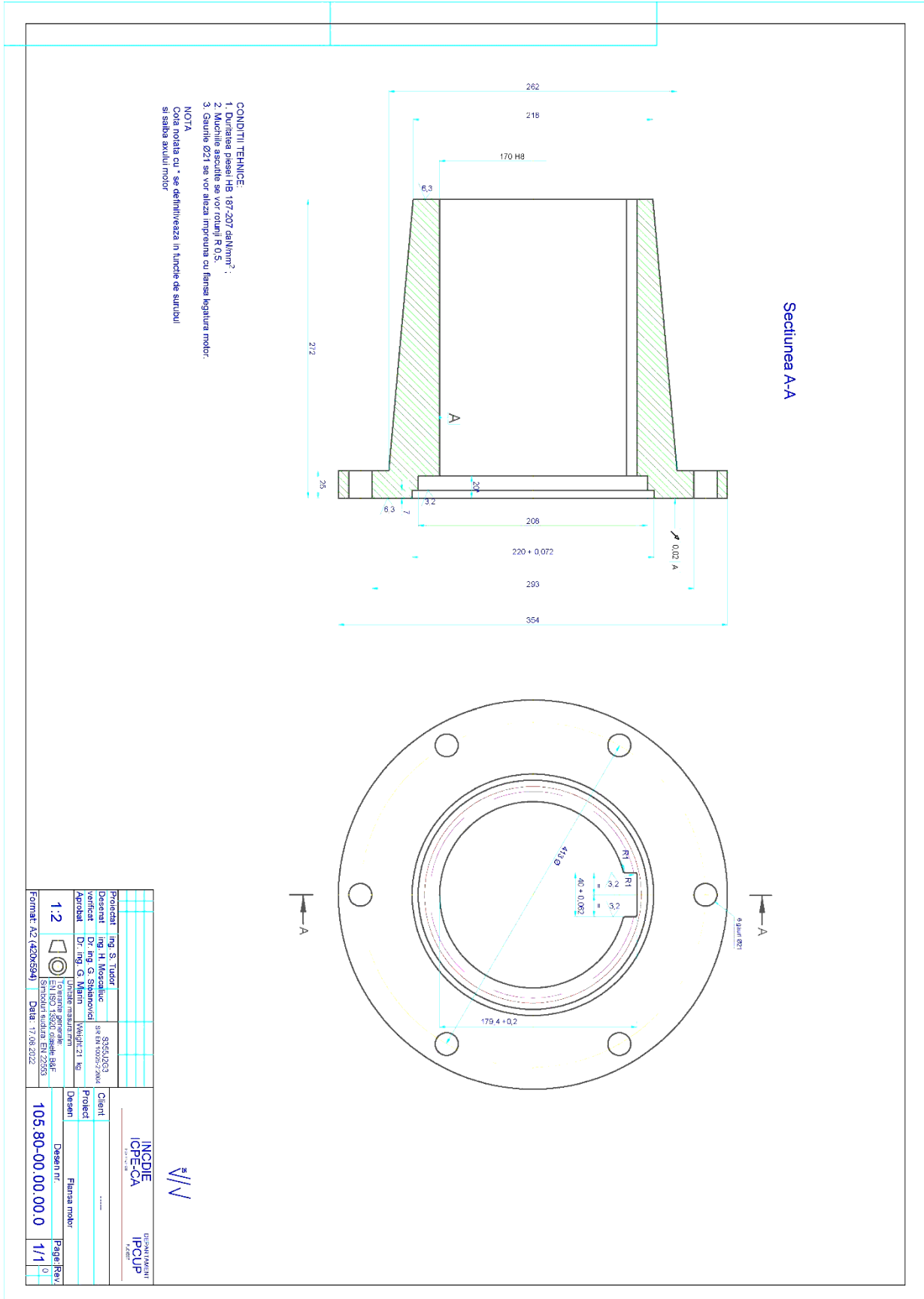
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CUI: RO841186
Capital social: 2.971.825 lei



Tel: 0040235/481781
Fax: 0040235/481342

Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

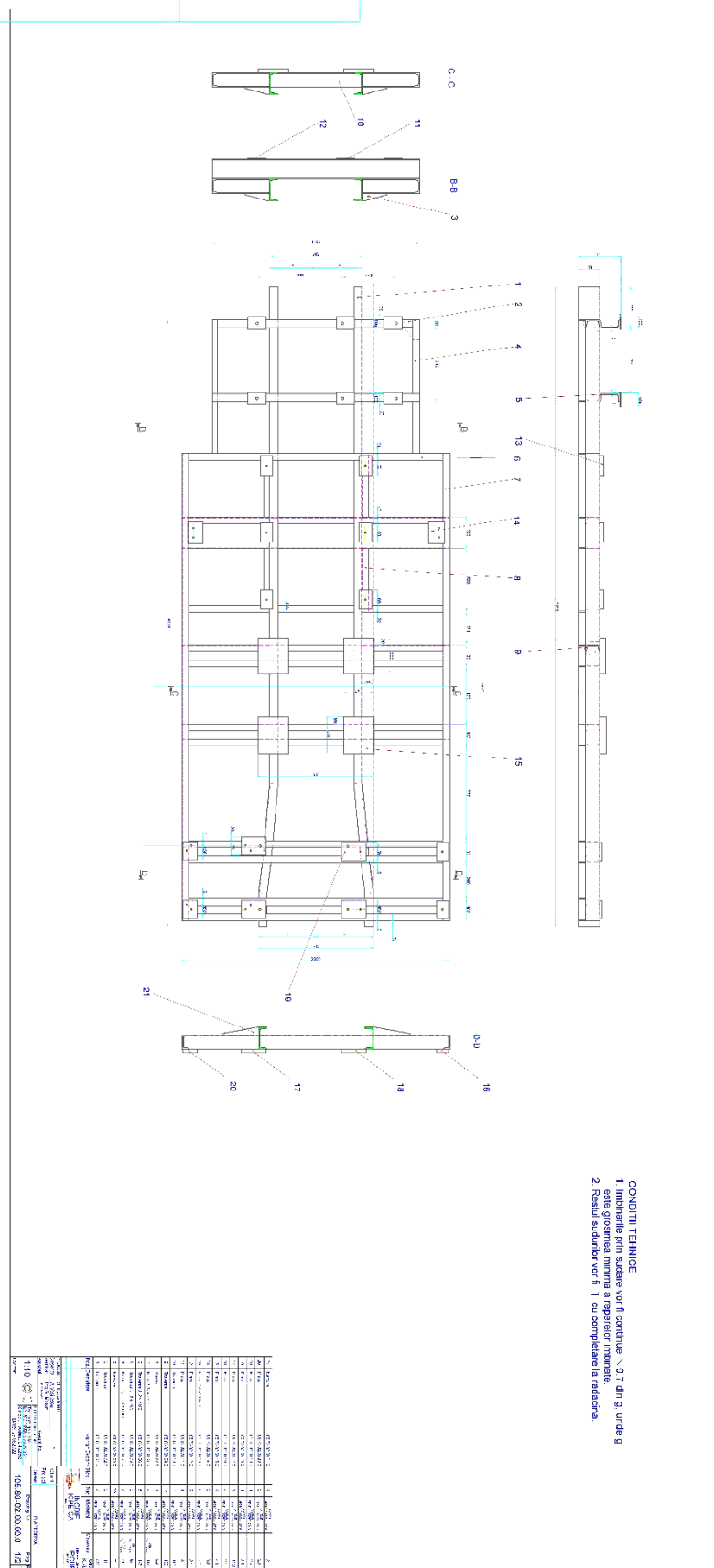
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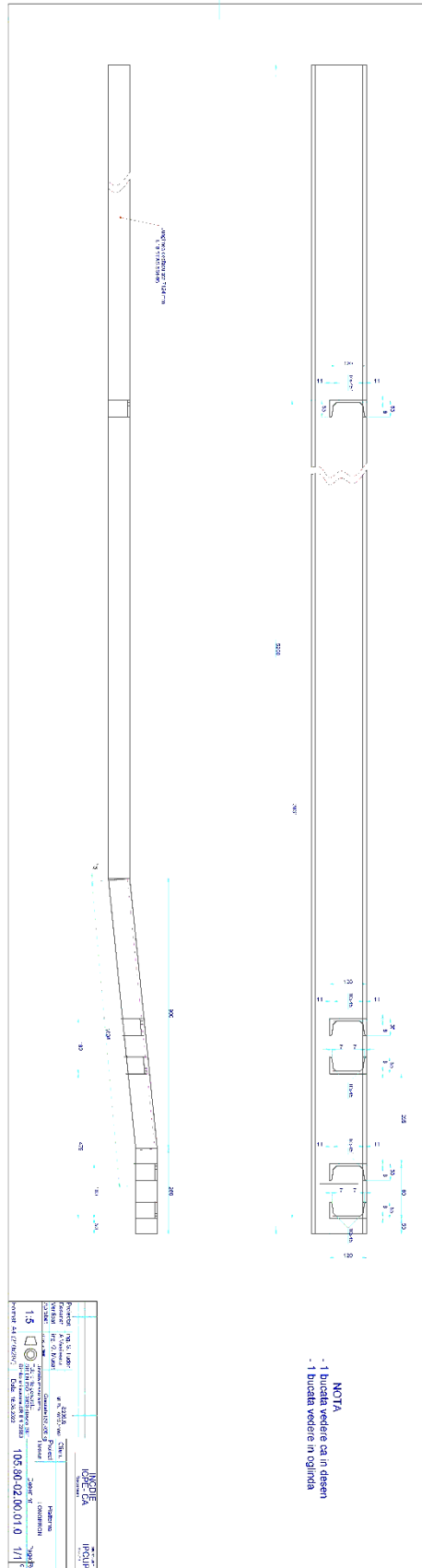


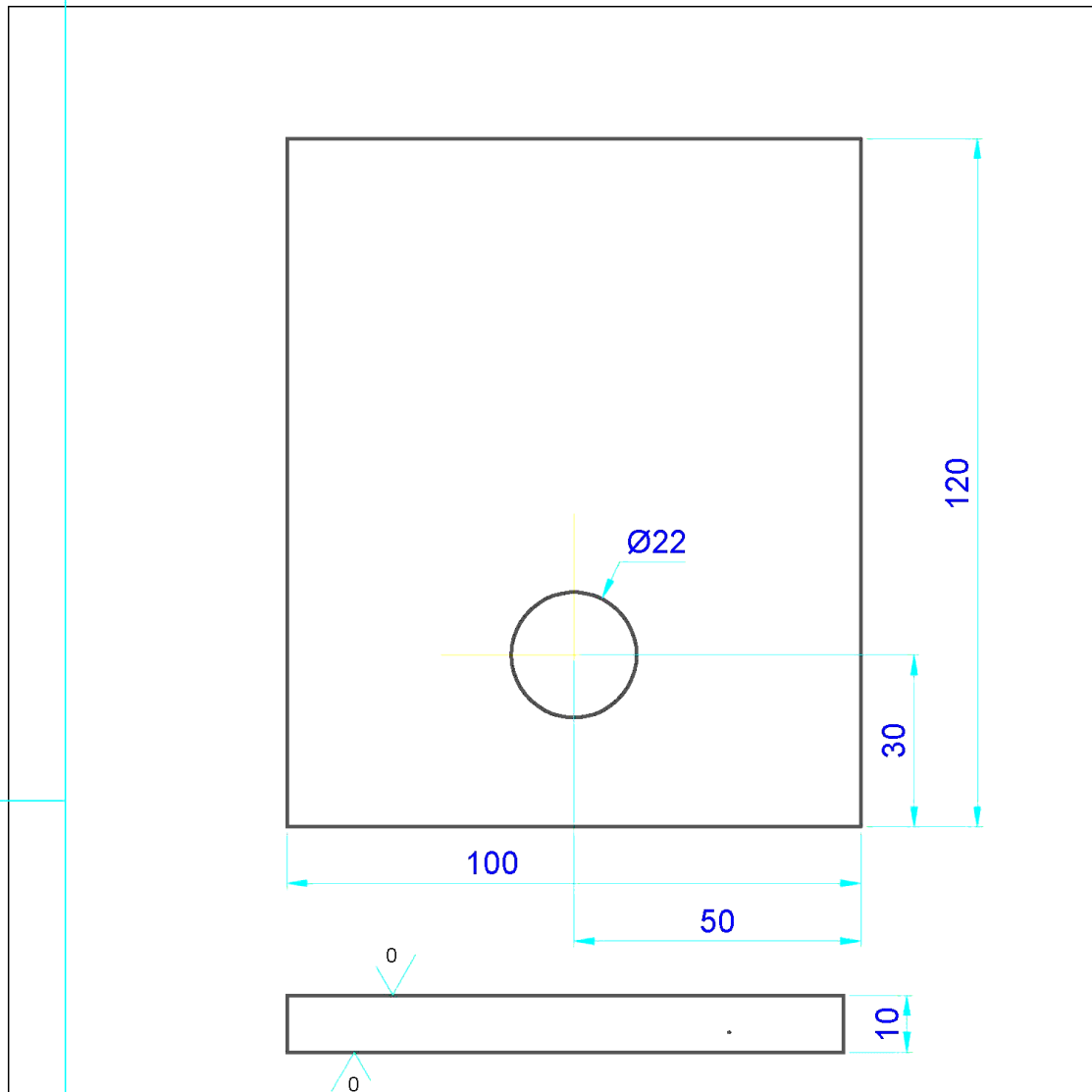
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E-mail: office@petal.ro

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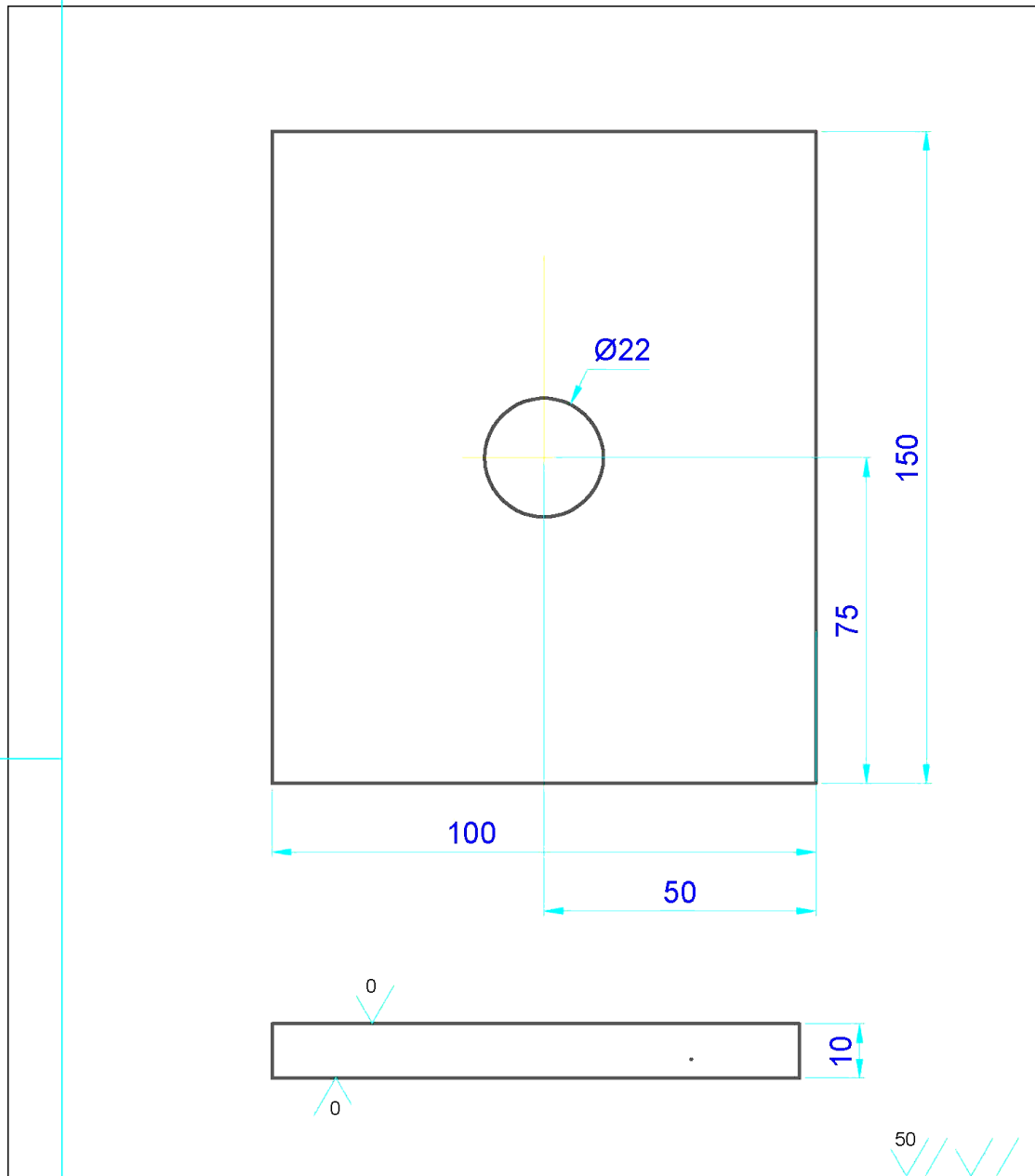




NOTA

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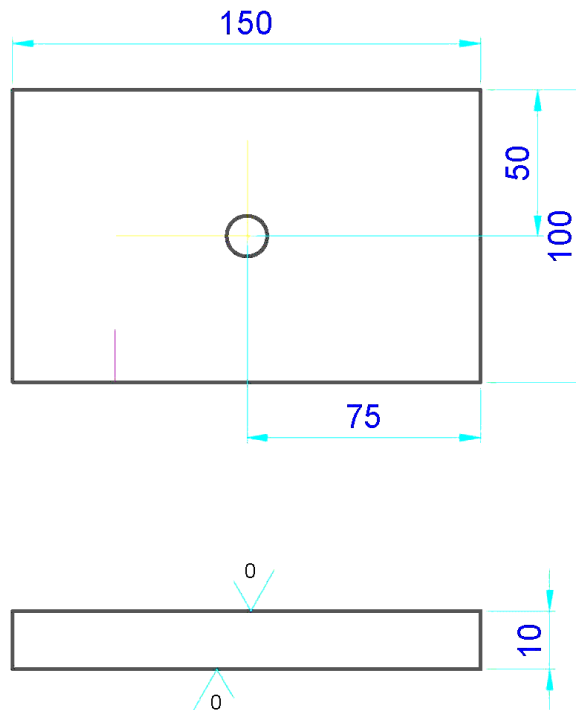
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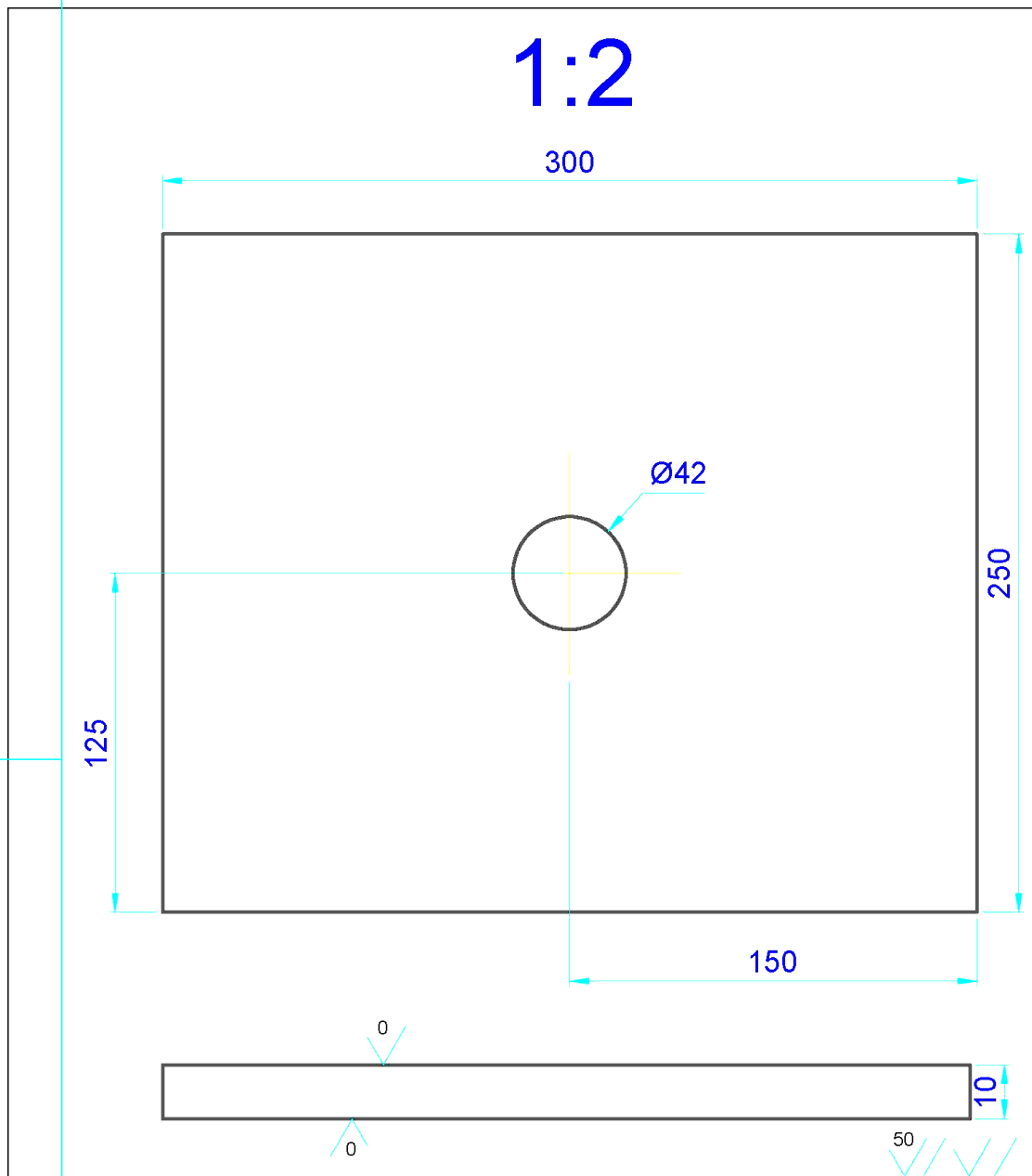



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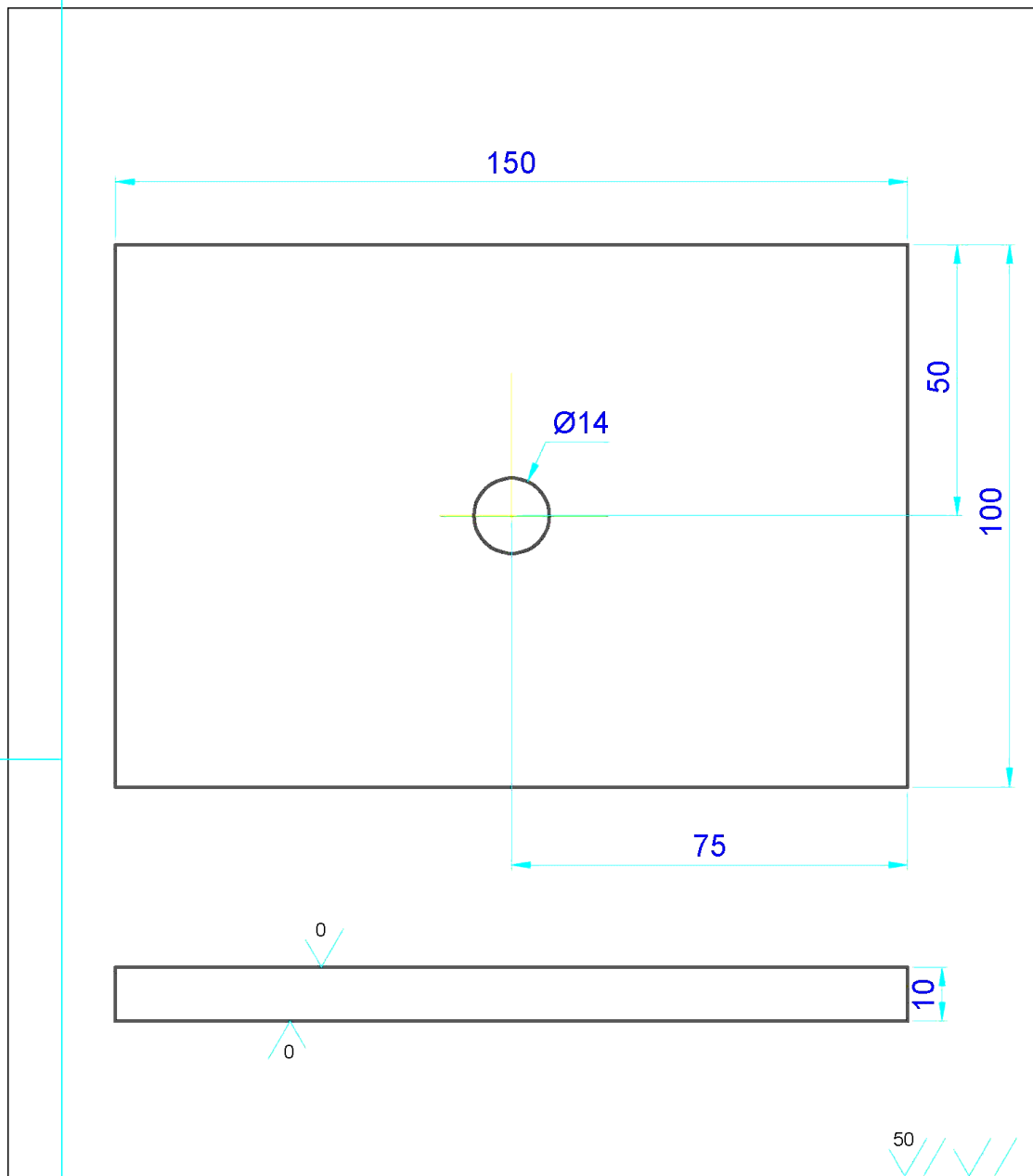
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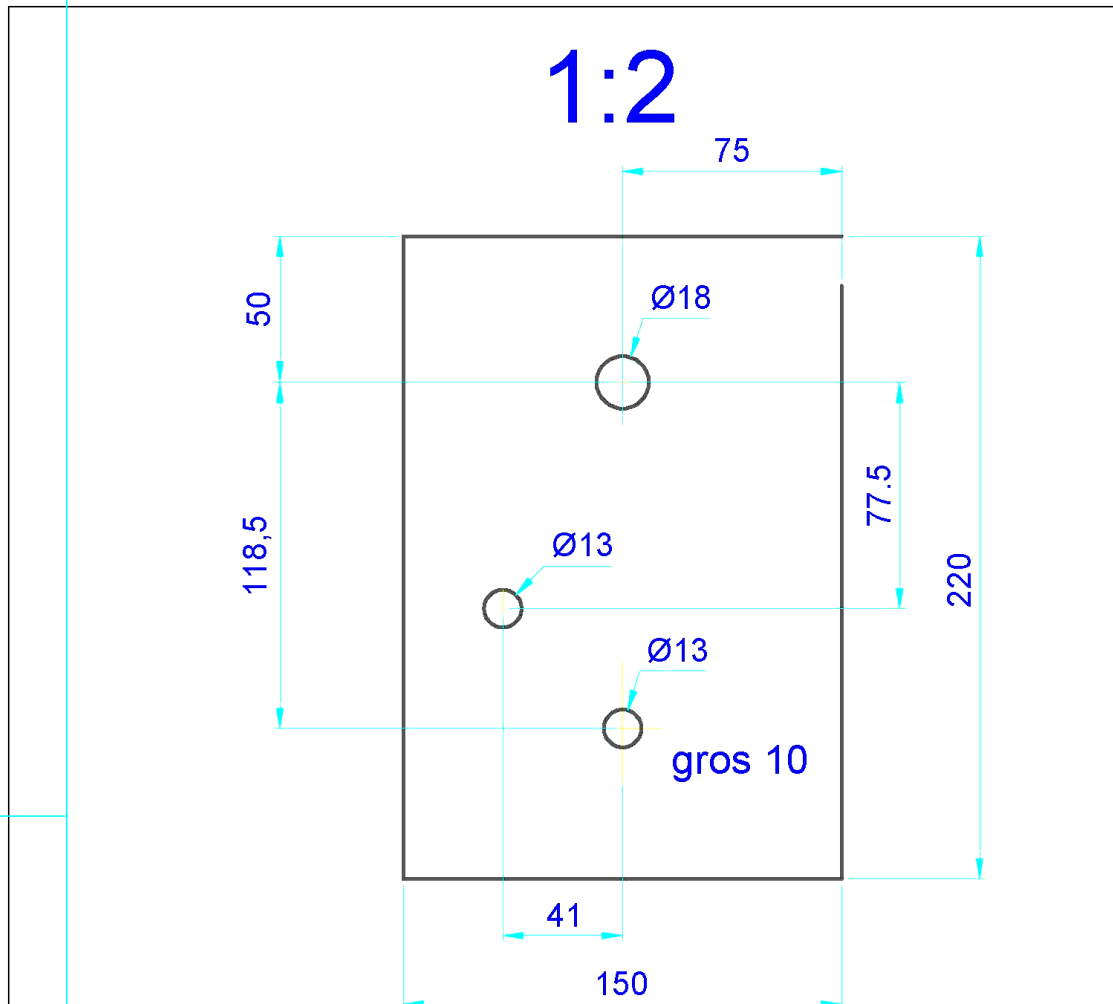

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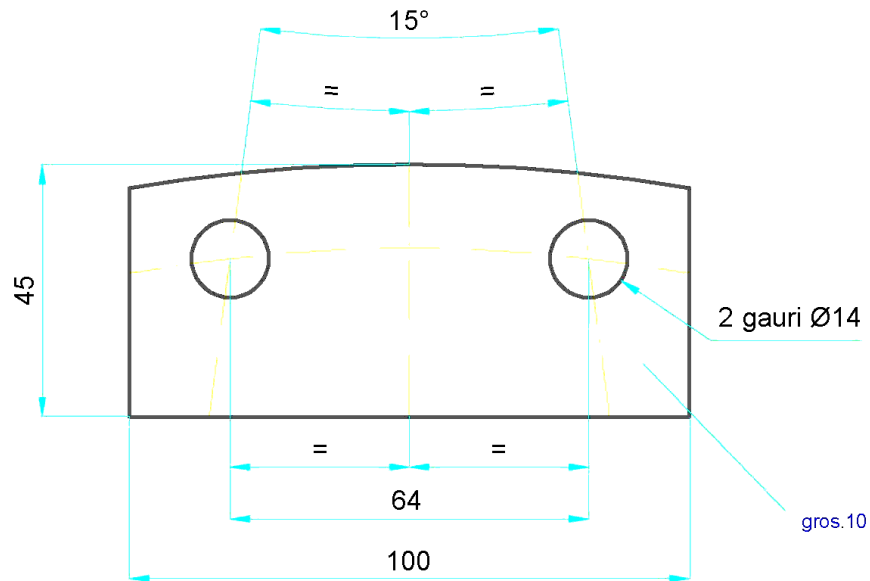
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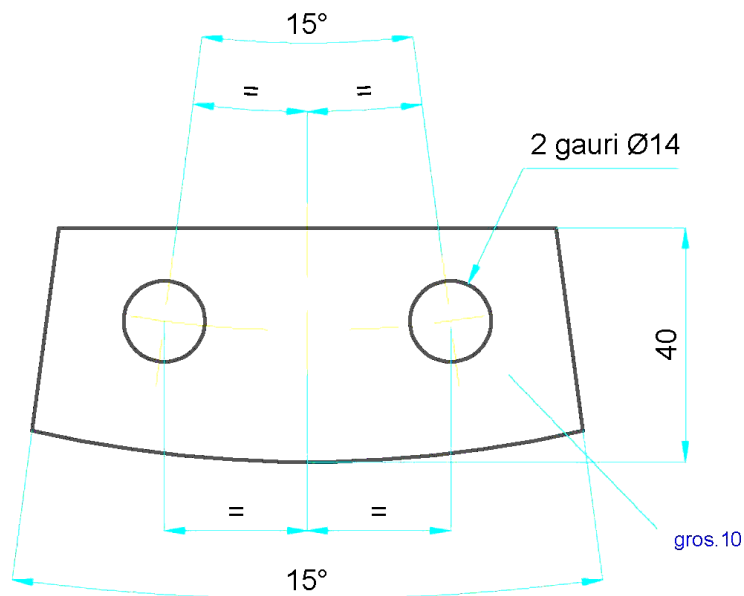
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Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019	Client	-----	
Desenat	ing. H. Moscaliuc		Proiect	Platforma	
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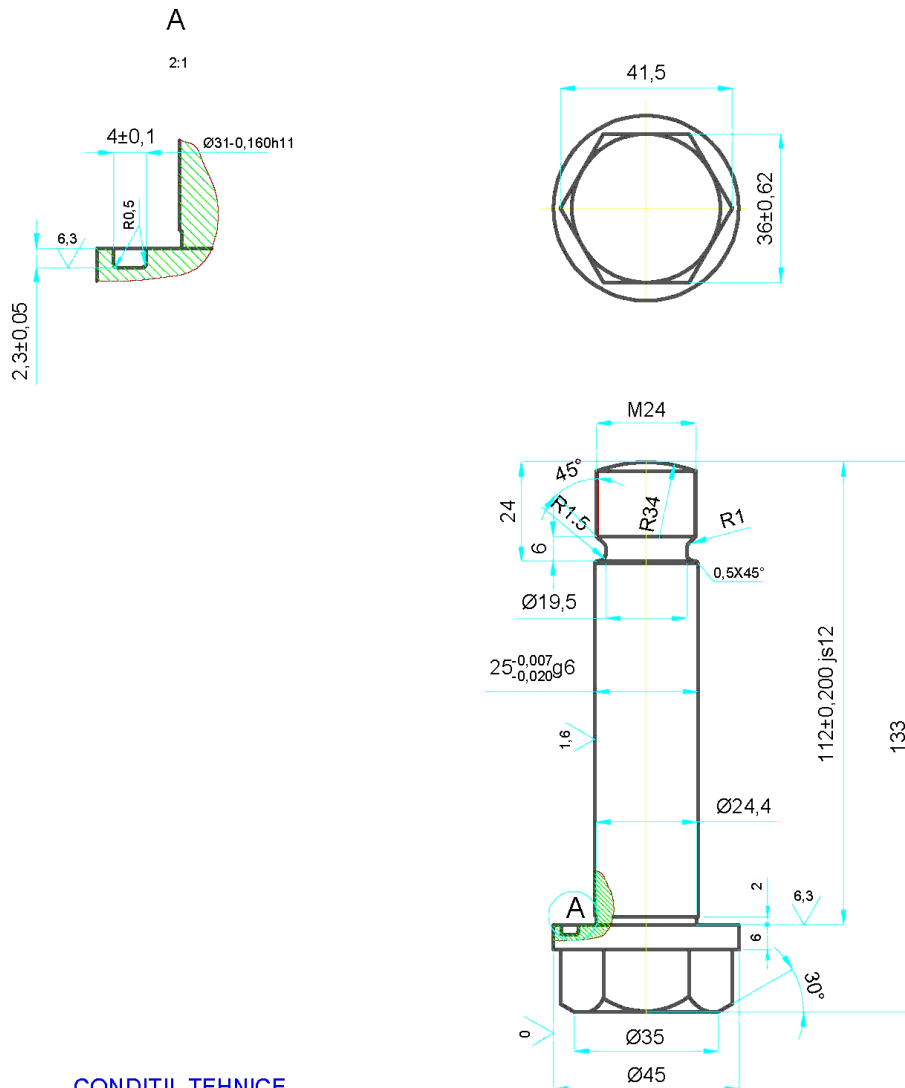


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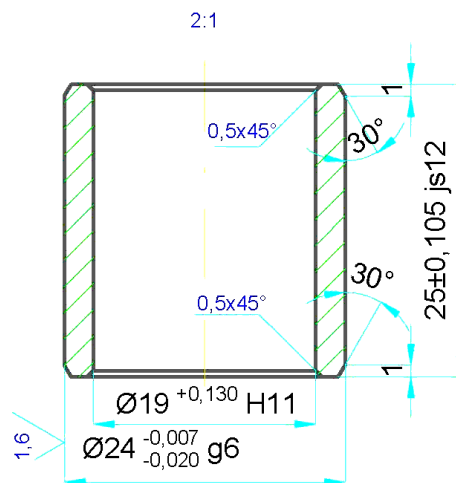
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 E-mail: office@petal.ro

 ORC: J37/191/2003
 CUI: RO841186
 Capital social: 2.971.825 lei

CONDITII TEHNICE

Protejare: AE/OL/Cd 12FI SR EN ISO 2080:2009

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		INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Bolmoaga Sergiu	34 CrMo4 SR EN 10250/3:2002	Client	-----	
Desenat	Gheuca Cristina		Proiect	Pompa triplex cu plungere 3PP-400	
Verificat	Munteanu Silvia	Greutate: 0,657 kg	Desen	surub de pasuire	
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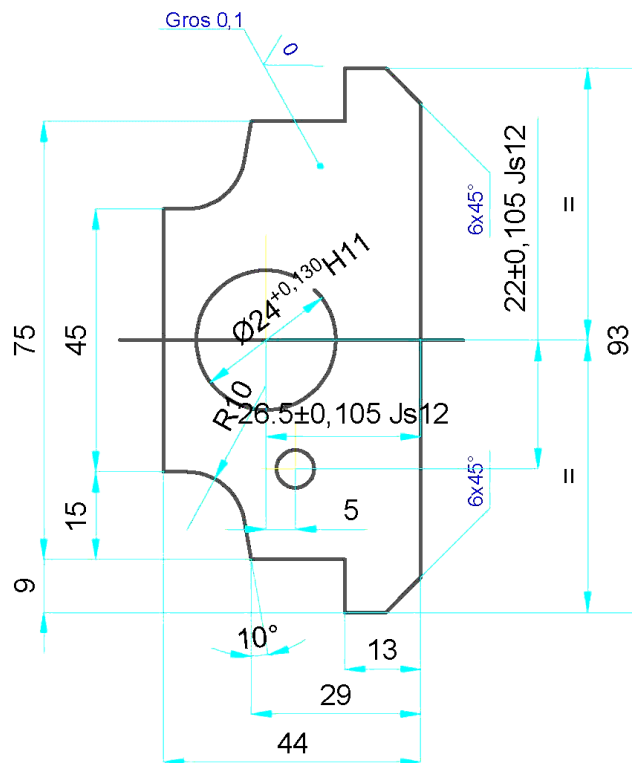


CONDITII TEHNICE

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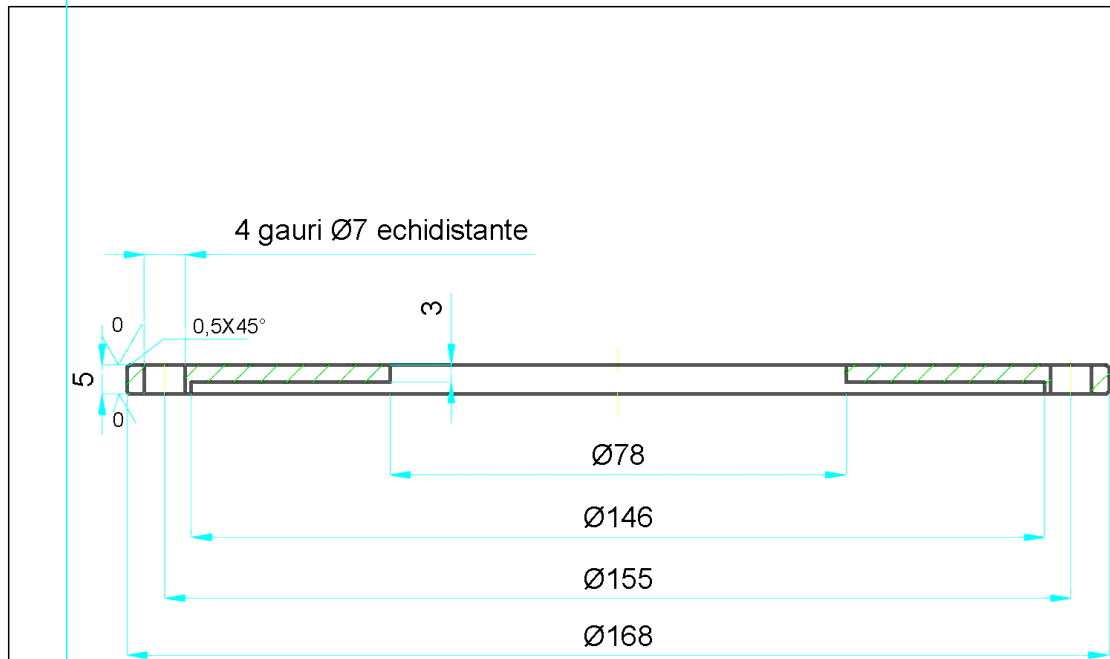
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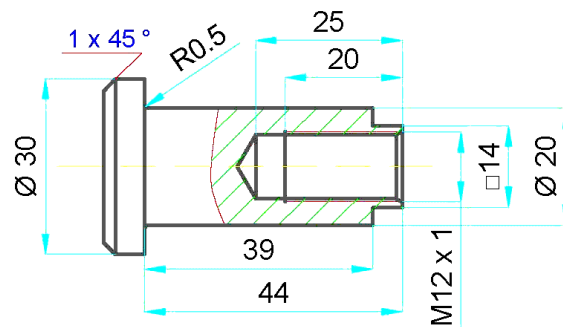


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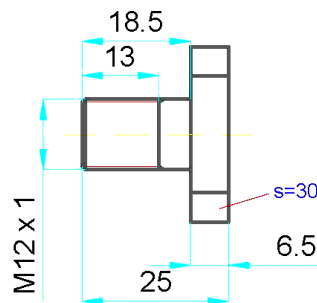
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			INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
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Proiectat	Arhire Tiberiu			Client	-----
Desenat	Daisa A.M.		C 45 E	Proiect	
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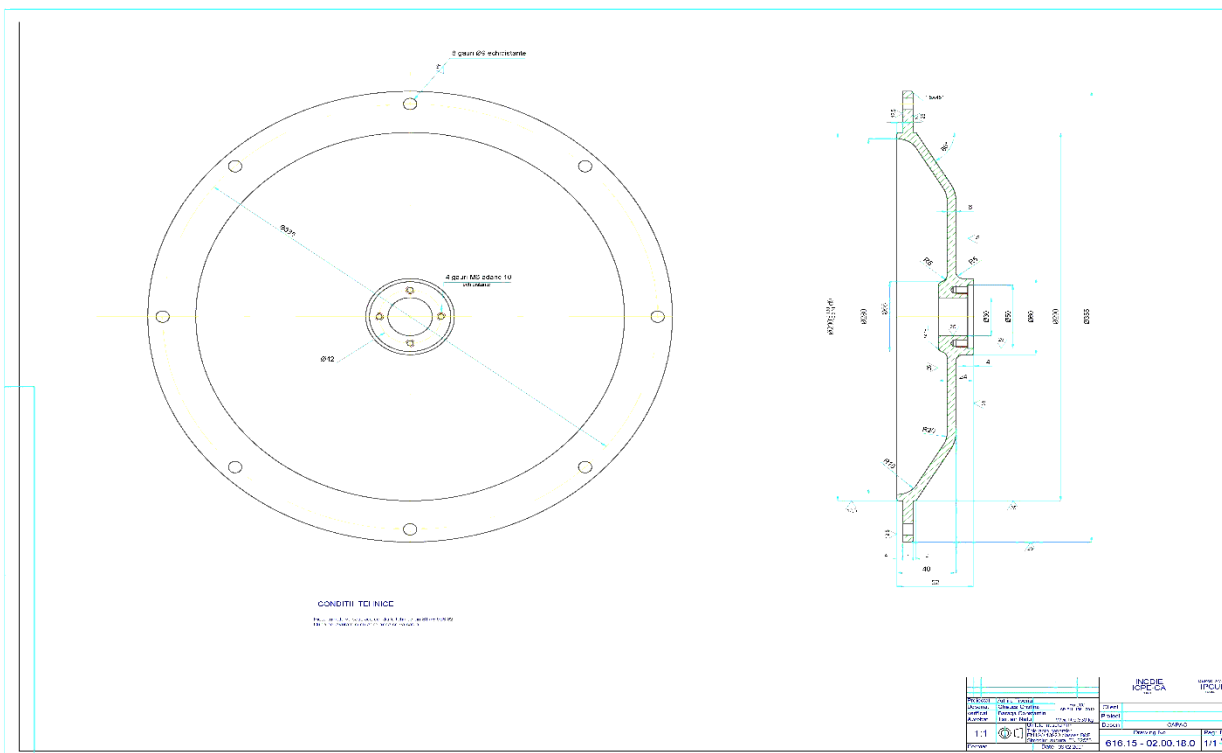
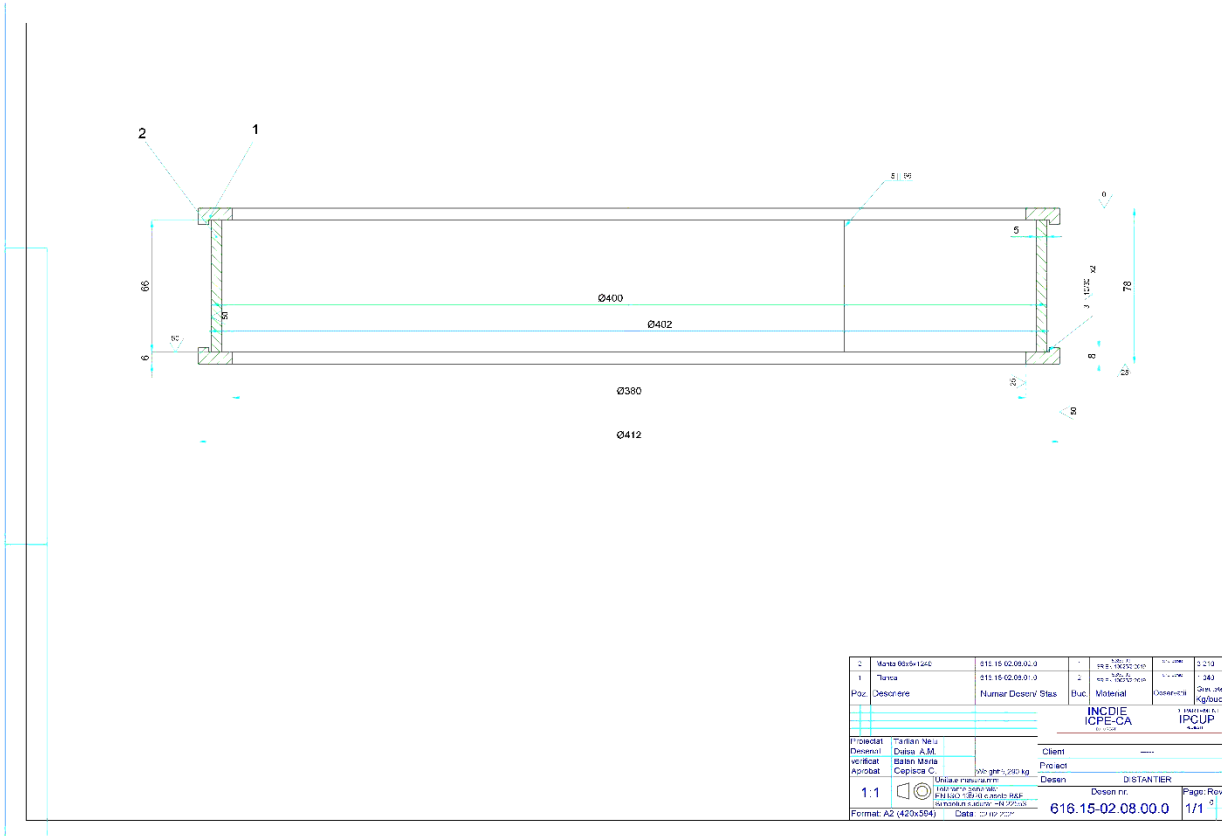



		INCDIE		DEPARTAMENT	
		ICPE- CA		IPCUP	
		Bucuresti		PLOIESTI	
Proiectat	Bolmoaga Sergiu	C25E SR EN 10250/2:2002	Client	-----	
Desenat	Baraga Cristina		Proiect		
Verificat	Balan Maria	Greutate: 0,033kg	Desen	Surub special	
Aprobat	Arhire Tiberiu		Desen nr.	Page:	Rev.
1:1		Unitate masura:mm	616.15-02.35.05.0	1/1	0
Format: A4 (210x297)		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553	Data:		
		Data: 4.02.2021			

Tel: 0040235/481781
Fax: 0040235/481342

Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

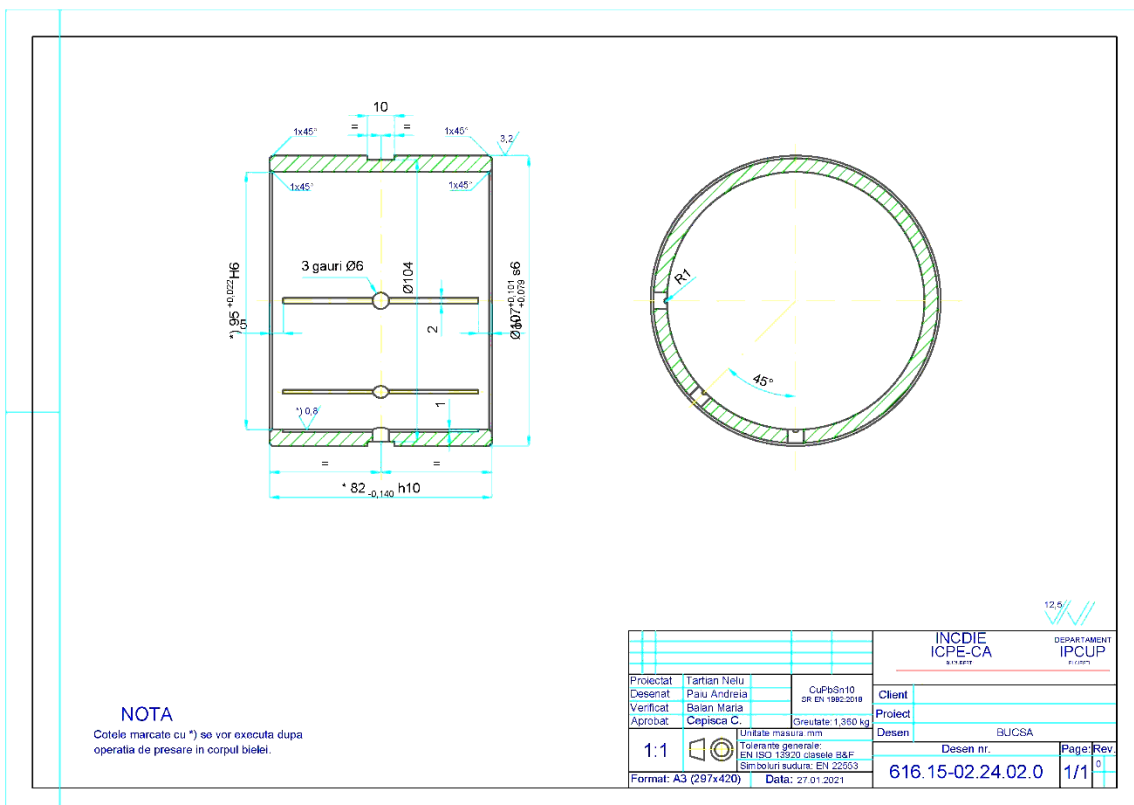
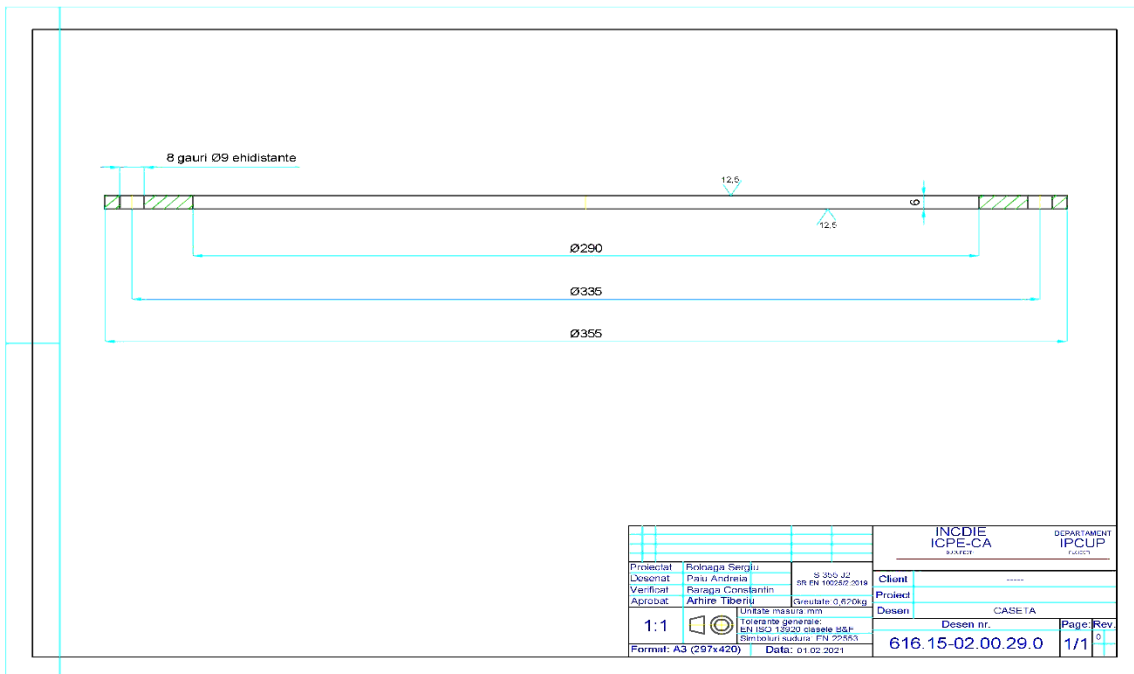
ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei

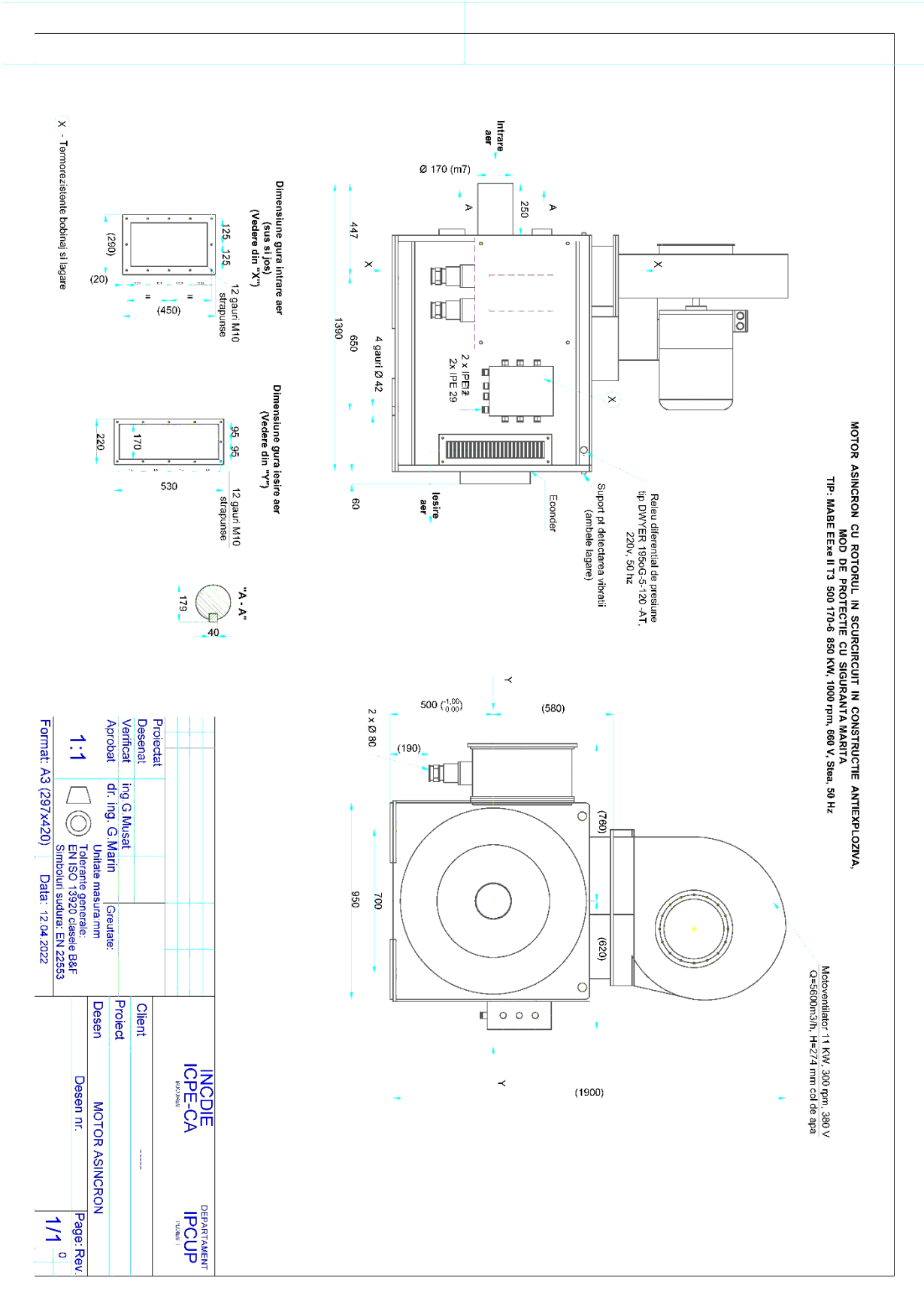


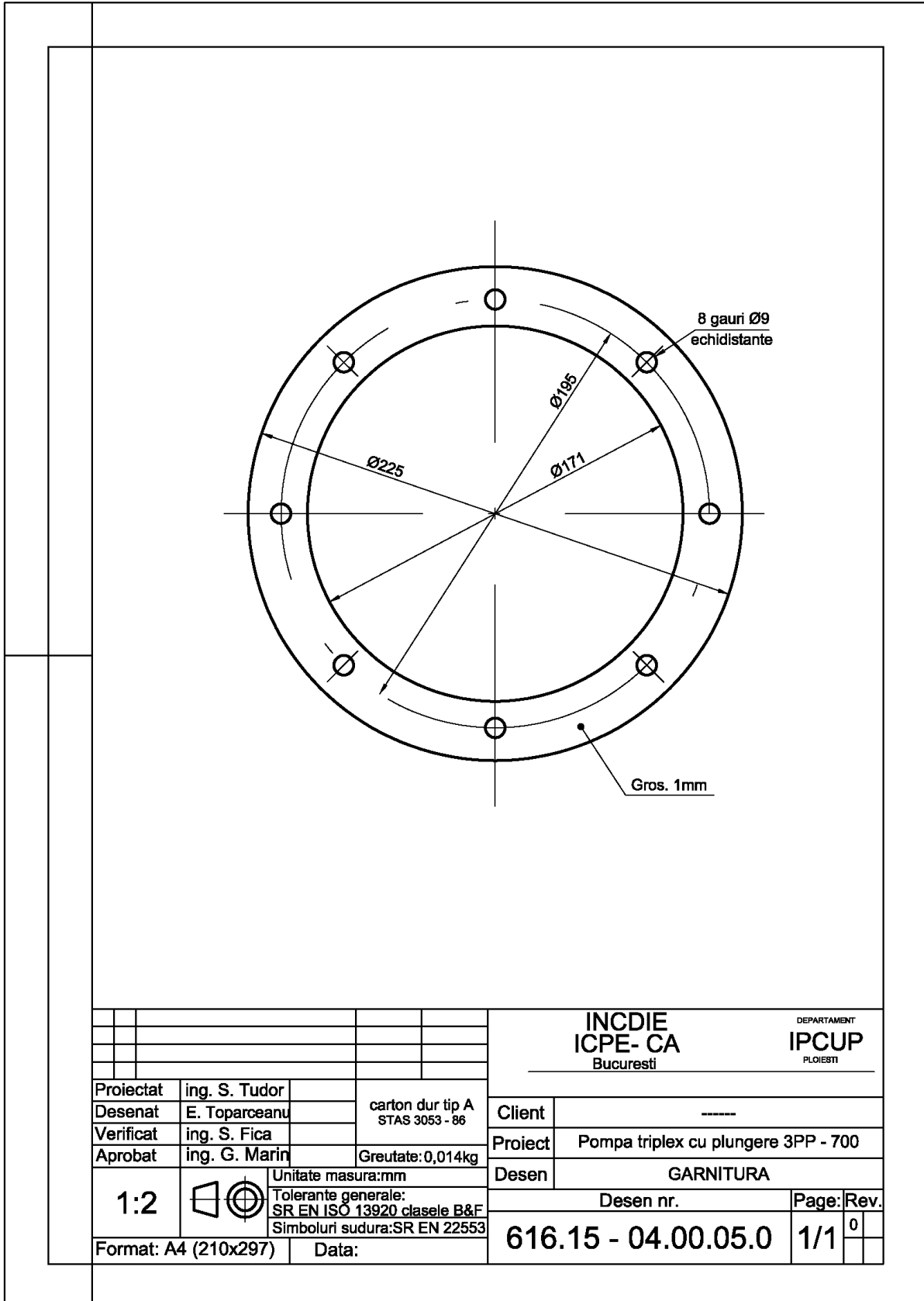
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Fax: 0040235/481342

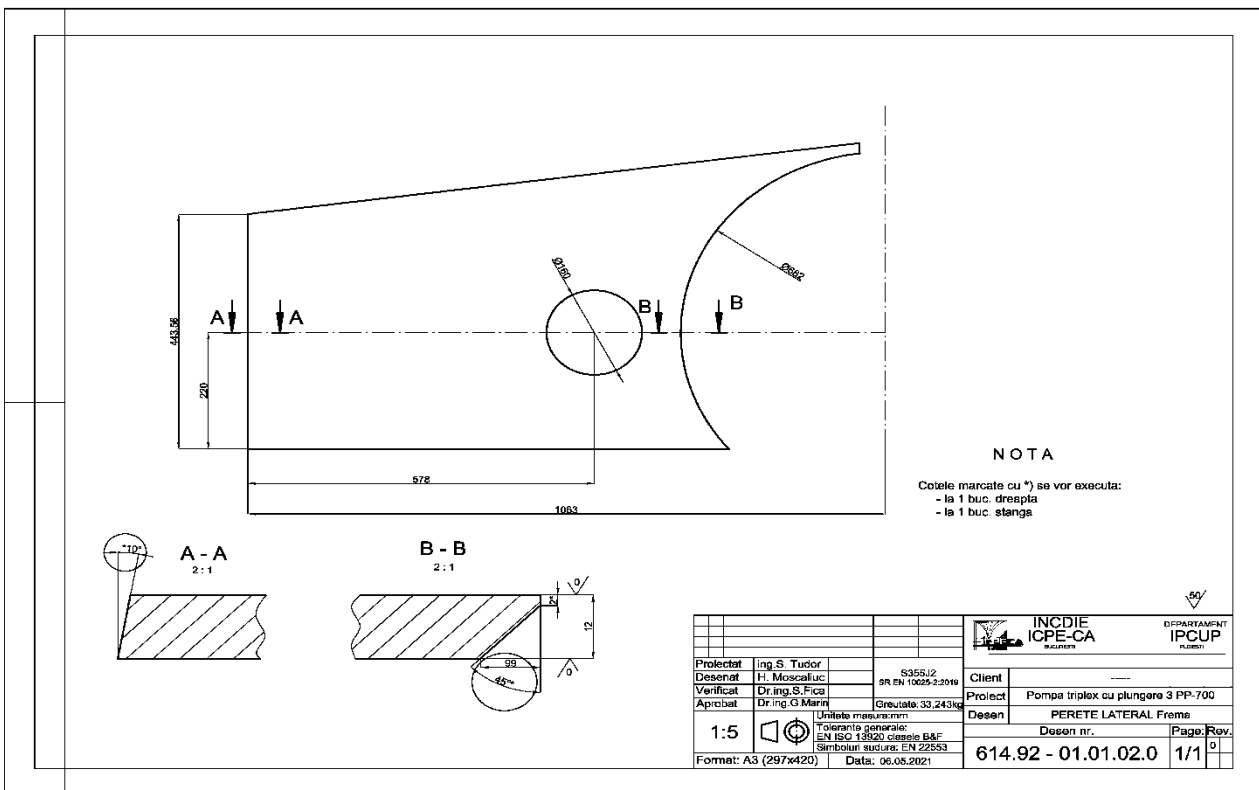
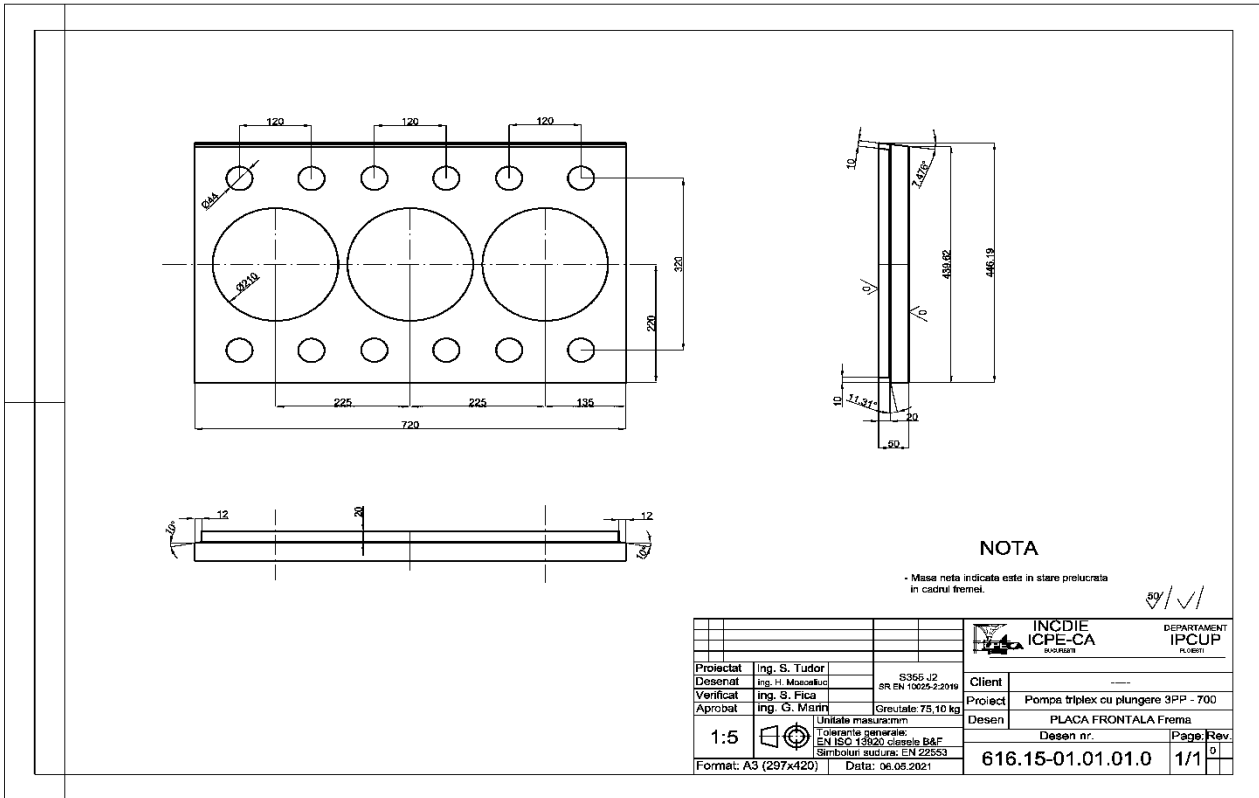
Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei





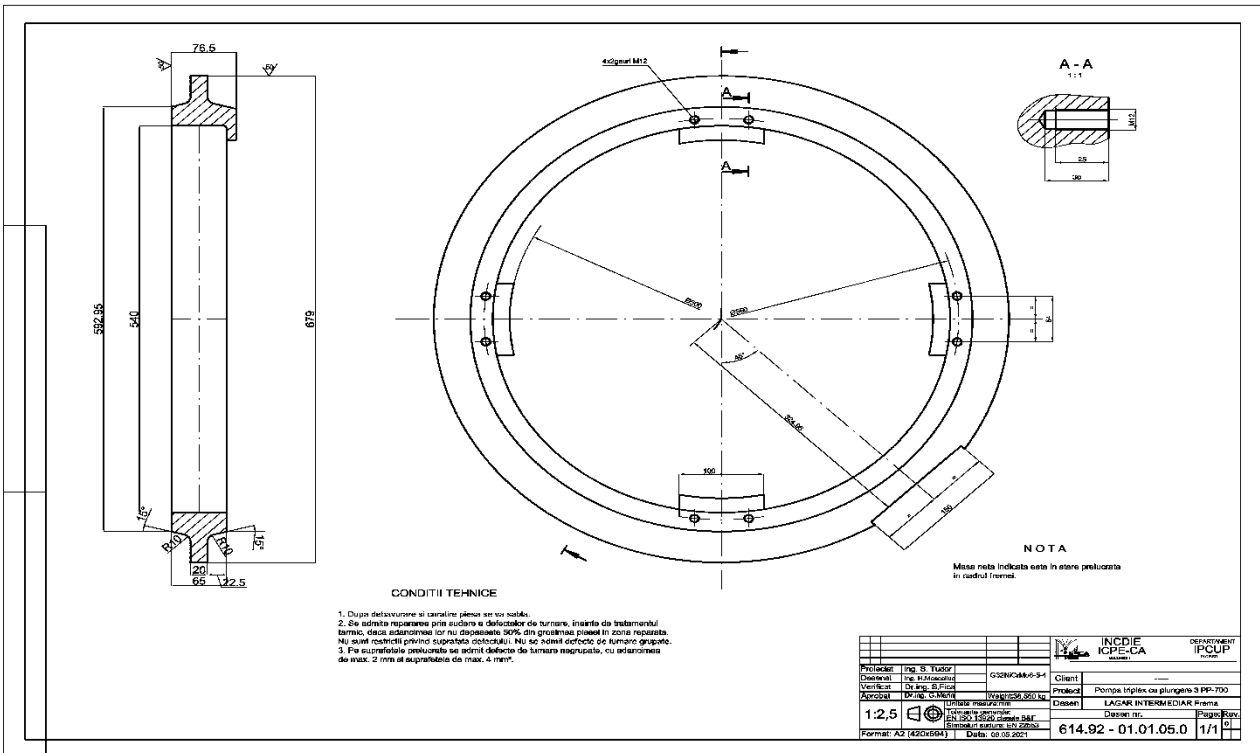
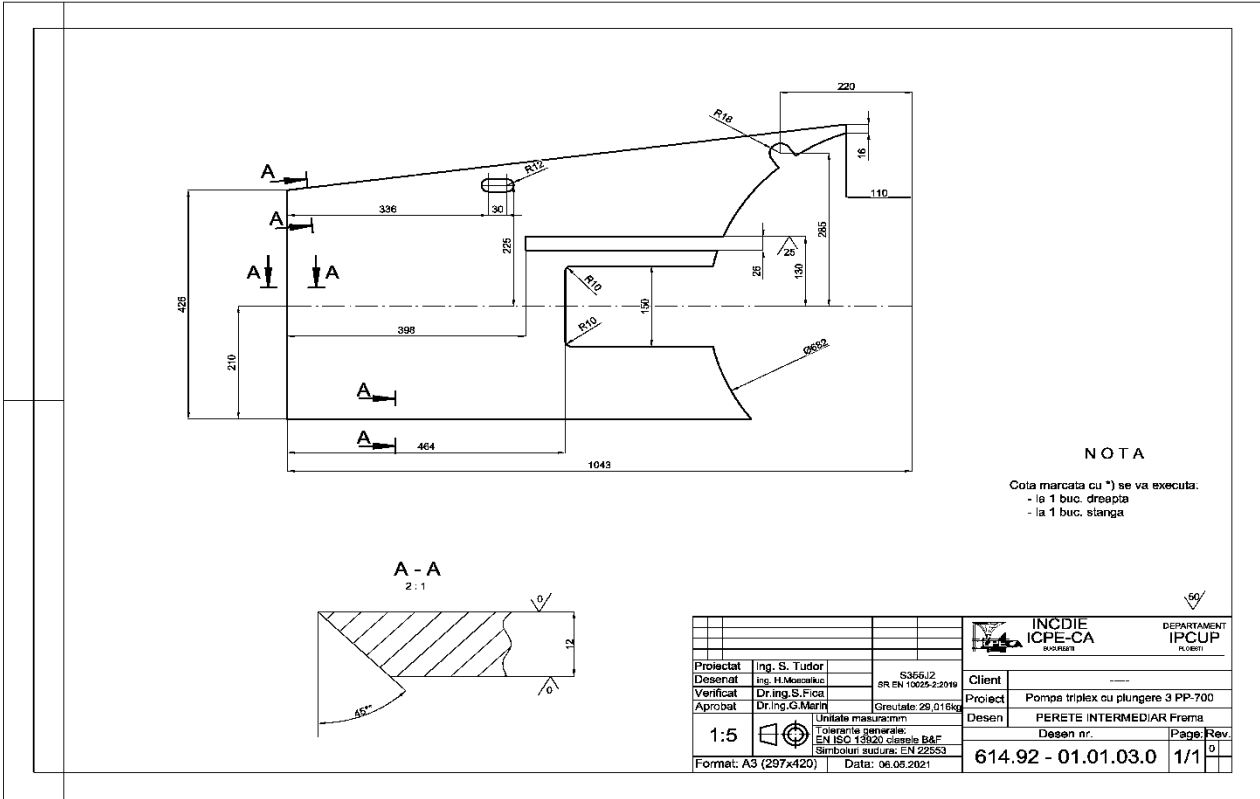


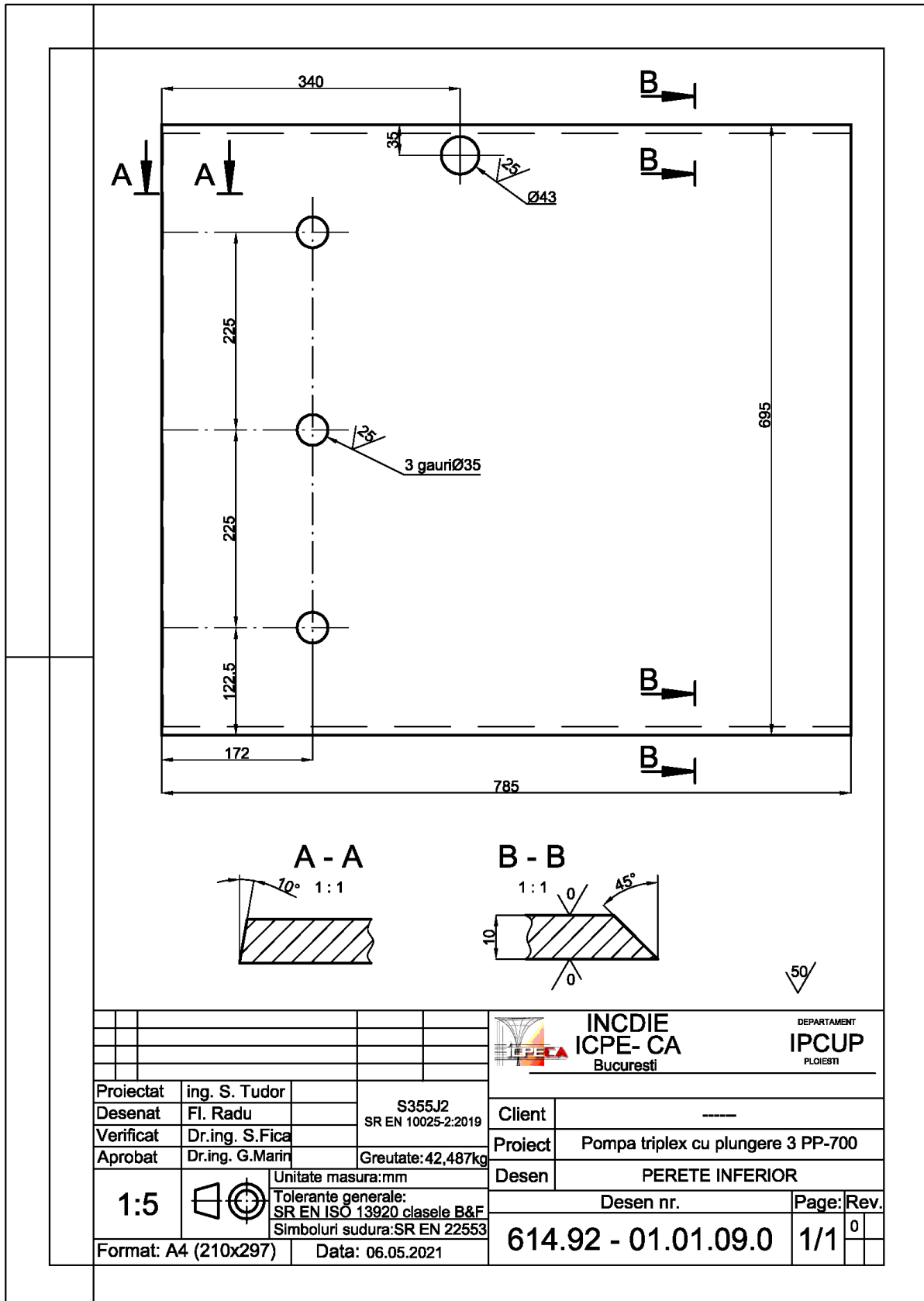


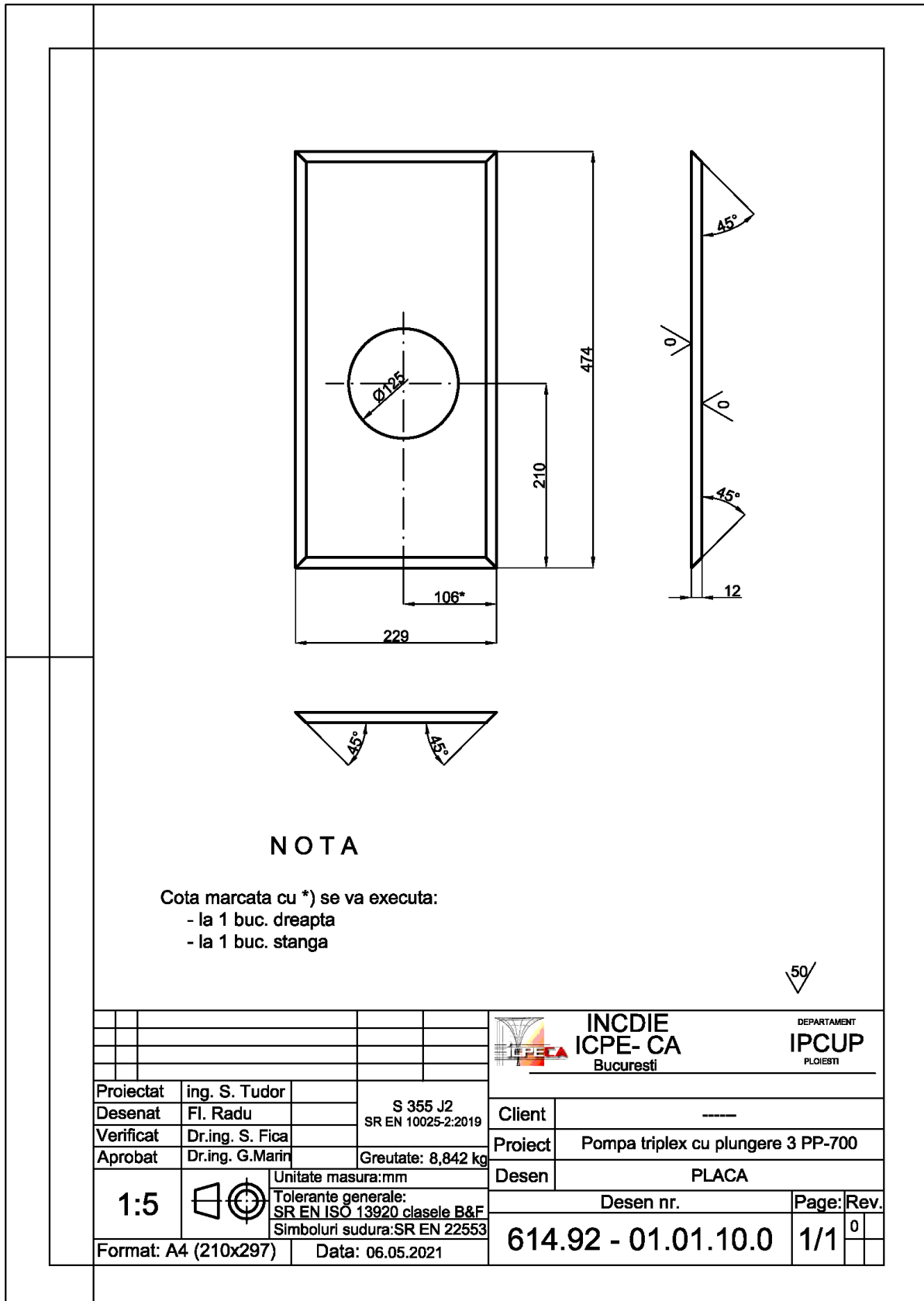
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Fax: 0040235/481342

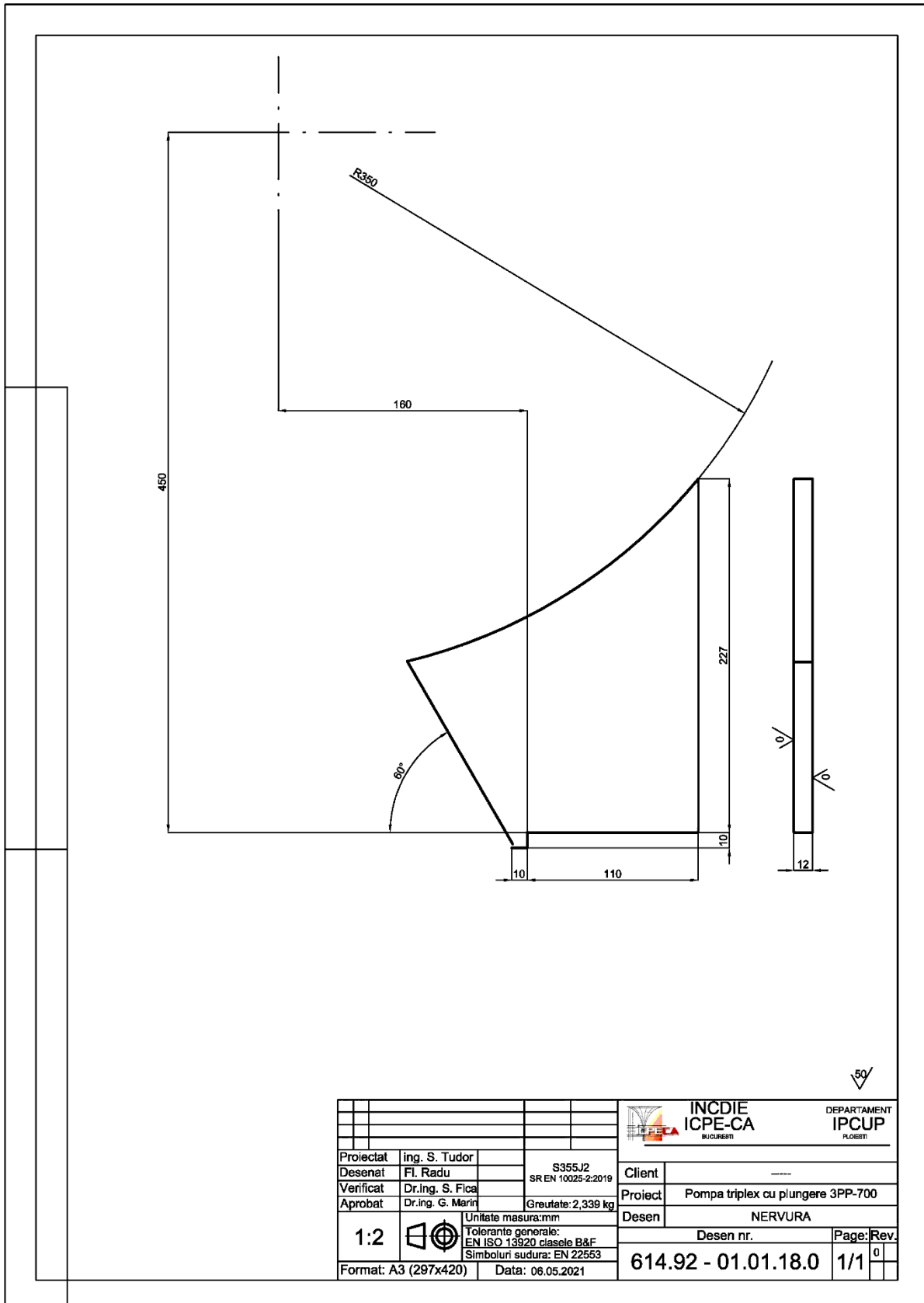
Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei





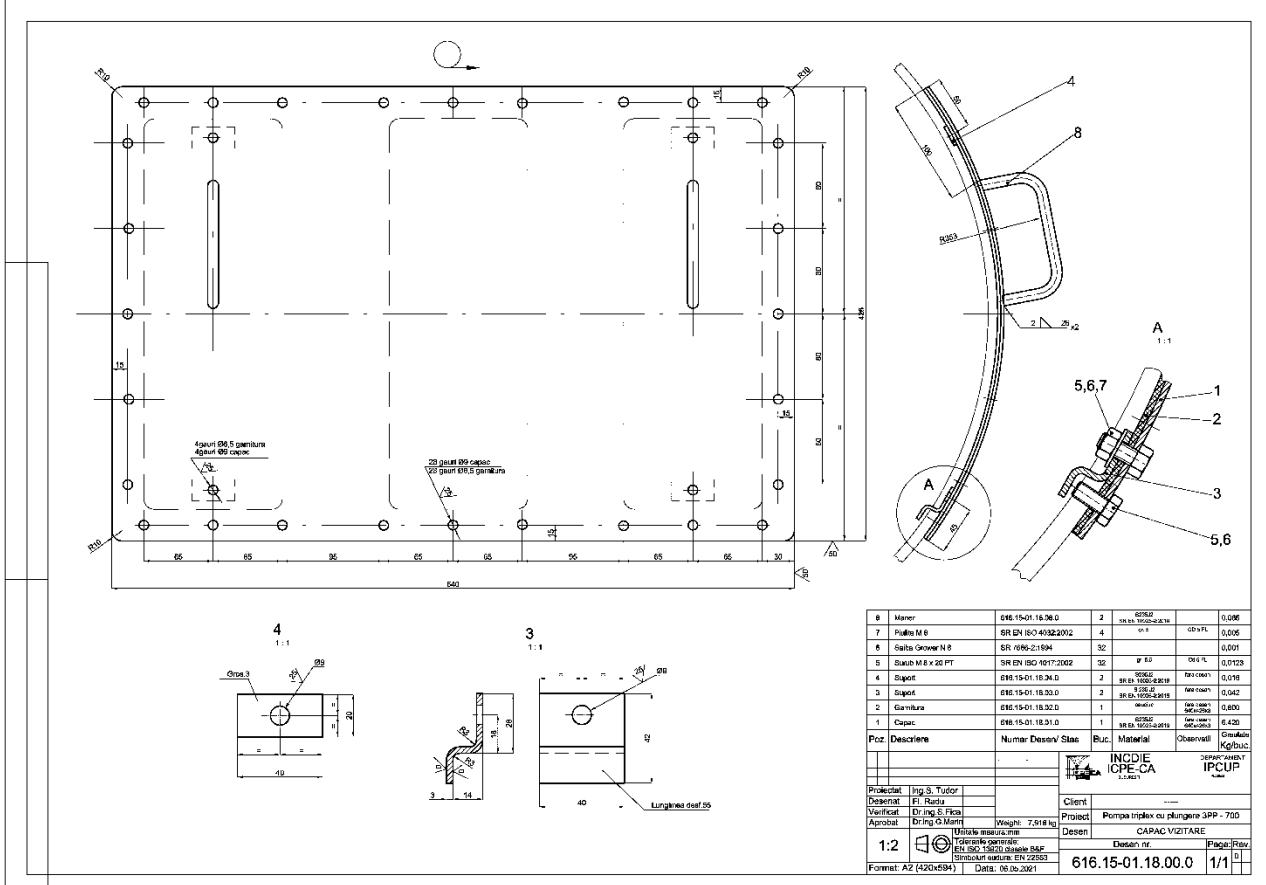
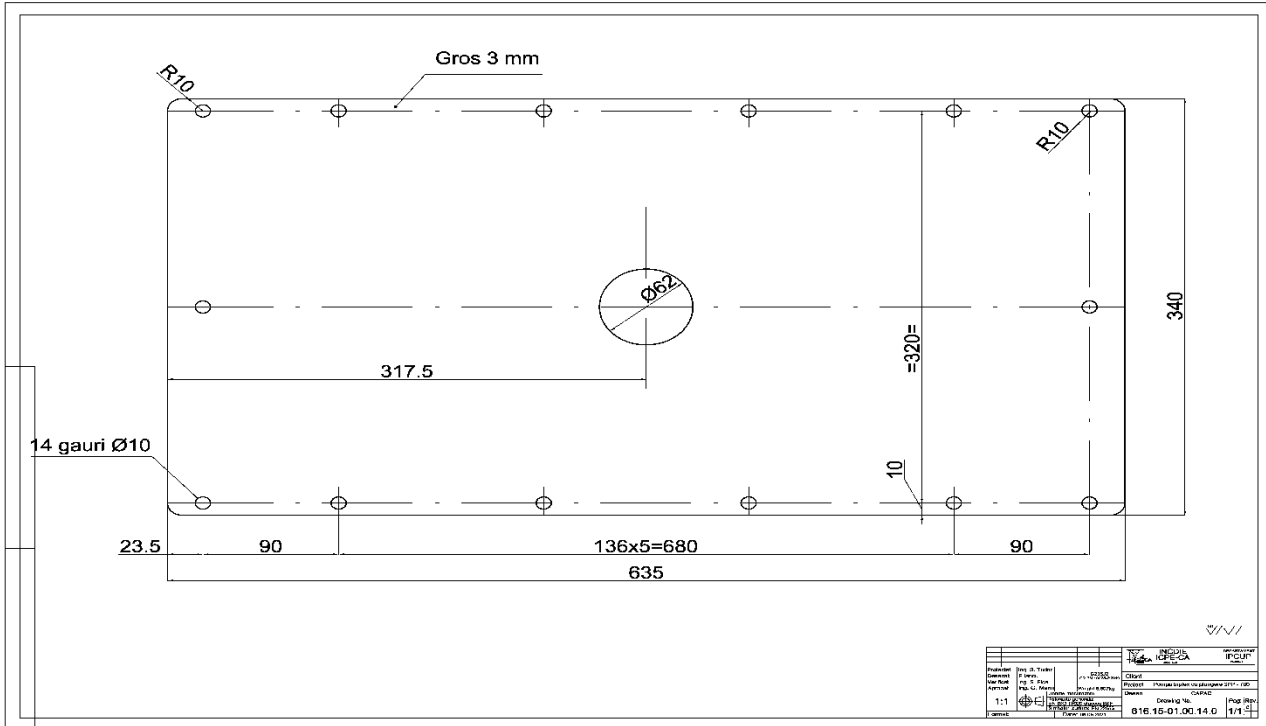




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Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
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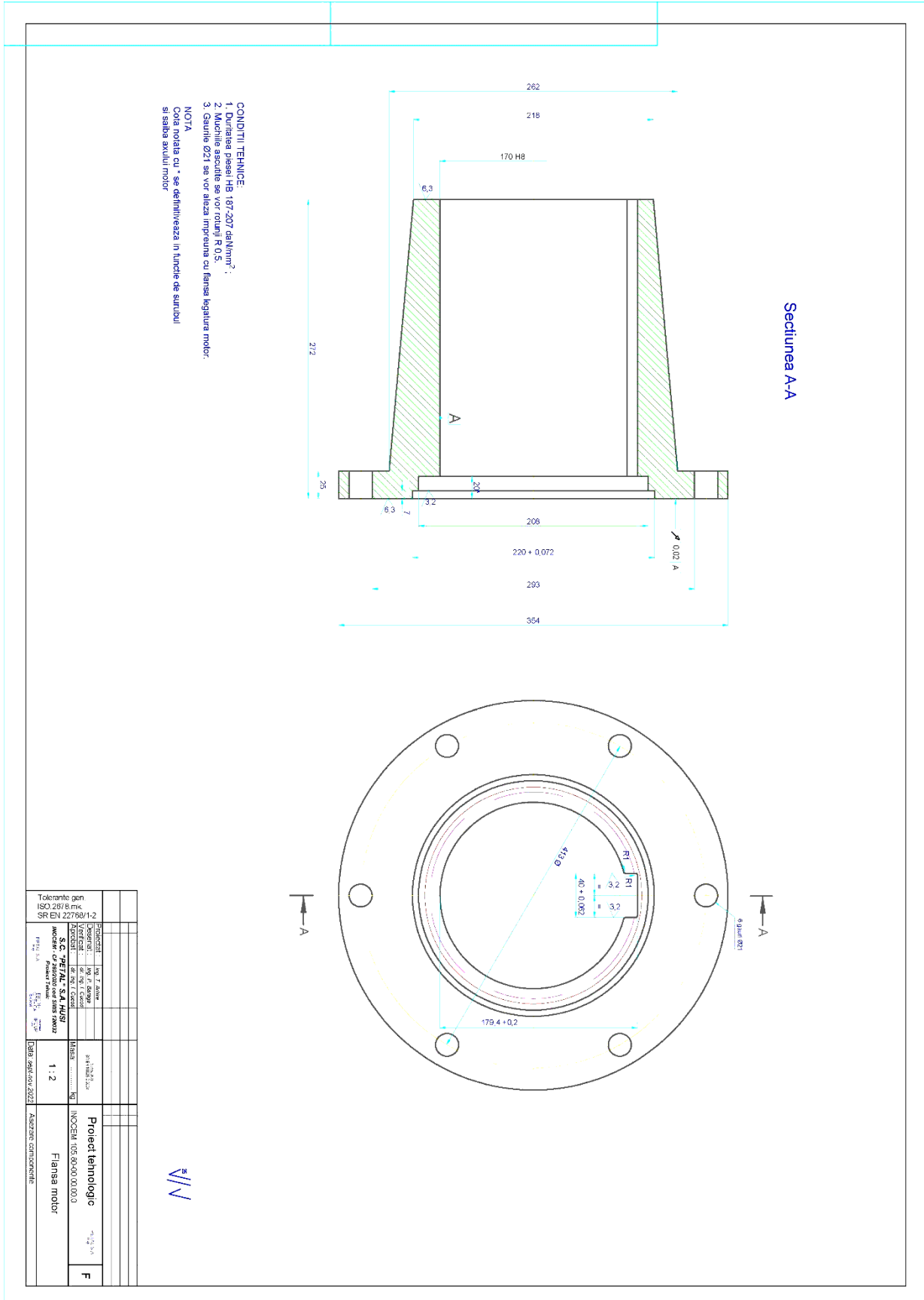
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Capital social: 2.971.825 lei



Tel: 0040235/481781
Fax: 0040235/481342

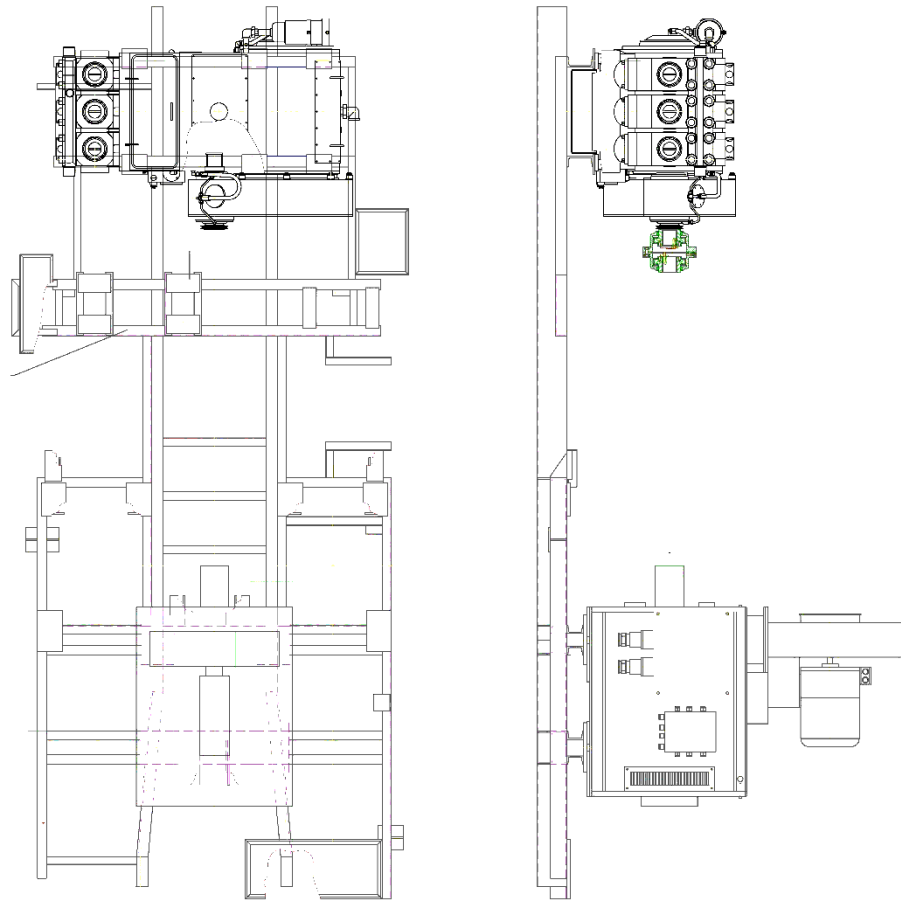
Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei

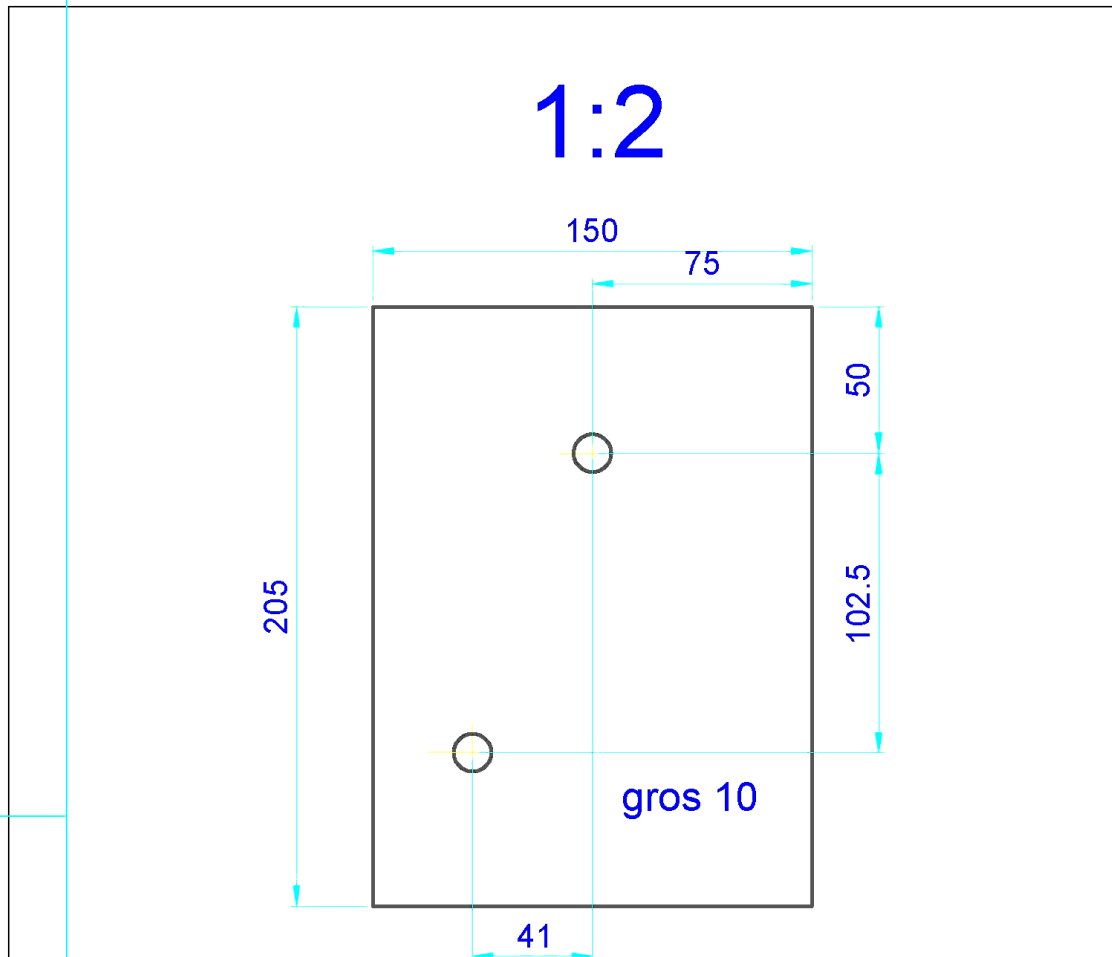


Tel: 0040235/481781
 Fax: 0040235/481342

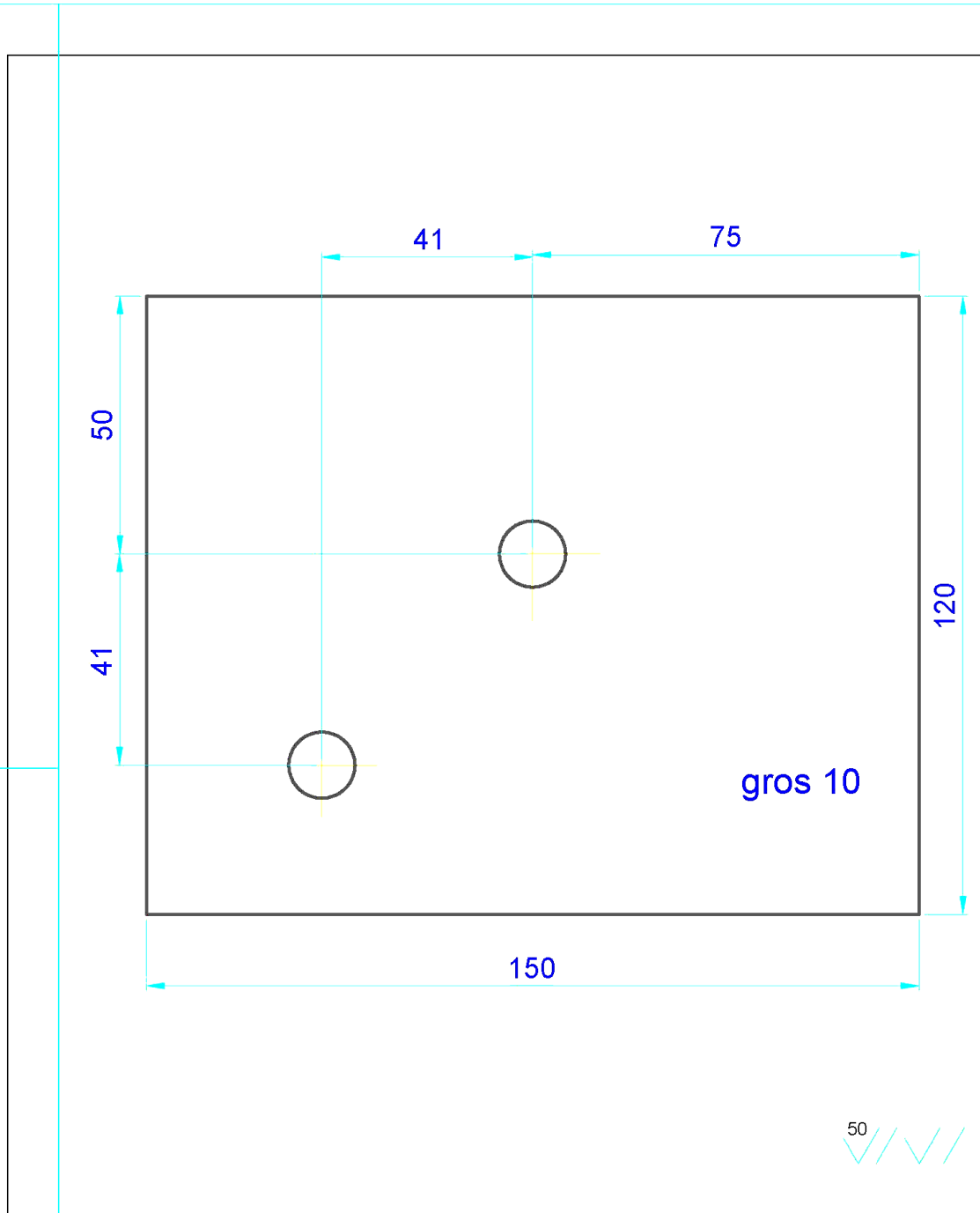
 Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
 E-mail: office@petal.ro

 ORC: J37/191/2003
 CUI: RO841186
 Capital social: 2.971.825 lei


Tolerante gen. ISO 2678.mk. SR EN 22768/1-2			
Proiectat : Desenat : Verificat : Aprobat :	Ing. T. Avilue Ing. P. Baraga dr. Ing. I. Ciocoi dr. Ing. I. Ciocoi		
S.C. "PETAL" S.A. HUSI INOCEM - cf. 246/2020 and 5145/2012 Proiect Tehnic			
PETAL S.A. INOCEM INOCEM			
Masa:	kg		
1 : 1			
Data: sep-nov 2022			
INOCEM - Ansamblu Instalatie			
Proiect tehnologic		PETAL S.A.	
INOCEM		F	
Asezare componente instalatie			


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Tolerante gen. ISO 2678 mk. SR EN 22768/1-2	Proiectat : <i>ing. T. Arhire</i>	S955J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Huși	F		
	Desenat : <i>ing. P. Baraga</i>					Masa: 2,460 kg	INOCEM 105.80-00.00.00.0
	Verificat : <i>dr. ing. I. Cucos</i>						
Aprobat : <i>dr. ing. I. Cucos</i>	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		1 : 1	Placa Poz 19			
PETAL S.A. Huși		INC DIE ICPE-CA Bucuresti		IPCUP HUȘI			
		Data: sept-nov.2022		Platforma			

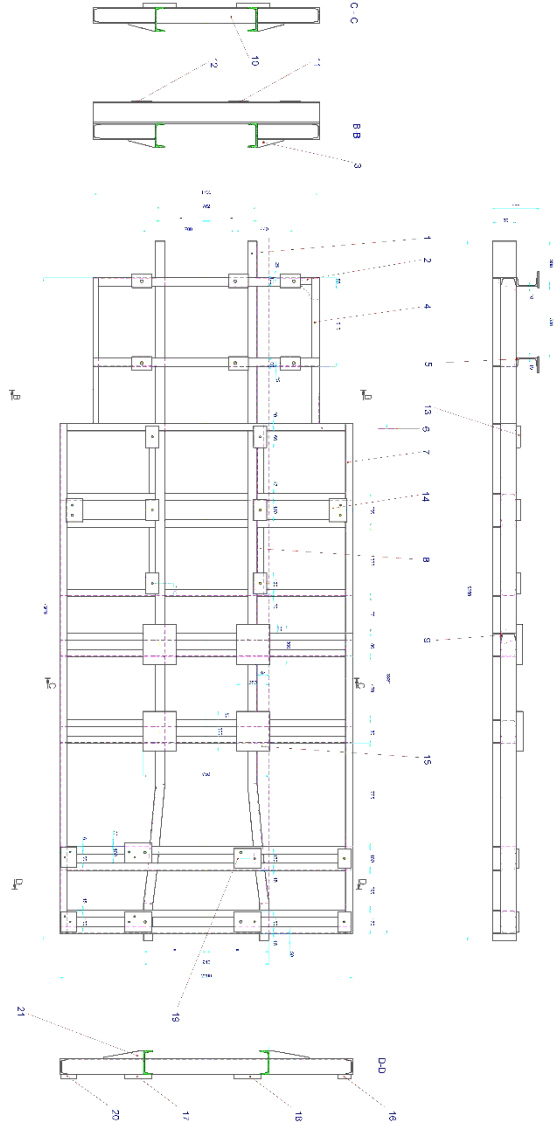


Tolerante gen. ISO 2678 mk. SR EN 22768/1-2	Proiectat : <i>ing. T. Arhire</i>	S955J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Huși	F
	Desenat : <i>ing. P. Baraga</i>				
	Verificat : <i>dr. ing. I. Cucos</i>	Masa: 1,45 kg	INOCEM 105.80-00.00.00.0		
	Aprobat : <i>dr. ing. I. Cucos</i>	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		Placa Poz 20	
PETAL S.A. Huși		INCIE ICPE-CA Bucuresti		IPCUP Huși	
		1 : 1	Data: sept-nov.2022		
		Platforma			

Tel: 0040235/481781
Fax: 0040235/481342

Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei



CONDITII TEHNICE
1. Instalatie prin sudare vor fi continute la 0,7 din g, unde g
este greutatea proprie a aparatelor din masa
2. Instalatiile vor fi de compozitie in Iudascina

NO	DESIGNATIE	CANTITATE	UNITATE	VALORI
1
2
3
4
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8
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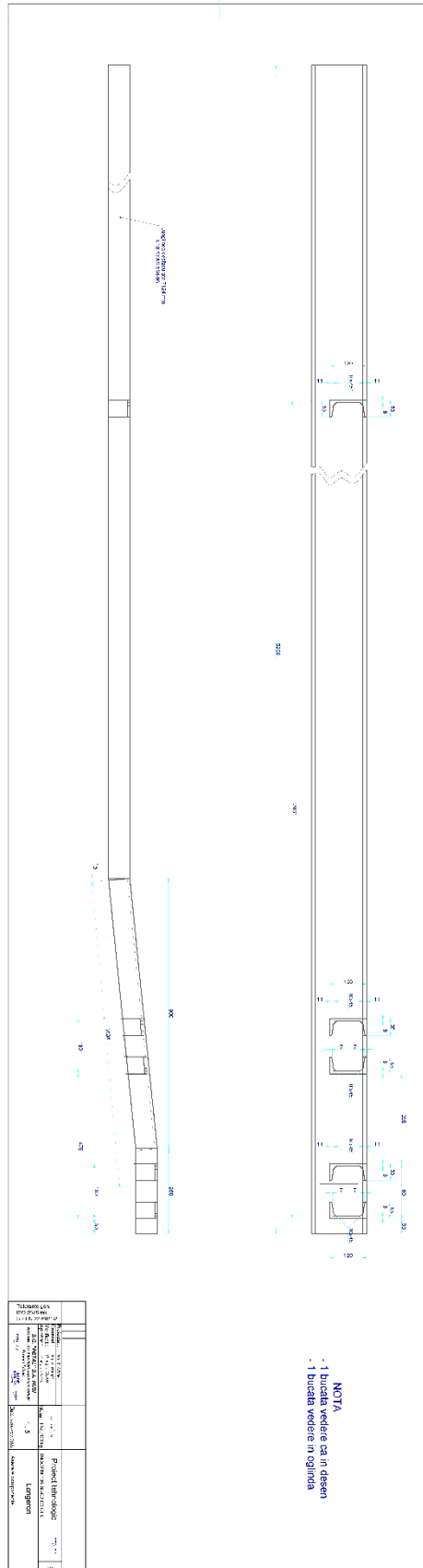
www.petal.ro



Tel: 0040235/481781
Fax: 0040235/481342

Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

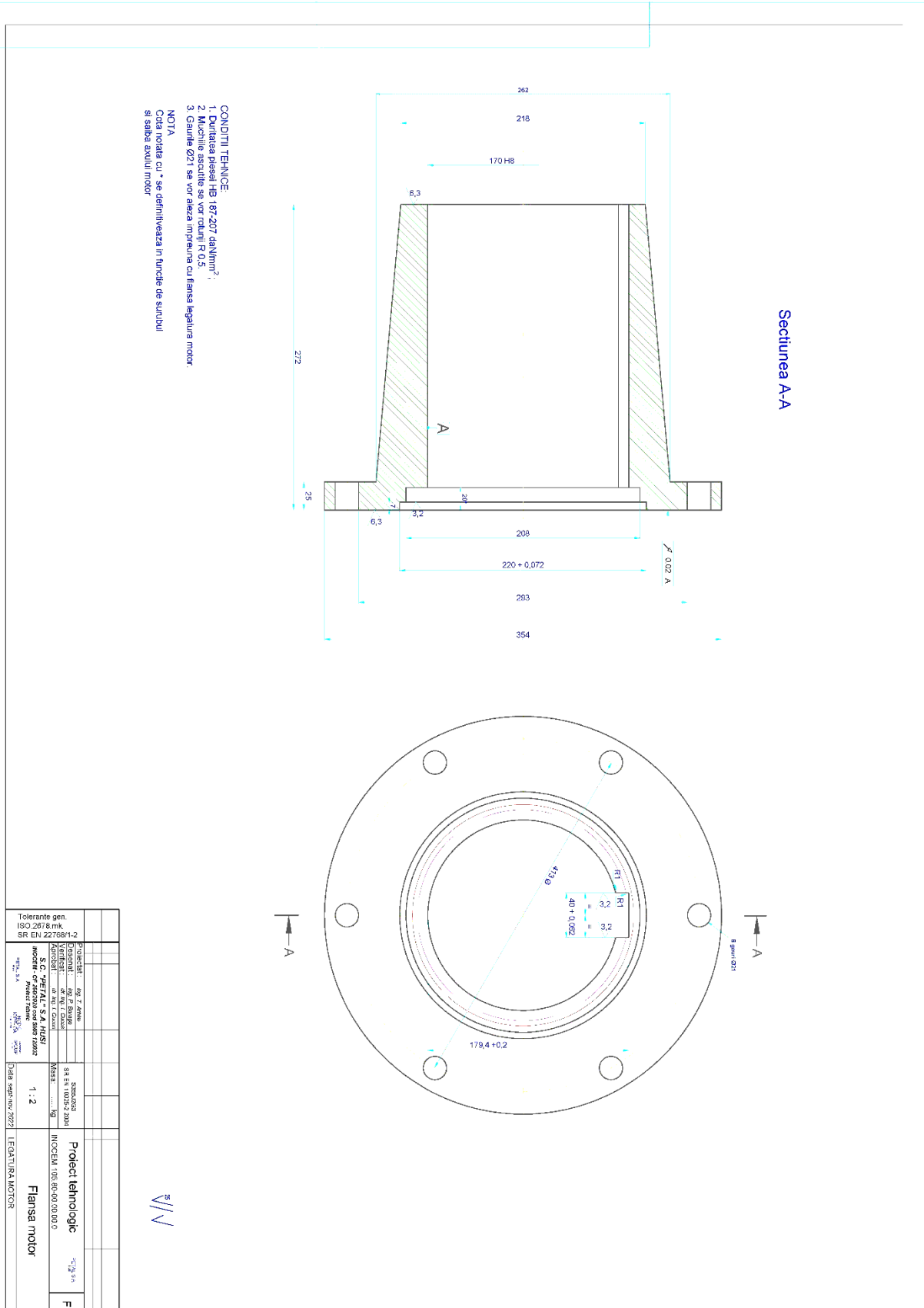
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Capital social: 2.971.825 lei

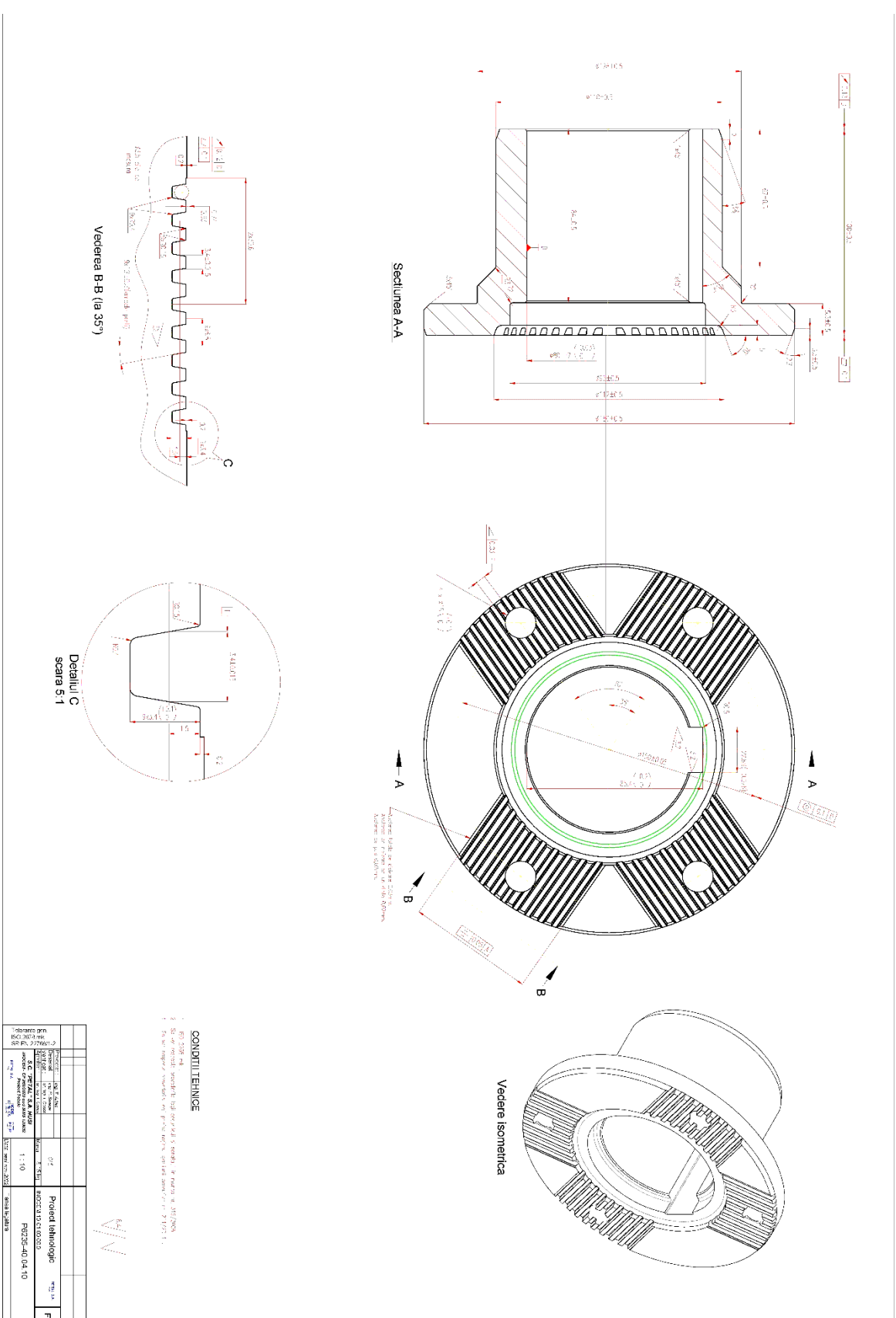


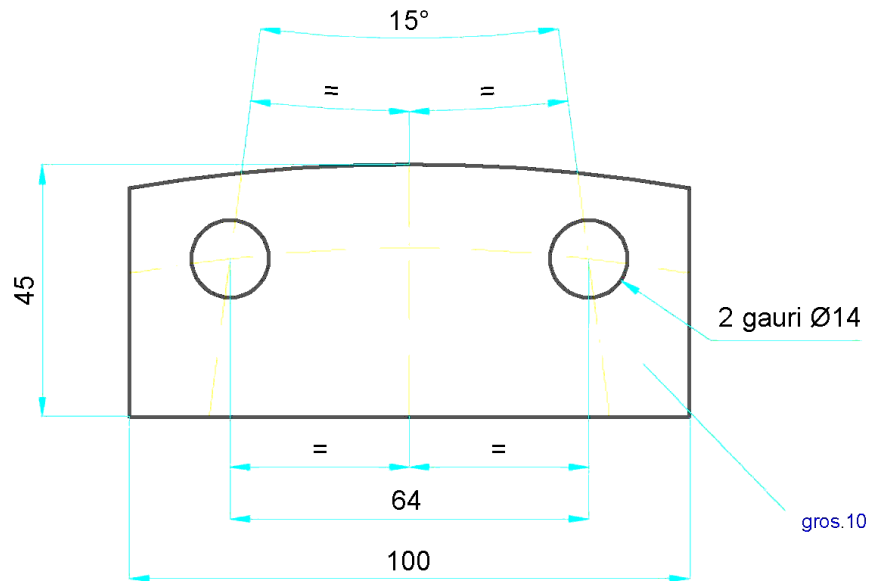
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Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
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ORC: J37/191/2003
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Capital social: 2.971.825 lei

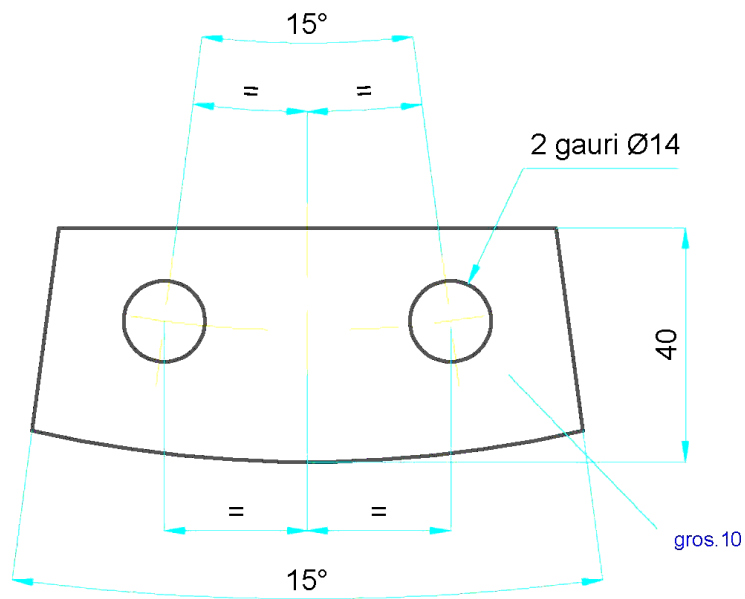






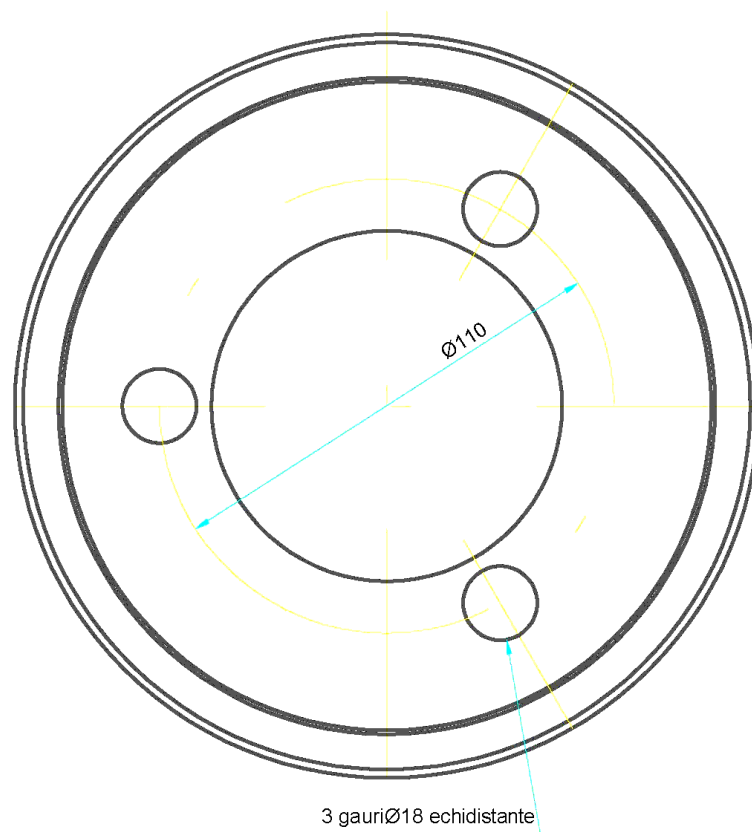
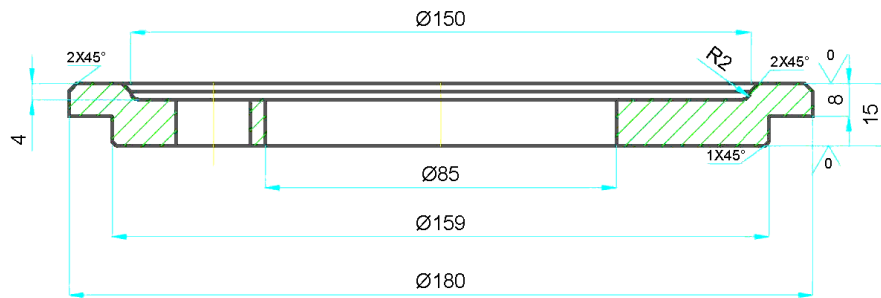
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Tolerante gen. ISO.2678.mk SR EN 22768/1-2	Proiectat : <i>ing. T. Arhire</i>	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Huși	F
	Desenat : <i>ing. P. Baraga</i>	Masa: 0,345 kg	INOCEM 616.15-02.00.03.0		
	Verificat : <i>dr. ing. I. Cucos</i>	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMS 120032 Proiect Tehnic			
	Aprobat : <i>dr. ing. I. Cucos</i>	1 : 1	Sector fixare 2		
PETAL S.A. Huși		INCDE ICPE-CA Bucuresti	ICPUP Huși	Mecanism motor ansamblu	Data: sept-nov.2022



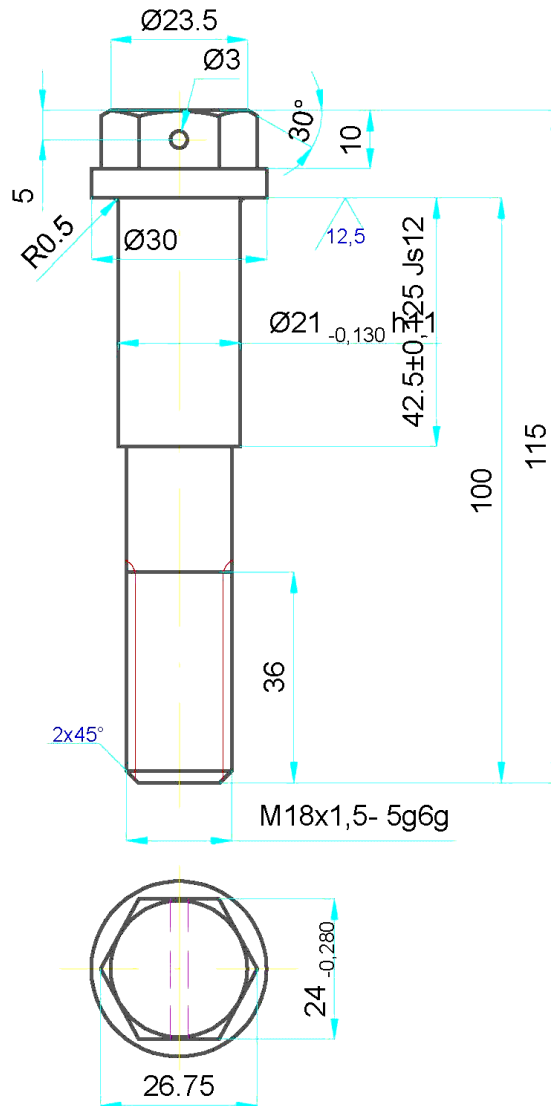
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Tolerante gen. ISO 2678 mk. SR EN 22768/1-2	Proiectat : <i>ing. T. Arhire</i>	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Huși	F
	Desenat : <i>ing. P. Baraga</i>				
	Verificat : <i>dr. ing. I. Cucos</i>	Masa: 0,280 kg	INOCEM 616.15-00.00.07.0		
	Aprobat : <i>dr. ing. I. Cucos</i>	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		Sector de fixare	
PETAL S.A. Huși		INCIE ICPE-CA București		IPCUP Huși	
		1 : 1	Mecanism motor ansamblu		
		Data: sept-nov.2022			



25

Toleranțe gen. ISO 2876, nmc. SR EN 22798/1-2	Proiectat : Desenat : Verificat : Aprobat :	ing. T. Arhire ing. P. Baraga dr. ing. I. Cucos dr. ing. I. Cucos	S 355 J2 SR EN 10025/2/2019 Masa: 1.460 kg	Proiect tehnologic INOCEM 616.15-02.00.11.0	PETAL S.A. Ing.	F
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 s-o-d SMS 120032 Proiect Tehnic		1 : 1	Capac		
	PETAL S.A. Ing.	INOCEM ICPE, CA Ing.	INOCEM ICPE, CA Ing.			
			Data: sept-nov. 2022	Mecanism motor ansamblu		

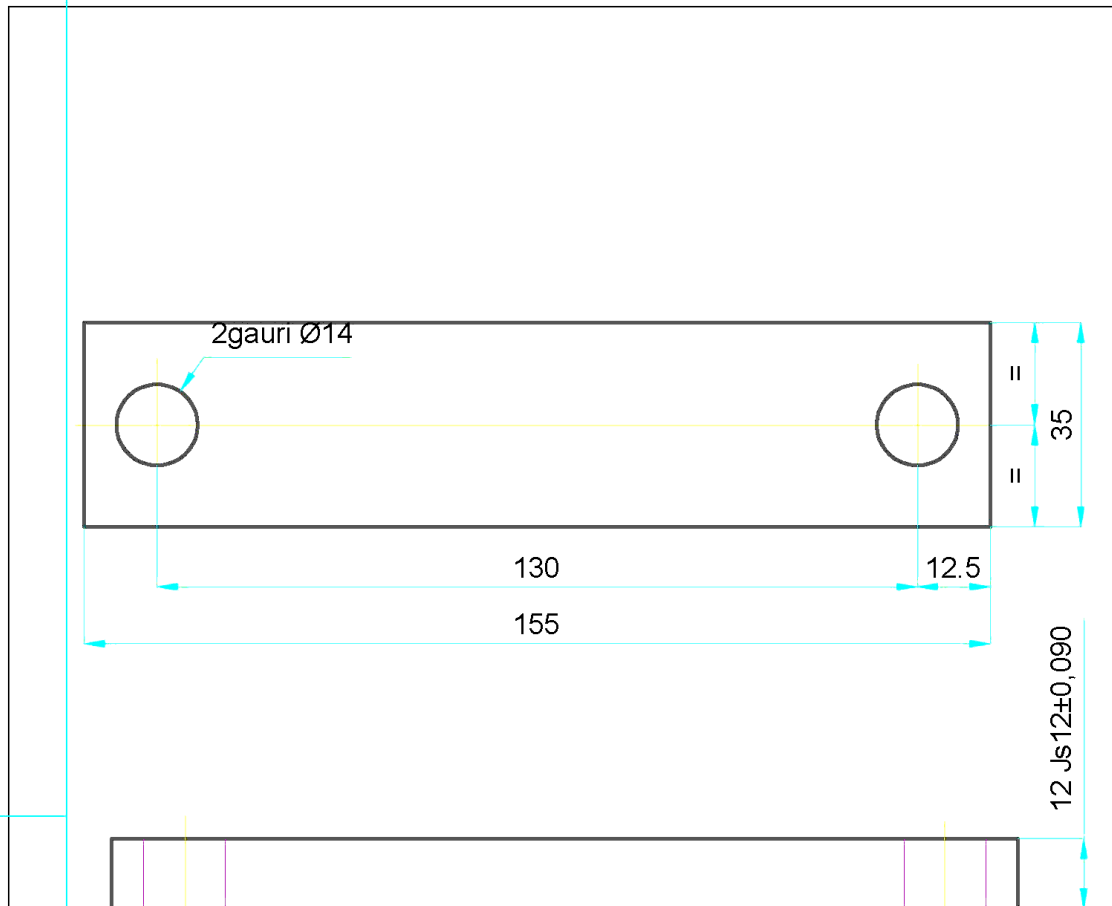


CONDITII TEHNICE

- Imbunatatit la duritatea 280.....320 HB.
- Protectie; AE/OL/CdFL- SR EN ISO 2082:2018

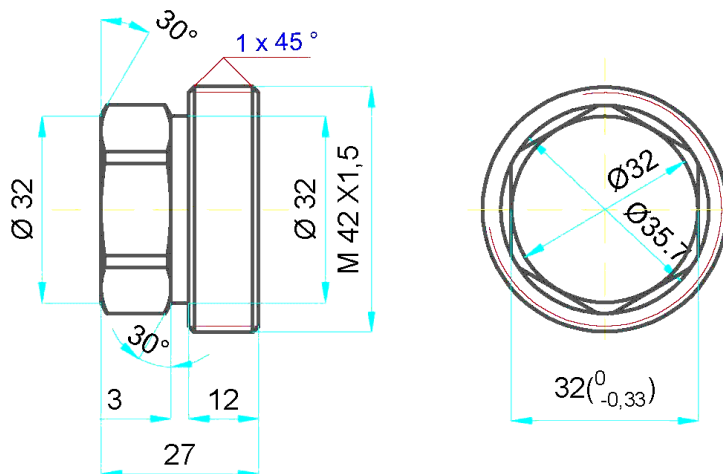


Tolerante gen. ISO 2678 mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	42CrMo4 SR EN 10250/3/2002 Masa: 0,269 kg	Proiect tehnologic	PETAL S.A. Huși	F	
	Desenat :	ing. P. Baraga					
	Verificat :	dr. ing. I. Cucos					
	Aprobat :	dr. ing. I. Cucos		INOCEM 616.15-02.24.08.0			
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Surub M18x1,5		
	PETAL S.A. Huși			INCIE ICPE-CA Bucuresti	IPCUP HUși	Data: sept-nov.2022	Mecanism motor ansamblu



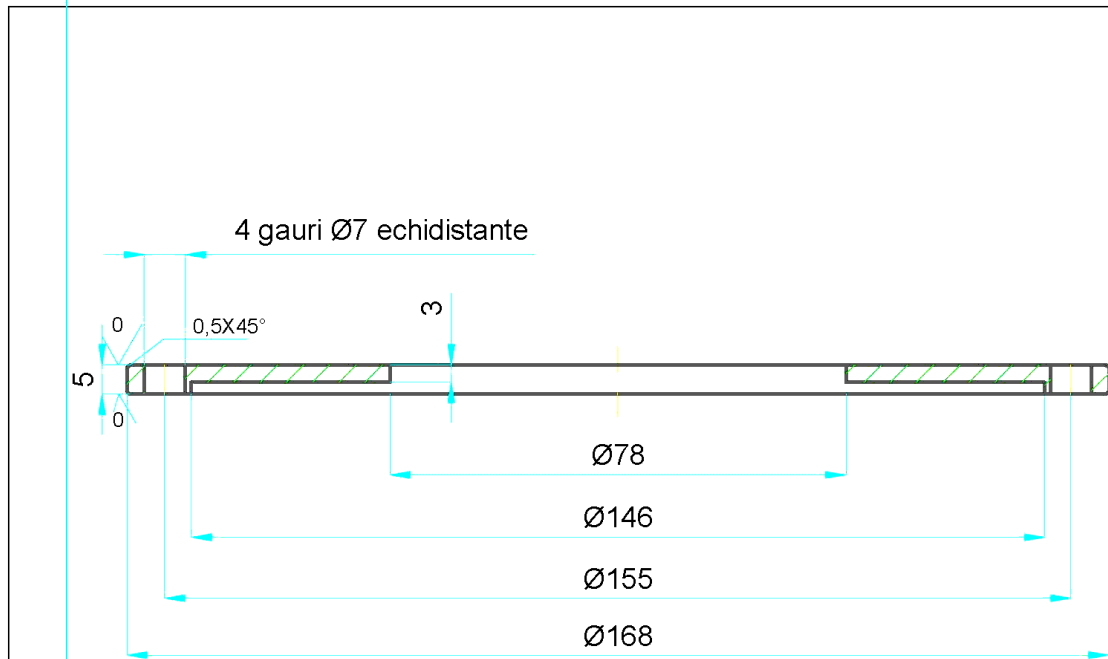
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Tolerante gen. ISO 2678 mk. SR EN 22768/1-2	Proiectat : <i>ing. T. Arhire</i>	34CrMo4 SR EN 10250/3/2002 Masa: 0,490 kg	Proiect tehnologic INOCEM 616.15-02.25.09.0	PETAL S.A. Huși	F
	Desenat : <i>ing. P. Baraga</i>				
	Verificat : <i>dr. ing. I. Cucos</i> Aprobat : <i>dr. ing. I. Cucos</i>				
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		1 : 1	Pana		
PETAL S.A. Huși		INCDIE ICPE-CA Bucuresti	IPICUP Huși	Data: sept-nov.2022	
		Mecanism motor ansamblu			



25 ✓ ✓

Tolerante gen. ISO 2678 mk. SR EN 22768/1-2	Proiectat : <i>ing. T. Arhire</i>	C45E SR EN 10250/2/2002	Proiect tehnologic	PETAL S.A. Huși	F
	Desenat : <i>ing. P. Baraga</i>				
	Verificat : <i>dr. ing. I. Cucos</i>	Masa: 0,215 kg	INOCEM 616.15-00.00.07.0		
Aprobat : <i>dr. ing. I. Cucos</i>	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic	1 : 1	Dop filetat		
	PETAL S.A. Huși	INCIE ICPE-CA Bucuresti	IPICUP Huși	Data: sept-nov.2022	Mecanism motor ansamblu



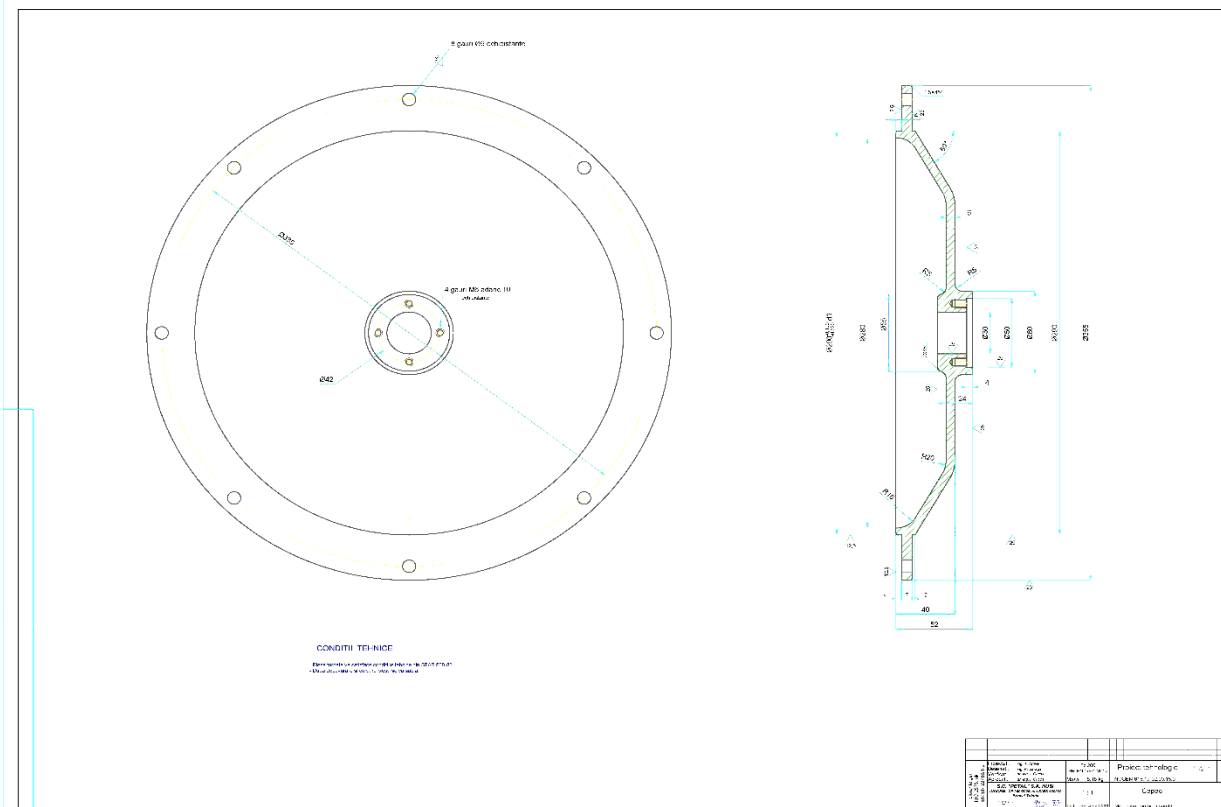
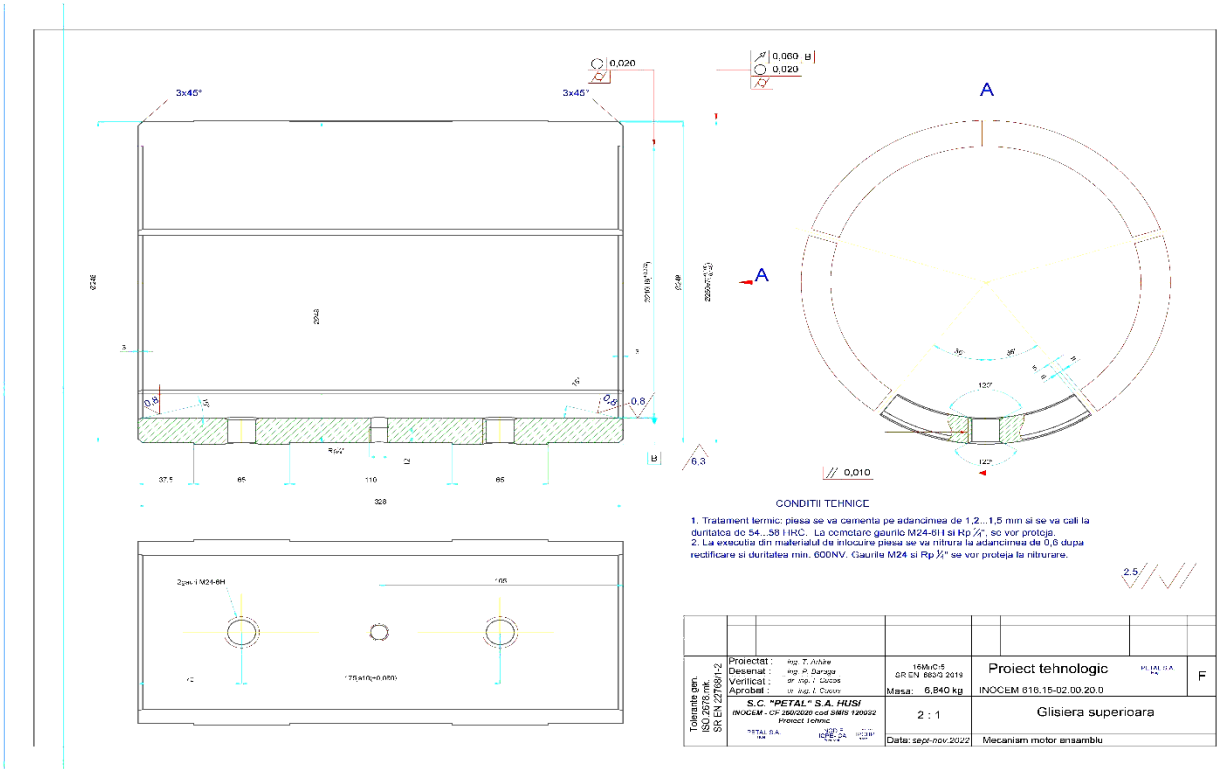
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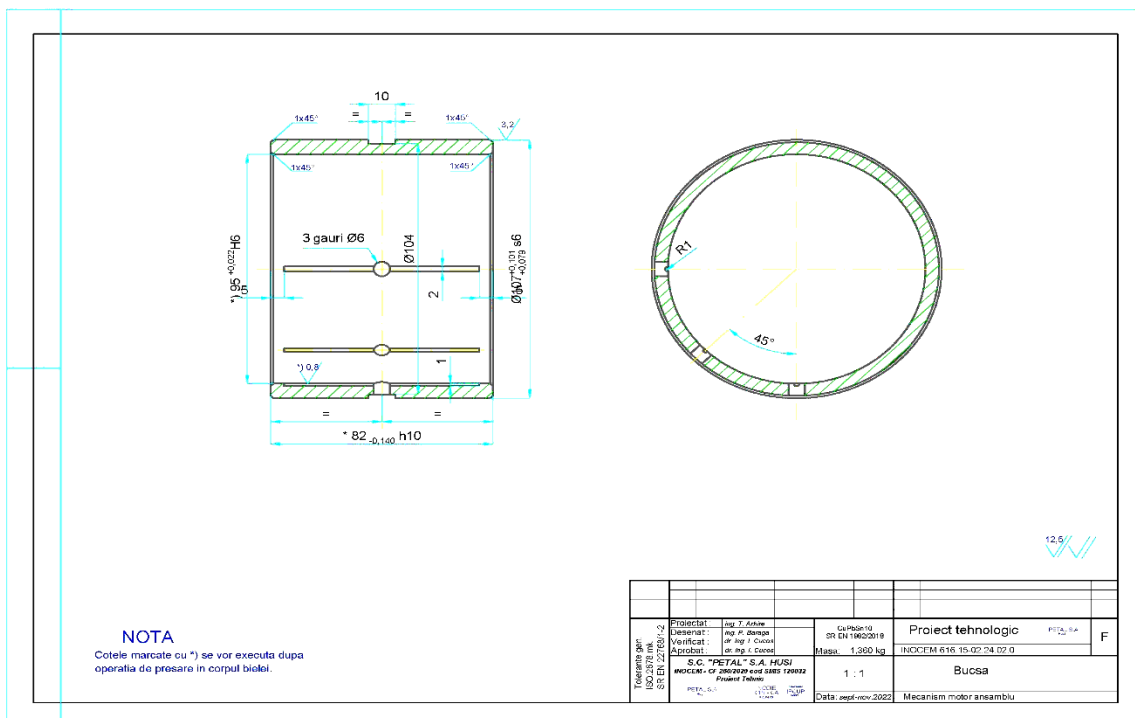
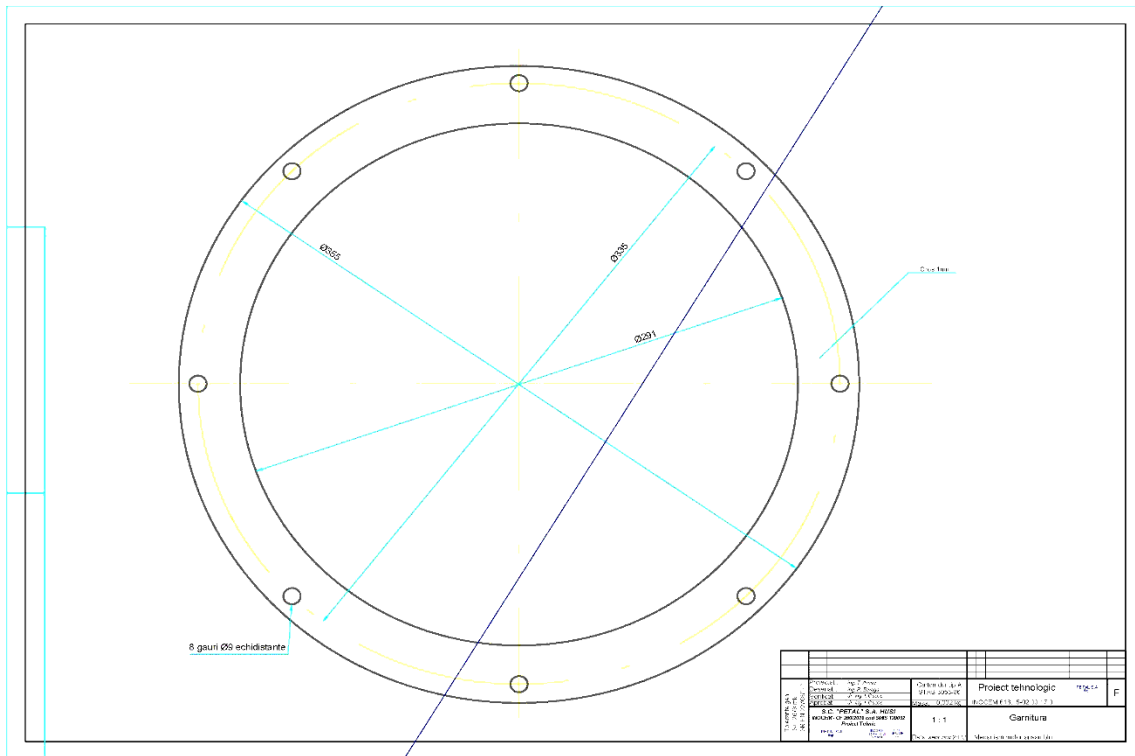
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	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos	Masa: 0,520 kg	INOCEM 616.15-02.00.31.0		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Inel de fixare	
	PETAL S.A. Huși INCPIE ICPE-CA Bucuresti INCUP Huși			Data: sept-nov.2022	Mecanism motor ansamblu	

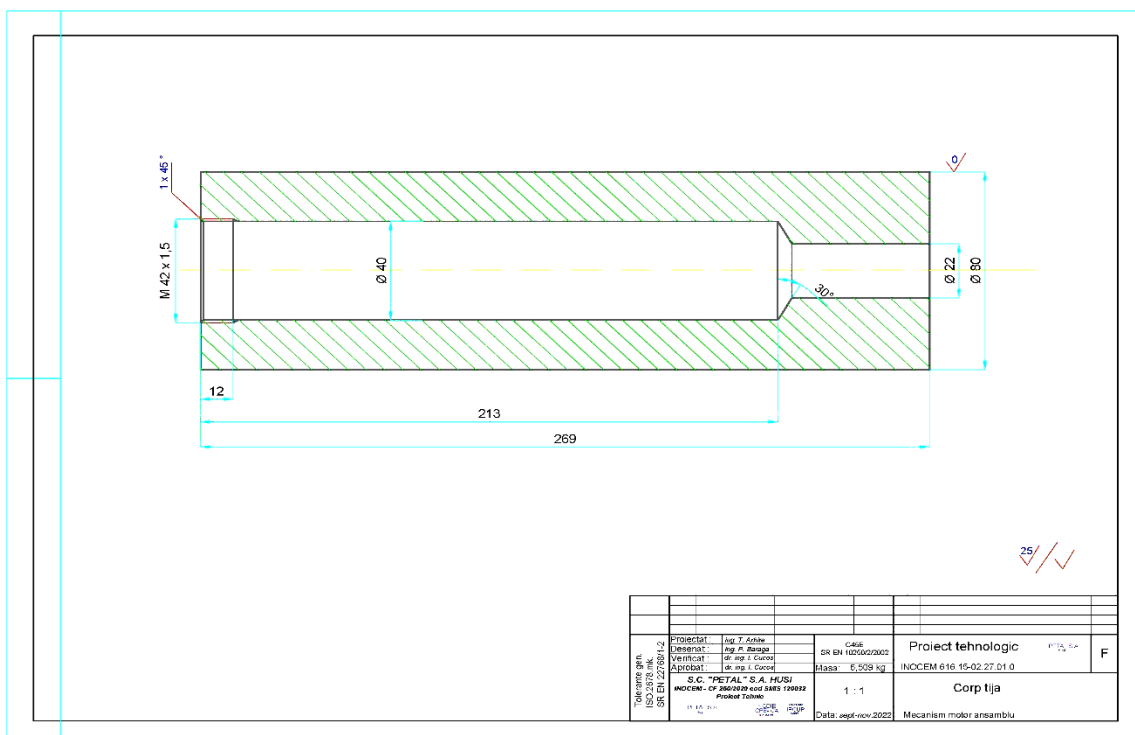
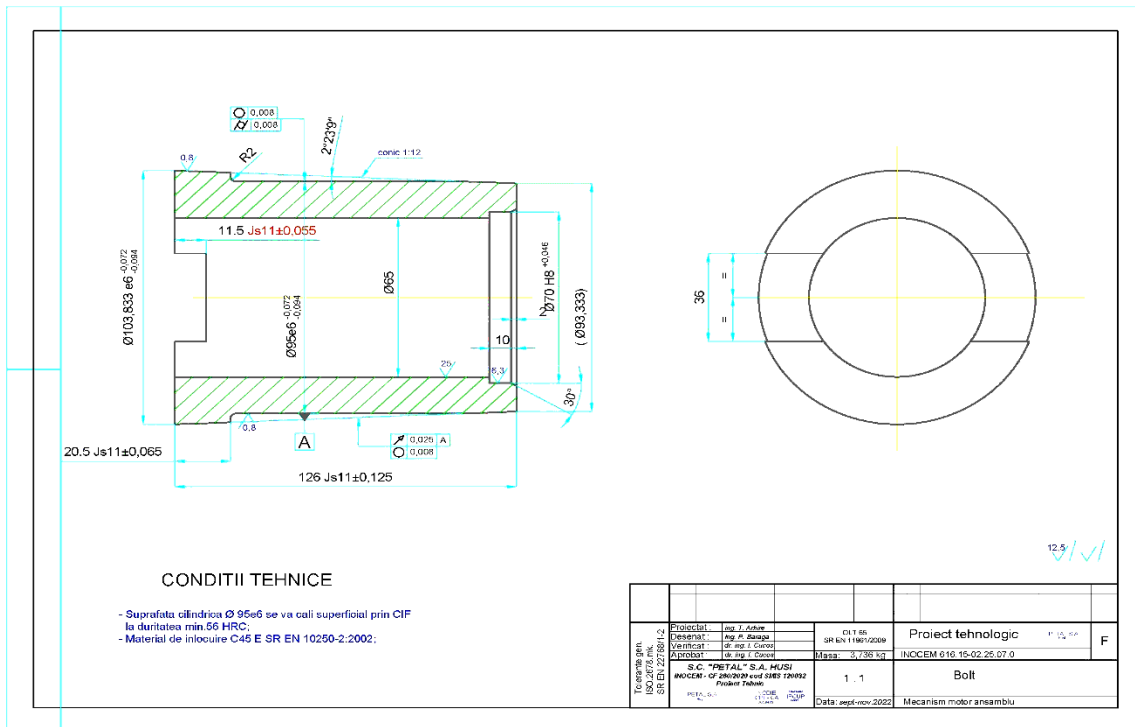
Tel: 0040235/481781
Fax: 0040235/481342

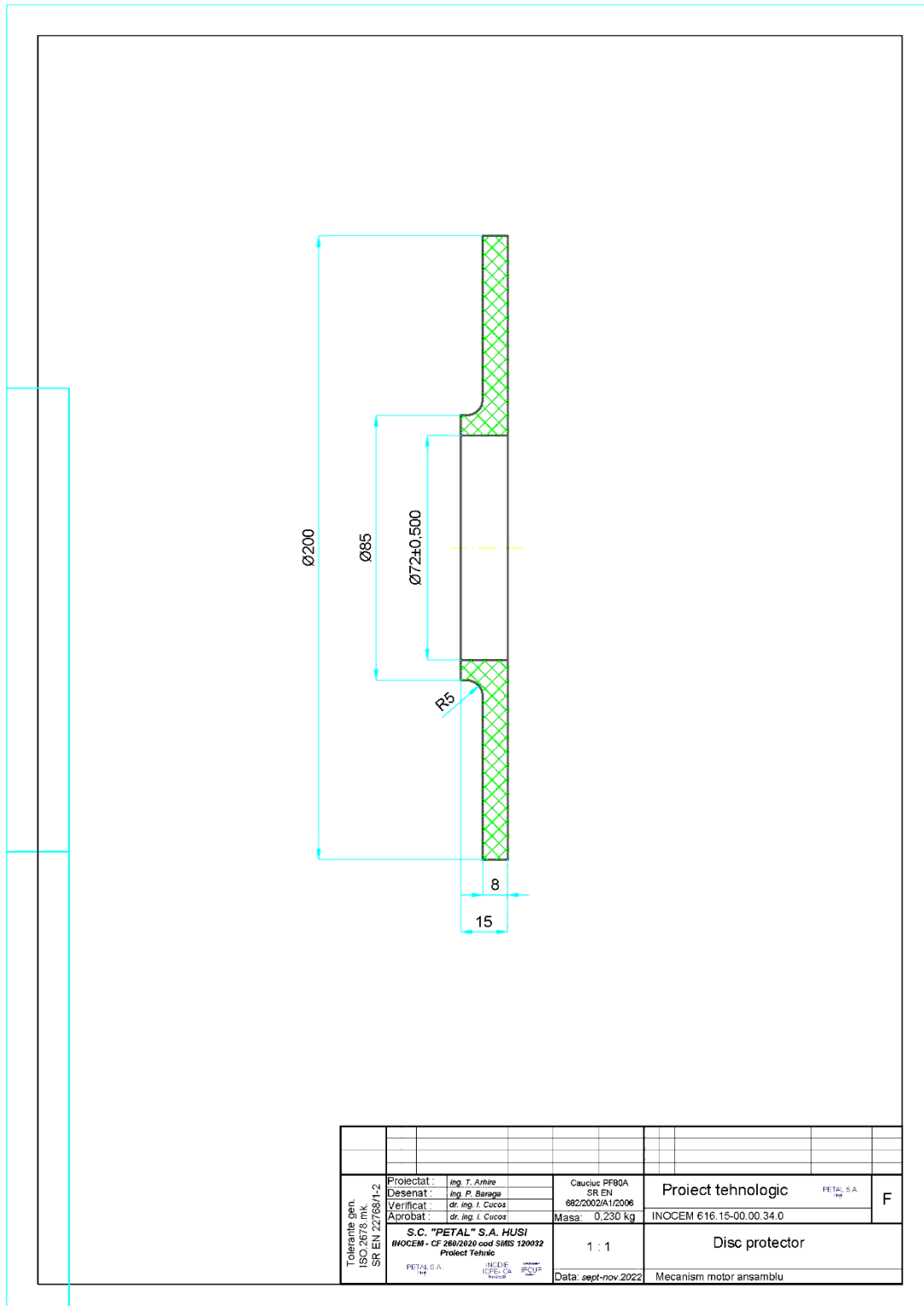
Adresa: Huși-Vaslui, Str. A. I. Cuza nr.99, 735100 România
E-mail: office@petal.ro

ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei











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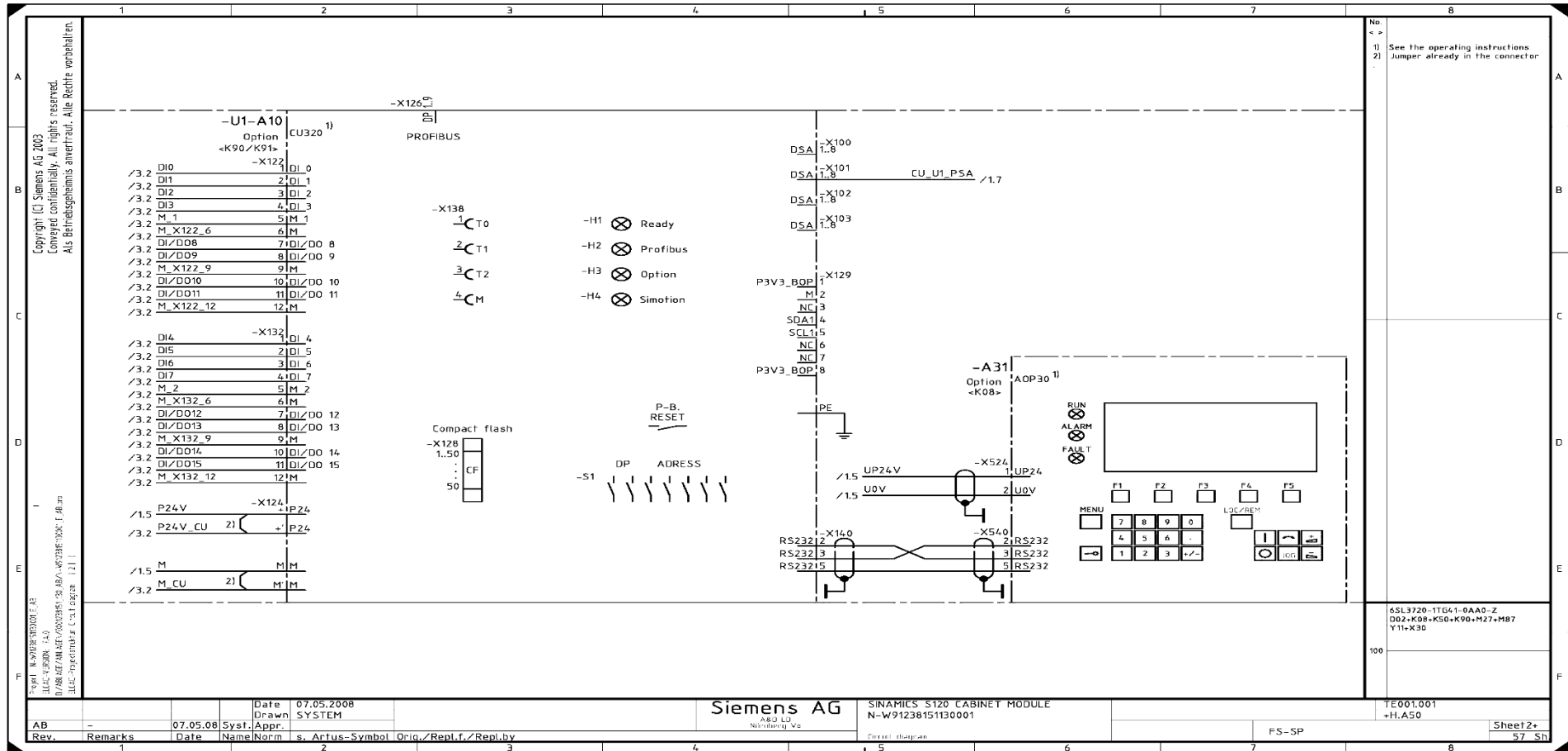
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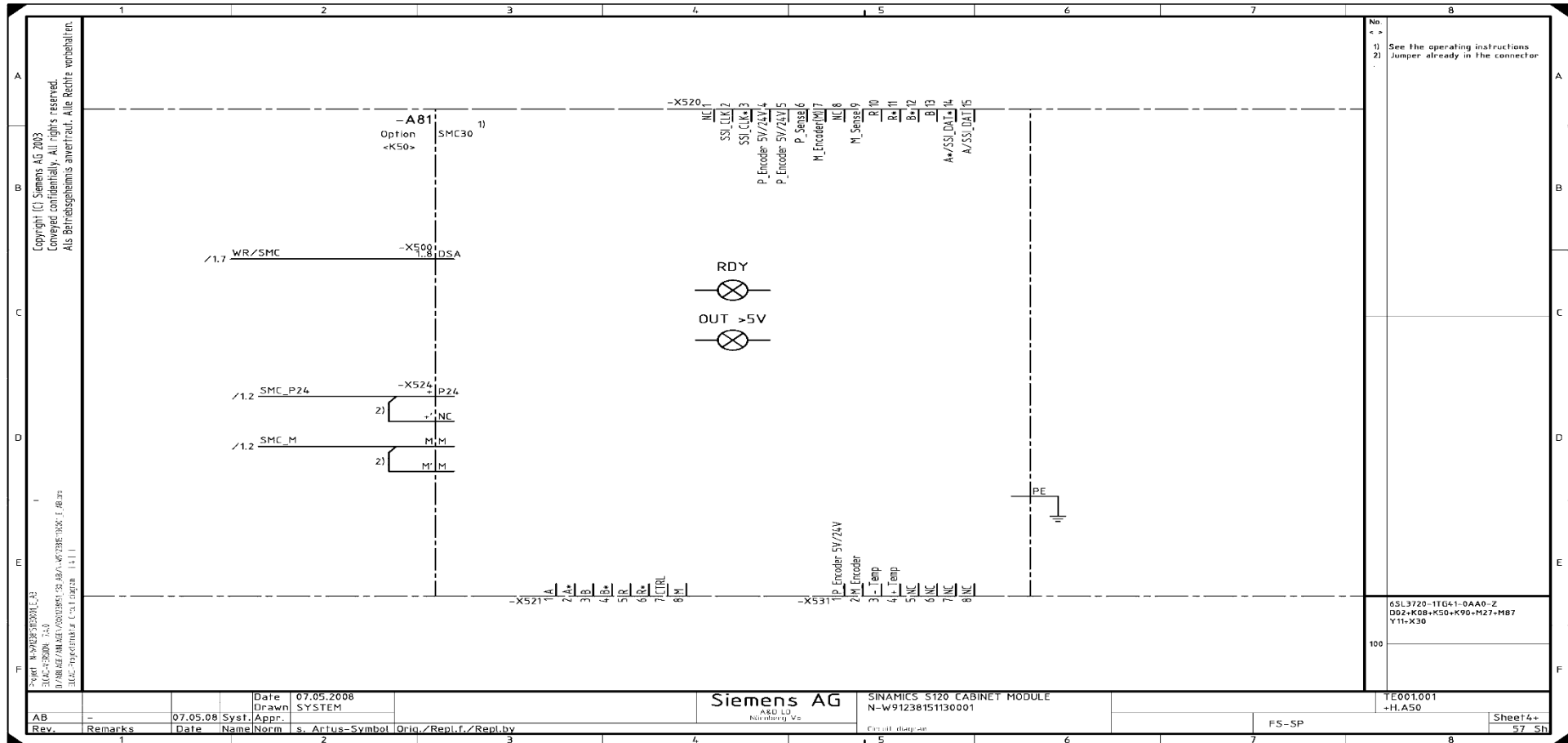
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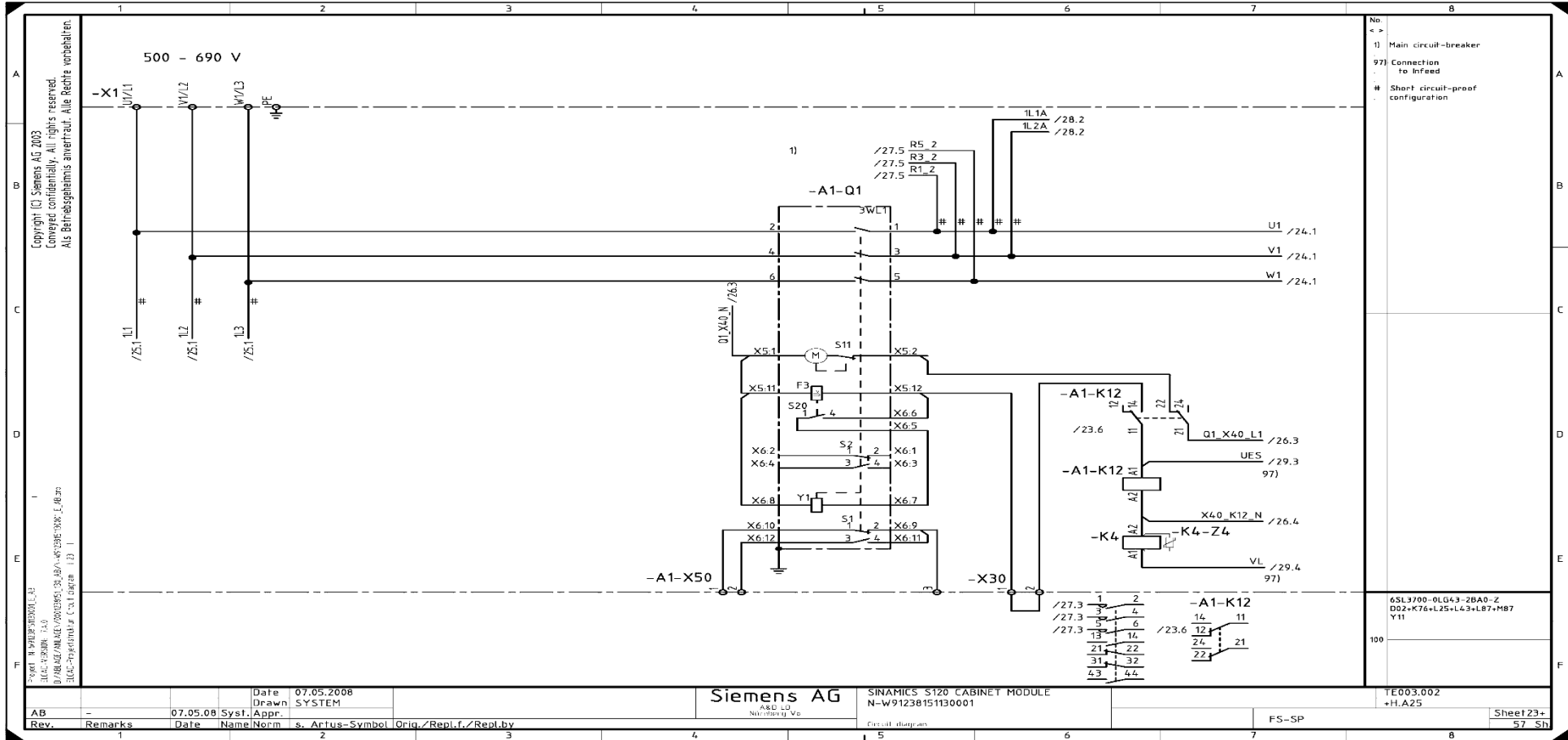
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ORC: J37/191/2003
CUI: RO841186
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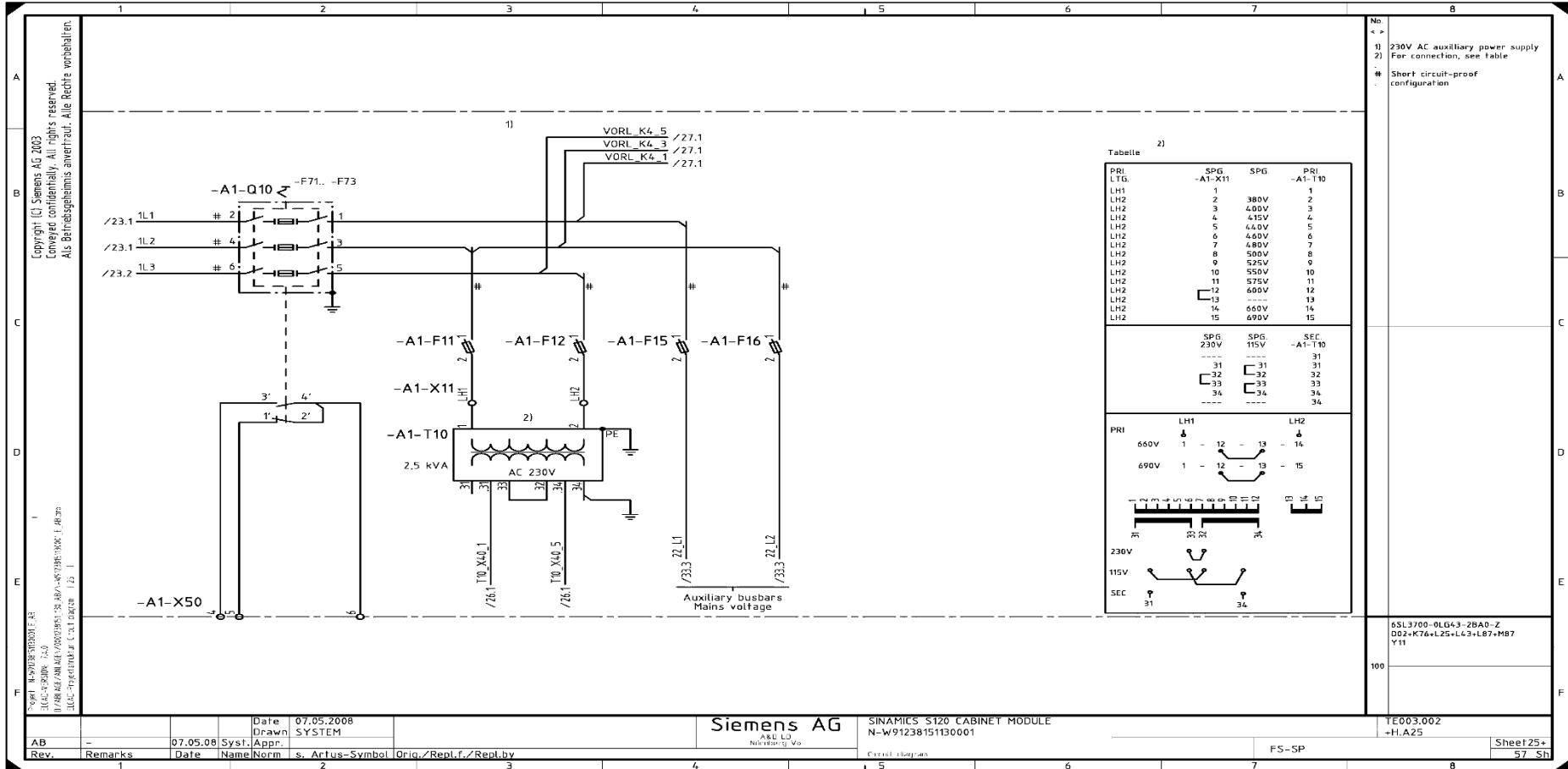
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E-mail: office@petal.ro

ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei





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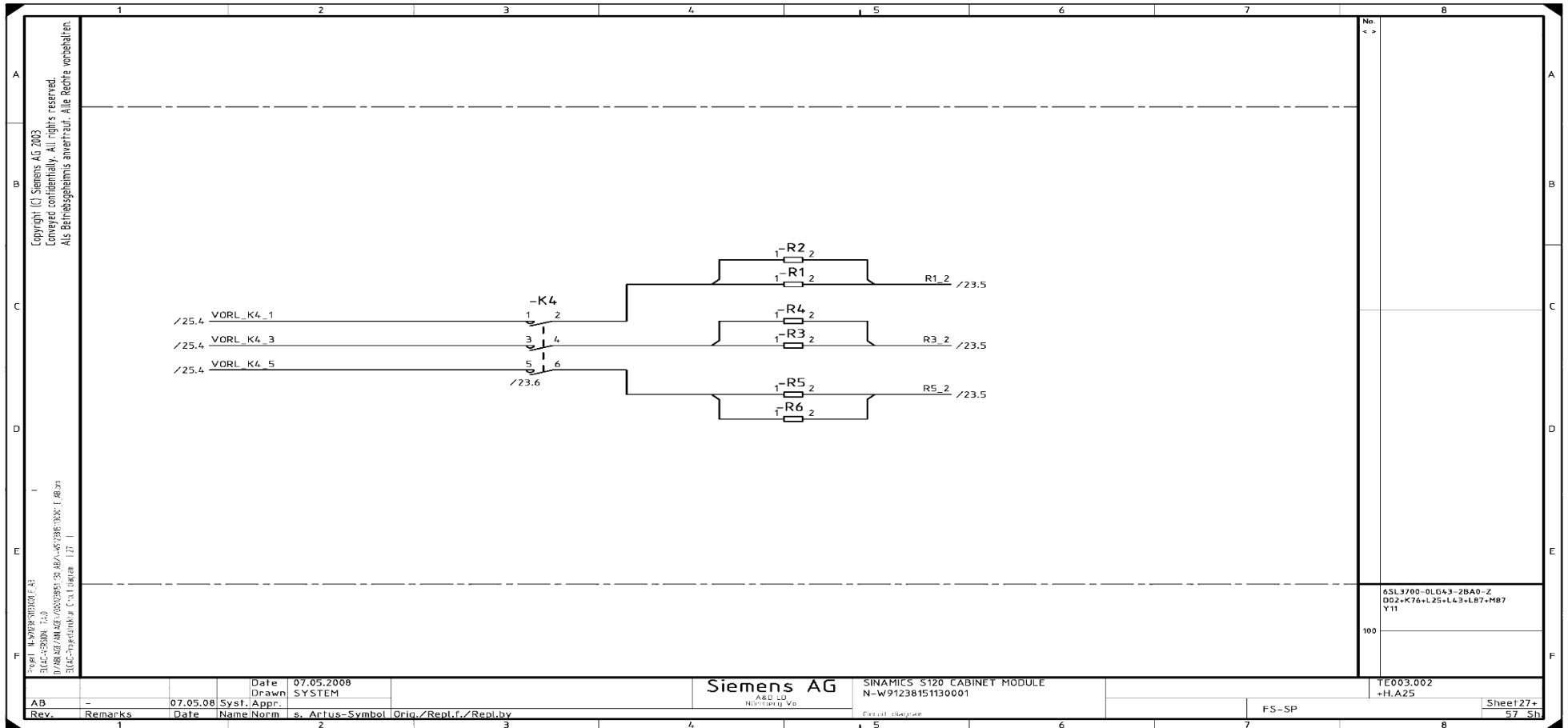
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E-mail: office@petal.ro

ORC: J37/191/2003
CUI: RO841186
Capital social: 2.971.825 lei



1		2		3		4			
Parameter	Data set	Parameter text	Online value	VECTOR 02	Unit	Modifiable	Access level	Minimum	Maximum
123	r302[0]	M	Motor code number of motor with DRIVE-CLIQ	0			2		
124	r303[0]	M	Motor status word from motor with DRIVE-CLIQ	0H			2		
125	p304[0]	M	Rated motor voltage	660	V rms	Commissioning (P10=1,3)	1	0	20000
126	p305[0]	M	Rated motor current	905.00	A rms	Commissioning (P10=1,3)	1	0	10000
127	p307[0]	M	Rated motor power	750.00	kW	Commissioning (P10=1,3)	1	-1000	10000
128	p308[0]	M	Rated motor power factor	0.870		Commissioning (P10=1,3)	1	0	1
129	p310[0]	M	Rated motor frequency	50.00	Hz	Commissioning (P10=1,3)	1	0	3000
130	p311[0]	M	Rated motor speed	995.0	RPM	Commissioning (P10=1,3)	1	0	21000
131	r313[0]	M	Motor pole pair number, actual (or calculated)	3			2		
132	p314[0]	M	Motor pole pair number	0		Commissioning (P10=1,3)	2	0	127
133	p320[0]	M	Motor rated magnetization current/short-circuit current	294.769	A rms	Operation	3	0	5000
134	p322[0]	M	Maximum motor speed	0.0	RPM	Commissioning (P10=1,3)	2	0	21000
135	r330[0]	M	Rated motor slip	0.250	Hz		3		
136	r331[0]	M	Motor magnetizing current/short-circuit current actual	294.769	A rms		3		
137	r332[0]	M	Rated motor power factor	0.870			3		
138	r333[0]	M	Rated motor torque	7197.96	Nm		3		
139	p335[0]	M	Motor cooling type	[1] Forced cooling		Ready to run	1		
140	r336[0]	M	Rated motor frequency actual	50.00	Hz		3		
141	r337[0]	M	Rated motor EMF	576.29	V rms		3		
142	r339[0]	M	Rated motor voltage	660.00	V rms		3		
143	p340[0]	D	Automatic calculation of motor/control parameters	[0] No calculation		Ready to run	2		
144	p341[0]	M	Motor moment of inertia	40.245037	kgm ²	Operation	3	0	10000

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Parameter	Default	Parameter text	Online value	VECTOR 02	Unit	Modifi- cable	Acce- ss level	MI nimum	Maxi- mum
145	p342[0]	M	Ratio between the total and motor moment of inertia	3.780		Operation	3	1	10000
146	p344[0]	M	Motor weight	5100.0	kg	Ready to run	3	0	50000
147	r345[0]	M	Nominal motor starting time	1.943	s		3		
148	p346[0]	M	Motor excitation build-up time	3.000	s	Operation	3	0	20
149	p347[0]	M	Motor de-excitation time	4.036	s	Operation	3	0	20
150	p349		System of units, motor equivalent circuit diagram data	[1] System of units, physical		Commissioning (P10,3)	1		
151	p350[0]	M	Motor stator resistance, cold	0.00765	Ohm	Operation	2	0	2000
152	p352[0]	M	Cable resistance	0.00203	Ohm	Operation	3	0	120
153	p353[0]	M	Motor series inductance	0.000	mH	Operation	2	0	1E+06
154	p354[0]	M	Motor rotor resistance cold / damping resistance d axis	0.00292	Ohm	Operation	3	0	300
155	p356[0]	M	Motor stator leakage inductance	0.16171	mH	Operation	3	0	1000
156	p358[0]	M	Motor rotor leakage inductance / damping inductance, d axis	0.16899	mH	Operation	3	0	1000
157	p360[0]	M	Motor magnetizing inductance/magn. inductance, d axis saturated	3.75462	mH	Operation	3	0	10000
158	p362[0]	M	Saturation characteristic flux 1	53.8	%	Operation	3	10	300
159	p363[0]	M	Saturation characteristic flux 2	86.9	%	Operation	3	10	300
160	p364[0]	M	Saturation characteristic flux 3	116.3	%	Operation	3	10	300
161	p365[0]	M	Saturation characteristic flux 4	131.8	%	Operation	3	10	300
162	p366[0]	M	Saturation characteristic l_mag 1	49.8	%	Operation	3	5	800
163	p367[0]	M	Saturation characteristic l_mag 2	83.4	%	Operation	3	5	800
164	p368[0]	M	Saturation characteristic l_mag 3	135.4	%	Operation	3	5	800
165	p369[0]	M	Saturation characteristic l_mag 4	215.5	%	Operation	3	5	800
166	p391[0]	M	Current controller adaptation, starting point KP	0.00	Arms	Operation	3	0	6000
167	p392[0]	M	Current controller adaptation, starting point KP adapted	0.00	Arms	Operation	3	0	6000
168	p393[0]	M	Current controller adaptation P gain scaling	100.00	%	Operation	3	0	1000
169	r395[0]	M	Stator resistance, actual	0.00967	Ohm		3		

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Parameter	Parameter text	Online value	VECTOR 02	Unit	Modifiable	Access level	Minimum	Maximum	
215	r466[0]	Encoder 2 identification number/serial number				3			
216	r467[0]	Encoder 3 identification number/serial number				3			
217	r477[0]	CO: Measuring gearbox, position difference, Encoder 1	0			1			
218	r479[0]	CO: Diagnostics encoder position actual value Gn_XIST1, Encoder 1	0			3			
219	p480[0]	CI: Signal source for encoder control word Gn_STW, Encoder 1	0		Ready to run	3			
220	r481[0]	CO: Encoder status word Gn_ZSW, Encoder 1	4000H			3			
221	r482[0]	CO: Encoder actual position value Gn_XACT1, Encoder 1	0			3			
222	r483[0]	CO: Encoder actual position value Gn_XACT2, Encoder 1	0			3			
223	r484[0]	CO: Redundant coarse encoder position + CRC Gn_XIST1, Encoder 1	0H			3			
224	r485[0]	CO: Measuring gearbox, encoder raw value incremental, Encoder 1	0			1			
225	r486[0]	CO: Measuring gearbox, encoder raw value absolute, Encoder 1	0			1			
226	r487[0]	Diagnostic encoder control word Gn_STW, Encoder 1	0H			3			
227	p488[0]	Measuring probe 1 input terminal, Encoder 1	[0] No meas probe		Operation	3			
228	p489[0]	Measuring probe 2 input terminal, Encoder 1	[0] No meas probe		Operation	3			
229	p491	Motor encoder fault response ENCODER	[0] Encoder fault results in OFF2		Ready to run	3			
230	p492	Square-wave encoder, maximum speed difference per sampling cycle	23.2	RPM	Operation	3	0	210000	
231	p495[0]	Equivalent zero mark, input terminal, Encoder 1	[0] No equivalent zero mark (evaluation of the encoder zero mark)		Operation	3			
232	p500	Technology application	[0] Standard drive (VECTOR)		Ready to run	2			
233	p505	Selecting the system of units	[1] System of units SI		Commissioning (P10,5)	1			
234	p570	Inhibit list: Number of effective values	0		Operation	2	0	50	
235	p571[0]	Inhibit list, motor/closed-loop control parameter calculation	[0] No parameter		Operation	2			
236	p572[0]	D Activate inhibit list	[0] No		Operation	2			
237	p573	Inhibit automatic reference value calculation	[1] Yes		Operation	2			
238	p578[0]	D Calculate parameters that are dependent on the technology/units	[0] No calculation		Ready to run	2			
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Parameter	Default	Parameter text	Online value	VECTOR 02	Unit	Modifi- cable	Access level	Min- imum	Max- imum
239	p600[0]	M Motor temperature sensor for monitoring	[0]	No sensor		Operation	2		
240	p601[0]	M Motor temperature sensor type	[2]	KTY84		Operation	2		
241	p603	CI: Motor temperature signal source	0			Ready to run	2		
242	p604[0]	M Motor overtemperature alarm threshold	130.0		°C	Operation	2	0	200
243	p605[0]	M Motor overtemperature fault threshold	145.0		°C	Operation	2	0	200
244	p606[0]	M Motor overtemperature timer	0.000		s	Operation	2	0	600
245	p607[0]	M Temperature sensor fault timer	0.100		s	Operation	2	0	600
246	p610[0]	M Motor overtemperature response	[1]	Alarm with reduction of I_max and fault		Ready to run	2		
247	p616[0]	M Motor overtemperature alarm threshold 1	130.0		°C	Operation	2	0	200
248	p620[0]	M Thermal adaptation, stator and rotor resistance	[1]	Resistances adapted to the temperatures of the thermal model		Operation	2		
249	p621[0]	M Temperature identification after restart	[0]	No temperature identification		Ready to run	2		
250	p622[0]	M Motor excitation time for temp_ident after powering-up again	1.345		s	Operation	3	0	20
251	p625[0]	M Motor ambient temperature	20		°C	Operation	3	-40	80
252	p626[0]	M Motor overtemperature, stator core	50		K	Operation	3	20	200
253	p627[0]	M Motor overtemperature, stator winding	80		K	Operation	3	20	200
254	p628[0]	M Rotor winding overtemperature	100		K	Operation	3	20	200
255	p640[0]	D Current limit	1357.50		A r m s	Operation	2	0	10000
256	p643[0]	M Overvoltage protection for synchronous motors	[0]	No measure		Commissioning (P10,3)	3		
257	p650[0]	M Actual motor operating hours	0		h	Ready to run	3	0	42949 67295
258	p651[0]	M Motor operating hours maintenance interval	0		h	Ready to run	3	0	99999
259	<input type="checkbox"/> p700[0]	C Macro Binector Input (BI)	0			Ready to run	1	0	99999 9
260	p806	BI: Inhibit master control	0			Ready to run	3		
261	<input type="checkbox"/> r807	BO: Master control active	0H				2		
262	<input type="checkbox"/> p809[0]	Copy Command Data Set CDS, Source Command Data Set	0			Ready to run	2	0	15
263	p810	BI: Command Data Set selection CDS bit 0	input_output_component_1 : r4022.2			Ready to run	3		
264	p811	BI: Command data set selection CDS bit 1	0			Ready to run	3		
265	<input type="checkbox"/> p819[0]	Copy Drive Data Set DDS, Source drive data set	0			Commissioning (P10,15)	2	0	31
266	<input type="checkbox"/> p820[0]	C BI: Drive data set selection DDS bit 0	0			Ready to run	3		
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Parameter	Parameter text	Online value VECTOR_02	Unit
345	p1041[0]	C BI: Motorized potentiometer manual/automatic	0
346	p1042[0]	C CI: Motorized potentiometer automatic setpoint	0
347	p1043[0]	C BI: Motorized potentiometer accept setpoint	0
348	p1044[0]	C CI: Motorized potentiometer setting value	0
349	r1045	CO: Mot. potentiometer speed setp. in front of ramp-fct. gen.	0.000
350	p1047[0]	D Motorized potentiometer ramp-up time	10.000
351	p1048[0]	D Motorized potentiometer ramp-down time	10.000
352	r1050	CO: Motor. potentiometer setpoint after the ramp-function generator	0.000
353	p1055[0]	C BI: Jog bit 0	0
354	p1056[0]	C BI: Jog bit 1	0
355	p1058[0]	D Jog 1 speed setpoint	0.000
356	p1059[0]	D Jog 2 speed setpoint	0.000
357	p1063[0]	D Speed limit setpoint channel	210000.000
358	p1070[0]	C CI: Main setpoint	Input_output_component_1 : r4055[0]
359	p1071[0]	C CI: Main setpoint scaling	100%
360	r1073	CO: Main setpoint effective	0.000
361	p1075[0]	C CI: Suppl setpoint	VECTOR_02 : r1050
362	p1076[0]	C CI: Supplementary setpoint scaling	100%
363	r1077	CO: Supplementary setpoint effective	0.000
364	r1078	CO: Total setpoint effective	0.000
365	p1080[0]	D Minimum speed	0.000
366	p1082[0]	D Maximum speed	1000.000
367	p1083[0]	D CO: Speed limit in positive direction of rotation	210000.000
368	r1084	Speed limit positive effective	1000.000

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Parameter	Default	Parameter text	Online value	VECTOR_02	Unit	Modifiable	Access level	Minimum	Maximum
369	p1085[0]	C Cl: Speed limit in positive direction of rotation	VECTOR_02 : p1083			Ready to run	3		
370	p1086[0]	D CO: Speed limit negative direction of rotation	-210000.000		R P M	Operation	2	-210000	0
371	r1087	Speed limit negative effective	-1000.000		R P M		3		
372	p1088[0]	C Cl: Speed limit negative direction of rotation	VECTOR_02 : p1086			Ready to run	3		
373	p1091[0]	D Skip speed 1	0.000		R P M	Operation	3	0	210000
374	p1092[0]	D Skip speed 2	0.000		R P M	Operation	3	0	210000
375	p1093[0]	D Skip speed 3	0.000		R P M	Operation	3	0	210000
376	p1094[0]	D Skip speed 4	0.000		R P M	Operation	3	0	210000
377	p1101[0]	D Skip speed bandwidth	0.000		R P M	Operation	3	0	210000
378	p1110[0]	C BI: Inhibit negative direction	0			Ready to run	3		
379	p1111[0]	C BI: Inhibit positive direction	0			Ready to run	3		
380	r1112	CO: Speed setpoint after minimum limiting	0.000		R P M		3		
381	p1113[0]	C BI: Direction reversal	VECTOR_02 : r2090.11			Ready to run	3		
382	r1114	CO: Setpoint after the direction of rotation limit	0.000		R P M		3		
383	p1115	Ramp-function generator selection	[0] Single ramp-function generator			Ready to run	3		
384	r1119	CO: Ramp-function generator setpoint at the input	0.000		R P M		3		
385	p1120[0]	D Ramp-function generator ramp-up time	5.000		s	Operation	1	0	999999
386	p1121[0]	D Ramp-function generator ramp-down time	5.000		s	Operation	1	0	999999
387	p1122[0]	C BI: Bypass ramp-function generator	0			Operation	3		
388	p1130[0]	D Ramp-function generator initial rounding-off time	0.000		s	Operation	2	0	30
389	p1131[0]	D Ramp-function generator final rounding-off time	0.000		s	Operation	2	0	30
390	p1134[0]	D Ramp-function generator rounding-off type	[0] Cont. smoothing			Operation	2		
391	p1135[0]	D OFF3 ramp-down time	3.000		s	Operation	2	0	600
392	p1136[0]	D OFF3 initial rounding-off time	0.000		s	Operation	2	0	30
393	p1137[0]	D OFF3 final rounding-off time	0.000		s	Operation	2	0	30
394	p1140[0]	C BI: Enables the ramp-function generator	VECTOR_02 : r2090.4			Ready to run	3		

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Parameter	Default	Parameter text	Online value	VECTOR_02	Unit	Modifi- cable	Acce- ss level	MI- nimum	Maxi- mum
395	p1141[0]	C BI: Start ramp-function generator	VECTOR_02 : r2090.5			Ready to run	3		
396	p1142[0]	C BI: Enable speed setpoint	VECTOR_02 : r2090.6			Ready to run	3		
397	p1143[0]	C BI: Ramp-function generator, accept setting value	0			Ready to run	3		
398	p1144[0]	C CI: Ramp-function generator setting value	0			Operation	3		
399	p1145[0]	D Ramp-function generator tracking intensity.	1.1			Operation	3	0	50
400	p1148[0]	D Ramp-function gen., tolerance for ramp-up and ramp-down active	19.80		RPM	Operation	3	0	1000
401	r1149	CO: Ramp-function generator, acceleration	0.00		1/s ²		3		
402	r1150	CO: Ramp-function generator speed setpoint at the output	0.000		RPM		3		
403	p1151[0]	D Ramp-function generator configuration	0H			Operation	2		
404	p1155[0]	C CI: Speed controller speed setpoint 1	0			Ready to run	3		
405	p1160[0]	C CI: Speed controller speed setpoint 2	0			Ready to run	3		
406	r1169	CO: Speed controller, speed setpoints 1 and 2	0.000		RPM		3		
407	r1170	CO: Speed controller, setpoint sum	0.000		RPM		3		
408	p1189[0]	D Speed setpoint configuration	3H			Operation	2		
409	r1197	Fixed speed setpoint, actual number	0				3		
410	r1198	CO/BO: Control word setpoint channel	0H				3		
411	r1199	CO/BO: Ramp-function generator status word	0H				3		
412	p1200[0]	D FlyRest oper mode	[0] Flying restart inactive			Operation	2		
413	p1203[0]	D Flying restart search rate factor	100		%	Operation	3	10	400
414	p1208[0]	BI: AR modification infeed, Infeed fault	0			Operation	3		
415	p1210	Automatic restart, mode	[0] Disables automatic restart			Operation	2		
416	p1211	Automatic restart, start attempts	3			Operation	3	0	10
417	p1212	Automatic restart, delay time start attempts	1.0		s	Operation	3	0.1	600
418	p1213	Automatic restart, monitoring time line supply return	0.0		s	Operation	3	0	1999
419	r1214	CO/BO: Automatic restart, status	0H				3		
420	p1215	Motor holding brake configuration	[0] No motor holding brake being used			Operation	2		
421	p1216	Motor holding brake, opening time	100		ms	Operation	2	0	10000
422	p1217	Motor holding brake closing time	100		ms	Operation	2	0	10000
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Parameter	Default	Parameter text	Online value	VECTOR 02	Unit	Modifiable	Access level	Minimum	Maximum
448	p1257[0]	D Vdc_min controller speed threshold	50.0		RPM	Operation	3	0	21000
449	r1258	CO: Vdc controller output	0.0		Arms		3		
450	p1272	Simulation mode	[0] Off			Ready to run	3		
451	p1278	Brake control, diagnostics evaluation	[0] Brake control with diagnostics evaluation			Operation	2		
452	p1280[0]	D Vdc controller or Vdc monitoring configuration (V/f)	[1] Enables Vdc_max controller			Operation	3		
453	r1282	Vdc_max controller switch-in level (V/f)	1116		V		3		
454	p1283[0]	D Vdc_max controller dynamic factor (V/f)	200		%	Operation	3	1	10000
455	p1285[0]	D Vdc_min controller switch-in level (kinetic buffering) (V/f)	76		%	Operation	3	65	150
456	r1286	Vdc_min controller switch-in level (kinetic buffering) (V/f)	703		V		3		
457	p1287[0]	D Vdc_min controller dynamic factor (kinetic buffering) (V/f)	200		%	Operation	3	1	10000
458	p1289[0]	D Vdc_max controller speed threshold (V/f)	7.0		RPM	Operation	3	0	21000
459	p1290[0]	D Vdc controller proportional gain (V/f)	16.64			Operation	3	0	100
460	p1291[0]	D Vdc controller integral time (V/f)	40		ms	Operation	3	0	10000
461	p1292[0]	D Vdc controller rate time (V/f)	166		ms	Operation	3	0	1000
462	p1293[0]	D Vdc controller output limit (V/f)	1.3		HZ	Operation	3	0	600
463	p1294	Vdc_max controller automatic detection ON signal level (V/f)	[1] Automatic detection enabled			Operation	3		
464	p1295[0]	D Vdc_min controller time threshold (V/f)	0.000		s	Operation	3	0	10000
465	p1296[0]	D Vdc_min controller response (kinetic buffering) (V/f)	[0] Buffer Vdc until undervoltage, n<p1297 -> F07405			Operation	3		
466	p1297[0]	D Vdc_min controller speed threshold (V/f)	50.0		RPM	Operation	3	0	21000
467	r1298	CO: Vdc controller output (V/f)	0.0		RPM		3		
468	p1300[0]	D Open-loop/closed-loop control operating mode	[20] Speed control (sensorless)			Ready to run	2		
469	p1310[0]	D Voltage boost permanent	50.0		%	Operation	2	0	250
470	p1311[0]	D Voltage boost at acceleration	0.0		%	Operation	2	0	250
471	p1320[0]	D V/f control programmable characteristic frequency 1	0.00		HZ	Operation	3	0	3000
472	p1321[0]	D V/f control programmable characteristic voltage 1	0.0		Vrms	Operation	3	0	10000

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602	p1658[0]	D Current setpoint filter 1 denominator natural frequency	1999.0		H z	Operation	3	0.5	16000
603	p1659[0]	D Current setpoint filter 1 denominator damping	0.700			Operation	3	0.001	10
604	p1660[0]	D Current setpoint filter 1 numerator natural frequency	1999.0		H z	Operation	3	0.5	16000
605	p1661[0]	D Current setpoint filter 1 numerator damping	0.700			Operation	3	0	10
606	p1662[0]	D Current setpoint filter 2 type	[1] Low pass: PT2			Operation	3		
607	p1663[0]	D Current setpoint filter 2 denominator natural frequency	1999.0		H z	Operation	3	0.5	16000
608	p1664[0]	D Current setpoint filter 2 denominator damping	0.700			Operation	3	0.001	10
609	p1665[0]	D Current setpoint filter 2 numerator natural frequency	1999.0		H z	Operation	3	0.5	16000
610	p1666[0]	D Current setpoint filter 2 numerator damping	0.700			Operation	3	0	10
611	p1699	Filter data acceptance	0			Operation	3	0	1
612	p1715[0]	D Current controller P gain	0.240			Operation	3	0	100000
613	p1717[0]	D Current controller integral-action time	6.40		m s	Operation	3	0	1000
614	r1728	De-coupling voltage, in-line axis	0		V r m s		3		
615	r1729	De-coupling voltage, quadrature axis	0		V r m s		3		
616	r1732	CO: Direct-axis voltage setpoint	0.0		V r m s		3		
617	r1733	CO: Quadrature-axis voltage setpoint	0.0		V r m s		3		
618	p1740[0]	D Gain resonance damping for sensorless closed loop control	0.025			Operation	3	0	10
619	p1744[0]	D Motor model speed threshold stall detection	40.00		R P M	Operation	3	0	210000
620	p1745[0]	D Motor model error threshold stall detection	60.0		%	Operation	3	0	1000
621	<input type="checkbox"/> p1750[0]	D Motor model configuration	0H			Operation	3		
622	<input type="checkbox"/> r1751	Motor model status	E00DH				3		
623	p1752[0]	D Motor model changeover speed operation with encoder	200.0		R P M	Operation	3	0	210000
624	p1753[0]	D Motor model changeover speed hysteresis operation with encoder	25.0		%	Operation	3	0	90
625	p1755[0]	D Motor model changeover speed sensorless operation	66.7		R P M	Operation	3	0	210000

Date	28-Feb-22	660V/750kW	
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Codreanu Checked			
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		Parameter	Parameter text	Online value VECTOR_02	Unit	Modifi- cable	Access level	Min- imum	Maxi- mum	
A	PARAMETERII CONVERTIZOR ACTIONARE POMPA ACE	700	r2089[0]	CO: Send binector-connector converter status word, Status word 1	EB31H			3		
		701	r2090	BO: IF1 PROFIBUS PZD1 receive bit-serial	406H			3		
		702	r2091	BO: IF1 PROFIdrive PZD2 receive bit-serial	30D4H			3		
		703	r2092	BO: IF1 PROFIdrive PZD3 receive bit-serial	0H			3		
		704	r2093	BO: IF1 PROFIdrive PZD4 receive bit-serial	0H			3		
		705	r2094	BO: Connector-binector converter binector output	0H			3		
		706	r2095	BO: Connector-binector converter binector output	0H			3		
		707	p2098[0]	Inverter connector-binector converter binector output	0H		Operation	3		
		708	p2099[0]	CI: Connector-binector converter signal source	0		Operation	3		
		709	p2100[0]	Setting the fault number for fault response	0		Operation	3	0	65535
		710	p2101[0]	Setting the fault response	[0] NONE		Operation	3		
		711	p2103[0]	C BI: 1. Acknowledge faults	VECTOR_02 : r2090.7		Operation	3		
		712	p2104[0]	C BI: 2. Acknowledge faults	0		Operation	3		
		713	p2105[0]	C BI: 3. Acknowledge faults	0		Operation	3		
		714	p2106[0]	C BI: External fault 1	1		Operation	3		
		715	p2107[0]	C BI: External fault 2	1		Operation	3		
		716	p2108[0]	C BI: External fault 3	1		Operation	3		
		717	r2109[0]	Fault time removed in milliseconds	0		ms		3	
		718	r2110[0]	Alarm number	0				2	
		719	p2111	Alarm counter	0			Operation	3	0 65535
		720	p2112[0]	C BI: External alarm 1	1			Operation	3	
		721	p2116[0]	C BI: External alarm 2	1			Operation	3	
		722	p2117[0]	C BI: External alarm 3	1			Operation	3	
		723	p2118[0]	Sets the message number for message type.	0			Operation	3	0 65535
		724	p2119[0]	Setting the message type	[1] Fault (F)			Operation	3	
		725	r2121	Counter, alarm buffer changes	15				3	
		726	r2122[0]	Alarm code	0				2	
		727	r2123[0]	Alarm time received in milliseconds	0		ms		3	
		728	r2124[0]	Alarm value	0				3	
		729	r2125[0]	Alarm time removed in milliseconds	0		ms		3	
		730	p2126[0]	Setting fault number for acknowledge mode	0			Operation	3	0 65535
		731	p2127[0]	Sets acknowledgement mode	[1] Acknowledgement only using POWER ON			Operation	3	
732	p2128[0]	Selecting fault/alarm code for trigger	0			Operation	3	0 65535		
733	r2129	CO/BO: Trigger word for faults and alarms	0H				3			
734	r2130[0]	Fault time received in days	0				3			
		Date	28-Feb-22							
		Oprea Editor		660V/750kW						
A1.4		25.10.2021	Codreanu Checked							
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1		2		3		4			
Parameter	Data set	Parameter text	Online value VECTOR 02	Unit	Modifiable	Access level	Minimum	Maximum	
841	p3838[0]	D Friction characteristic, value M8	0.00	Nm	Ready to run	2	-1E+06	1E+06	
842	p3839[0]	D Friction characteristic, value M9	0.00	Nm	Ready to run	2	-1E+06	1E+06	
843	r3840	CO/BO: Friction characteristic, status word	101H			2			
844	r3841	CO: Friction characteristic output	0.00	Nm		2			
845	p3842	Friction characteristic activation	[0] Friction characteristic de-activated		Ready to run	2			
846	p3845	Friction characteristic record activation	[0] Friction characteristic record de-activated		Ready to run	2			
847	p3846[0]	D Friction characteristic record ramp-up/ramp-down time	10.000	s	Ready to run	2	0	999999	
848	p3847[0]	D Friction characteristic record warm-up time	0.000	s	Ready to run	2	0	3600	
849	p3900	Completion of quick commissioning	[0] No quick parameterization		Commissioning (P10=1)	1			
850	p3902[0]	P Power unit EEPROM Vdc calibration	1018		Ready to run	3	0	4294967295	
851	r3925[0]	D Identification final display	DH			3			
852	r3927[0]	D Motor data identification control word	60H			3			
853	r3928[0]	D Rotating measurement configuration	1FH			3			
854	p3981	Faults, acknowledge drive object	0		Operation	2	0	1	
855	p3985	Master control mode selection	[0] Change master control for STW1.0 = 0		Operation	3			
856	r3986	Parameter count	1456			3			
857	r3996	Parameter write inhibit status	0			1			
858	p4600[0]	E Motor temperature sensor 1 sensor type	[0] No sensor available		Operation	2			
859	p4601[0]	E Motor temperature sensor 2 sensor type	[0] No sensor available		Operation	2			
860	p4602[0]	E Motor temperature sensor 3 sensor type	[0] No sensor available		Operation	2			
861	p4603[0]	E Motor temperature sensor 4 sensor type	[0] No sensor available		Operation	2			
862	r4620[0]	Motor temperatures SME, SME temperature channel 1	-200	°C		3			
863	r8850[0]	CO: IF2 PZD receive word, PZD 1	0H			3			
864	p8851[0]	CI: IF2 PZD send word, PZD 1	0		Operation	3			
865	r8853[0]	IF2 diagnostics PZD send, PZD 1	0H			3			
866	r8860[0]	CO: IF2 PZD receive double word, PZD 1 + 2	0H			3			
867	p8861[0]	CI: IF2 PZD send double word, PZD 1 + 2	0		Operation	3			
868	r8863[0]	IF2 diagnostics PZD send double word, PZD 1 + 2	0H			3			
		Date	28-Feb-22	660V/750kW					
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1		2		3		4			
Parameter	Default	Parameter text	Online value	VECTOR 02	Unit	Modifiable	Access level	Minimum	Maximum
892	p9319	SI motion fine resolution G1_XIST1 (Motor Module)	11			Commissioning (P10,95)	3	2	18
893	p9320	SI motion spindle pitch (Motor Module)	10.0000		mm	Commissioning (P10,95)	3	0.1	8388
894	<input type="checkbox"/> p9321[0]	SI motion gearbox encoder/load denominator (Motor Module), Gearbox 1	1			Commissioning (P10,95)	3	1	214700000
895	<input type="checkbox"/> p9322[0]	SI motion gearbox encoder/load numerator (Motor Module), Gearbox 1	1			Commissioning (P10,95)	3	1	214700000
896	p9326	SI motion encoder assignment (Motor Module)	1			Commissioning (P10,95)	3	1	3
897	<input type="checkbox"/> p9328[0]	SI Motion Sensor Module Node Identifier (Motor Module)	0H			Commissioning (P10,95)	3	0H	FFH
898	p9330	SI motion standstill tolerance (Motor Module)	1.000		mm	Commissioning (P10,95)	3	0	100
899	<input type="checkbox"/> p9331[0]	SI motion SLS limit values (Motor Module), Limit value SLS1	2000.00		mm/min	Commissioning (P10,95)	3	0	1E+06
900	p9342	SI motion act val comparison tol (crosswise) (Motor Module)	0.1000		mm	Commissioning (P10,95)	3	0.001	360
901	p9346	SI motion SSM velocity limit (Motor Module)	20.00		mm/min	Commissioning (P10,95)	3	0	1E+06
902	p9348	SI motion SBR actual velocity tolerance (Motor Module)	300.00		mm/min	Commissioning (P10,95)	3	0	120000
903	p9349	SI motion slip velocity tolerance (Motor Module)	6.00		mm/min	Commissioning (P10,95)	3	0	6000
904	p9351	SI Motion SLS changeover delay time (Motor Module)	100000.00		μs	Commissioning (P10,95)	3	0	6E+08
905	p9352	SI Motion transition time STOP C to SOS (Motor Module)	100000.00		μs	Commissioning (P10,95)	3	0	6E+08
906	p9353	SI Motion transition time STOP D to SOS (Motor Module)	100000.00		μs	Commissioning (P10,95)	3	0	6E+08
907	p9355	SI motion transition time STOP F to STOP B (Motor Module)	0.00		μs	Commissioning (P10,95)	3	0	6E+08
908	p9356	SI motion pulse cancelation delay time (Motor Module)	100000.00		μs	Commissioning (P10,95)	3	0	6E+08
909	p9357	SI motion pulse cancelation test time (Motor Module)	100000.00		μs	Commissioning (P10,95)	3	0	1E+07

PARAMETERII CONVERTIZOR ACTIONARE POMPA ACE

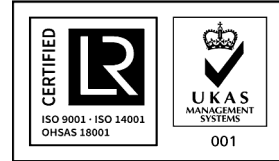
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			Standard

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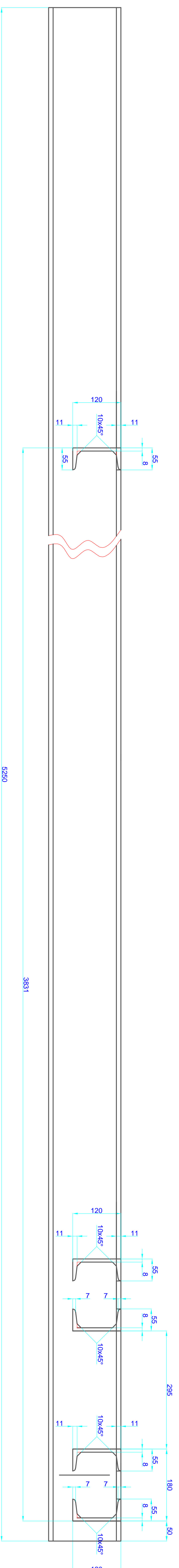
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CUI: RO841186
Capital social: 2.971.825 lei

1		2		3		4			
Parameter	Default	Parameter text	Online value	VECTOR 02	Unit	Modifiable to	Access level	Minimum	Maximum
950	p9551	SI motion SLS (SG) changeover delay time (Control Unit)	100.00		ms	Commissioning (P10,95)	3	0	60000
951	p9552	SI motion transition time STOP C to SOS (SBH) (Control Unit)	100.00		ms	Commissioning (P10,95)	3	0	60000
952	p9553	SI motion transition time STOP D to SOS (SBH) (Control Unit)	100.00		ms	Commissioning (P10,95)	3	0	60000
953	p9555	SI motion transition time STOP F to STOP B (Control Unit)	0.00		ms	Commissioning (P10,95)	3	0	60000
954	p9556	SI motion pulse cancelation delay time (Control Unit)	100.00		ms	Commissioning (P10,95)	3	0	60000
955	p9557	SI motion pulse cancelation test time (Control Unit)	100.00		ms	Commissioning (P10,95)	3	0	10000
956	p9558	SI motion acceptance test mode time limit (Control Unit)	40000.00		ms	Commissioning (P10,95)	3	5000	10000
957	p9559	SI motion forced checking procedure timer (Control Unit)	8.00		h	Commissioning (P10,95)	3	0	9000
958	p9560	SI motion pulse cancelation shutdown velocity (Control Unit)	0.00		mm/min	Commissioning (P10,95)	3	0	6000
959	<input type="checkbox"/> p9563[0]	SI motion SLS (SG)-specific stop response (Control Unit), Limit value SLS1	[2] STOP C			Commissioning (P10,95)	3		
960	p9570	SI motion acceptance test mode (Control Unit)	[0] [00 hex] De-select the acceptance test mode			Operation	3		
961	r9571	SI motion acceptance test status (Control Unit)	[0] [00 hex] Acc_mode inactive				3		
962	<input type="checkbox"/> r9590[0]	SI motion version safety motion monitoring (Control Unit), Safety Version (major release)	2				3		
963	<input type="checkbox"/> p9601	SI enable, functions integrated in the drive (Control Unit)	0H			Commissioning (P10,95)	3		
964	p9602	SI enable Safe Brake Control (Control Unit)	[0] Inhibit SBC			Commissioning (P10,95)	3		
965	p9610	SI PROFIsafe address (Control Unit)	0H			Commissioning (P10,95)	3	0H	FFFEH
966	<input type="checkbox"/> p9620[0]	BI: SI signal source for STO (SH)/SBC/SS1 (Control Unit)	0			Commissioning (P10,95)	3		
967	p9650	SI SGE changeover tolerance time (Control Unit)	500.00		ms	Commissioning (P10,95)	3	0	2000
968	p9652	SI Safe Stop 1 delay time (Control Unit)	0.00		s	Commissioning (P10,95)	3	0	300
969	p9658	SI transition time STOP F to STOP A (Control Unit)	0.00		ms	Commissioning (P10,95)	3	0	30000
970	p9659	SI forced checking procedure timer	8.00		h	Commissioning (P10,95)	3	0	9000
		Date	28-Feb-22						
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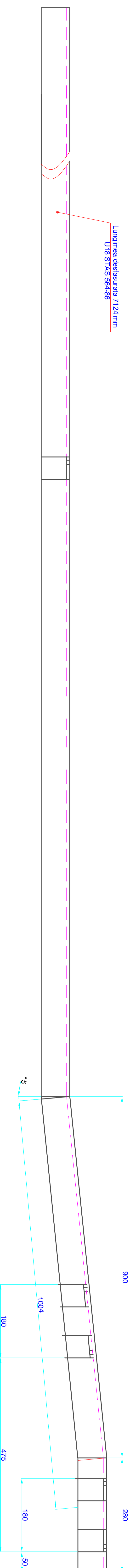
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Parameter	Data set	Parameter text	Online value	VECTOR 02	Unit	Modifiable	Access level	Minimum	Maximum
1019	p9850	SI SGE changeover tolerance time (Motor Module)	500000.00		μs	Commissioning (P10,95)	3	0	2E+06
1020	p9852	SI Safe Stop 1 delay time (Motor Module)	0.00		ms	Commissioning (P10,95)	3	0	300000
1021	p9858	SI transition time STOP F to STOP A (Control Unit)	0.00		μs	Commissioning (P10,95)	3	0	3E+07
1022	<input type="checkbox"/> r9870[0]	SI version safety functions integrated in drive (Motor Module), Safety Version (major release)	2				3		
1023	<input type="checkbox"/> r9871	SI common functions (Motor Module)	DH				3		
1024	<input type="checkbox"/> r9872	CO/BO: SI status list (Motor Module)	0H				2		
1025	r9880	SI monitoring clock cycle (Motor Module)	16.00		ms		3		
1026	<input type="checkbox"/> r9881[0]	SI Motion Sensor Module Node Identifier second channel	30H				3		
1027	<input type="checkbox"/> r9890[0]	SI version (Sensor Module), Safety Version (major release)	0				3		
1028	<input type="checkbox"/> r9894[0]	SI crosswise comparison list (Motor Module)	1				3		
1029	r9895	SI diagnostics STOP F (Motor Module)	0				2		
1030	r9898	SI actual checksum SI parameters (Motor Module)	73DA52EDH				3		
1031	p9899	SI reference checksum SI parameters (Motor Module)	0H			Commissioning (P10,95)	3	0H	FFFF FFFF H
PARAMETERII CONVERTIZOR ACTIONARE POMPA ACE									
		Date	28-Feb-22						
		Oprea Editor			660V/750kW				
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ANEXA 1

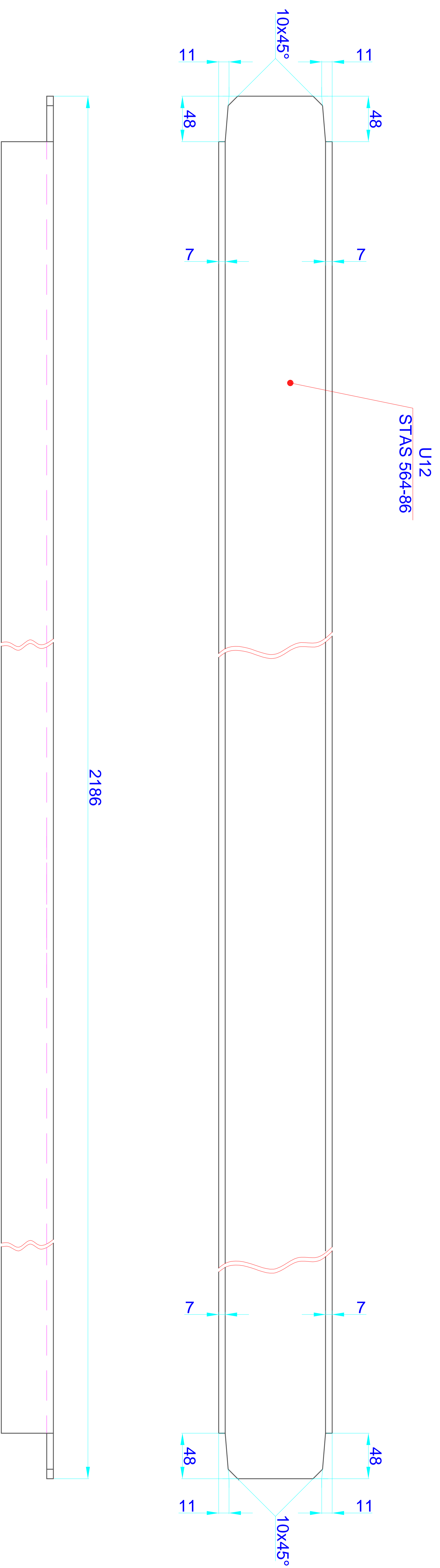
Proiectul Tehnic pentru
Ansamblul echipament Instalație inovatoare pentru cimentare
și operațiuni speciale la sondă



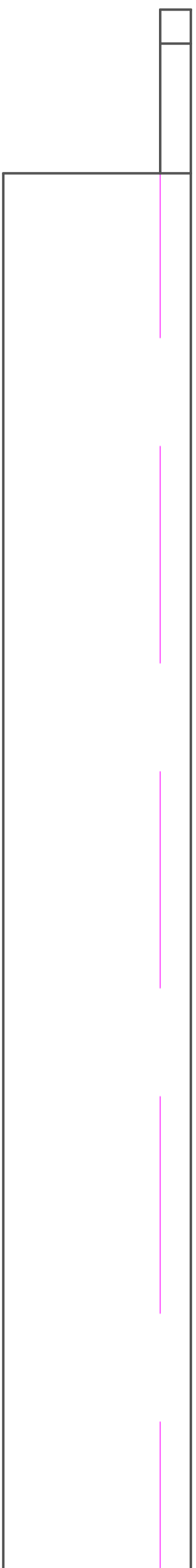
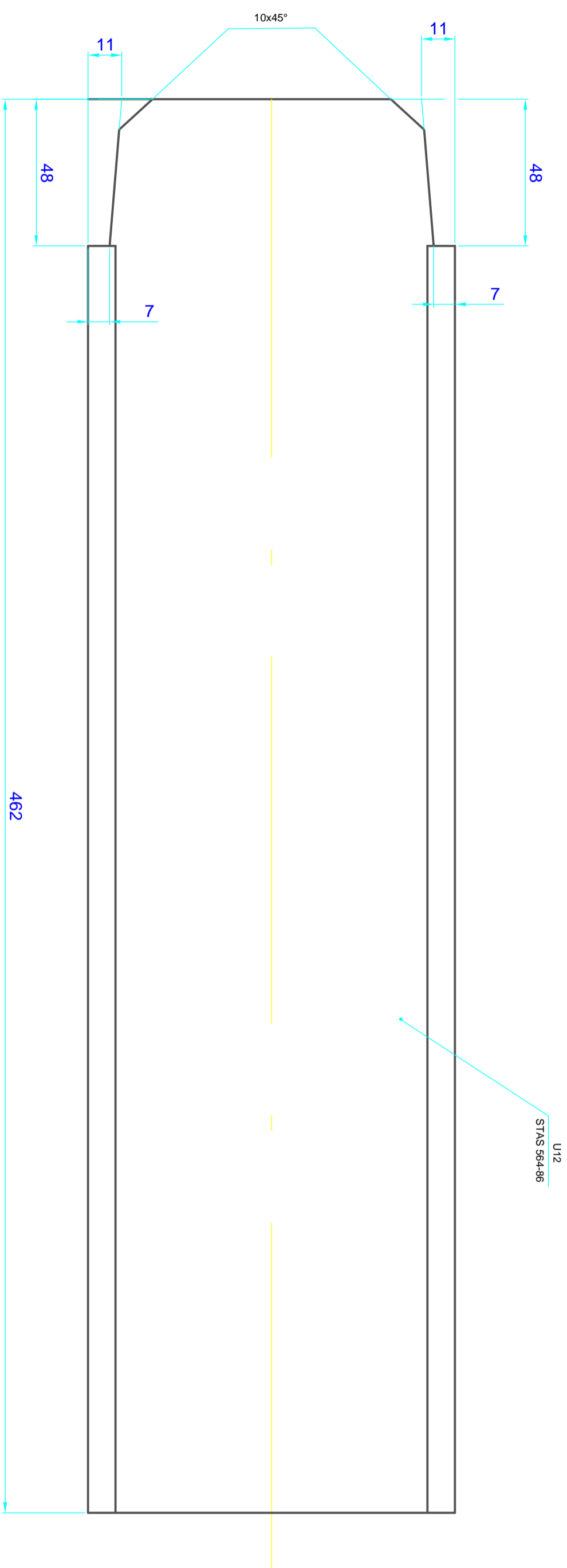
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 - 1 bucată vedere ca în desen
 - 1 bucată vedere în oglindă



Proiectant	Ing. S. Tudor	Client	INCIDIE ICPE-CA Bucuresti
Desenat	A. Vasilescu	Proiect	Patrimonia
Verificat	Ing. G. Musat	Desen	LONGERON
Aprobat	Ing. S. Tudor	Desen nr.	105.80-02.00.01.0
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Format: A4 (210x297)	Data: 10.08.2022		



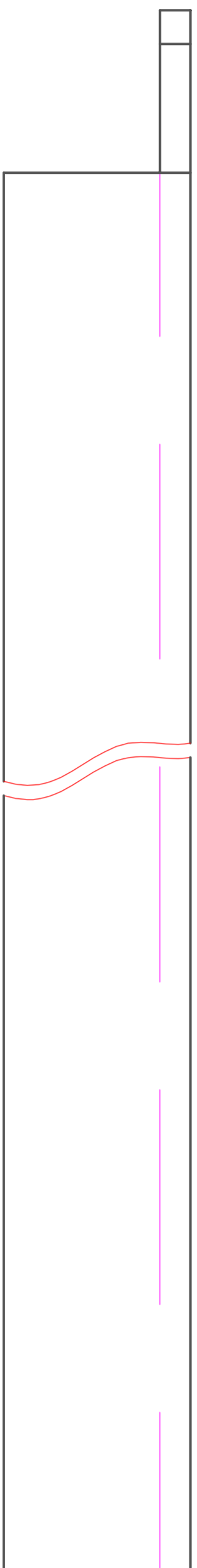
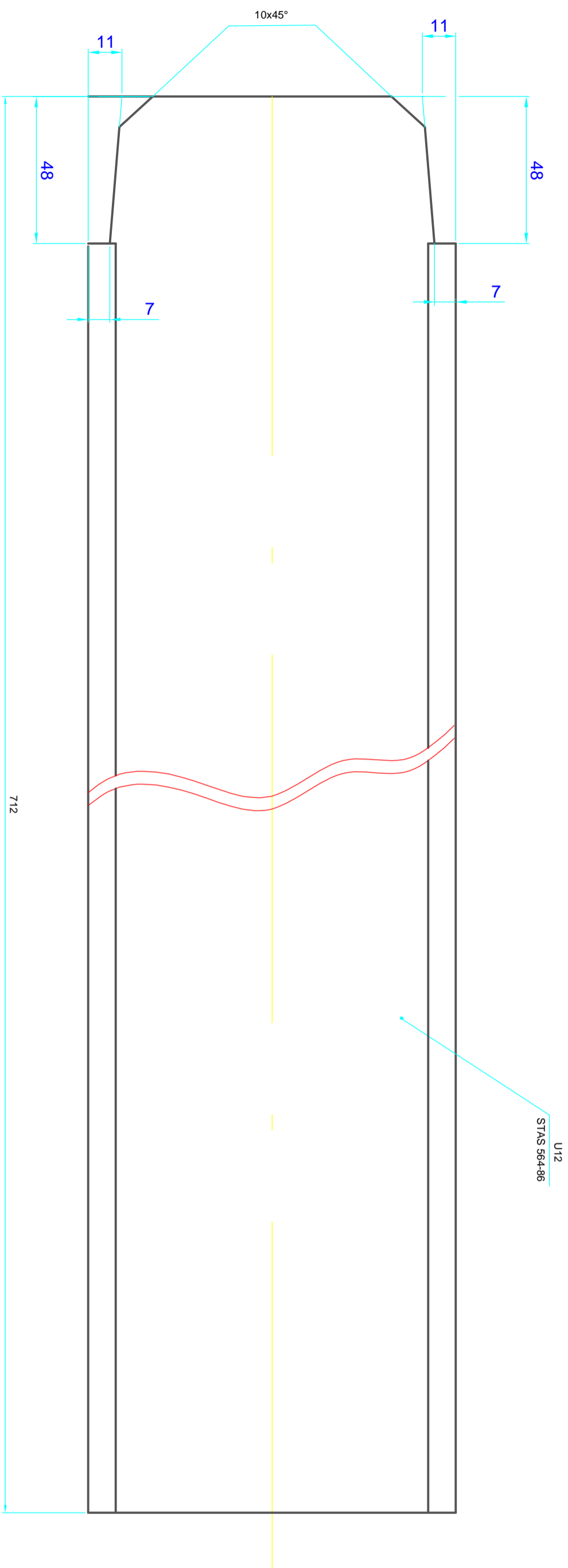
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Proiectat	ing. S. Tudor	S235J2	Client	Platforma	
Desenat	A. Vasilescu	SR EN 10025-2:2019	Proiect	TRAVERSA	
Verificat	ing. G. Musat		Desen		
Aprobat	dr.ing. Marin	Greutate: 26,650kg			
		Unitate masura: mm			
		Tolerante generale: EN ISO 13920 clasele B&F			
		Simboluri sudura: EN 22553			
		1:5			
		Format: A3 (297x420)	Data: 27.07.2022		
			Desen nr.	Page: Rev.	
			Poz 6	1/1	0



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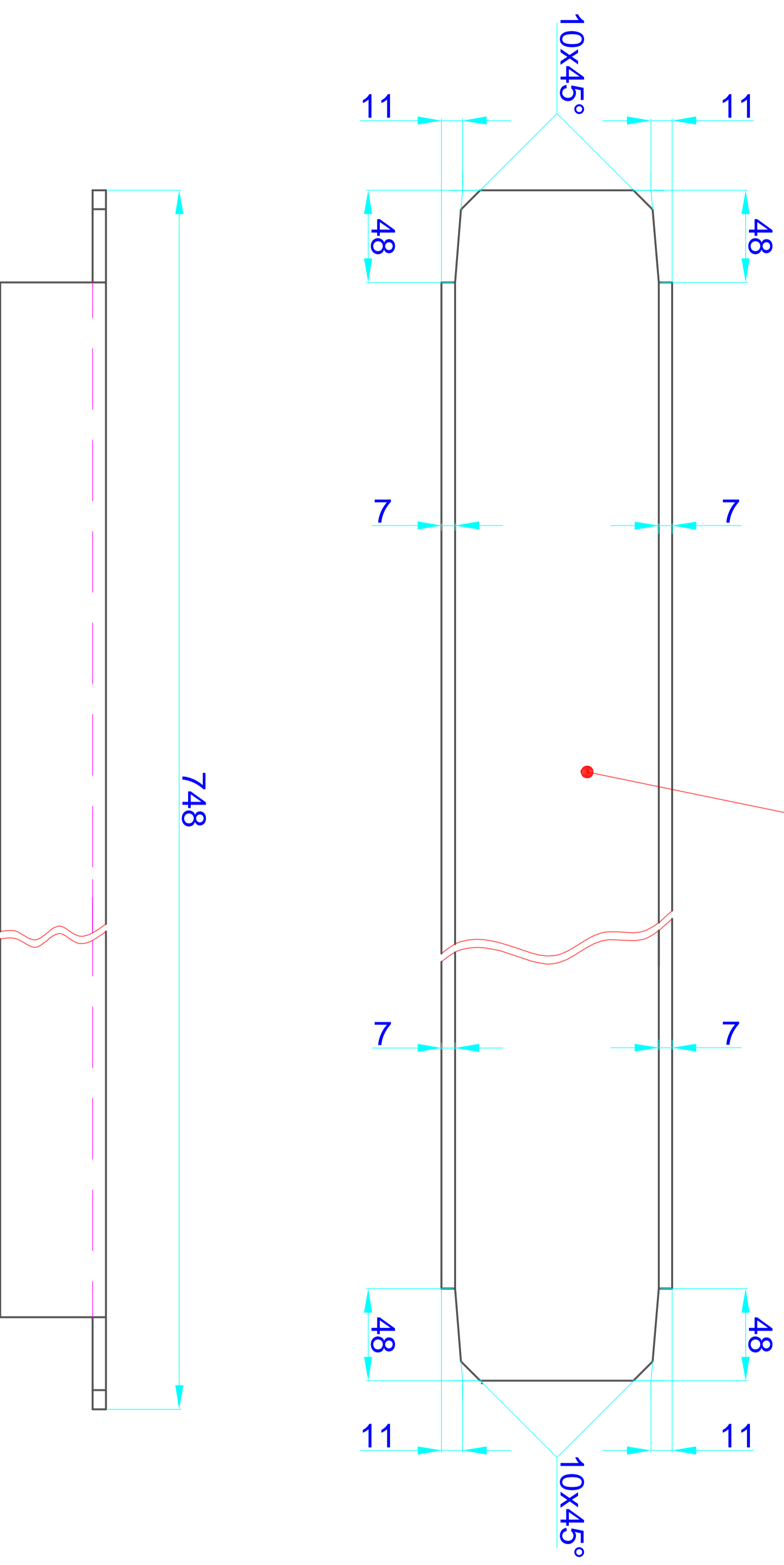
- 1 bucata vedere ca in desen
- 1 bucata vedere in oglinda

Proiectat	Ing. S. Tudor		
Desenat	Ing. F. Jiancu	S235J2	
Verificat	Ing. G. Musat	SR EN 10264-2:2019	
Aprobat	Dr. Ing. G. Marin	Weighting 0,00 kg	
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		Proiect	TRAVERSA
		Desen	
		Drawing No.	Poz 2
		Pag: Rev:	1/1 0

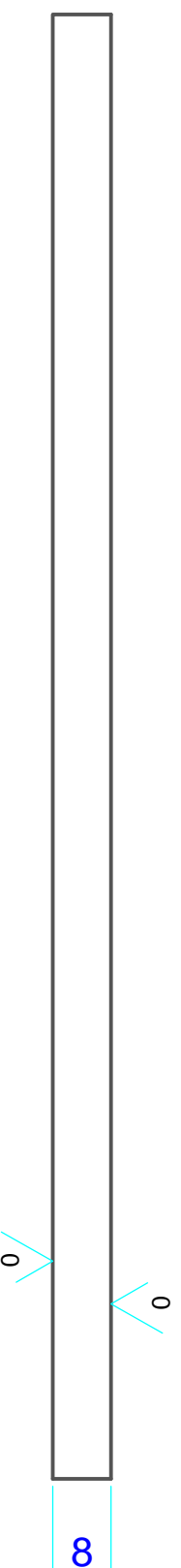
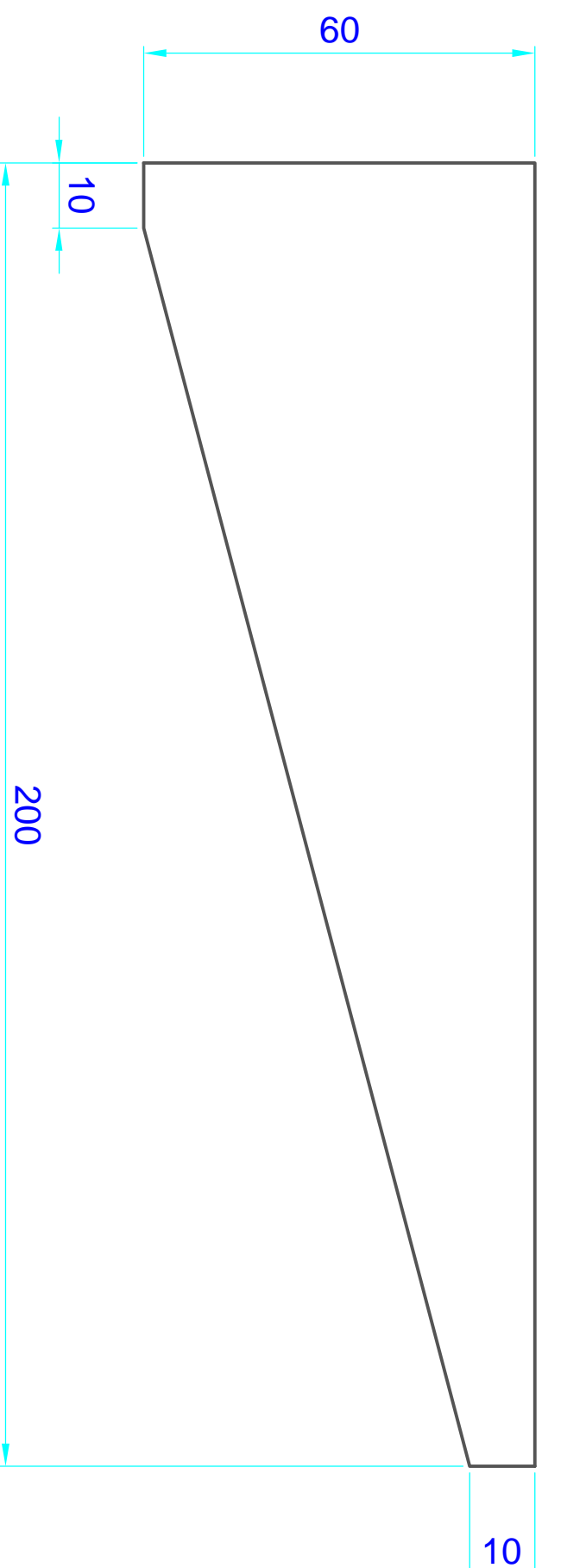


Proiectat	Ing. S. Tudor				
Desenat	Ing. F. Jiancu	S235J2			
Verificat	Ing. G. Musat	Sr EN 10264-2:2019			
Aprobat	Dr. Ing. G. Marin	Weighting 0,00 kg			
1:1	Unitate masura mm				
	Tolerante generale: EN ISO 2825 Tolerante speciale: EN ISO 2825				
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Proiect	TRAVERSA				
Desen					
Drawing No.	Poz 9				
Page	1/1				
Rev.	0				

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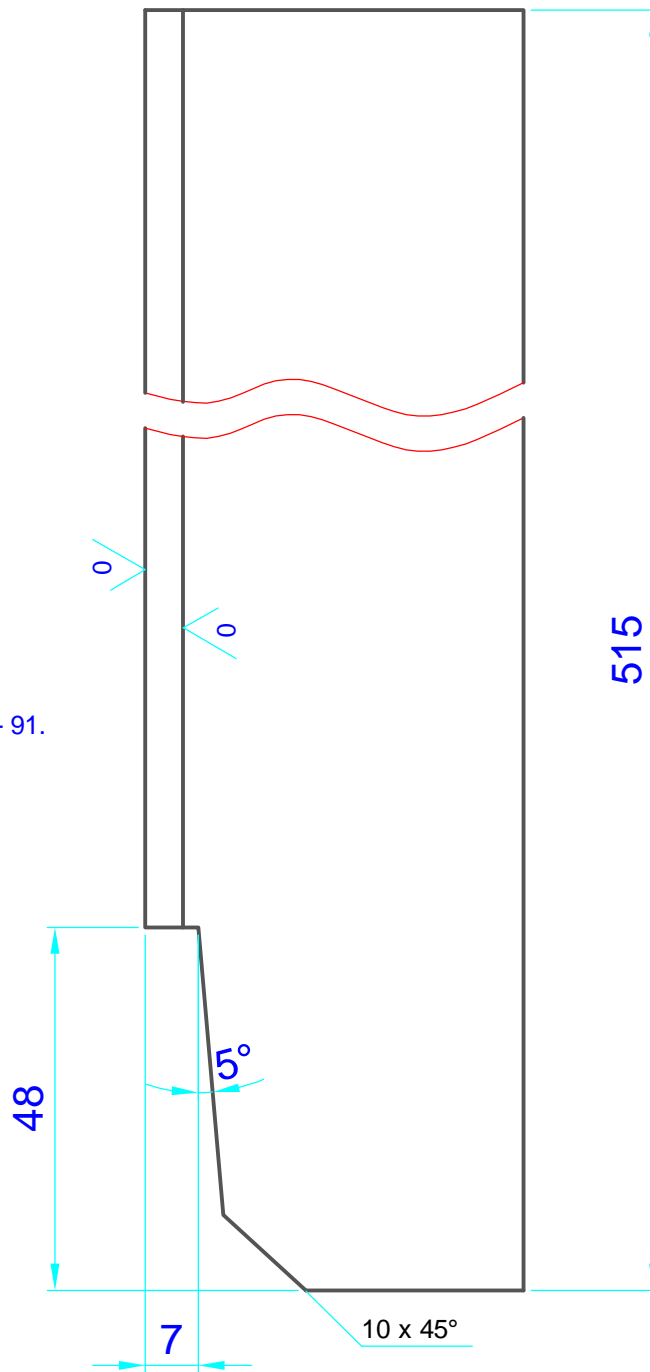


Proiectat	Ing. S. Tudor	S235J2	Client	INCIDIE	DEPARTMENT
Desenat	A. Vasilescu	SR EN 10025-2:2019	Client	ICPE-CA	IPCUP
Verificat	Ing. G. Musat		Proiect	BUCHAREST	ROBESIT
Aprobat	dr. Ing. G. Marin	Greutate: 26,650 kg	Desen	Platforma	
		Unitate masurazmm		TRAVERSA	
		Tolerante generale:			
		EN ISO 13920 clasa B&F			
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			Desen nr.	Poz 10	Page: Rev
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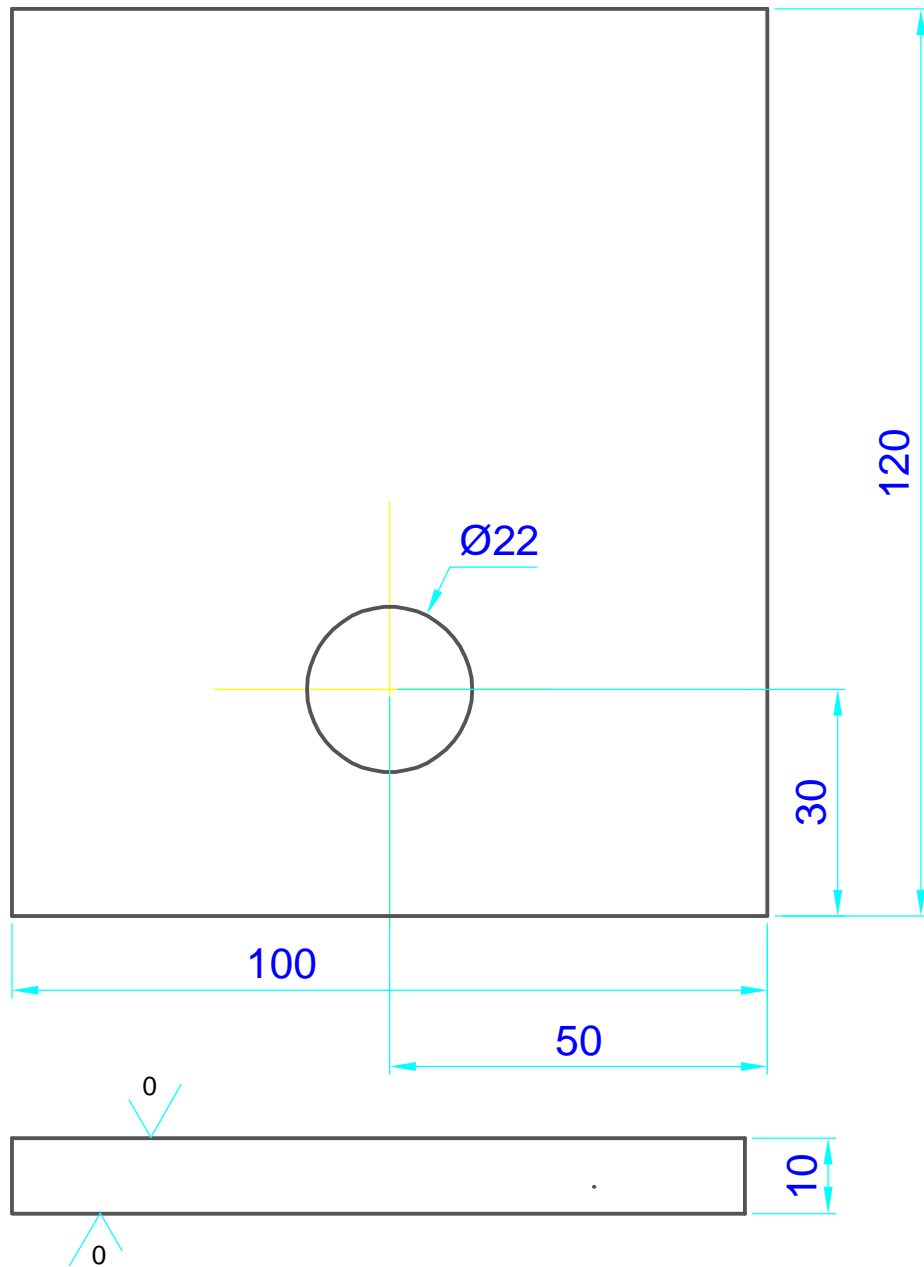
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Proiectat	ing. S. Tudor	S235J2	Client
Desenat	F. Iancu	SR EN 10025-2:2019	-----
Verificat	ing. G. Musat		Proiect
Aprobat	dr.ing. G. Marin	Greutate: 0,308 kg	Platforma
		Unitate masuraz: mm	Desen
		Tolerante generale:	NERVURA
		EN ISO 13920 clasele B&F	Desen nr.
		Simboluri sudura: EN 22553	poz 3
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 - 2 bucati vedere in oglinda

				INCDIE ICPE- CA Bucuresti		<small>DEPARTAMENT</small> IPCUP <small>PLOIESTI</small>		
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Desenat	A. Vasilescu		Proiect					Platforma
Verificat	ing. G. Musat		Desen					SUPORT
Aprobat	dr.ing.G.Marin		Desen nr.					Page: Rev.
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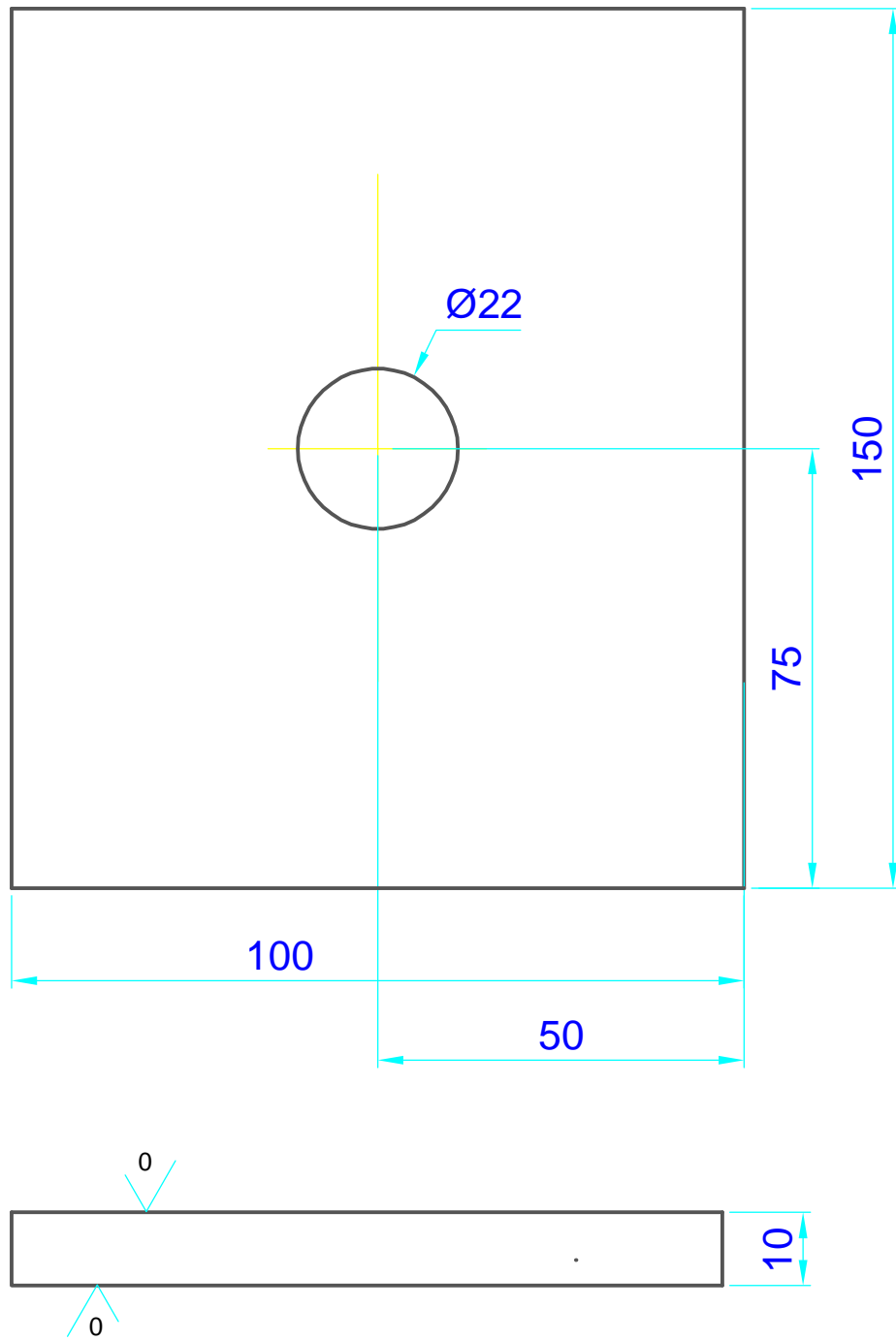


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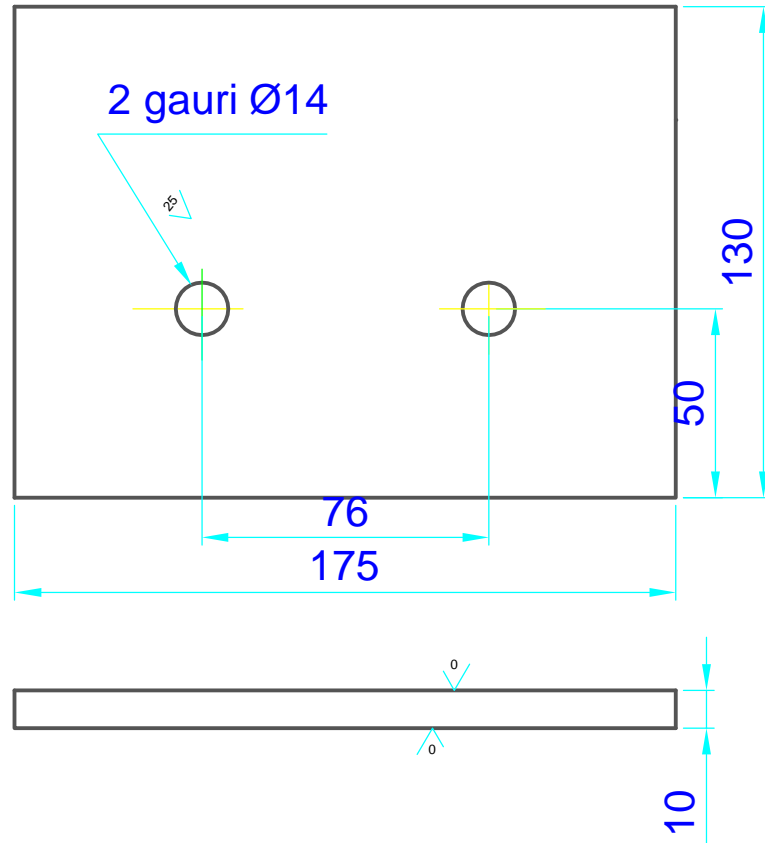


				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
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Desenat	ing. H. Moscaliuc			Proiect	Platforma		
Verificat	ing. G. Musat			Desen	PLACA		
Aprobat	dr.ing.G.Marin			Desen nr.		Page:	Rev.
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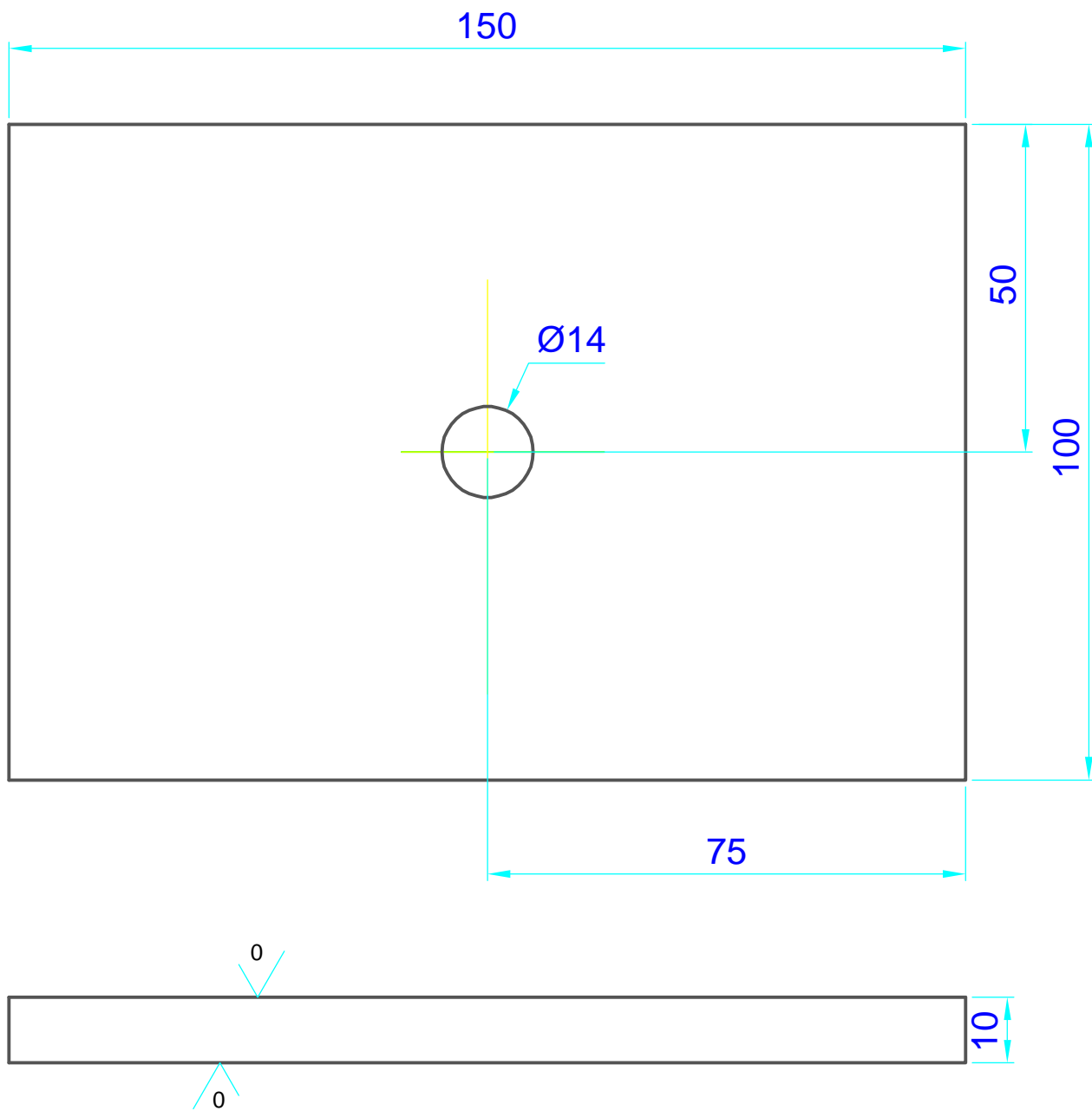


				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI				
Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019	Client					-----		
Desenat	ing. H. Moscaliuc		Proiect					Platforma		
Verificat	ing. G. Musat	Greutate:1,2 kg	Desen					PLACA		
Aprobat	dr.ing.G.Marin		Desen nr.					Page: Rev.		
1:1				Unitate masura:mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553			Poz 12		1/1	0
Format: A4 (210x297)			Data: 03.08.2022							

1:2



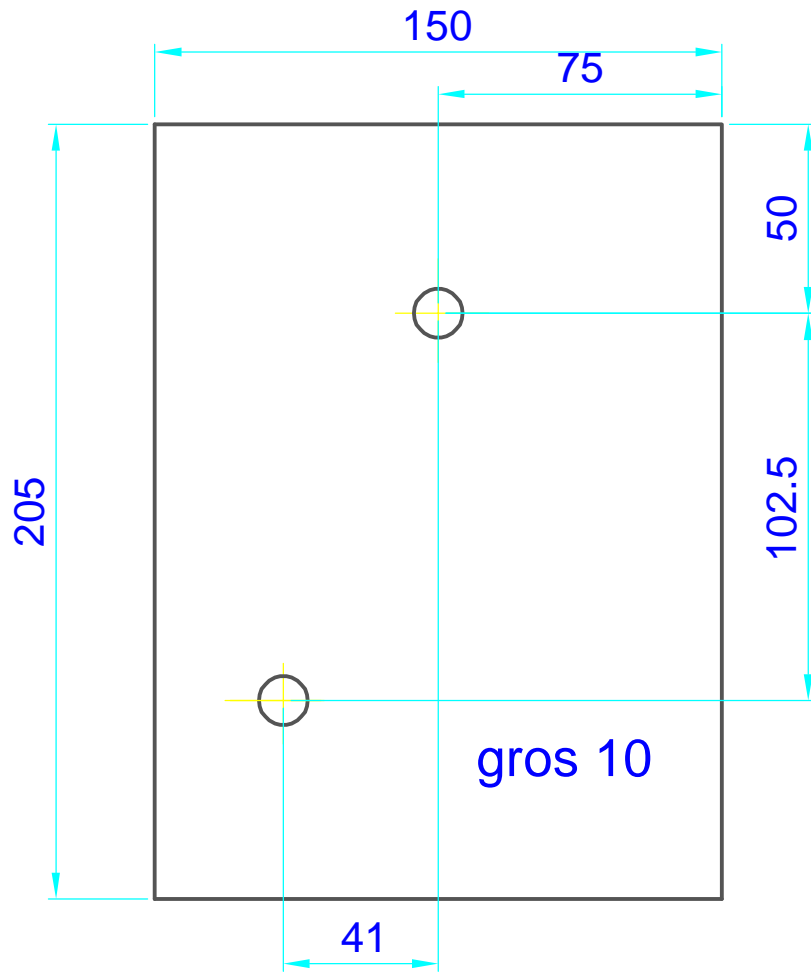
				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019	Greutate:1,80 kg	Client	-----		
Desenat	ing. H. Moscaliuc			Proiect	Platforma		
Verificat	ing. G. Musat			Desen	PLACA		
Aprobat	dr.ing.G.Marin			Desen nr.		Page:	Rev.
1:1		Unitate masura:mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553		Poz 14		1/1	0
Format: A4 (210x297)		Data: 03.08.2022					



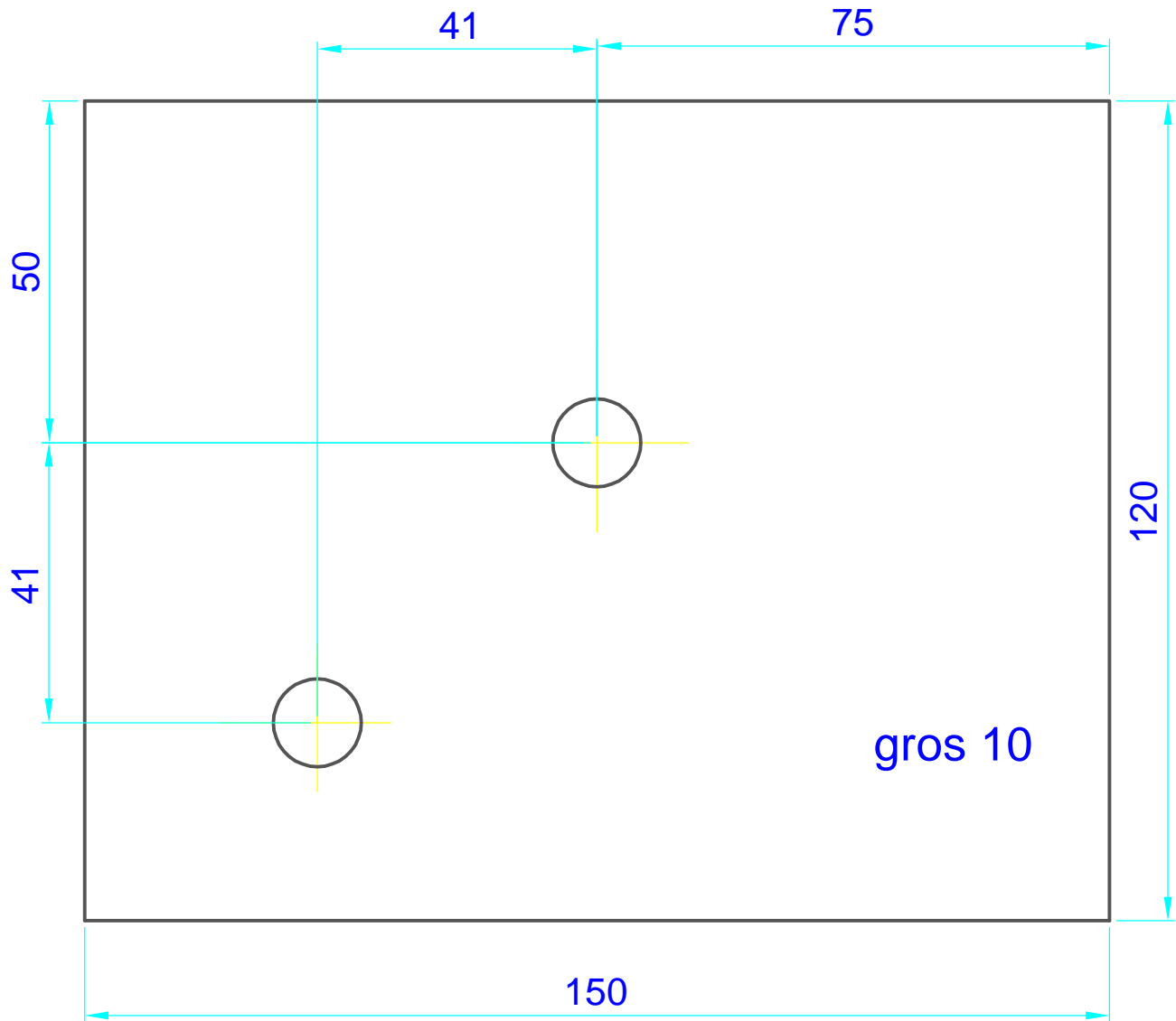
50 ✓✓✓

				INCDIE ICPE- CA Bucuresti		<small>DEPARTAMENT</small> IPCUP <small>PLOIESTI</small>		
Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019	Client					-----
Desenat	ing. H. Moscaliuc		Proiect					Platforma
Verificat	ing. G. Musat	Greutate: 1,20 kg	Desen					PLACA
Aprobat	dr.ing.G.Marin		Desen nr.					Page: Rev.
1:1				Unitate masura:mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553			Poz 16	
Format: A4 (210x297)		Data: 03.08.2022					1/1	

1:2

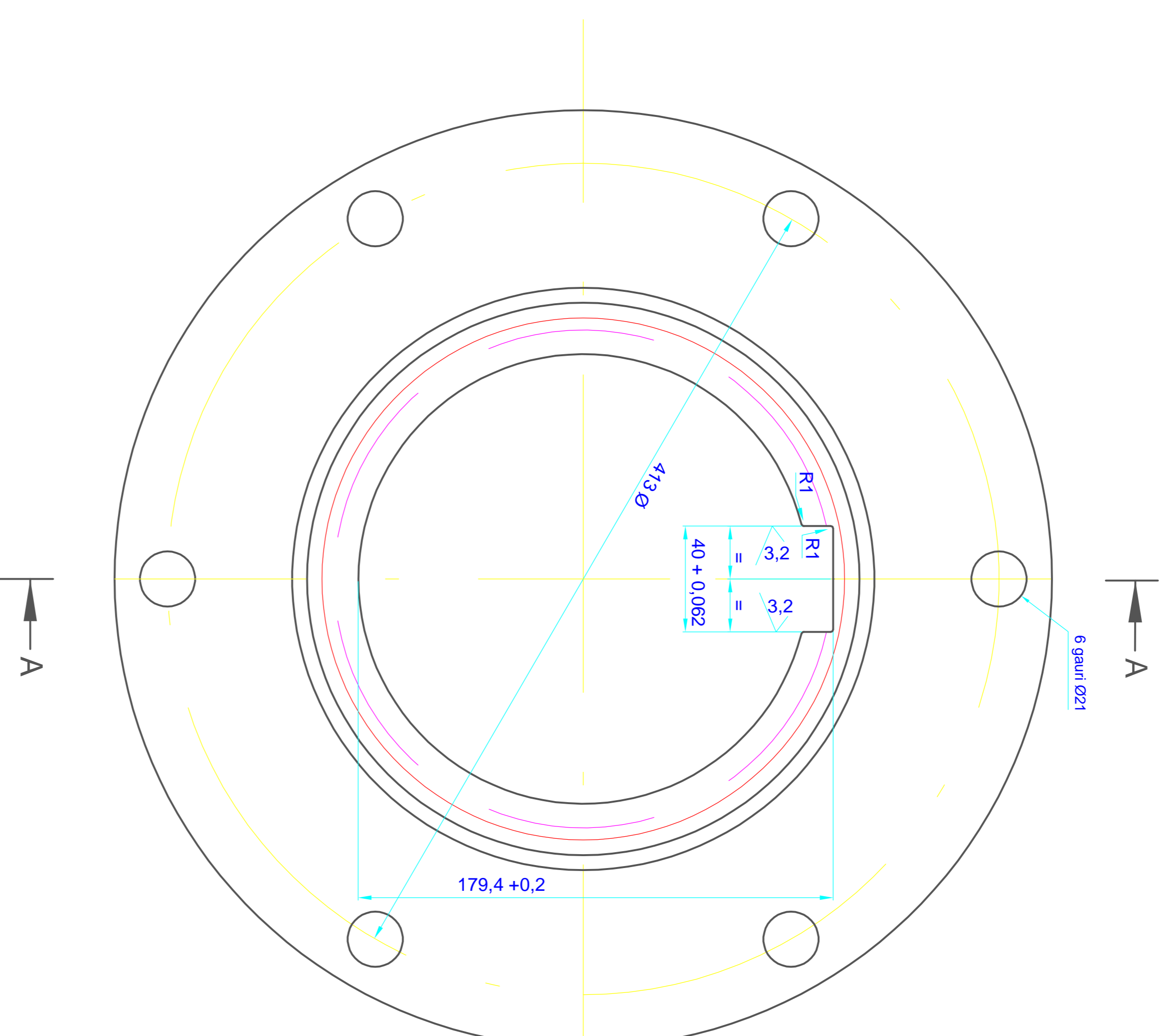
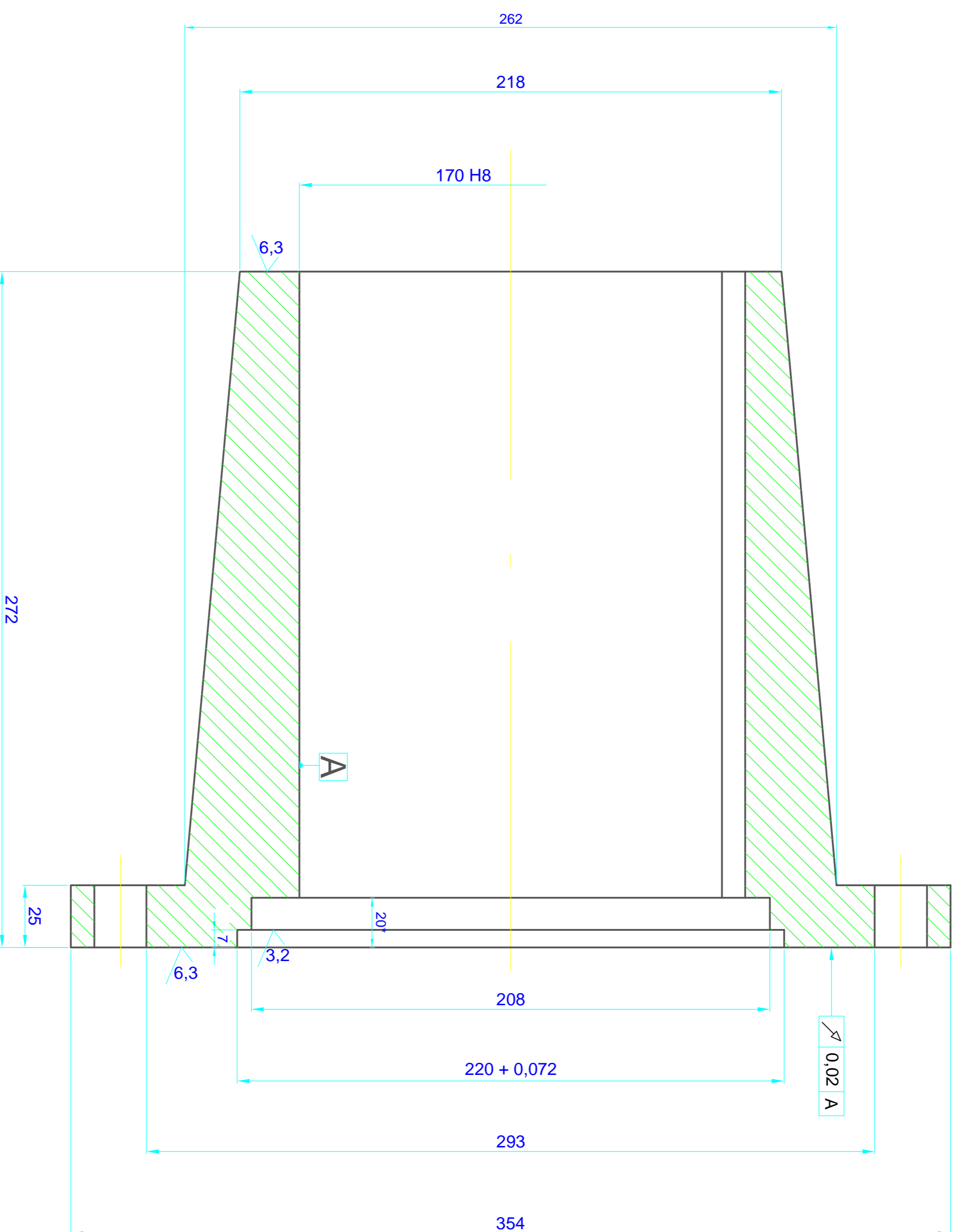


			INCDIE		DEPARTAMENT	
			ICPE- CA		IPCUP	
			Bucuresti		PLOIESTI	
Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019	Client	-----		
Desenat	ing. H. Moscaliuc		Proiect	Platforma		
Verificat	ing. G. Musat	Greutate 2,460 kg	Desen	PLACA		
Aprobat	dr.ing.G.Marin		Desen nr.	Page:	Rev.	
1:1		Unitate masura: mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553	Poz 19	1/1	0	
Format: A4 (210x297)		Data: 03.08.2022				



				INCDIE		<small>DEPARTAMENT</small>	
				ICPE- CA		IPCUP	
				Bucuresti		<small>PLOIESTI</small>	
Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019	Client	-----			
Desenat	ing. H. Moscaliuc			Proiect	Platforma		
Verificat	ing. G. Musat	Greutate: 1,45 kg	Desen		PLACA		
Aprobat	dr.ing.G.Marin			Unitate masura:mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553	Desen nr.		Page:
Format: A4 (210x297)		Data: 15.08.2022	Poz 20		1/1	0	

Sectiunea A-A

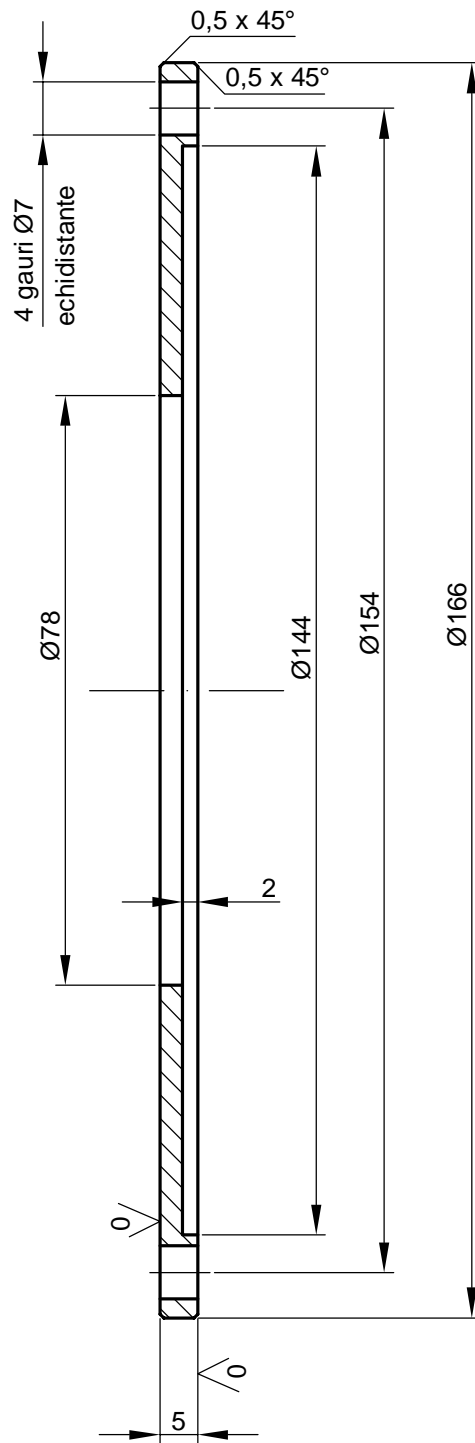


- CONDITIILE TEHNICE:**
1. Duritatea piesei HB 187-207 daN/mm² ;
 2. Muchiile ascute se vor rotunji R 0,5.
 3. Gaurile Ø21 se vor aleza impreuna cu flansa legatura motor.

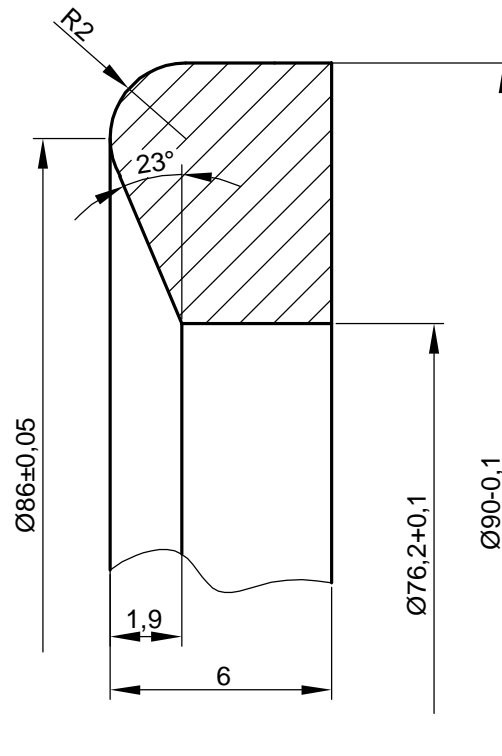
NOTA
Cota notata cu * se definitiveaza in functie de surubul si saiba axului motor

Proiectat	ing. S. Tudor	S355J2G3	Client	INCIDIE	DEPARTMENT
Desenat	ing. H. Moscaliuc	SR EN 10025-2:2004	Proiect	ICPE-CA	IPCUP
Verificat	Dr. ing. G. Stobanovici		Desen	BUCHARESTI	ROBESHTI
Aprobat	Dr. ing. G. Marin	Weight:----- kg	Flansa motor		
		Unitate masuraz:mm			
		Tolerante generale:			
		EN ISO 13920 clasele B&F			
		Simboluri sudura: EN 22553			
		Data: 17.08.2022			
Format: A2 (420x594)			Desen nr.:	105.80-00.00.00.0	Page: Rev.
					1/1 0

28

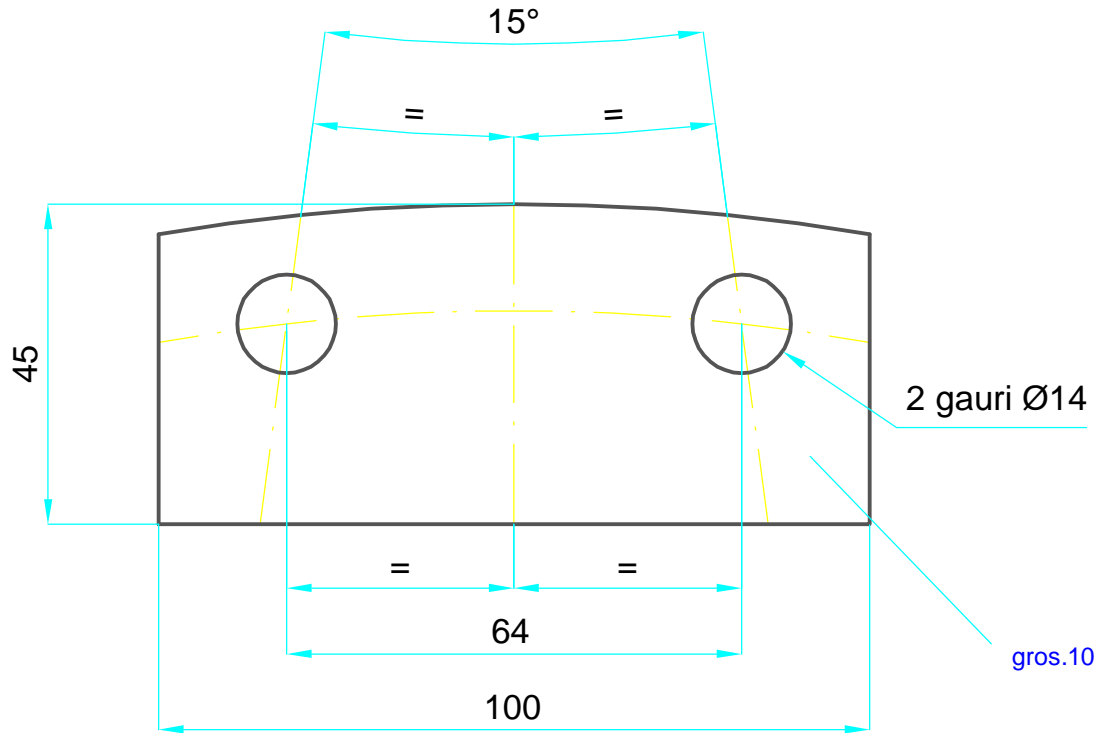


25/										
✓										
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire		OL 52.4	Proiect tehnic	PETAL S.A. Husi	Ca			
	Desenat :	ing. P. Baraga		STAS 500/2-80						
	Verificat :	dr. ing. I. Cucos		Masa: 0,475 kg	INOCEM 10-02.19.04.0					
	Aprobat :	dr. ing. I. Cucos								
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi			1 : 1	Inel de fixare					
				Data: sept-nov.2022	Caseta de etansare					



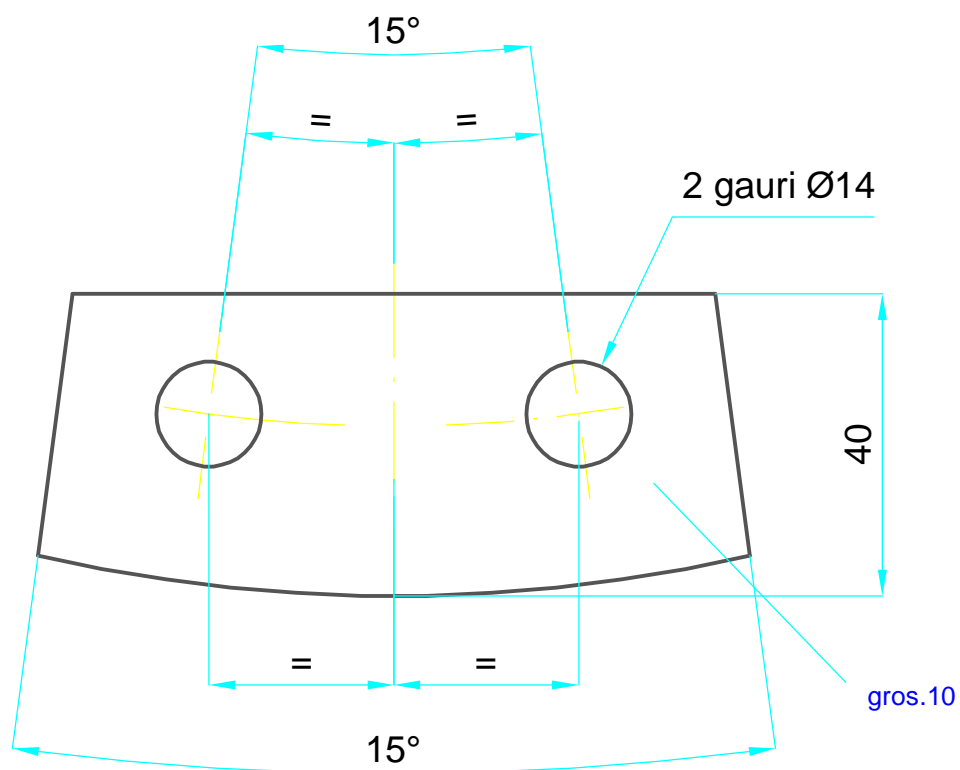
NOTA: Muchiile ascutite se tesesc 1x45°.

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire							
	Desenat :	ing. P. Baraga			CuSn6Zn4Pb4		Proiect tehnic	PETAL S.A. Husi	Ca
	Verificat :	dr. ing. I. Cucos							
	Aprobat :	dr. ing. I. Cucos			Masa: 0,095 kg		INOCEM 10-02.19.07.0		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi			5 : 1	Inel de presare				
				Data: sept-nov.2022	Caseta de etansare				



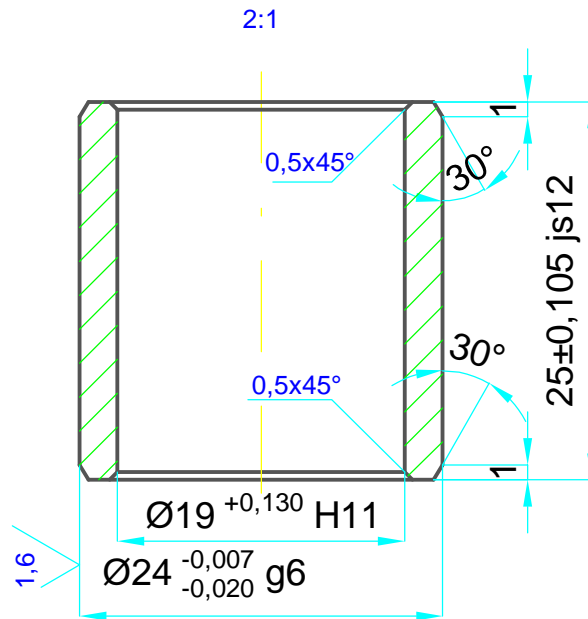
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			INCDIE ICPE- CA Bucuresti		<small>DEPARTAMENT</small> IPCUP <small>PLOIESTI</small>
Proiectat	Bolmoaga Sergiu	S355 J2 SR EN 10025/2:2019	Client	-----	
Desenat	Baraga Cristina		Proiect		
Verificat	Munteanu Silvia	Greutate: 0,345kg	Desen	SECTOR DE FIXARE	
Aprobat	Tartian Nelu		Desen nr.	616.15-02.00.03.0	Page:
1:1		Unitate masura: mm	Desen nr.		Page: Rev.
Format: A4 (210x297)		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553	616.15-02.00.03.0		1/1 0
		Data: 09.03.2021			



50

			INCDIE ICPE- CA Bucuresti		<small>DEPARTAMENT</small> IPCUP <small>PLOIESTI</small>	
Proiectat	Arhire Tiberiu	S355 J2 SR EN 10025/2:2019	Client	-----		
Desenat	Gheuca Cristina		Proiect			
Verificat	Munteanu Silvia	Greutate: 0,280kg	Desen	SECTOR DE FIXARE		
Aprobat	Tartian Nelu		Desen nr.	Page:	Rev.	
1:1		<small>Unitate masura: mm</small> <small>Tolerante generale:</small> <small>SR EN ISO 13920 clasele B&F</small> <small>Simboluri sudura: SR EN 22553</small>	616.15-02.00.07.0		1/1	0
Format: A4 (210x297)			Data: 09.03.2021			

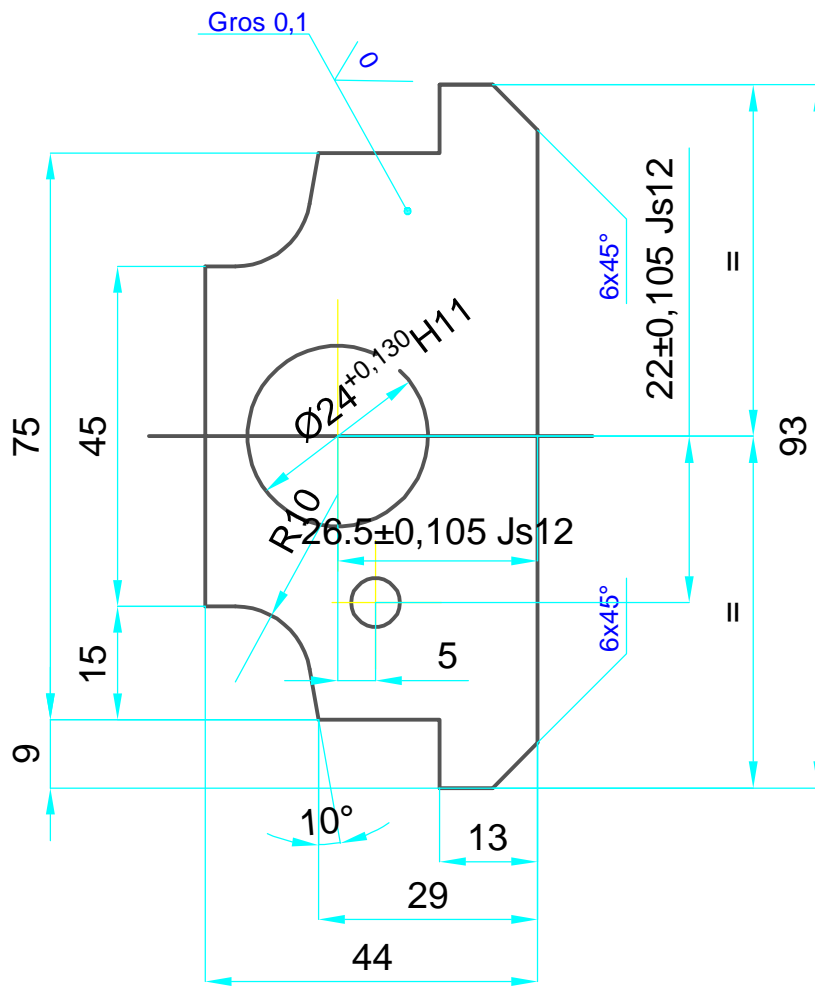


CONDITII TEHNICE

Imbunatatit la duritatea 280.....320 HB.



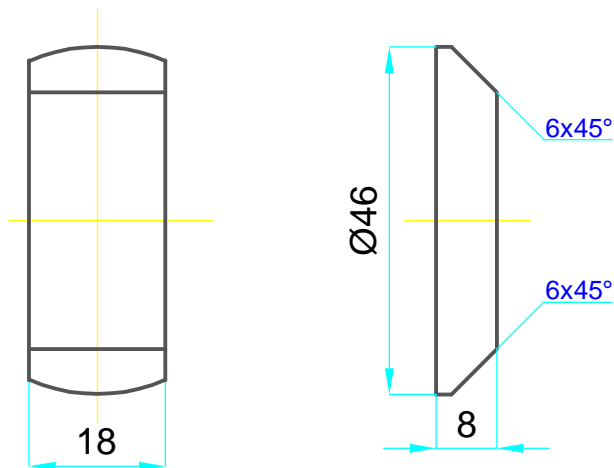
				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Tartian Nelu			Client			
Desenat	Paiu Andreia		42CrMo4 SR EN 10250-3:2002	Proiect			
Verificat	Munteanu Silvia		Greutate: 0,033 kg	Desen	BUCSA DE CENTRARE		
Aprobat	Cepisca C.			Desen nr.		Page:	Rev.
1:1				616.15-02.24.07.0		1/1	0
Format: A4 (210x297)		Data: 27.01.2021					



Banda TA 0,1 STAS 290/2-89

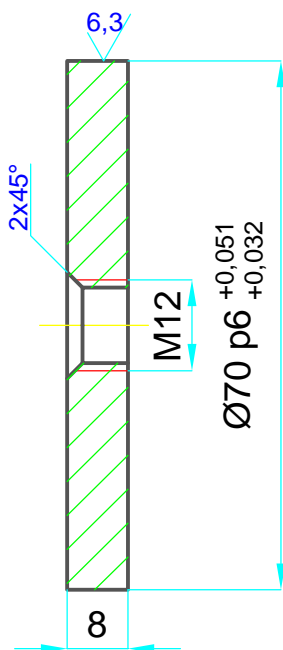


			INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Tartian Nelu	CuZn30(Am70) STAS 95-90	Client			
Desenat	Gheuca Cristina		Proiect			
Verificat	Baraga Constantin		Desen	ADAOS		
Aprobat	Arhire Tiberiu		Greutate: 0,003 kg	Desen nr.	Page:	Rev.
1:1		Unitate masura: mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		616.15-02.24.09.0		1/1
Format: A4 (210x297)		Data: 27.01.2021				

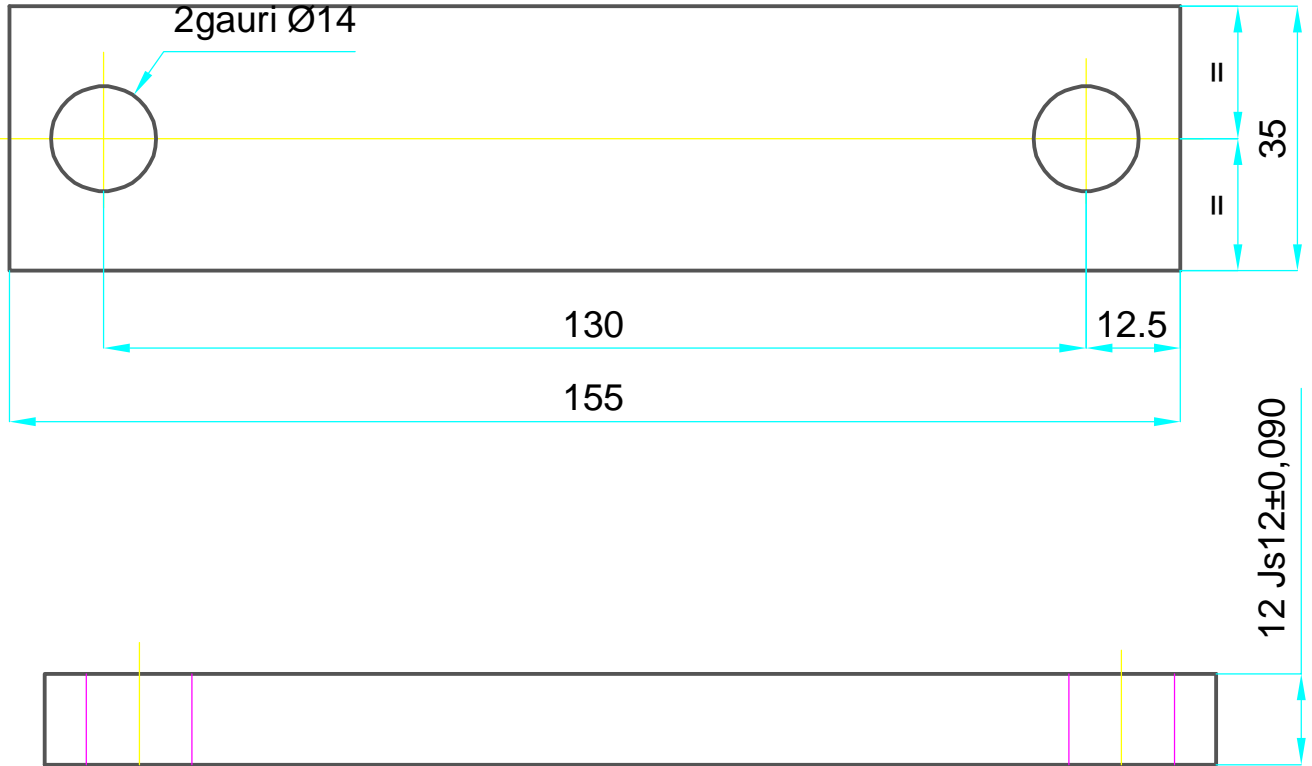


50/

			INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Bolmoaga Sergiu	S355J2 SR EN 10025-2:2019	Client	-----		
Desenat	Gheuca Cristina		Proiect			
Verificat	Munteanu Silyia	Greutate: 0,050 kg	Desen	PUNTE		
Aprobat	Arhire Tiberiu		Desen nr.	Page:	Rev.	
1:1		Unitate masura: mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553	616.15 - 02.25.03.0		1/1	0
Format: A4 (210x297)			Data: 26.01.2021			

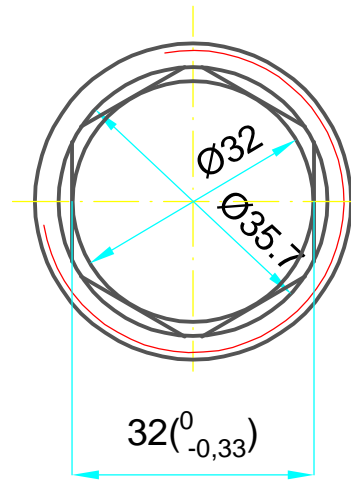
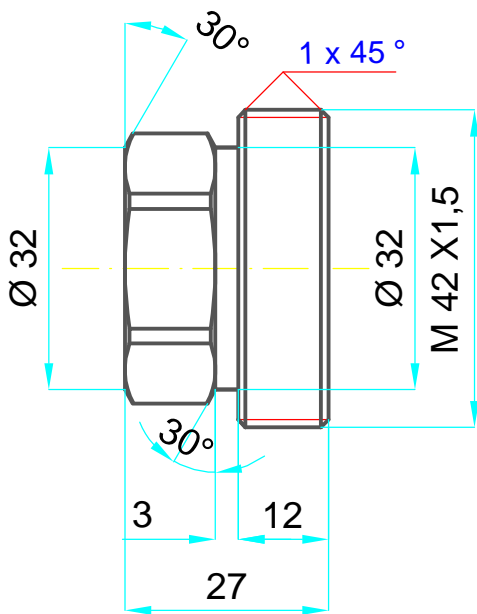


				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI		
Proiectat	Bolmoaga Sergiu	S355J2 SR EN 10025-2:2019	Client					-----
Desenat	Gheuca Cristina		Proiect					
Verificat	Baraga Constantin		Desen					CAPAC
Aprobat	Cepisca C.	Greutate: 0,236 kg	Unitate masura: mm		Desen nr.		Page: Rev.	
1:1		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		616.15- 02.25.08.0		1/1	0	
Format: A4 (210x297)		Data: 28.01.2021						



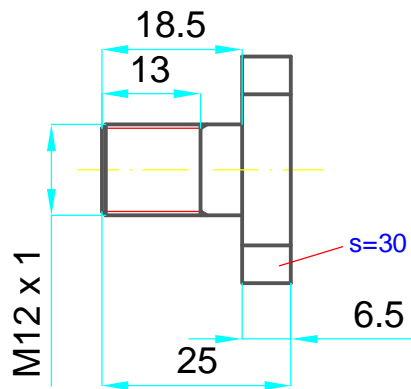
25

				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Tartian Nelu	34CrMo4 SR EN 10250-3:2002	Greutate: 0,490 kg	Client	-----		
Desenat	Baraga Cristina			Proiect			
Verificat	Balan Maria			Desen	PANA		
Aprobat	Arhire Tiberiu			Desen nr.		Page:	Rev.
1:1		Unitate masura:mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553		616.15- 02.25.09.0		1/1	0
Format: A4 (210x297)		Data: 29.01.2021					

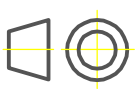


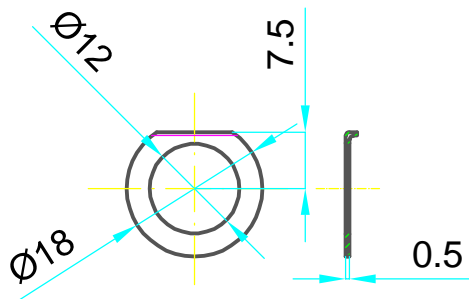
25/

				INC DIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Tartian Nelu			Client	-----		
Desenat	Paiu Andeia		C 45 E SR EN 10250/2:2002	Proiect			
Verificat	Munteanu Silvia		Greutate: 0,215 kg	Desen	Dop filetat		
Aprobat	Cepisca C.			Desen nr.		Page:	Rev.
1:1				616.15-02.27.02.0		1/1	0
Format: A4 (210x297)		Data: 2.02.2021					



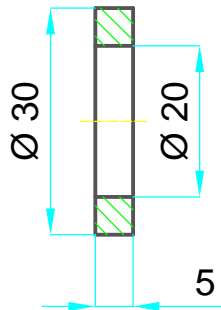
25/ ✓

			INCDIE ICPE- CA Bucuresti		<small>DEPARTAMENT</small> IPCUP <small>PLOIESTI</small>	
Proiectat	Bolmoaga Sergiu	C25E SR EN 10250/2:2002	Client	-----		
Desenat	Baraga Cristina		Proiect			
Verificat	Balan Maria	Greutate: 0,033kg	Desen	Surub special		
Aprobat	Arhire Tiberiu		Desen nr.	Page:	Rev.	
1:1		 Unitate masura:mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553	616.15-02.35.05.0		1/1	0
Format: A4 (210x297)			Data: 4.02.2021			



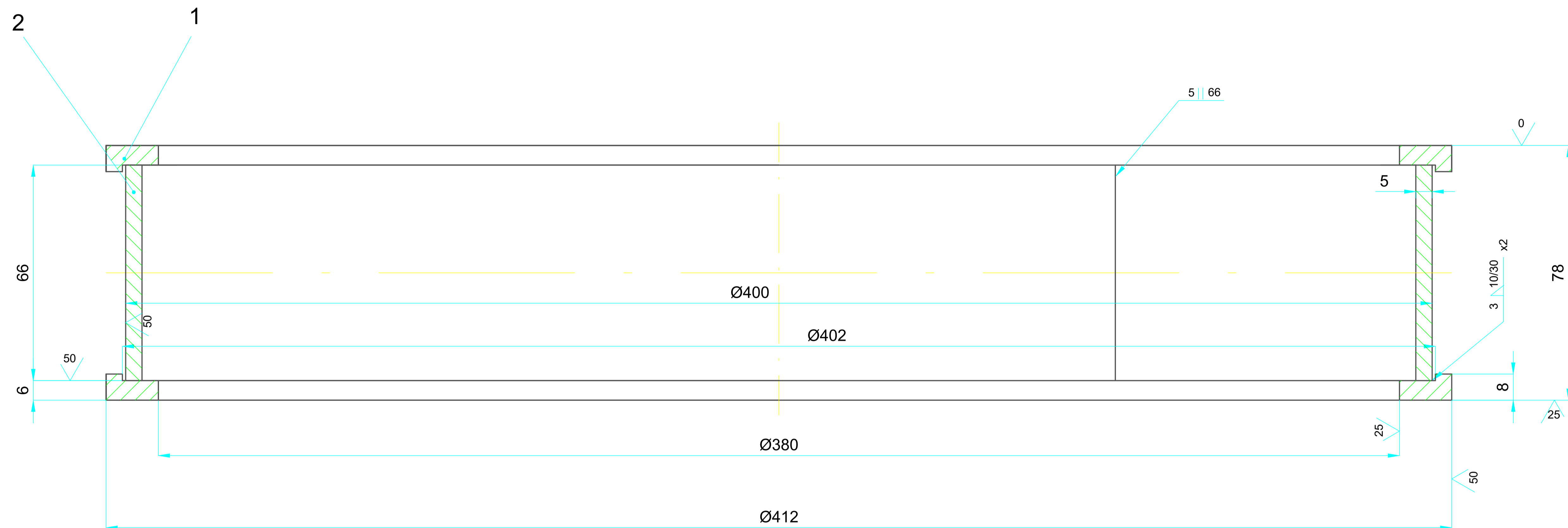
25/ ✓

				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Tartian Nelu	S 355 J2 SR EN 10025/2:2019		Client	-----		
Desenat	Gheuca Cristina			Proiect			
Verificat	Balan Maria	Greutate: 0,005 kg		Desen	Siguranta		
Aprobat	Cepisca C.			Desen nr.		Page:	Rev.
1:1		Unitate masura: mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		616.15-02.35.04.0		1/1	0
Format: A4 (210x297)		Data: 3.02.2021					

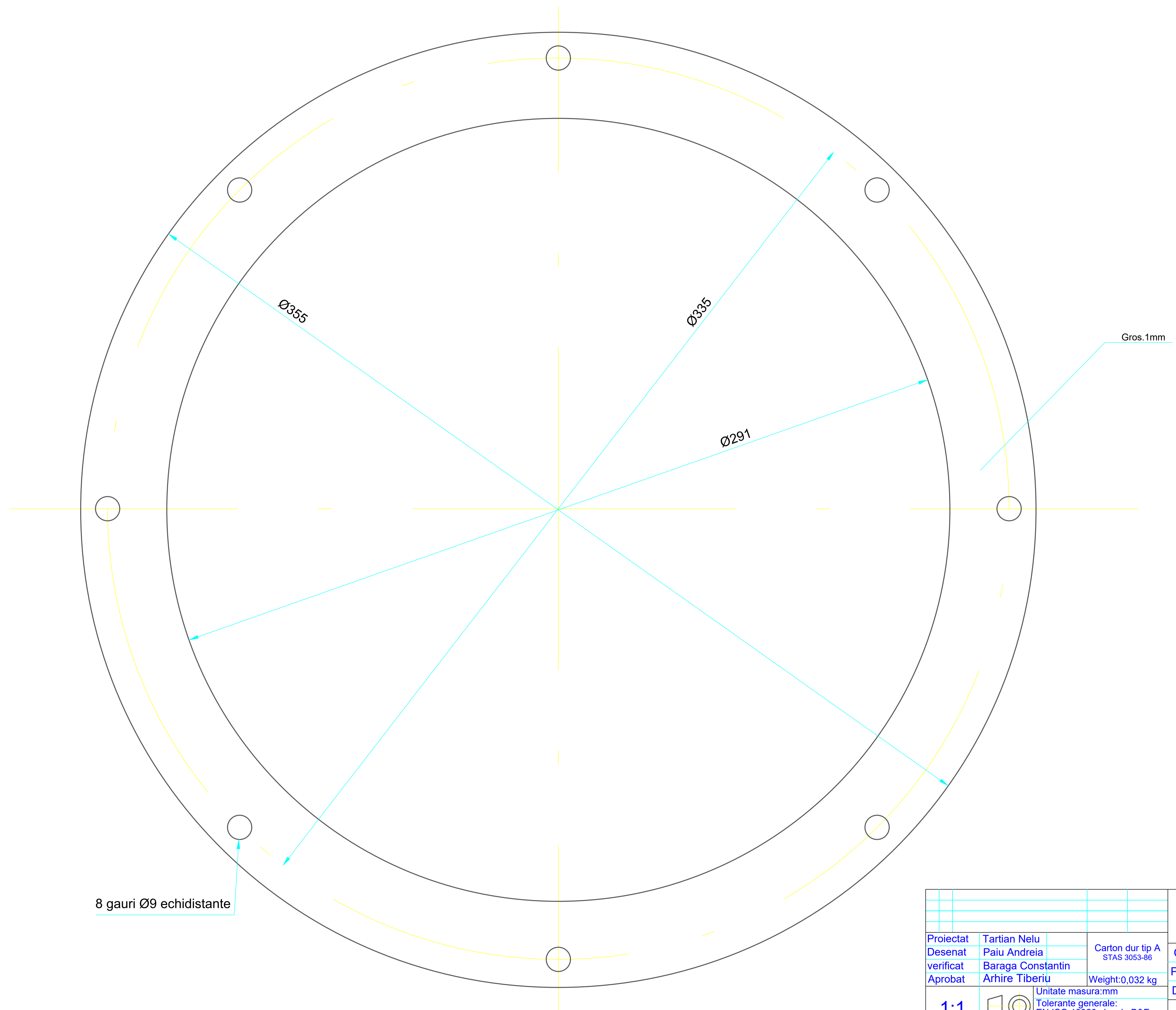


25/ ✓

				INCDIE ICPE- CA Bucuresti		<small>DEPARTAMENT</small> IPCUP <small>PLOIESTI</small>	
Proiectat	Bolmoaga Sergiu	C 45 E SR EN 10250/2:2002	Greutate: 0,019 kg	Client	-----		
Desenat	Paiu Andreia			Proiect			
Verificat	Baraga Constantin			Desen	Saiba		
Aprobat	Tartian Nelu			Desen nr.		Page:	Rev.
1:1				616.15-02.25.03.0		1/1	0
Format: A4 (210x297)		Data: 3.02.2021					



2	Manta 66x5x1240	616.15-02.08.02.0	1	S355 J2 SR EN 10025/2:2019	fara desen	3,210
1	Flansa	616.15-02.08.01.0	2	S355 J2 SR EN 10025/2:2019	fara desen	1,040
Poz.	Descriere	Numar Desen/ Stas	Buc.	Material	Observatii	Greutate Kg/buc.
				INC DIE ICPE-CA <small>BUCLURESTI</small>		DEPARTAMENT IPCUP <small>PLOIESTI</small>
Proiectat	Tartian Nelu		Client	----		
Desenat	Daisa A.M.		Proiect			
verificat	Balan Maria		Desen	DISTANTIER		
Aprobat	Cepisca C.	Weight: 5,290 kg	Desen nr.	616.15-02.08.00.0		
1:1		Unitate masura: mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553	Page: Rev.	1/1 0		
Format: A2 (420x594)	Data: 02.02.2021					



8 gauri Ø9 echidistante

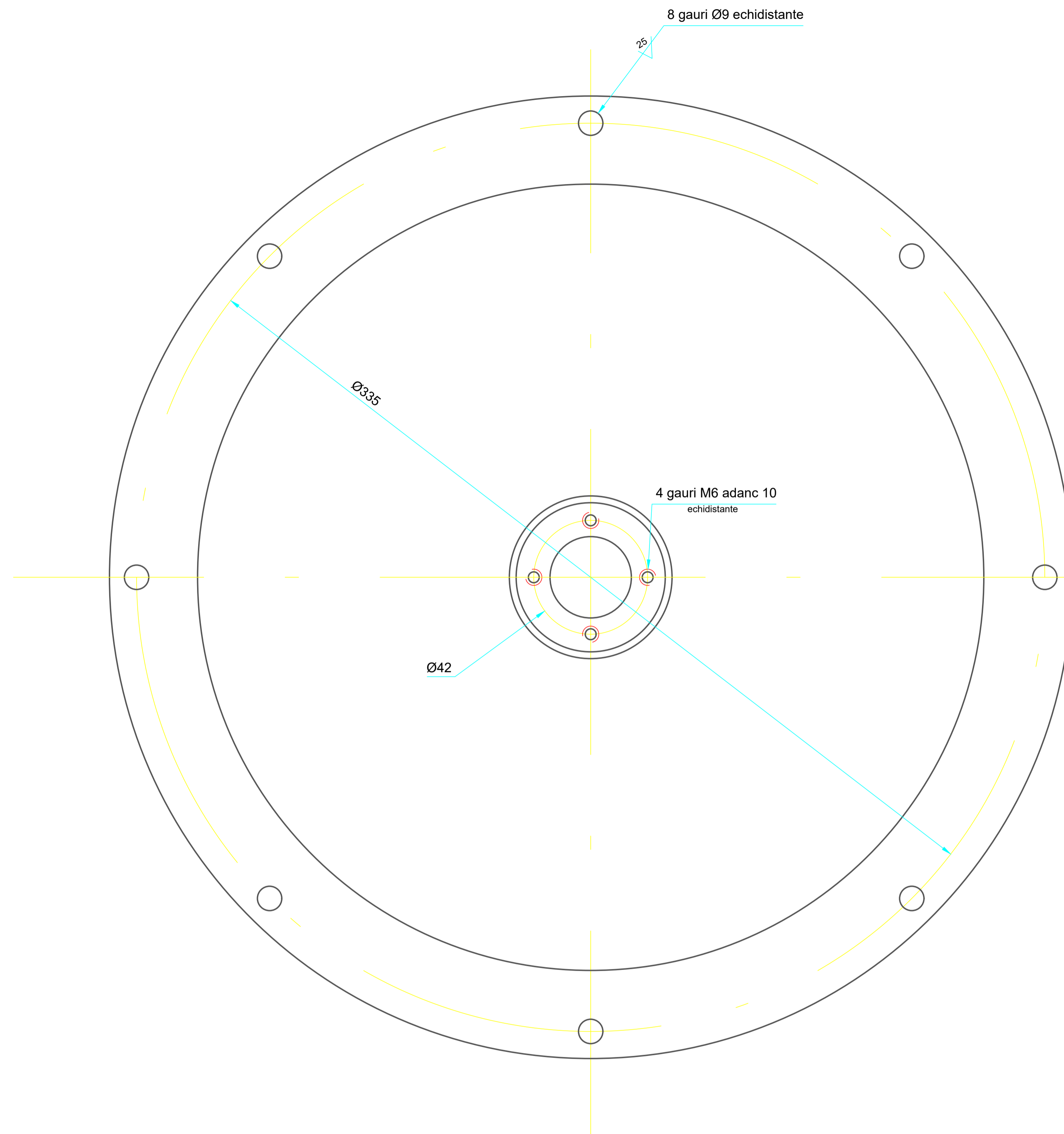
Gros. 1mm

Ø355

Ø335

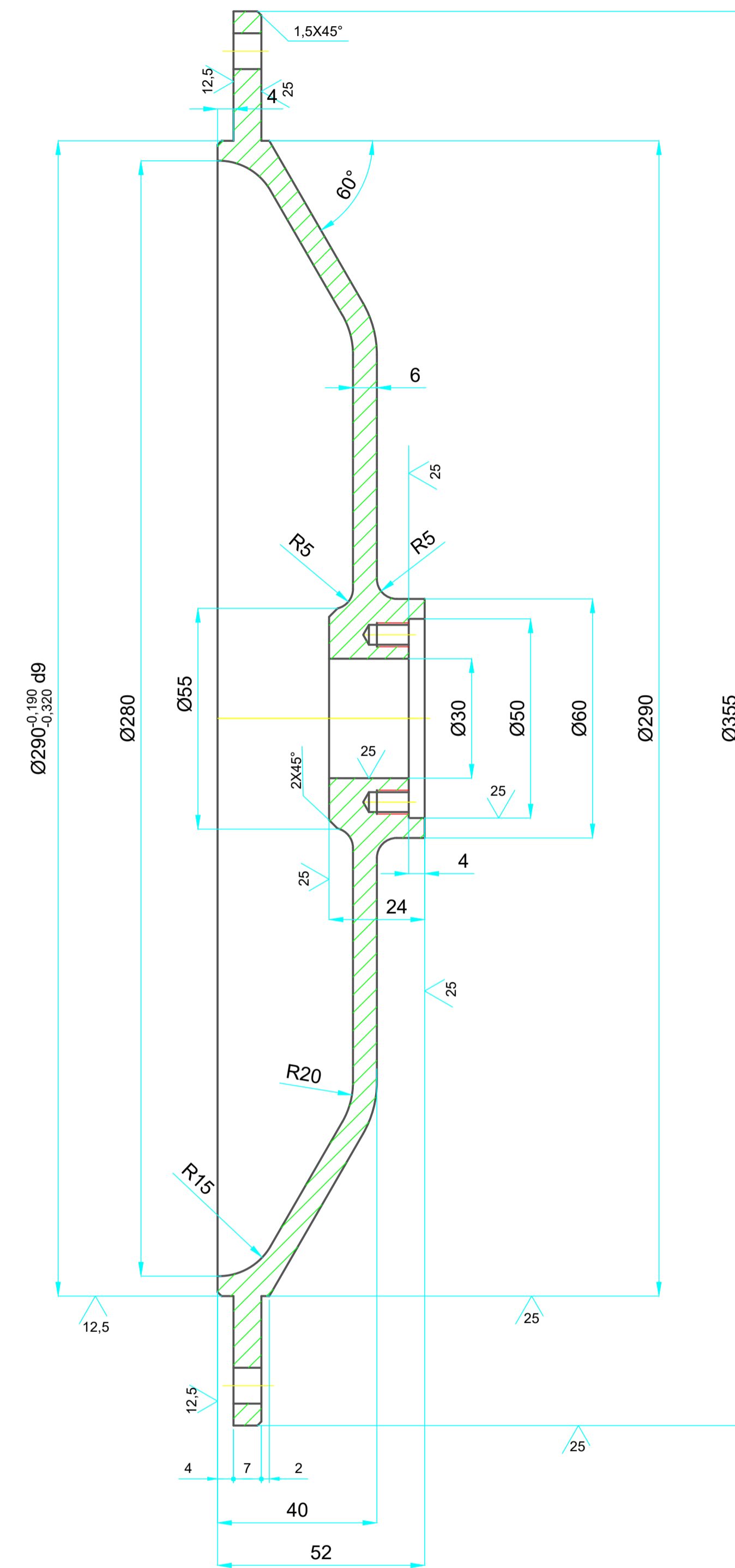
Ø291

			INCDIE ICPE-CA <small>BUCHURESTI</small>		<small>DEPARTAMENT</small> IPCUP <small>PLIESTI</small>	
Proiectat	Tartian Nelu	Carton dur tip A STAS 3053-86	Client	-----		
Desenat	Paiu Andreia		Proiect			
verificat	Baraga Constantin		Desen	GARNITURA		
Aprobat	Arhire Tiberiu	Weight: 0,032 kg	Desen nr.	616.15-02.00.17.0		Page: Rev.
		Unitate masura: mm				
		Tolerante generale: EN ISO 13920 clasele B&F				
		Simboluri sudura: EN 22553				
		Format: A2 (420x594)				
		Data: 01. 02. 2021				

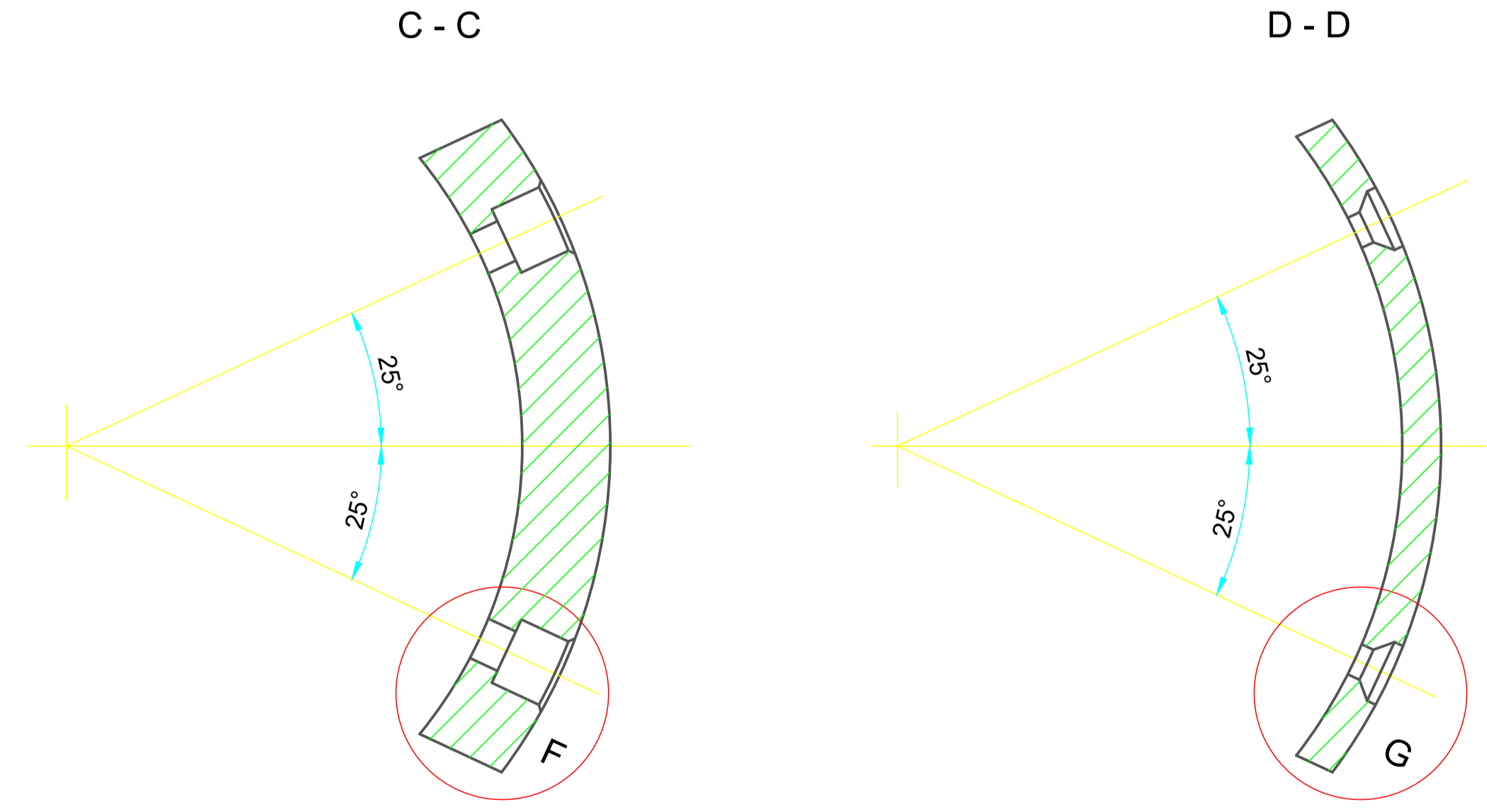
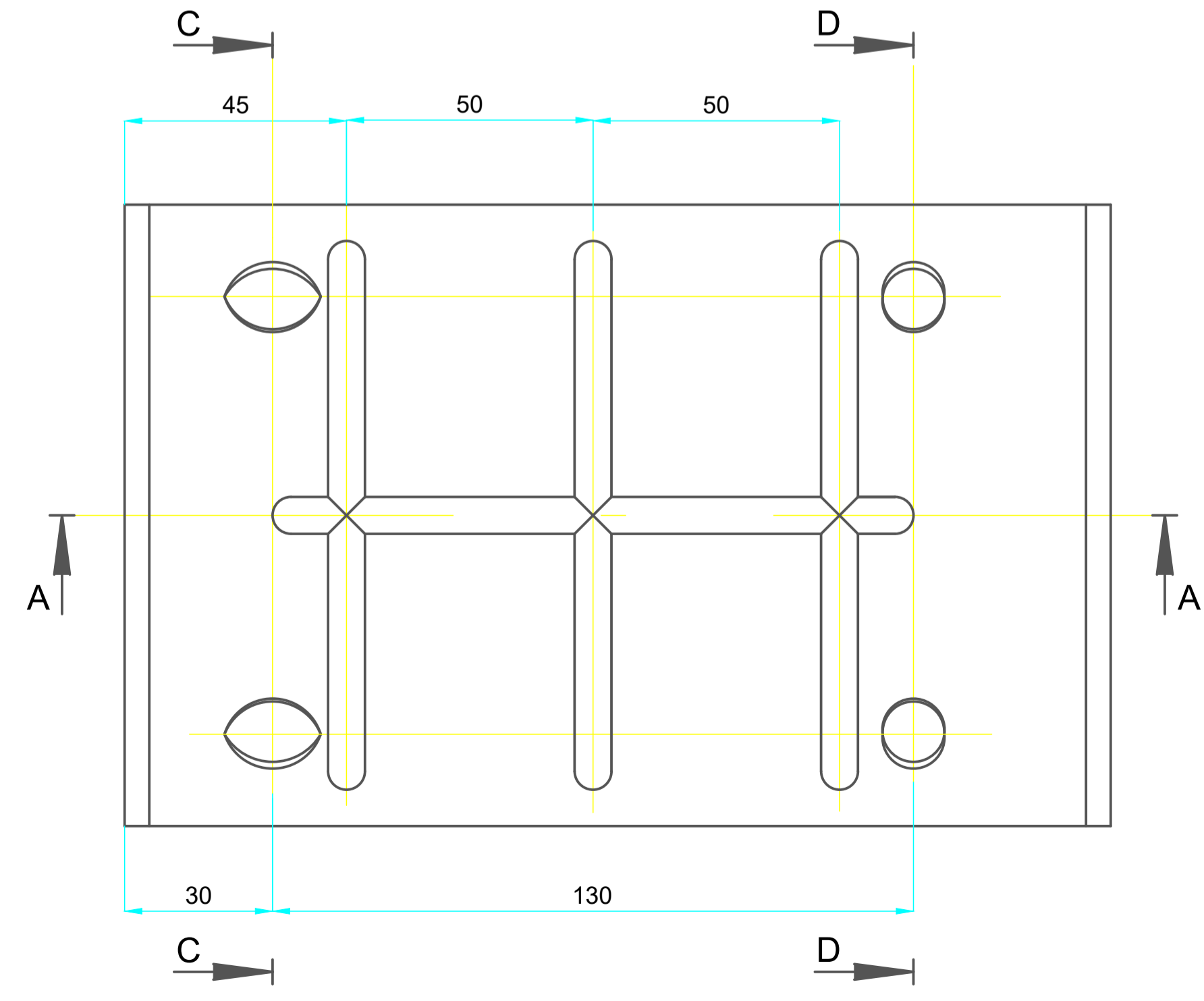
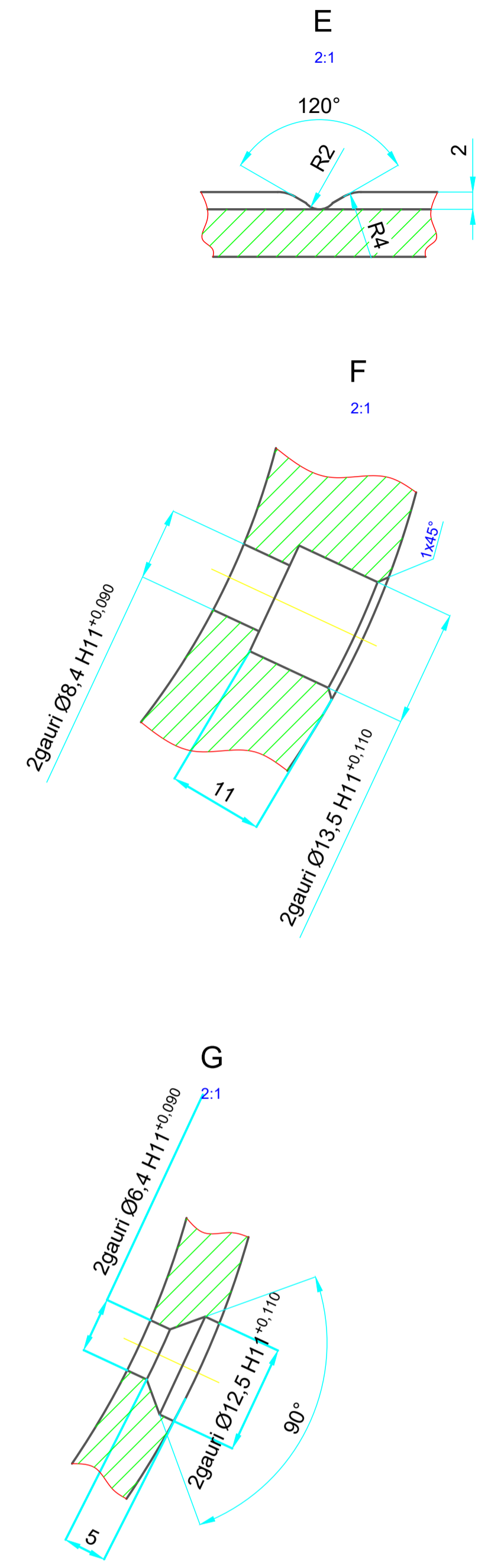
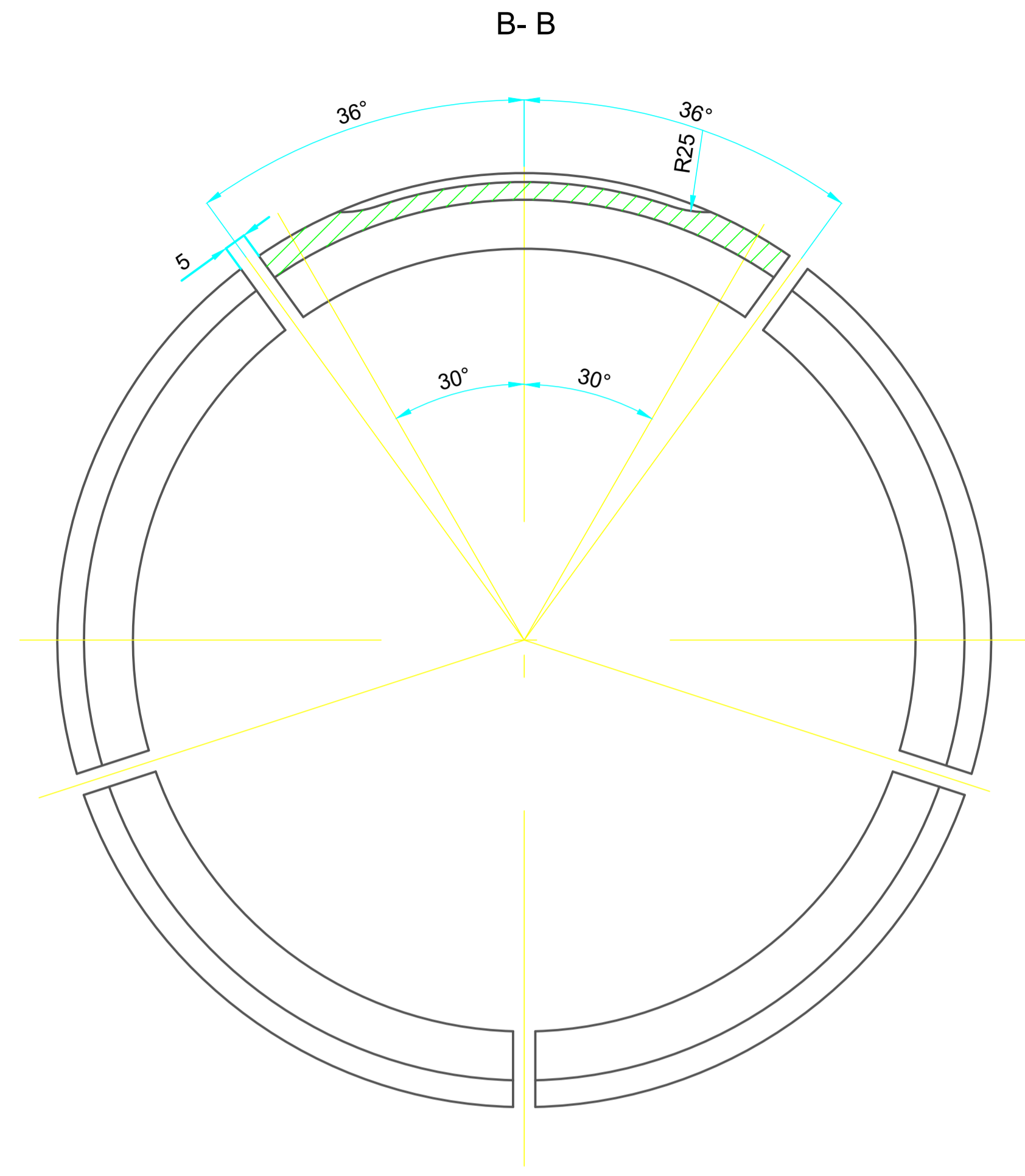
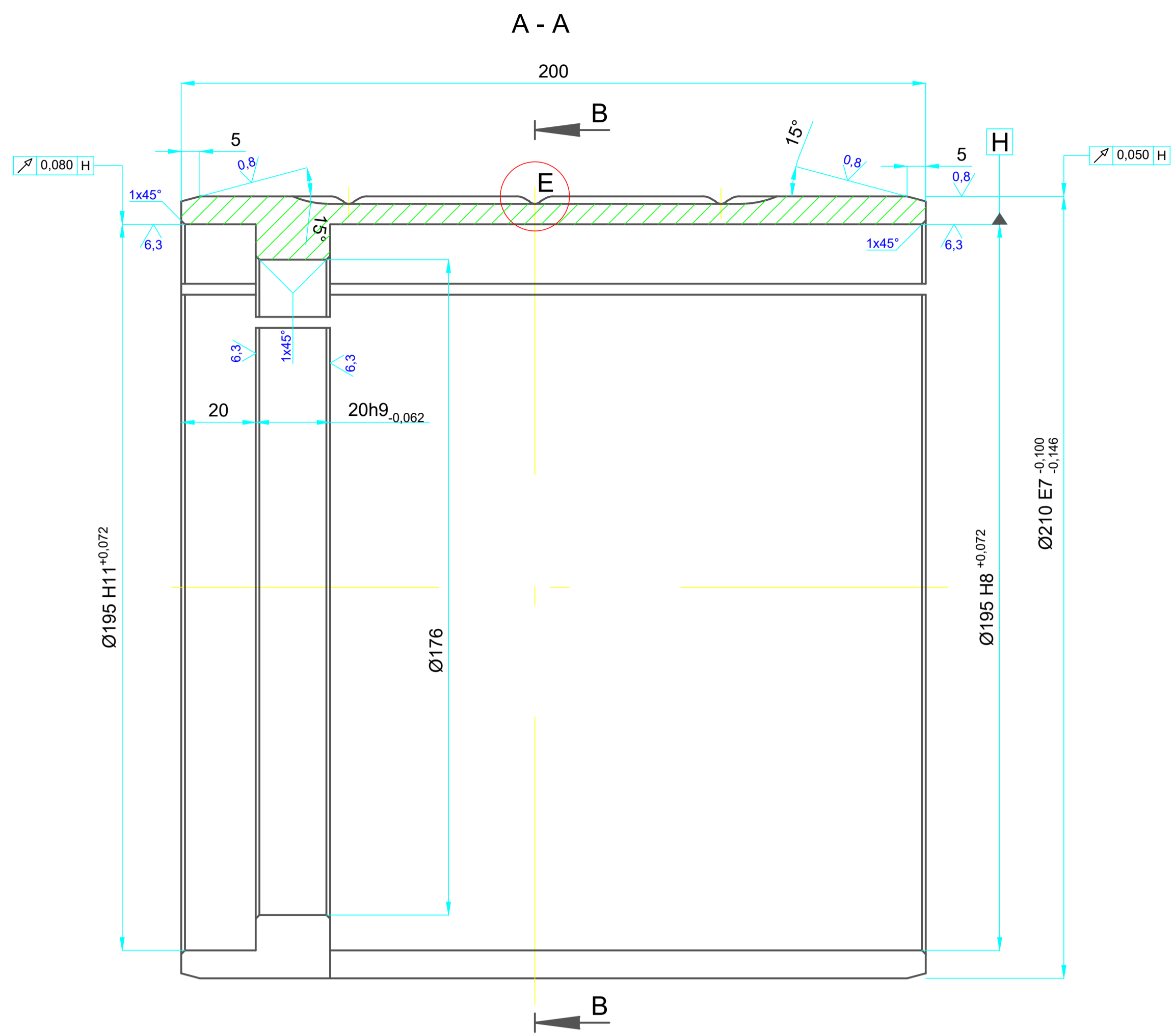


CONDITII TEHNICE

- Piesa turnata va satisface conditiile tehnice din STAS 568-82
- Dupa debavurare si curatire piesa se va sabla.



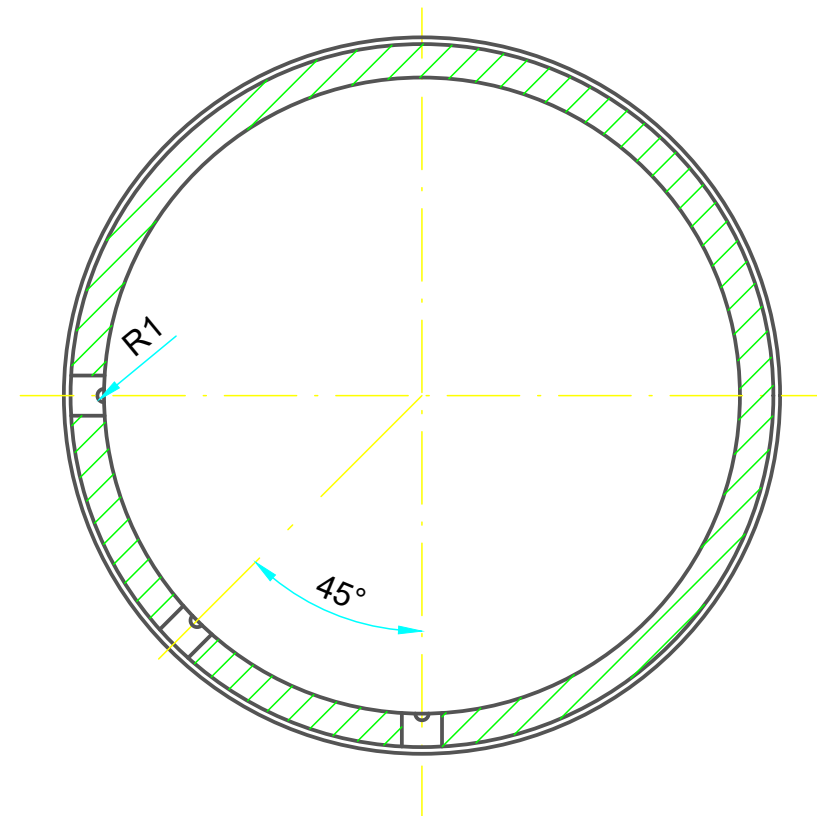
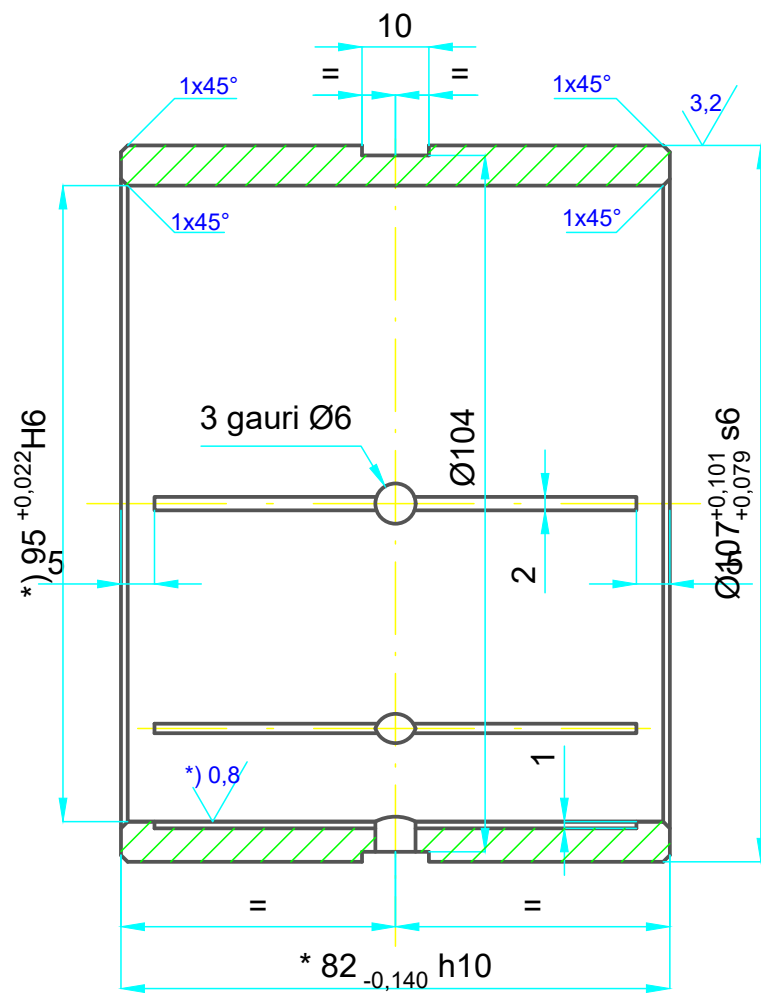
INCIE ICPE-CA <small>INCUBATOR</small>		DEPARTAMENT IPCUP <small>PROIECT</small>	
Proiectat Desenat verificat Aprobat	Arhire Tiberiu Gheuca Cristina Baraga Constantin Tartian Nelu	Fc 200 SR EN 1561:2012 Weight: 5,330 kg	Client Proiect Desen CAPAC
1:1 Format:	Tolerante generale: EN ISO 13920 classes B&F Simboluri sudura: EN 22553 Date: 03.02.2021	Drawing No. 616.15 - 02.00.18.0	Pag: Rev. 1/1 0



CONDITII TEHNICE

- Pe suprafata cilindrica Ø210 e7, nu se admit defecte de turnare;
- Pe celelalte suprafete se admit defecte de turnare negrupate daca adancimea lor nu depaseste 2mm, iar suprafata unui defect este de max. 10mm²;
- Numarul maxim de defecte :5.

Proiectat	Arhire Tiberiu	Cu Pb10 Sn10	Client
Desenat	Baraga Cristina	SR EN 1982:2018	Proiect
verificat	Balan Maria		Desen
Aprobat	Tartian Nelu	Weight: 1.840 kg	
Unitate masura: mm		PATINA	
1:1	Tolerante generale: EN ISO 13920 classes B&F Simboluri sudura: EN 22553	Drawing No.	Pag: Rev.
Format:	Date: 29.01.2021	616.15 - 02.25.04	1/1 0



NOTA

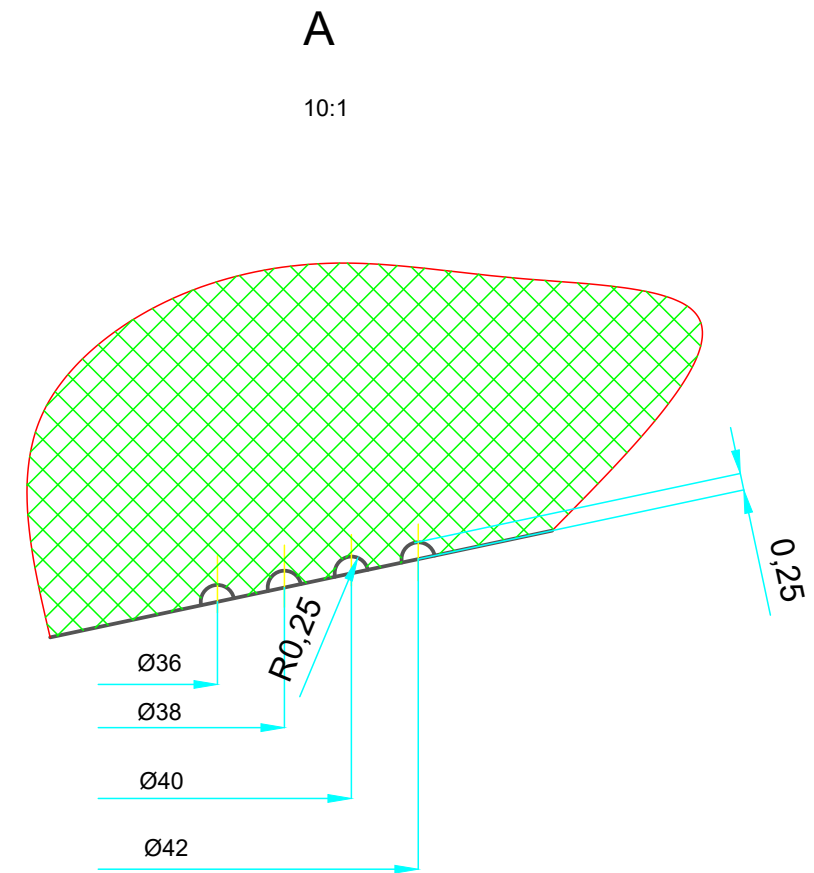
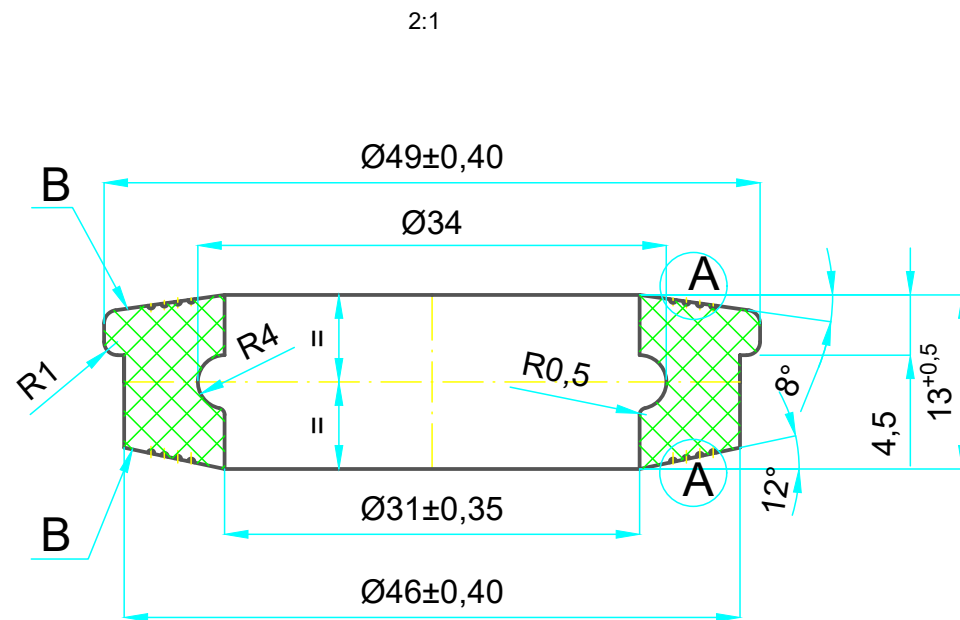
Cotele marcate cu *) se vor executa dupa operatia de presare in corpul bielei.

12,5

INC DIE
ICPE-CA
BUCURESTI

DEPARTAMENT
IPCUP
PLOIESTI

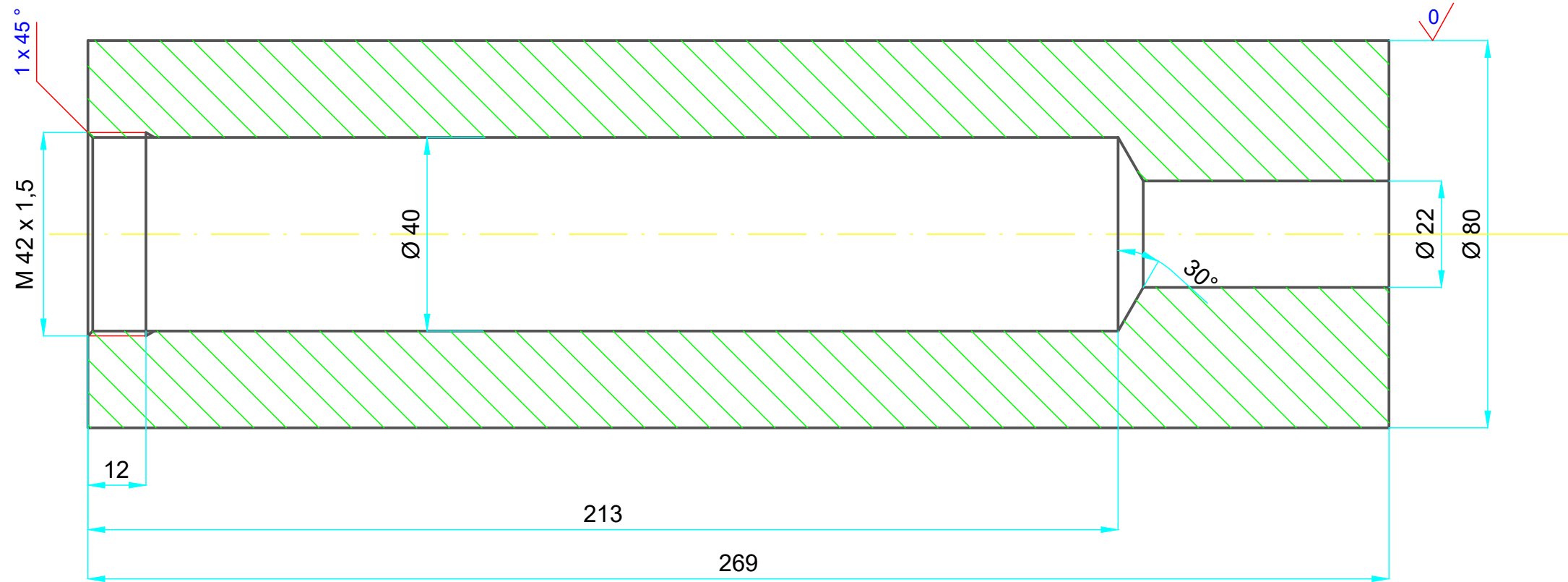
Proiectat	Tartian Nelu	CuPbSn10 SR EN 1982:2018	Client	
Desenat	Paiu Andreia		Proiect	
Verificat	Balan Maria		Desen	BUCSA
Aprobat	Cepisca C.		Greutate: 1,360 kg	
1:1		Unitate masura: mm	Desen nr.	Page: Rev.
Format: A3 (297x420)		Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553	616.15-02.24.02.0	1/1 0
		Data: 27.01.2021		



CONDITII TEHNICE

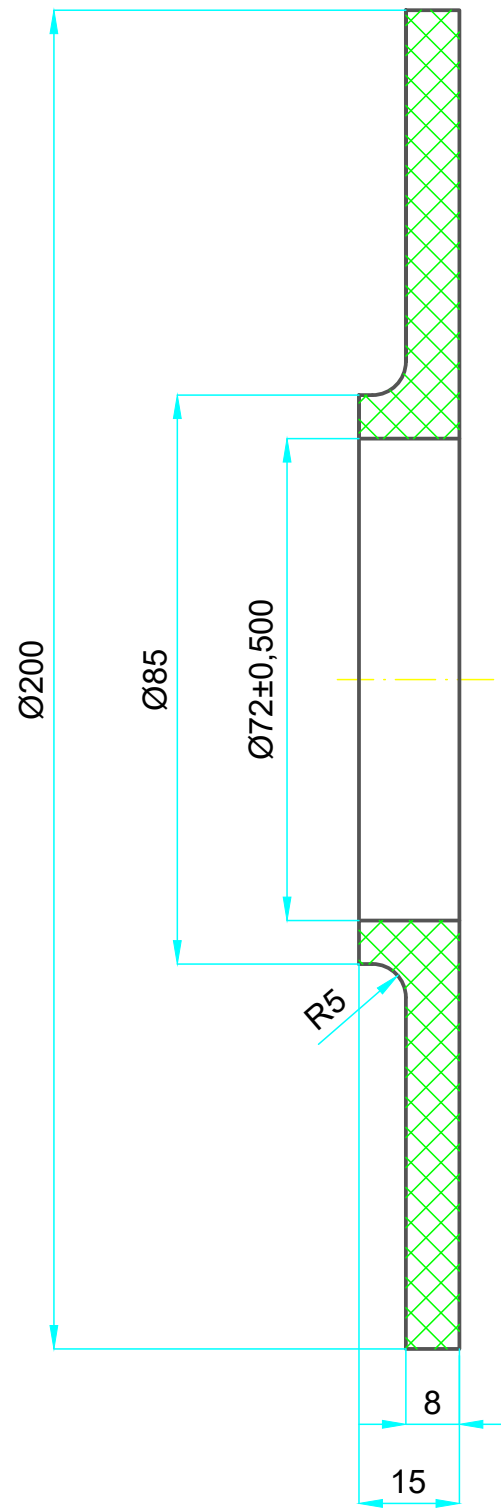
1. Mediul de lucru: pasta de ciment, noroide foraj, titei, fluide acide si bazice.
2. Temperatura de lucru: -45...+80°C.
3. Cotele netolerate se vor incadra in clasa de precizie P2 SR ISO 3302-1:2008.
4. Pe suprafetele de etansare "B" nu se admit bavuri, lipsa de material, impaturiri sau alte defecte care ar periclita buna functionare.
5. Garnitura se va executa din cauciuc tip NBR rezistent la -45°C si caracteristici fizico-mecanice conf. SR EN 682:2002/A1, CLASA PF-80A.
6. Garnitura se va marca cu un punct de culoare albastru deschis, conform STI 1/87.

			INCDIE BUCURESTI		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Tartian Nelu	Cauciuc	Client	----		
Desenat	Baraga Cristina		Proiect			
Verificat	Baraga Constantin		Desen	GARNITURA		
Aprobat	Cepisca C.		Greutate: 0,013kg	Desen nr.	616.15-02.00.26.0	Page: 1/1
1:1		Unitate masura: mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		Data: 01.02.2021		
Format: A3 (297x420)						



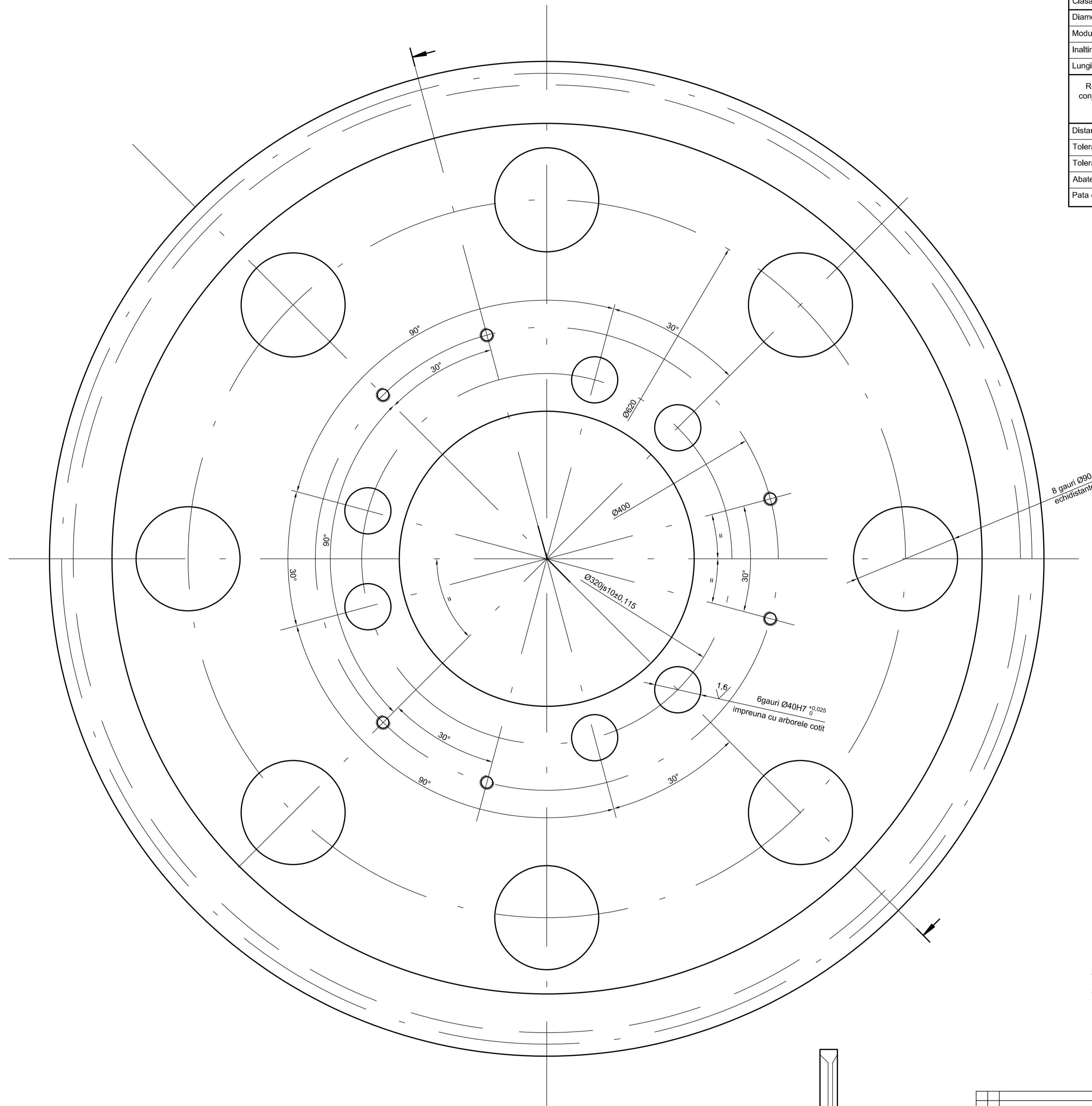
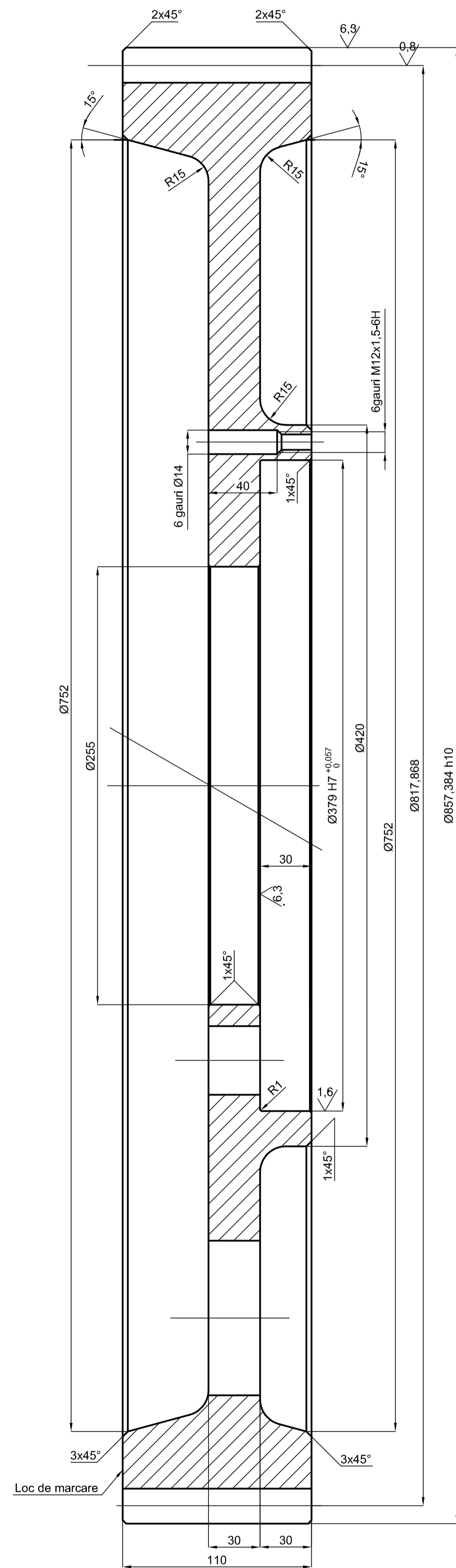
25/ ✓

			INC DIE BUCURESTI		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	Bolmoaga Sergiu		Client	----		
Desenat	Daisa A.M.	C45 E SR EN 10250/2:2002	Proiect			
Verificat	Baraga Constantin		Desen	CORP TIJA		
Aprobat	Arhire Tiberiu	Greutate: 6,509 kg	Desen nr.	616.15-02.27.01.0	Page:	1/1
1:1		Unitate masura: mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		Rev.	0	
Format: A3 (297x420)		Data: 11.01.2021				



			INCDIE ICPE-CA <small>BUCURESTI</small>		<small>DEPARTAMENT</small> IPCUP <small>PLOIESTI</small>	
Proiectat	Tartian Nelu		Client	----		
Desenat	Daisa A.M.	Cauciuc PF 80 A SR EN 682:2002/A1:2006	Proiect			
Verificat	Munteanu Silvia		Desen	DISC PROTECTOR		
Aprobat	Arhire Tiberiu	Greutate: 0,230 kg	Desen nr.		Page:	Rev.
1:1		Unitate masura: mm	616.15-02.00.34.0		1/1	0
		Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553				
Format: A3 (297x420)		Data: 01.02.2021				

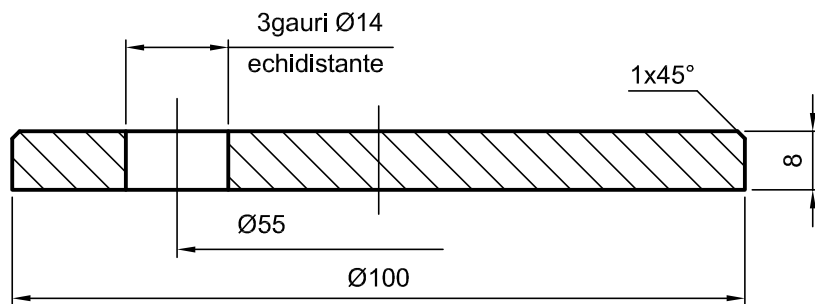
Numarul de dinti	z	79		
Modulul normal	m_n	10		
Unghiul de inclinare de divizare	B_d	15°		
Sensul inclinarii dintelui	-	dreapta		
Cremaliera de referinta	$\alpha_{on- fon}$ α_{on}	20°-1-0,25		
Deplasarea specifica normala a profilului	ξ_n	1,121		
Clasa de precizie si jocul	-	7B		
Diametul de divizare	D_d	817,868,573		
Modulul frontal	m_f	10,352		
Inaltimea dintelui (informativ)	h	21,046		
Lungimea normala peste 10dinti	L_{12}	359,378 ^{+0,280} _{-0,46}		
Roata conjugata	numarul desenului	-	616.15-04.00.01.0	
	numarul de dinti	z	14	
	deplasarea specifica a profilului	ξ	0,6	
Distanta dintre axe		A	497±0,120	
Toleranta bataii radiale		F_r	0,090	
Toleranta variatiei lungimii peste dinti		F_{vw}	0,100	
Abaterrea limita a pasului frontal		f_{pt}	±0,085	
Pata de contact		- pe inaltimea dintelui	P_c	45%
		- pe lungimea dintelui		60%



CONDITII TEHNICE

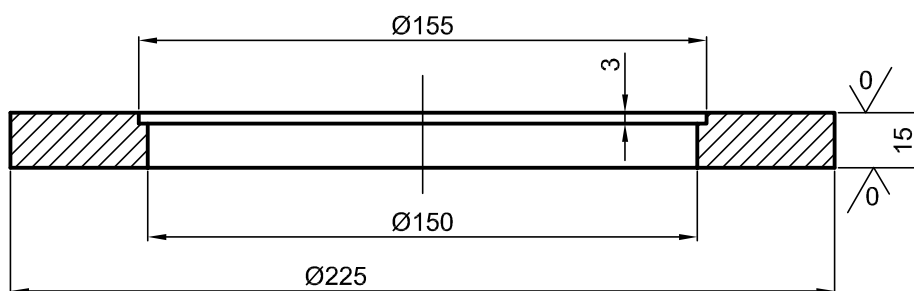
- Pe probe maror ale sarjei si lotului de tratament termic, pentru piesele forjate se determina caracteristicile mecanice care vor avea valorile minime conform STAS 11512 - 91, si suplimentar se va verifica energia de rupere care va avea valoarea KV (-40°C) = 28J;
- Dantura se va cementa sau carbonitrua la duritatea 59 ± 63HRC, pe adancimea 1,8±0,2mm;
- In locul indicat se va marca prin poansonare: Z=81,nr.cod, poanson C.T.C.
Inaltimea cifrelor : 5mm.

Proiectat		ing. S. Tudor	Client		-
Desenat		E. Toparceanu	Proiect		Pompa triplex cu plungere 3PP- 400
verificat		ing. S. Fica	Desen		ROATA Z=81
Aprobat		ing. G. Marin	Tolerante generale:		EN ISO 13920 classes B&F
Unitate masura:mm			Simboluri sudura: EN 22553		
1:2			Format: A1(594x841)		Date:
INCDIE ICPE-CA		DEPARTAMENT IPCUP		616.15 - 04.00.15.0	
SUCURESTI		PULESTI		Pag: Rev.	
				1/1 ⁰	



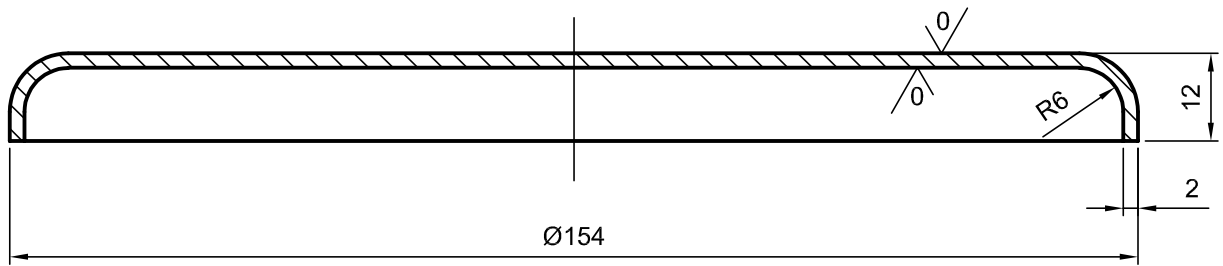
25/

			INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor		S355J2 SR EN 10025-2:2019	Client	-----	
Desenat	E. Toparceanu			Proiect	Pompa triplex cu plungere 3PP - 700	
Verificat	ing. S. Fica		Greutate: 0,464kg	Desen	SAIBA DE FIXARE	
Aprobat	ing. G. Marin			Desen nr.		Page:
1:1		Unitate masura: mm	616.15 - 04.00.03.0		1/1	0
Format: A4 (210x297)		Data:				
Tolerante generale: SR EN ISO 13920 clasele B&F						
Simboluri sudura: SR EN 22553						



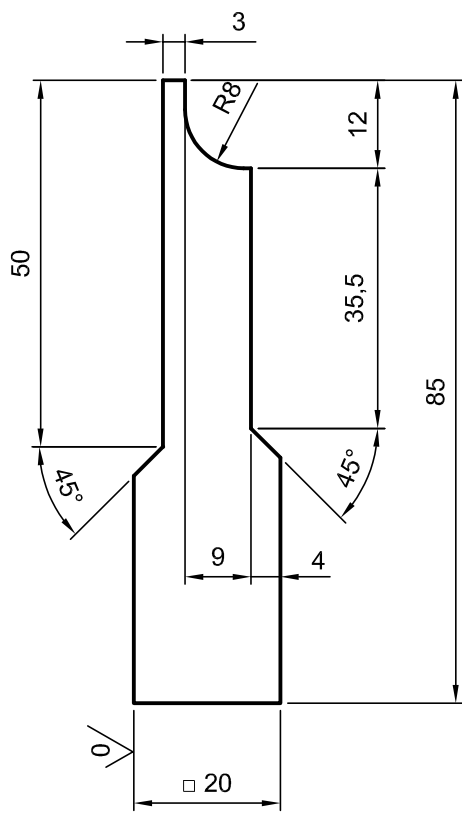
25/✓/✓/

				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019		Client	-----		
Desenat	E. Toparceanu			Proiect	Pompa triplex cu plungere 3PP -700		
Verificat	ing. S. Fica	Greutate: 1,230kg		Desen	FLANSA		
Aprobat	ing. G. Marin			Unitate masura:mm		Desen nr.	
1:2		Tolerante generale: SR EN ISO 13920 clasele B&F		616.15- 04.04.01.0		1/1	0
Format: A4 (210x297)		Data:					



25/ ✓/ ✓/

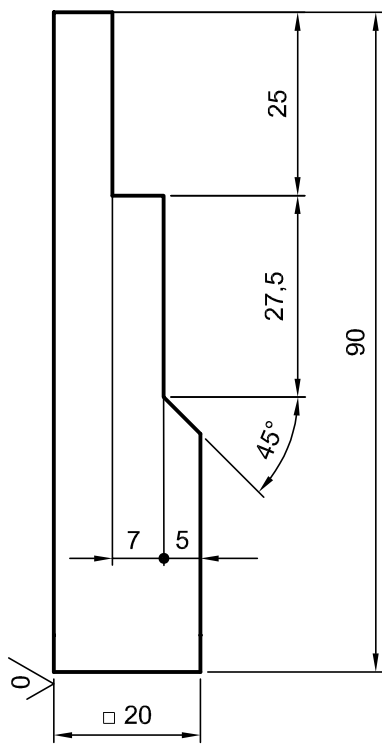
			INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor		S235J2 SR EN 10025-2:2019			
Desenat	E. Toparceanu					
Verificat	ing. S. Fica		Greutate: 0,380kg			
Aprobat	ing. G. Marin					
1:1		Unitate masura: mm				
		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553				
Format: A4 (210x297)		Data:		Desen nr. 616.15 - 04.04.02.0		Page: Rev. 1/1 0



25/✓/✓/✓

Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019	
Desenat	E. Toparceanu		
Verificat	ing. S. Fica		
Aprobat	ing. G. Marin		
Unitate masura: mm		Greutate: 0,200kg	
1:1			Tolerante generale:
			SR EN ISO 13920 clasele B&F
Format: A4 (210x297)		Simboluri sudura: SR EN 22553	
Data:			

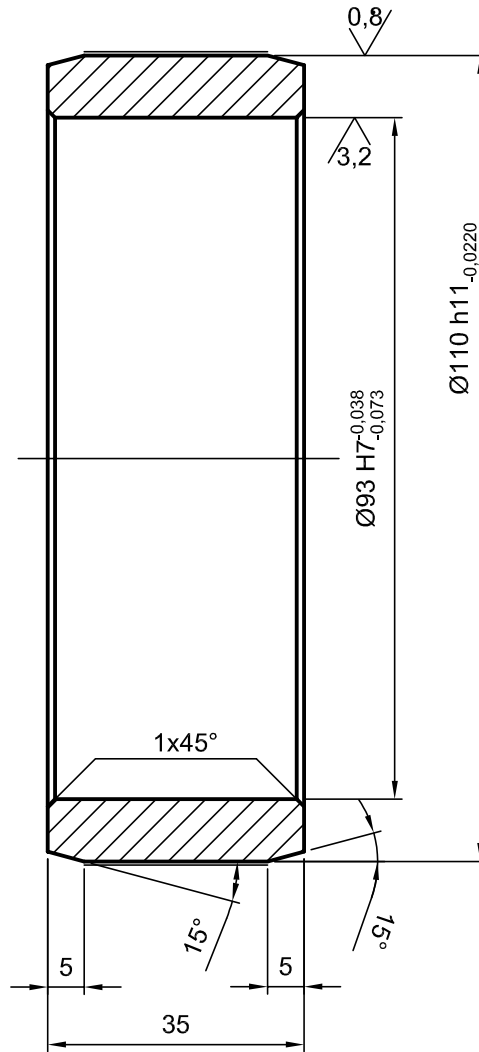
INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Client	-----		
Proiect	Pompa triplex cu plungere 3PP - 700		
Desen	MUFA		
Desen nr.		Page:	Rev.
616.15 - 04.04.03.0		1/1	0



25/1/1

Proiectat	ing. S. Tudor	S235J2 SR EN 10025-2:2019
Desenat	E. Toparceanu	
Verificat	ing. S. Fica	
Aprobat	ing. G. Marin	
Unitate masura: mm		Greutate: 0,200kg
1:1		Tolerante generale: SR EN ISO 13920 clasele B&F
		Simboluri sudura: SR EN 22553
Format: A4 (210x297)		Data:

INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Client	-----		
Proiect	Pompa triplex cu plungere 3PP - 700		
Desen	MUFA		
Desen nr.		Page:	Rev.
616.15 - 04.07.02.0		1/1	0



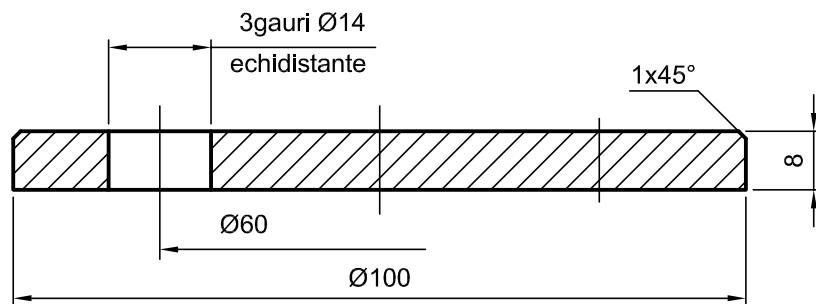
CONDITII TEHNICE

- Suprafata marcata cu se va croma dur
AE - Cr U2 / STAS 7978 - 88, dupa o prealabila
calire prin CIF la duritatea 56±2HRC;
- Materialul de inlocuire : C45 SR EN 683-1:2018.

Teava 114x14 STAS 404/1 -87.

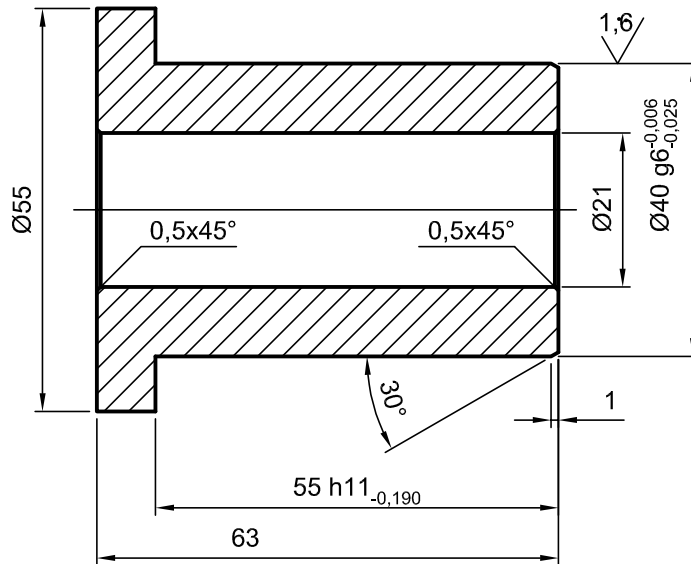
6;3/✓/✓/

				INCDIE		DEPARTAMENT	
				ICPE- CA		IPCUP	
				Bucuresti		PLOIESTI	
Proiectat	ing. S. Tudor			Client	-----		
Desenat	E. Toparceanu	OLT 65 SR EN ISO 11961:2009		Proiect	Pompa triplex cu plungere 3PP - 700		
Verificat	ing. S. Fica			Desen	BUCSA		
Aprobat	ing. G. Marin	Greutate:0,745kg		Desen nr.		Page:	Rev.
1:1		Unitate masura:mm		616.15 - 04.00.11.0		1/1	0
		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553					
Format: A4 (210x297)		Data:					

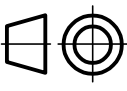


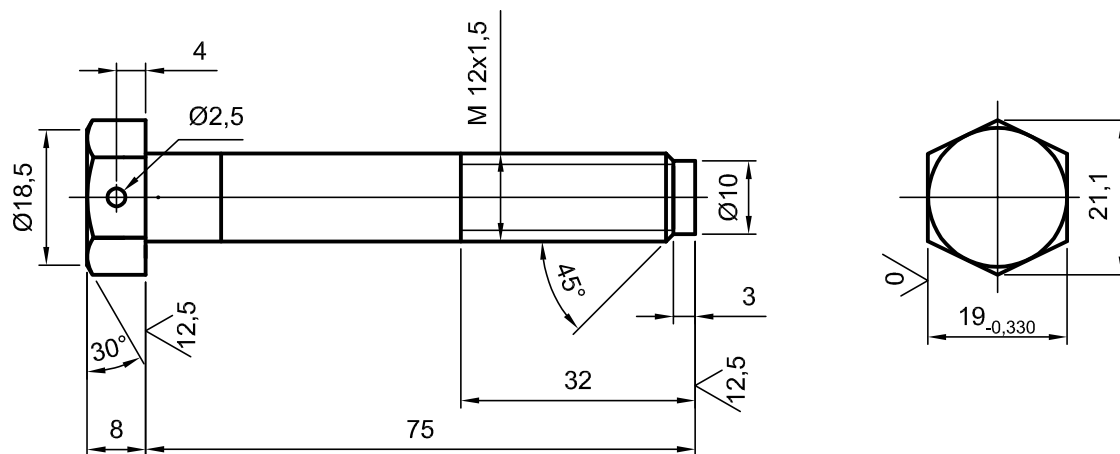
25/

			INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI
Proiectat	ing. S. Tudor		S355J2 SR EN 10025-2:2019	Client	-----
Desenat	E. Toparceanu			Proiect	Pompa triplex cu plungere 3PP - 700
Verificat	ing. S. Fica		Greutate: 0,464kg	Desen	SAIBA DE FIXARE
Aprobat	ing. G. Marin			Desen nr.	
1:1		Unitate masura: mm		Page: Rev.	
		Tolerante generale: SR EN ISO 13920 clasele B&F		616.15 - 04.00.12.0	
Format: A4 (210x297)		Data:		1/1	
				0	



25/✓/✓/

				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	42CrMo4 SR EN 10250-3:2002		Client	-----		
Desenat	E. Toparceanu			Proiect	Pompa triplex cu plungere 3PP - 700		
Verificat	ing. S. Fica	Greutate: 0,520kg		Desen	BUCSA		
Aprobat	ing. G. Marin			Unitate masura: mm		Desen nr.	
1:1		 Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		616.15 - 04.00.16.0		1/1	0
Format: A4 (210x297)				Data:			

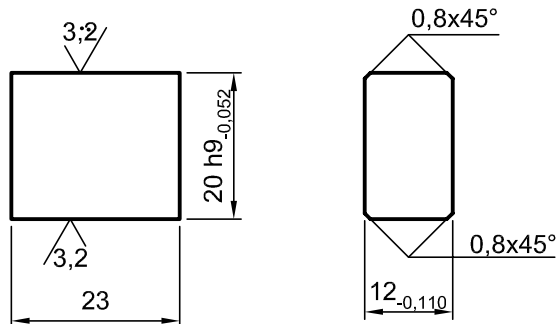


NOTA

Protectie: AE / OL / Cd 12 FL STAS 7222 - 90.

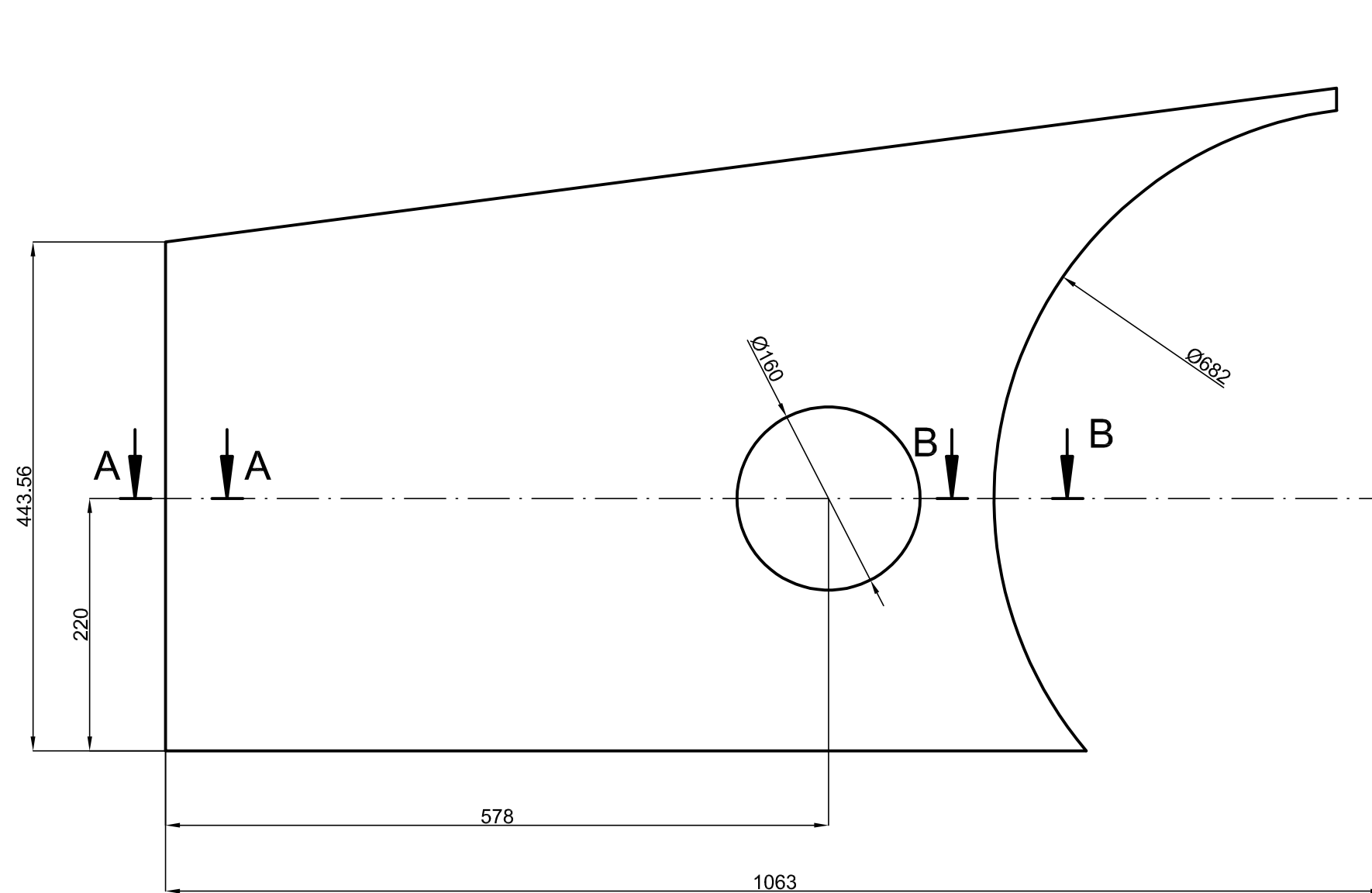
25/✓/✓/

				INCDIE		DEPARTAMENT	
				ICPE- CA		IPCUP	
				Bucuresti		PLOIESTI	
Proiectat	ing. S. Tudor	C25 SR EN 683-1:2018		Client	-----		
Desenat	E. Toparceanu			Proiect	Pompa triplex cu plungere 3PP - 700		
Verificat	ing. S. Fica	Greutate: 0,083kg		Desen	SURUB SPECIAL M 12x75		
Aprobat	ing. G. Marin			Desen nr.		Page:	Rev.
1:1		Unitate masura: mm		616.15 - 04.00.19.0		1/1	0
Format: A4 (210x297)		Tolerante generale: SR EN ISO 13920 clasele B&F		Data:			
		Simboluri sudura: SR EN 22553					



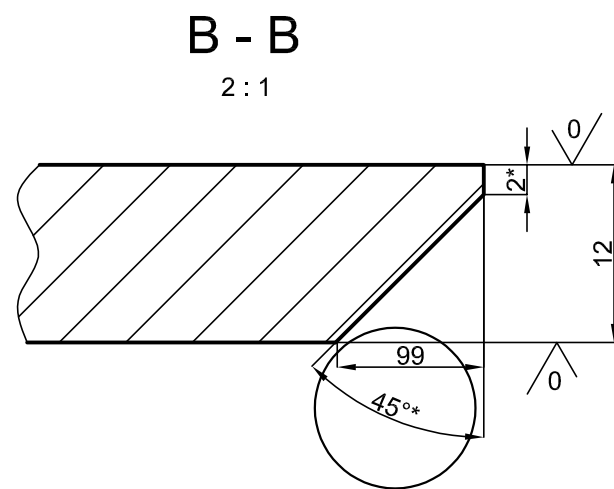
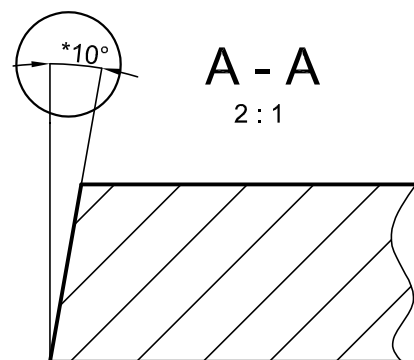
12,5 ✓/✓/✓

				INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	C45 SR EN 683-1:2018		Client	-----		
Desenat	E. Toparceanu			Proiect	Pompa triplex cu plungere 3PP - 700		
Verificat	ing. S. Fica	Greutate: 0,043kg		Desen	PANA 20x12x23		
Aprobat	ing. G. Marin			Unitate masura: mm		Desen nr.	
1:1		Tolerante generale: SR EN ISO 13920 clasele B&F		616.15 - 04.00.20.0		1/1	0
Format: A4 (210x297)		Data:					



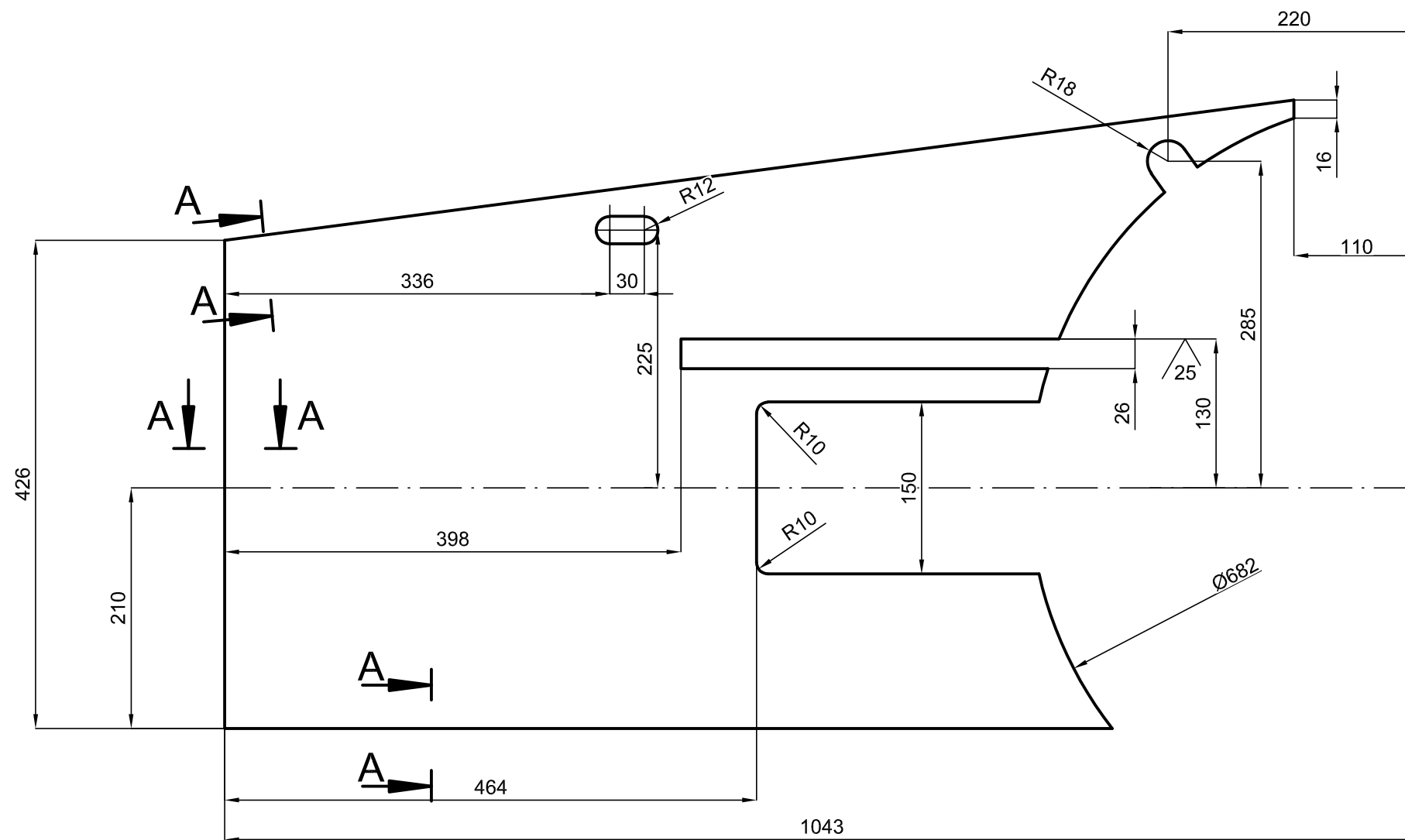
NOTA

Cotele marcate cu *) se vor executa:
 - la 1 buc. dreapta
 - la 1 buc. stanga



50/

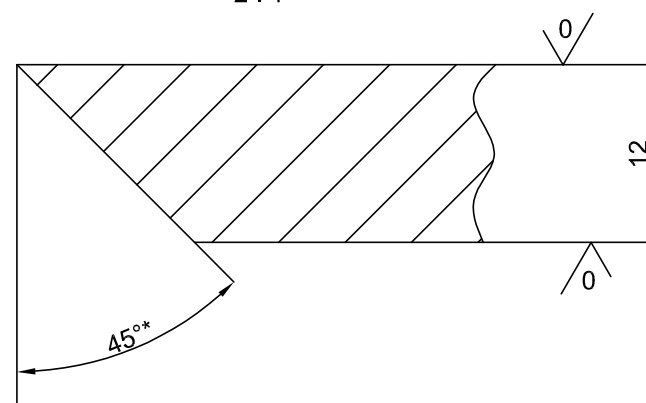
		INC DIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing.S. Tudor	S355J2 SR EN 10025-2:2019		Client	----
Desenat	H. Moscaliuc			Proiect	Pompa triplex cu plungere 3 PP-700
Verificat	Dr.ing.S.Fica	Greutate:33,243kg		Desen	PERETE LATERAL Frema
Aprobat	Dr.ing.G.Marin			Desen nr.	Page: Rev.
1:5		Unitate masura:mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		614.92 - 01.01.02.0	
Format: A3 (297x420)		Data: 06.05.2021		1/1 0	




NOTA

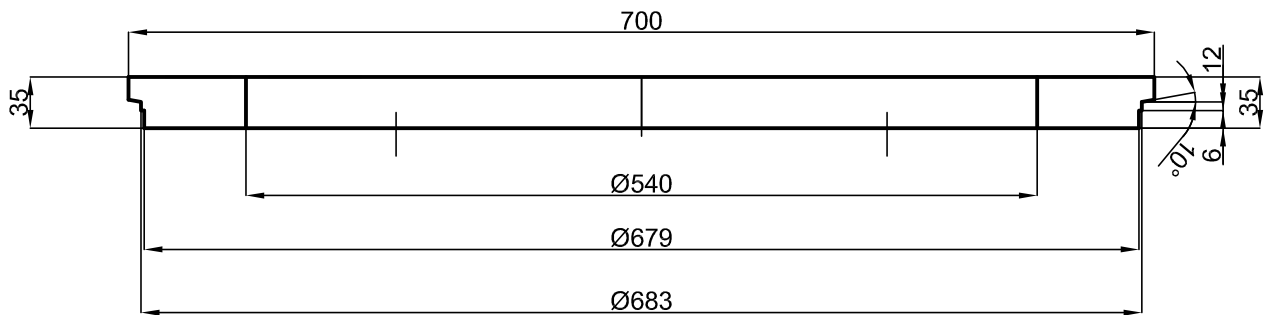
Cota marcata cu *) se va executa:
 - la 1 buc. dreapta
 - la 1 buc. stanga

A - A
2 : 1




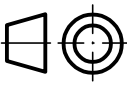
50/

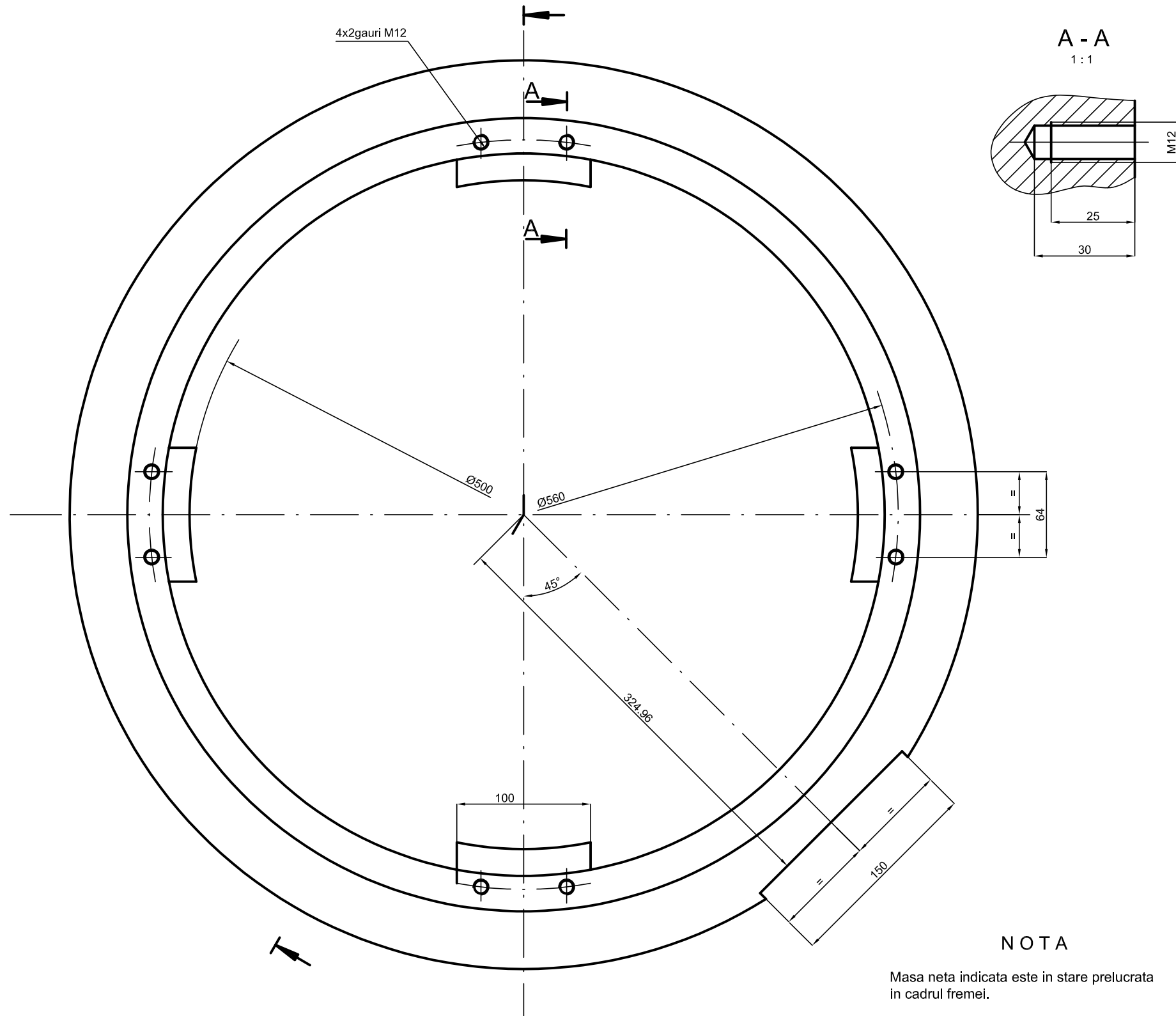
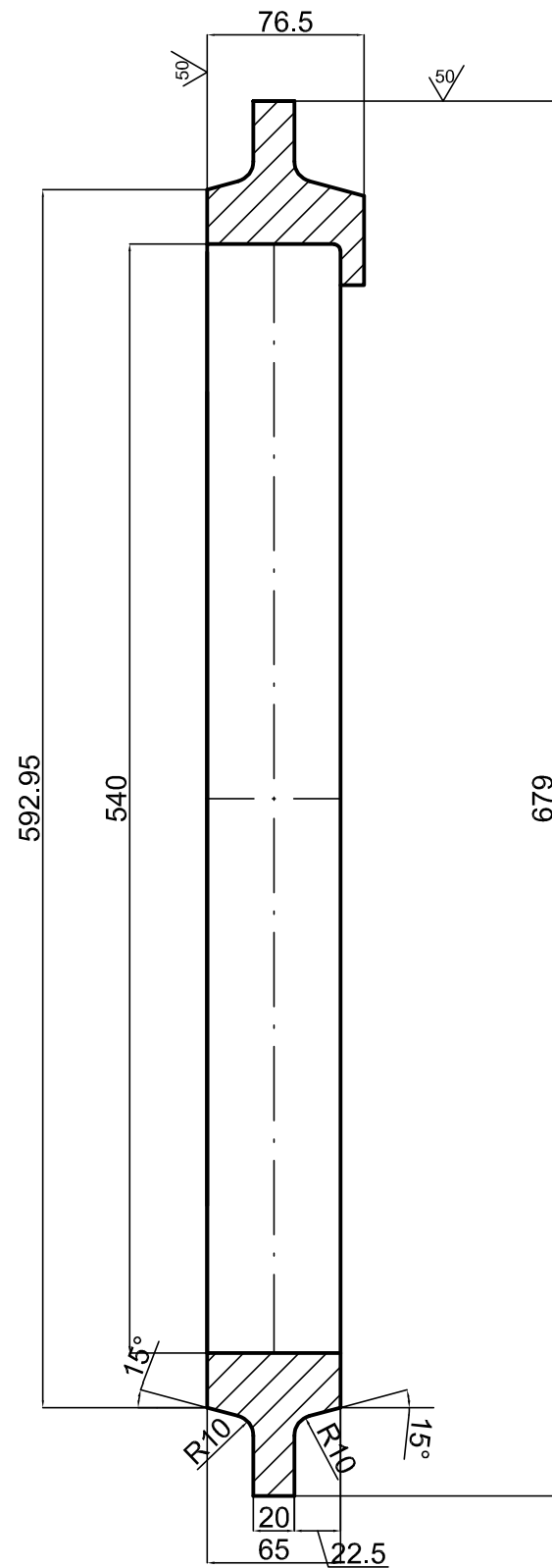
		 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOIESTI		
Proiectat	ing. S. Tudor	S355J2 SR EN 10025-2:2019		Client		----
Desenat	ing. H.Moscaliuc			Proiect		Pompa triplex cu plungere 3 PP-700
Verificat	Dr.ing.S.Fica	Greutate:29,016kg		Desen		PERETE INTERMEDIAR Frema
Aprobat	Dr.ing.G.Marin			Desen nr.		Page:
1:5		Unitate masura:mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		614.92 - 01.01.03.0		1/1
Format: A3 (297x420)		Data: 06.05.2021				0



NOTA

Masa neta indicata este in stare prelucrata
in cadrul fremei.

				 INCDIE CPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	S355J2 SR EN 10025-2:2019		Client	-----		
Desenat	ing. H. Moscaliuc			Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing. S.Fica	Greutate: 30,100kg		Desen	INEL LATERAL Freme		
Aprobat	Dr.ing. G.Marin			Desen nr.		Page:	Rev.
1:5		Unitate masura:mm		614.92 - 01.01.04.0		1/1	0
Format: A4 (210x297)		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553		Data: 06.05.2021			





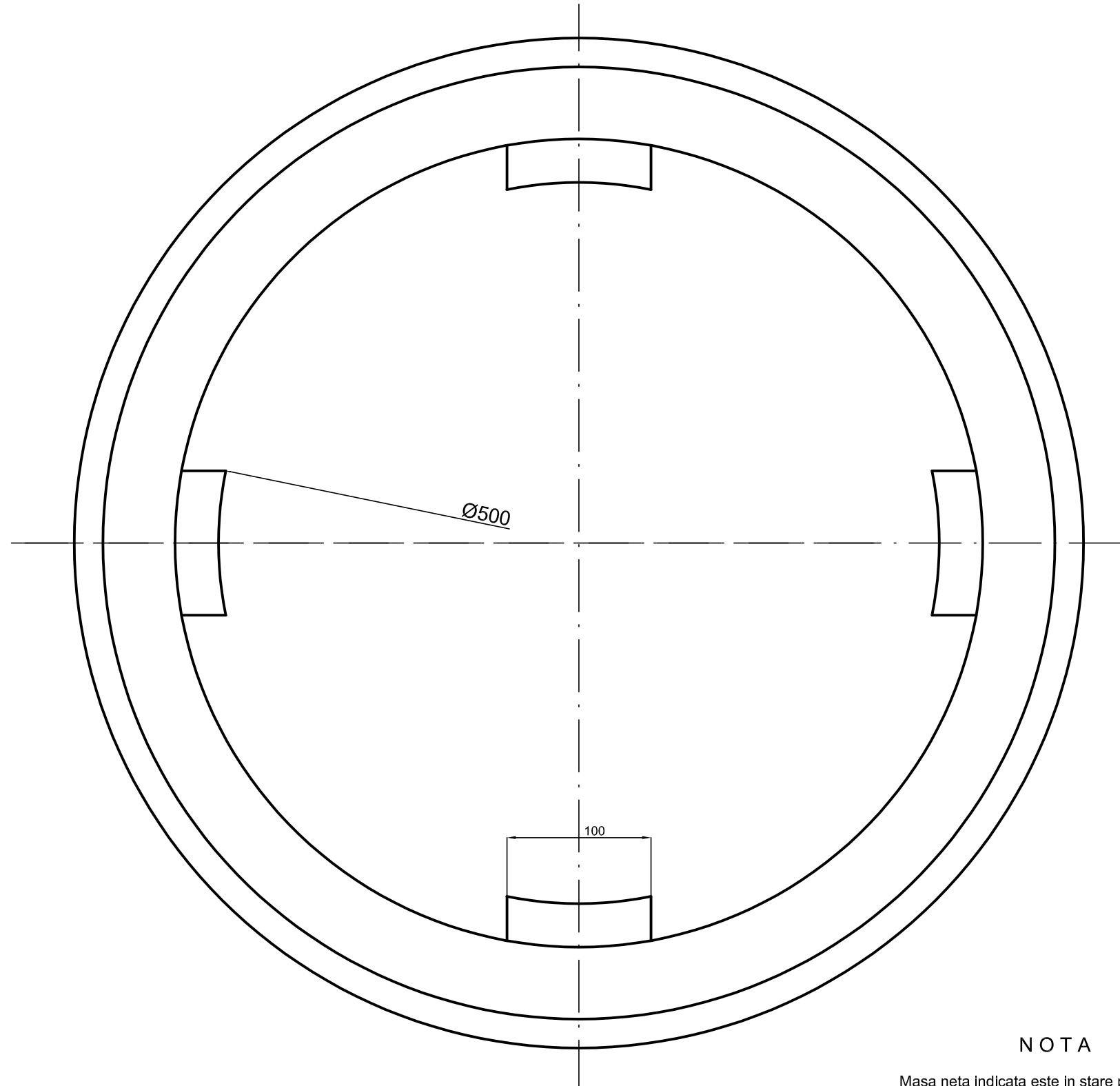
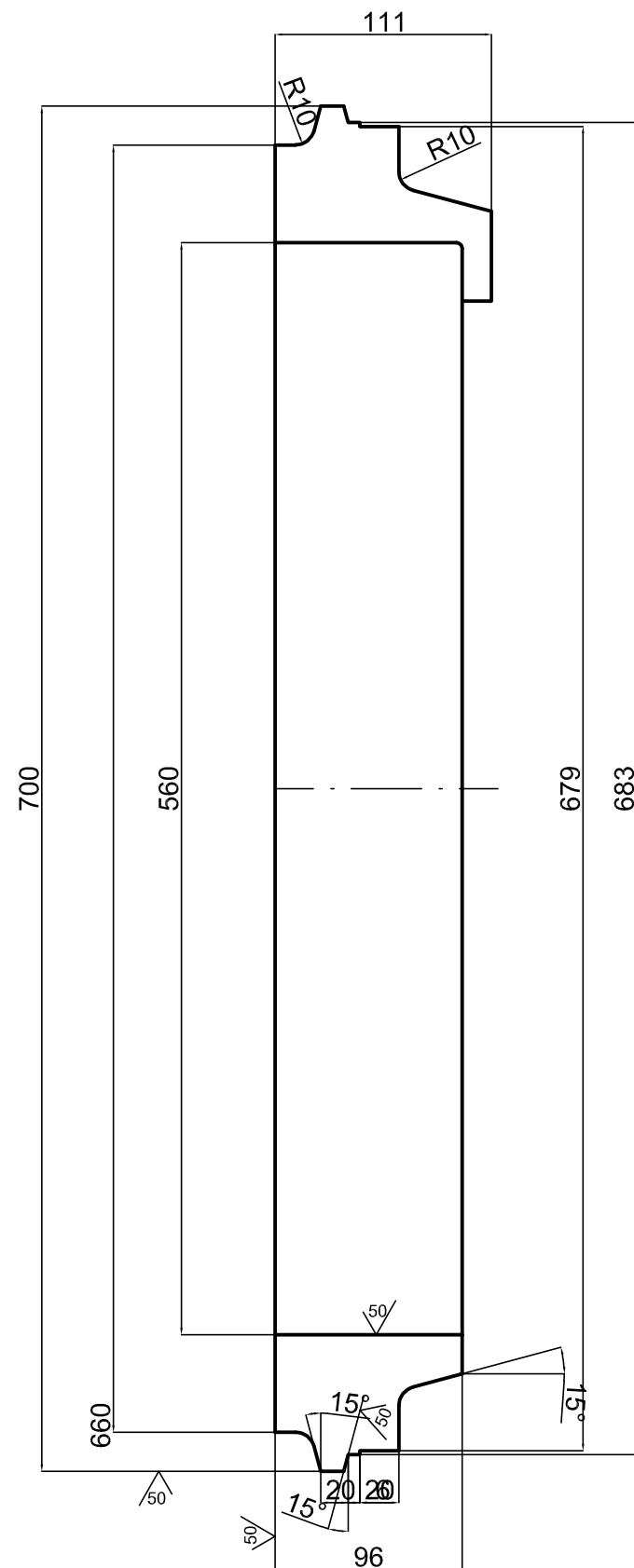
CONDITII TEHNICE

1. Dupa debavurare si curatire piesa se va sabla.
2. Se admite repararea prin sudare a defectelor de turnare, inainte de tratamentul termic, daca adancimea lor nu depaseste 50% din grosimea piesei in zona reparata. Nu sunt restrictii privind suprafata defectului. Nu se admit defecte de turnare grupate.
3. Pe suprafetele prelucrate se admit defecte de turnare negrupate, cu adancimea de max. 2 mm si suprafetele de max. 4 mm².

NOTA

Masa neta indicata este in stare prelucrata in cadrul fremei.



Proiectat		ing. S. Tudor	G32NiCrMo8-5-4		 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOESTI	
Desenat		ing. H. Moscaliuc			Client		---	
Verificat		Dr.ing. S. Fica			Proiect		Pompa triplex cu plungere 3 PP-700	
Aprobat		Dr.ing. G. Marin	Weight: 38,550 kg		Desen		LAGAR INTERMEDIAR Freme	
1:2,5		 Unitate masura: mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		Desen nr.		Page: Rev.		
Format: A2 (420x594)		Data: 06.05.2021		614.92 - 01.01.05.0		1/1 0		

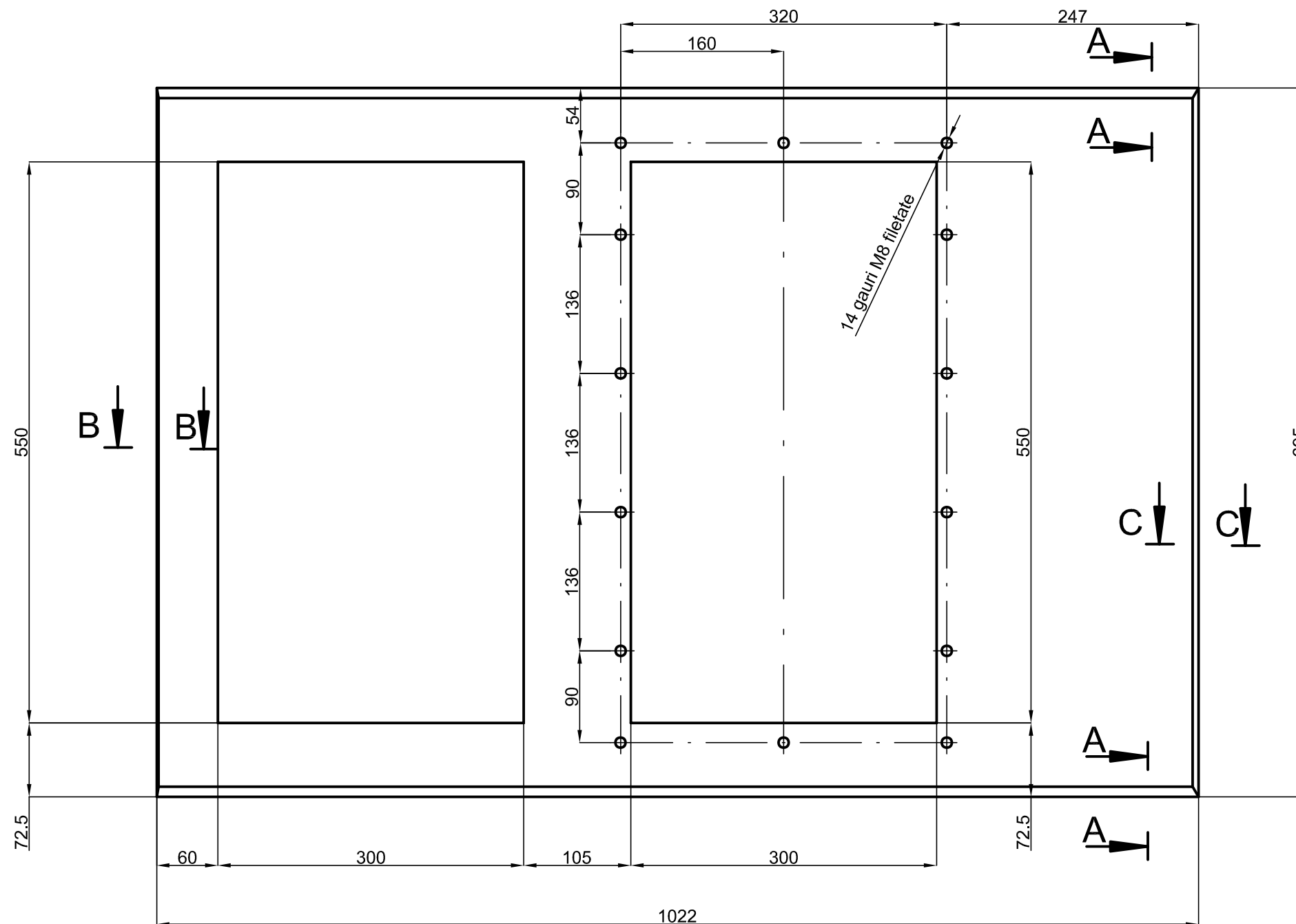


NOTA

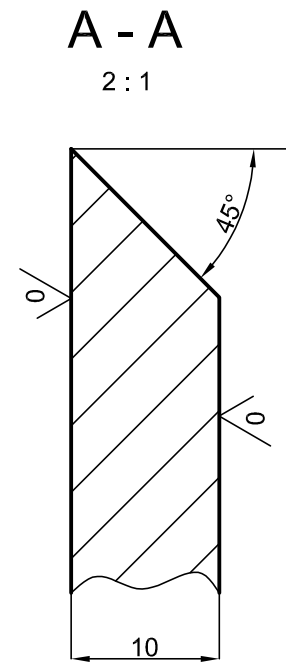
Masa neta indicata este in stare prelucrata in cadrul pompei.

1. Dupa debavurare si curatire piesa se va sabla.
2. Se admite repararea prin sudare a defectelor de turnare, inainte de tratamentul termic, daca adancimea lor nu depaseste 50% din grosimea piesei in zona reparata. Nu sunt restrictii privind suprafata defectului. Nu se admit defecte de turnare grupate.
3. Pe suprafetele prelucrate se admit defecte de turnare negrupate, cu adancimea de max. 2 mm si suprafetele de max. 4 mm².

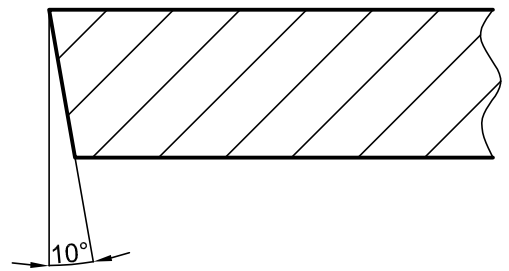
Proiectat		ing. S. Tudor	G32NiCrMo8-5-4		 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOESTI	
Desenat		ing. H. Moscaliuc			Client		---	
Verificat		Dr.ing. S.Fica			Proiect		Pompa triplex cu plungere 3 PP-700	
Aprobat		Dr.ing. G.Marin	Weight:83,022 kg		Desen		LAGAR LATERAL	
1:2,5		 Unitate masura:mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		Desen nr.		Page:Rev.		
Format: A2 (420x594)		Data: 06.05.2021		614.92 - 01.01.06.0		1/1 0		



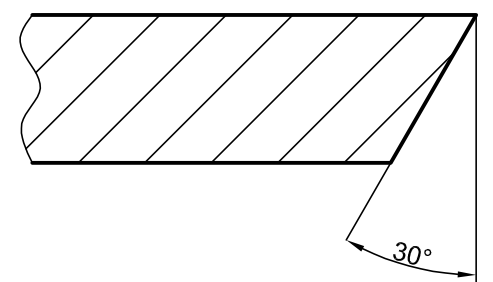
14 gauri M8 filetate



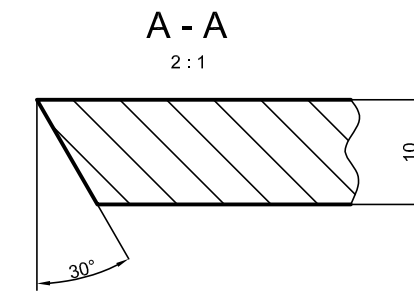
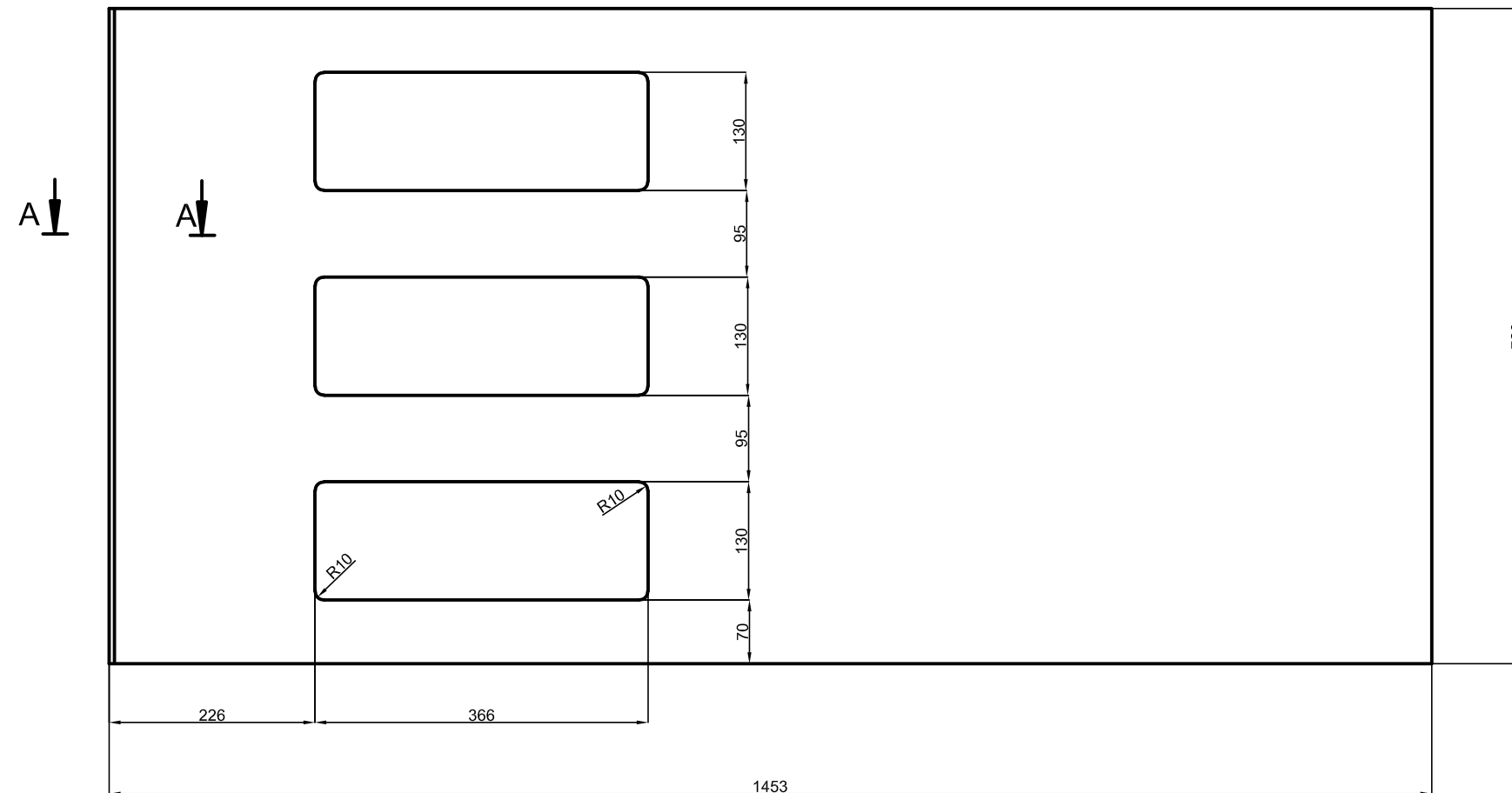
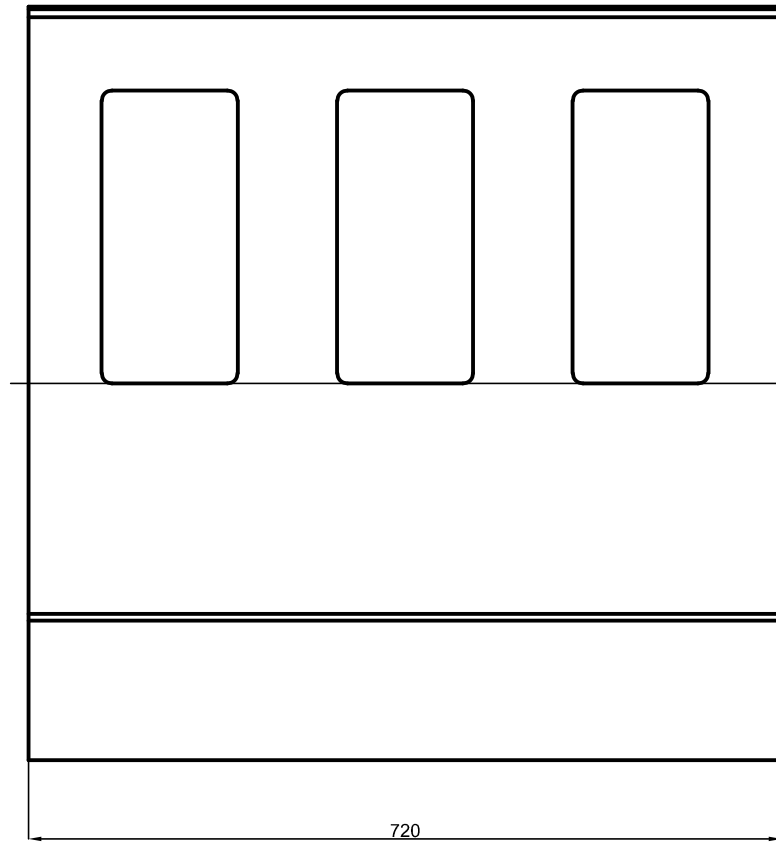
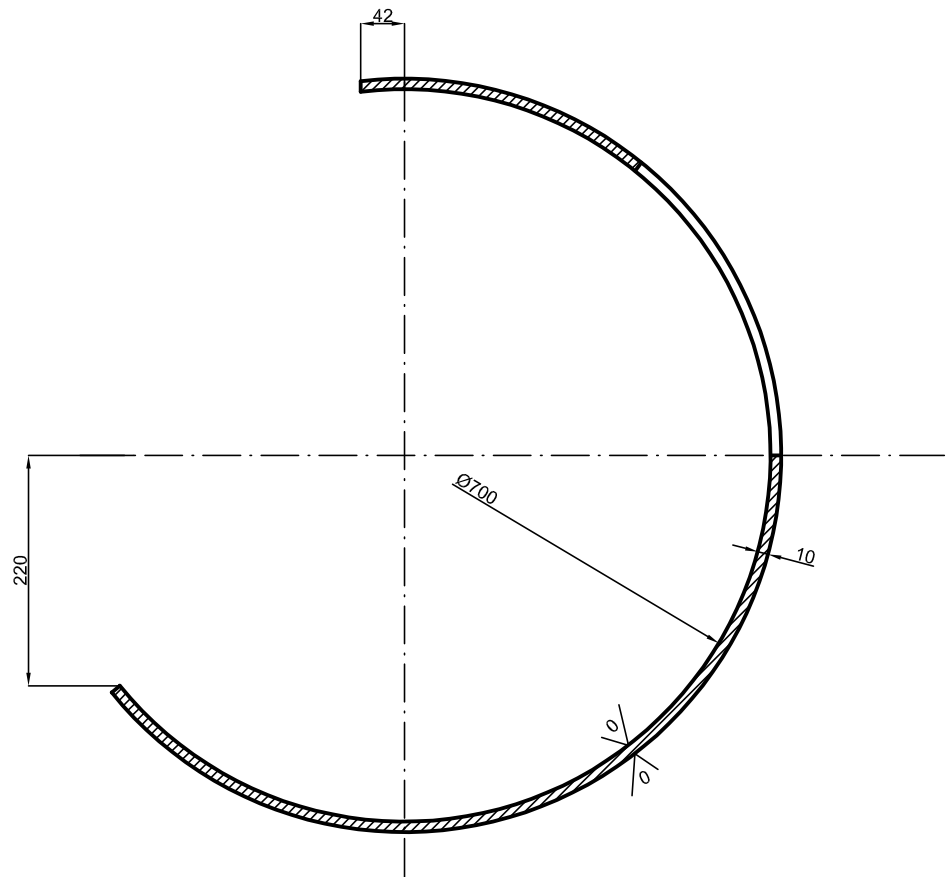
B - B
2:1



C - C
2:1



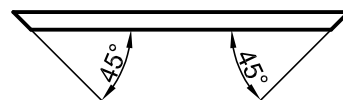
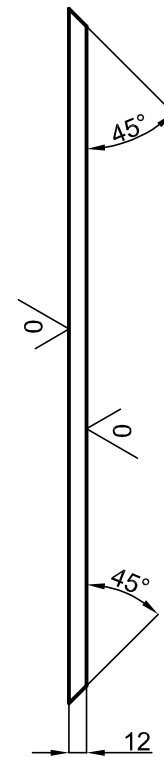
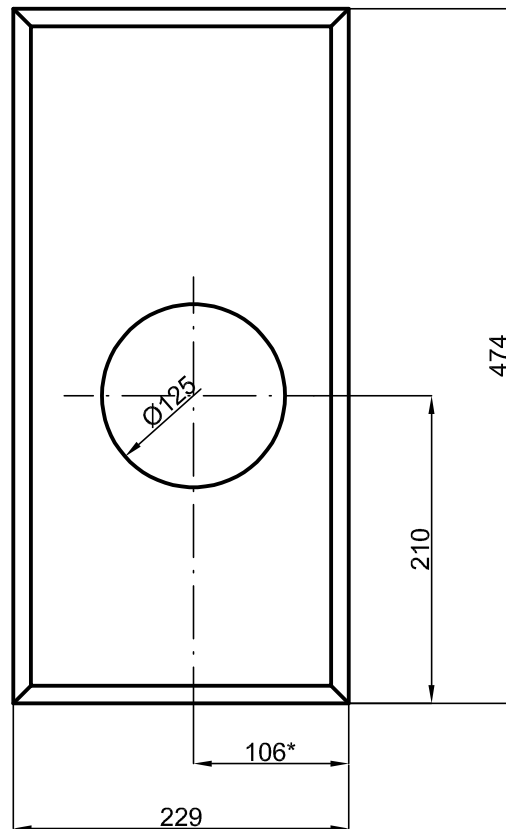
		50		
		DEPARTAMENT IPCUP PLOIESTI		
		INC DIE ICPE-CA BUCURESTI		
Proiectat	ing. S. Tudor	S 355 J2 SR EN 10025-2:2019	Client	----
Desenat	Fl. Radu		Proiect	Pompa triplex cu plungere 3 PP-700
Verificat	Dr.ing. S.Fica	Greutate: 24,483kg	Desen	PERETE SUPERIOR
Aprobat	Dr.ing. G.Marin		Desen nr.	614.92 - 01.01.07.0
Format: A3 (297x420)		Unitate masura: mm	Rev. 0	
1:5		Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553	Data: 06.05.2021	



Proiectat		ing. S. Tudor	S355J2		Client	---	
Desenat		Fl. Radu	SR EN 10025-2:2019			Pompa triplex cu plungere 3 PP-700	
Verificat		Dr.ing. S.Fica	Weight:68,066 kg		Desen		MANTA
Aprobat		Dr.ing. G.Marin	Unitate masura:mm		Desen nr.		Page:Rev.
1:5			Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		614.92 - 01.01.08.0		1/1
Format: A2 (420x594)		Data: 06.05.2021					

DEPARTAMENT
ICPE-CA
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 PLOESTI

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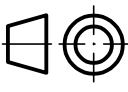


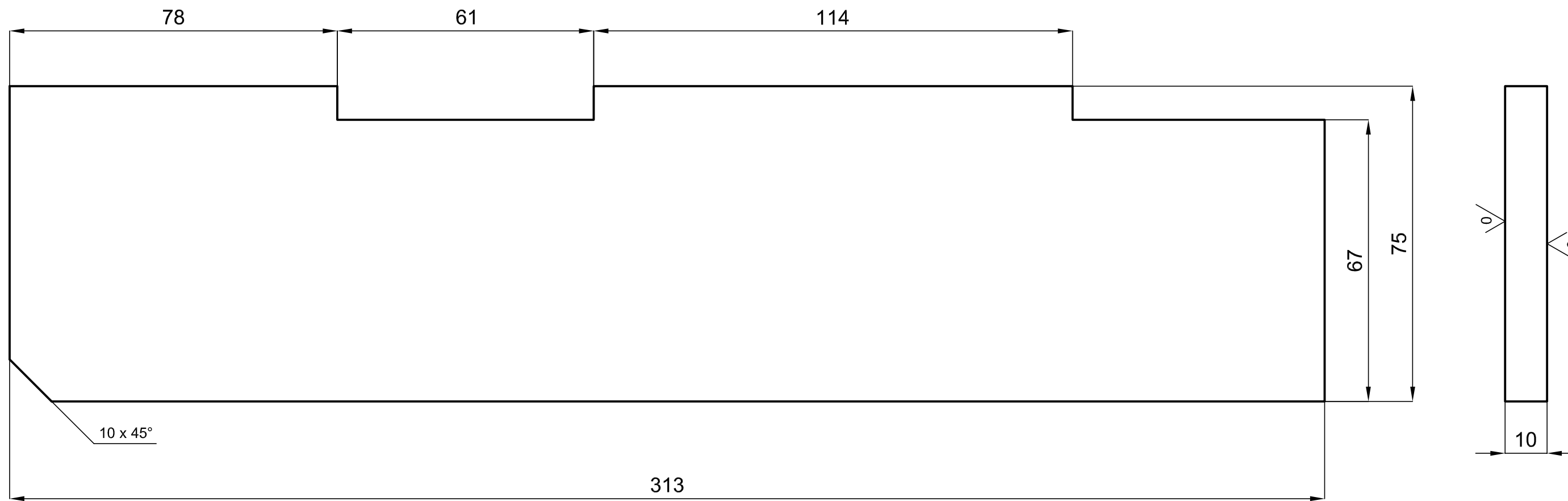
NOTA

Cota marcata cu *) se va executa:


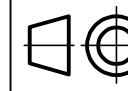
- la 1 buc. dreapta
- la 1 buc. stanga

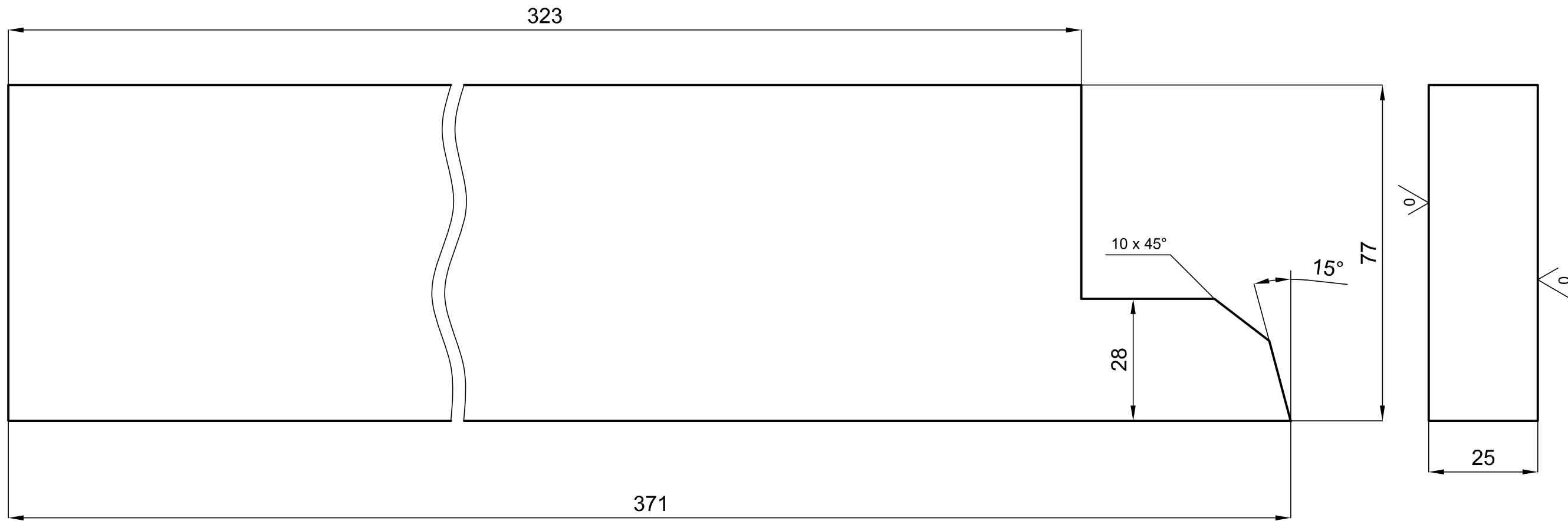
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				 INCDIE ICPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	S 355 J2 SR EN 10025-2:2019		Client	-----		
Desenat	Fl. Radu			Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing. S. Fica	Greutate: 8,842 kg		Desen	PLACA		
Aprobat	Dr.ing. G.Marin			Unitate masura:mm Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553		Desen nr.	
1:5 						614.92 - 01.01.10.0	
Format: A4 (210x297)		Data: 06.05.2021					


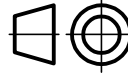


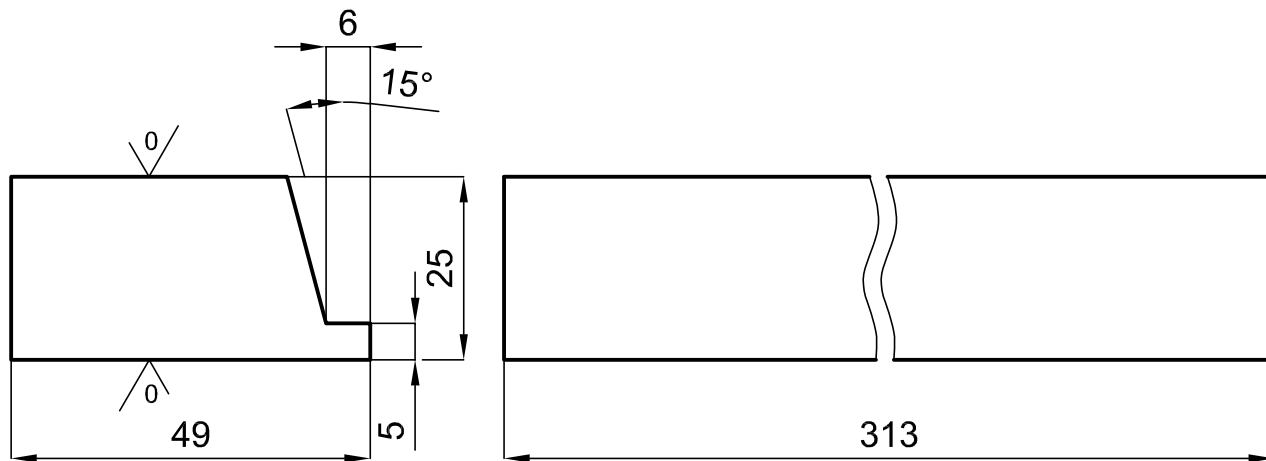
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				 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOIESTI		
Proiectat	ing. S. Tudor			S355J2 SR EN 10025-2:2019 Greutate: 1,747kg	Client	----		
Desenat	Fl. Radu				Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing. S.Fica				Desen	SUPORT		
Aprobat	Dr.ing. G. Marin				Desen nr.		Page:	Rev.
1:1		 Unitate masura:mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		614.92 - 01.01.12.0		1/1	0	
Format: A3 (297x420)		Data: 11.02.2021						


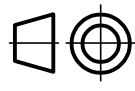


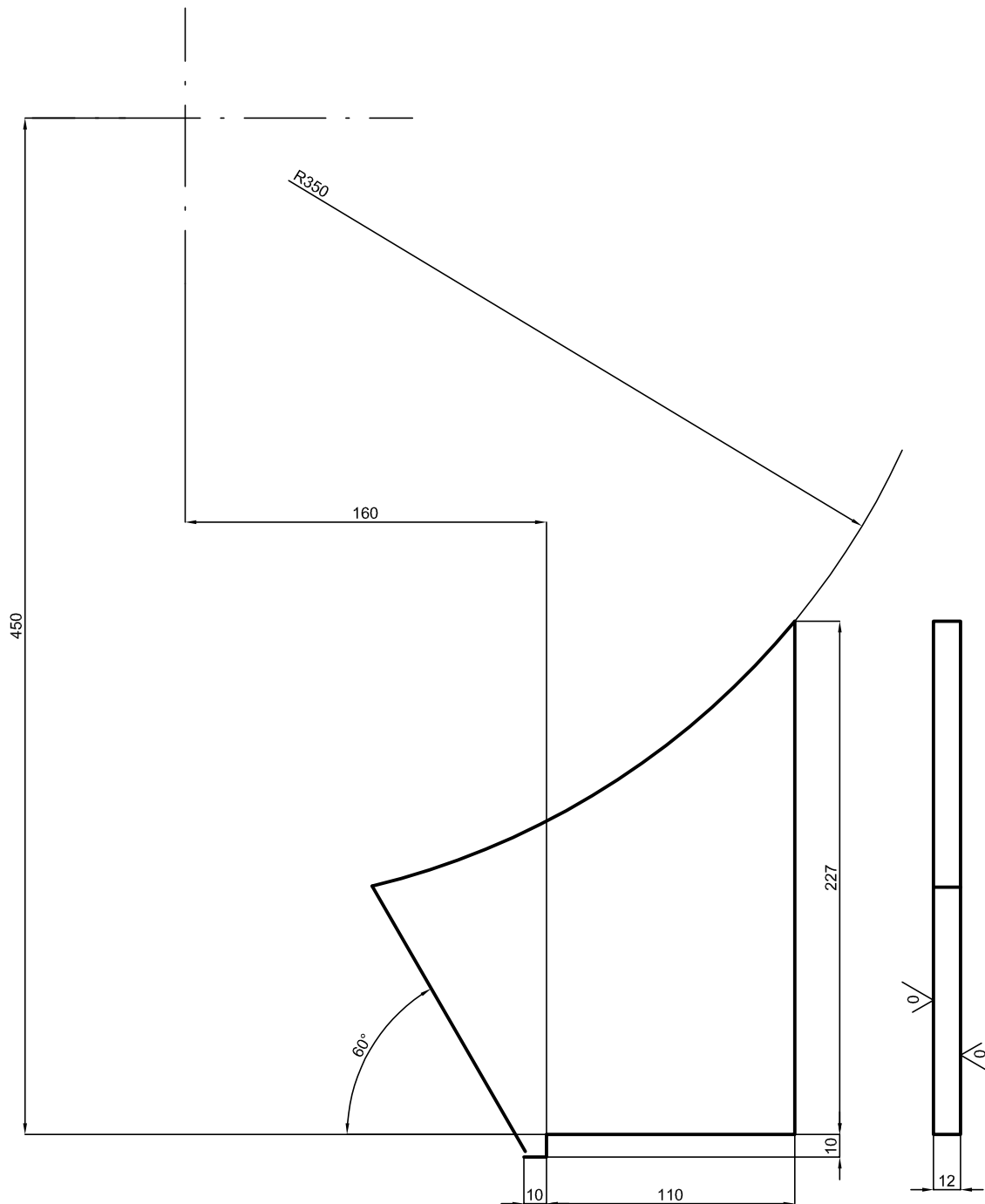
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				 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	S355J2 SR EN 10025-2:2019		Client	----		
Desenat	Fl. Radu			Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing. S. Fica	Greutate: 4,468kg		Desen	SUPPORT		
Aprobat	Dr.ing. G. Marin			Desen nr.		Page:	Rev.
1:1		 Unitate masura: mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		614.92 - 01.01.16.0		1/1	0
Format: A3 (297x420)		Data: 06.05.2021					





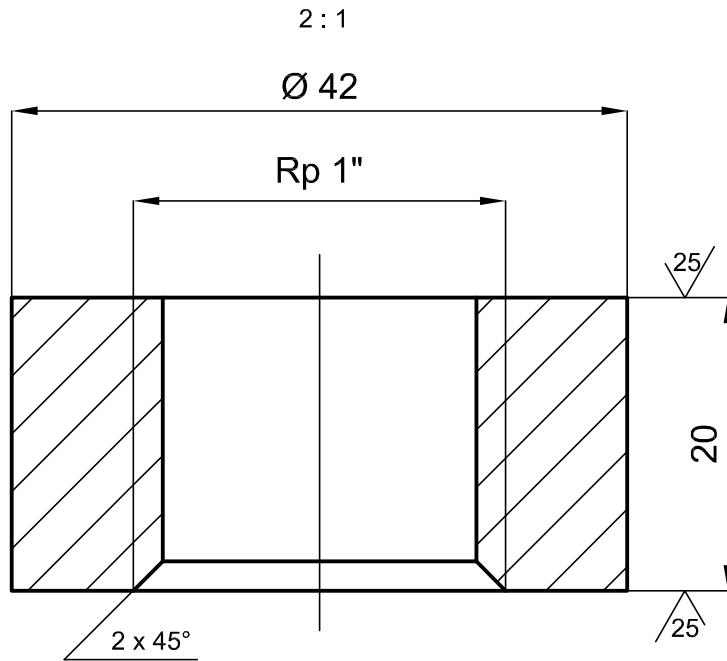
50/

				 INCDIE CPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor	313					
Desenat	Fl. Radu	S355J2		Client	-----		
Verificat	Dr.ing. S. Fica	SR EN 10025-2:2019		Proiect	Pompa triplex cu plungere 3 PP-700		
Aprobat	Dr.ing. G. Marin	Greutate: 2,652kg		Desen	SUPORT		
1:1		Unitate masura: mm		Desen nr.		Page:	Rev.
		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		614.92 - 01.01.17.0		1/1	0
Format: A4 (210x297)		Data: 06.05.2021					


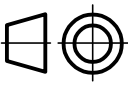


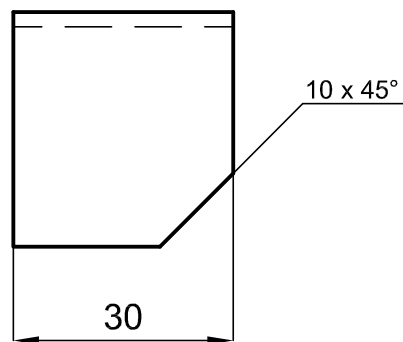
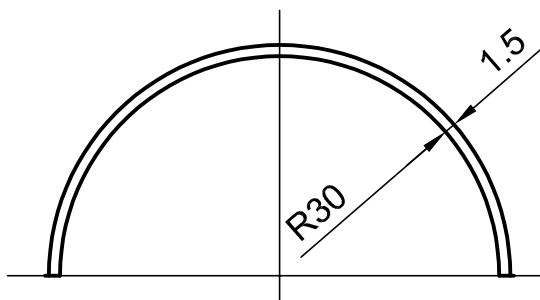
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				 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing. S. Tudor					Client	----
Desenat	Fl. Radu			S355J2 SR EN 10025-2:2019		Proiect	Pompa triplex cu plungere 3PP-700
Verificat	Dr.ing. S. Fica					Desen	NERVURA
Aprobat	Dr.ing. G. Marin			Greutate: 2,339 kg			
1:2		 Unitate masura: mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		Desen nr.		Page:	Rev.
Format: A3 (297x420)		Data: 06.05.2021		614.92 - 01.01.18.0		1/1	0




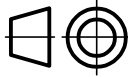
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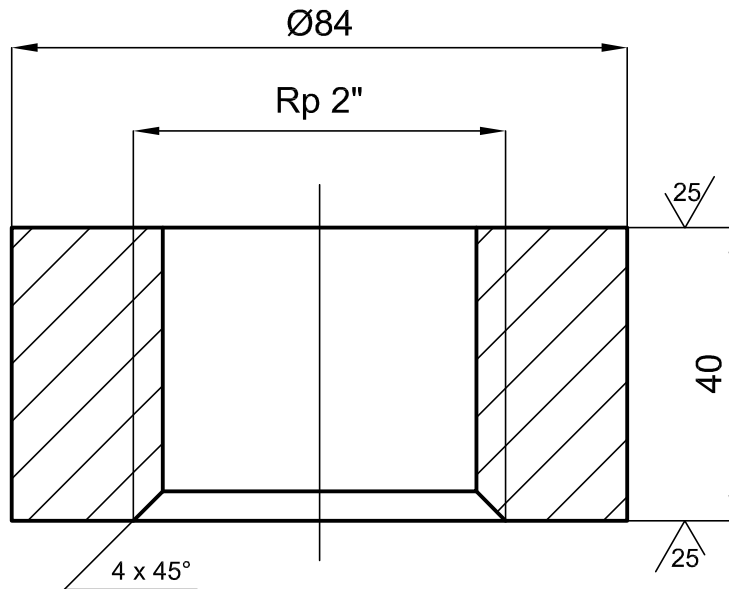
				 INCDIE CPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing.S. Tudor	S235J2 SR EN 10025-2:2019		Client	-----		
Desenat	Fl. Radu			Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing.S.Fica	Greutate: 0,093kg Unitate masura: mm		Desen	MUFA Rp 1"		
Aprobat	Dr.ing.G.Marin			Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		Desen nr.	
1:1				614.99 - 01.01.36.0		1/1	0
Format: A4 (210x297)		Data: 06.05.2021					




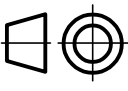
Lungimea desfasurata = 97 mm

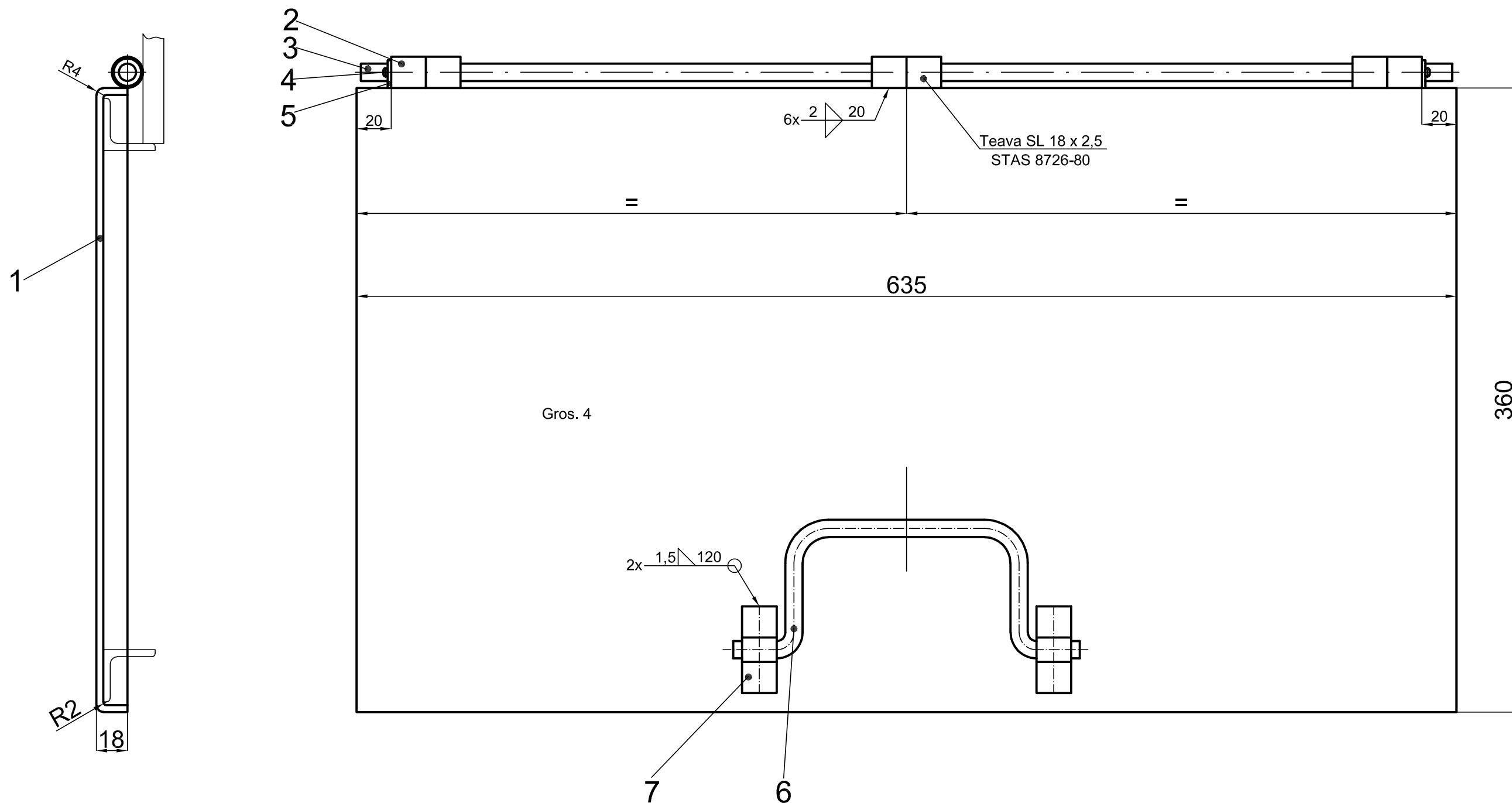
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				 INCDIE CPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing.S. Tudor	S235J2 SR EN 10025-2:2019		Client	-----		
Desenat	Fl. Radu			Project	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing.S.Fica	Greutate: 0,034kg		Desen	APARATOARE		
Aprobat	Dr.ing.G.Marin			Desen nr.		Page:	Rev.
1:1		Unitate masura: mm		614.99 - 01.01.39.0		1/1	0
Format: A4 (210x297)		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		Data: 06.05.2021			



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				 INCDIE CPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing.S. Tudor	E 275 SR EN 10297-1:2003		Client	-----		
Desenat	Fl. Radu			Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing.S.Fica	Greutate: 0,363kg Unitate masura: mm		Desen	MUFA Rp 2''		
Aprobat	Dr.ing.G.Marin			Desen nr.		Page:	Rev.
1:1 		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura: SR EN 22553		614.99 - 01.01.27.0		1/1	0
Format: A4 (210x297)		Data: 06.05.2021					

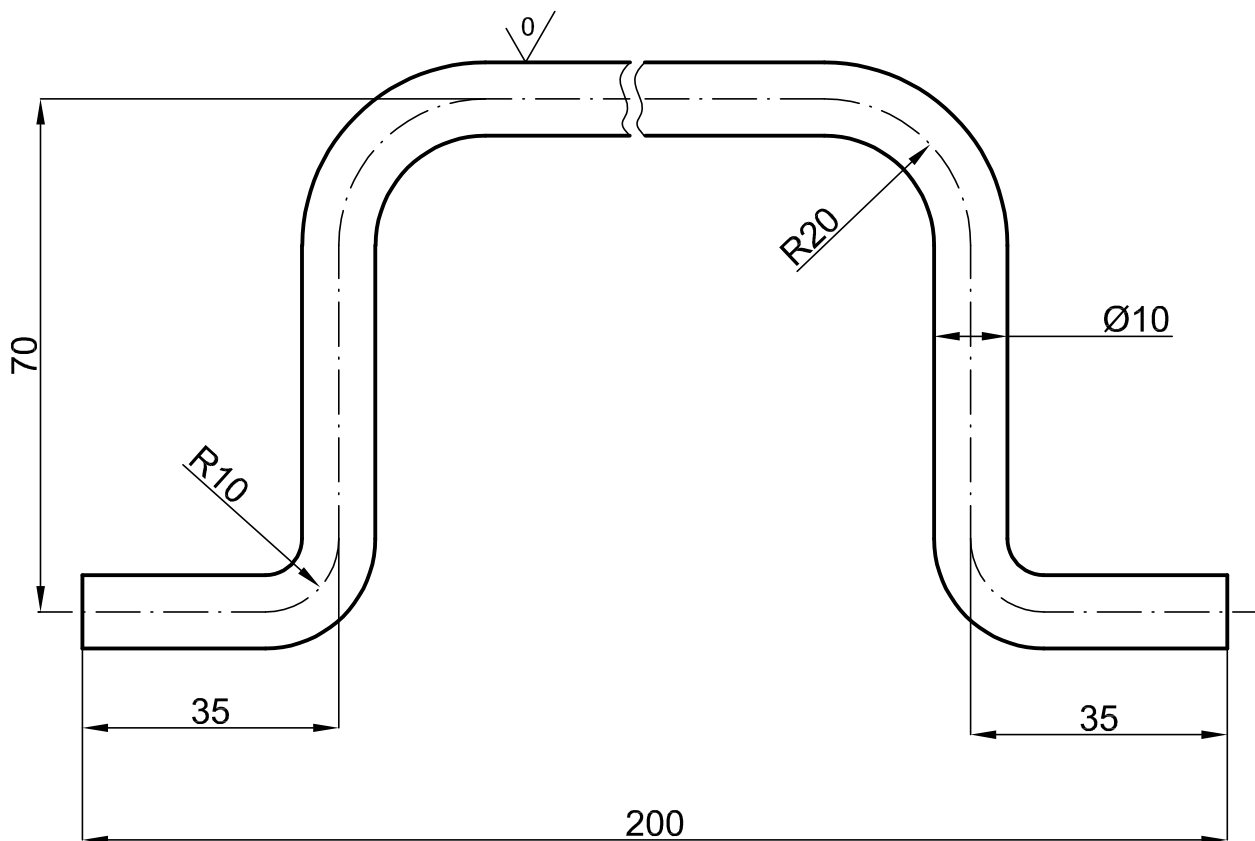


NOTA

- 3 buc. din poz. 2 se vor suda pe frema pompei si 3 pe capac.
- La capetele tijei Ø 10 (poz.3) se vor da 2 gauri Ø 2,5 pentru splint.


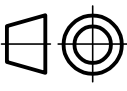
Poz.	Descriere	Numar Desen/ Stas	Buc.	Material	Observatii	Greutate Kg/buc.
7	Balama	616.15-01.09.07.0	2	S235 J2 SR EN 10025-2:2019		0,019
6	Maner	616.15-01.09.06.0	1	S235 J2 SR EN 10025-2:2019		0,195
5	Saiba A 10	SR ISO 4759-3:1996	2	S235 J2 SR EN 10025-2:2019	Cd 5 FL	0,004
4	Splint Ø2 x 20	SR EN ISO 1234:2001	2	S235 J2 SR EN 10025-2:2019	Cd 5 FL	0,001
3	Tija Ø10 x 720	616.15-01.09.03.0	1	S235 J2 SR EN 10025-2:2019	fara desen	0,446
Poz.	Descriere	Numar Desen/ Stas	Buc.	Material	Observatii	Greutate Kg/buc.

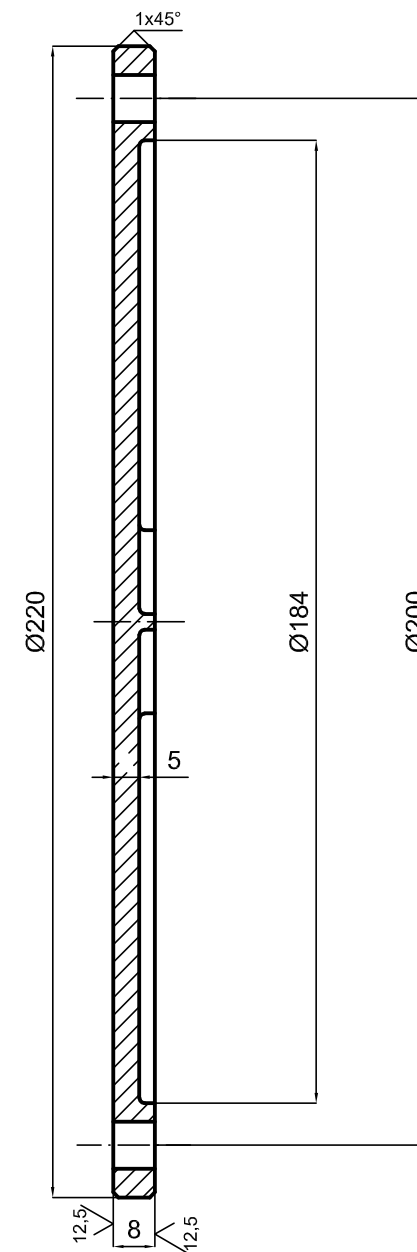
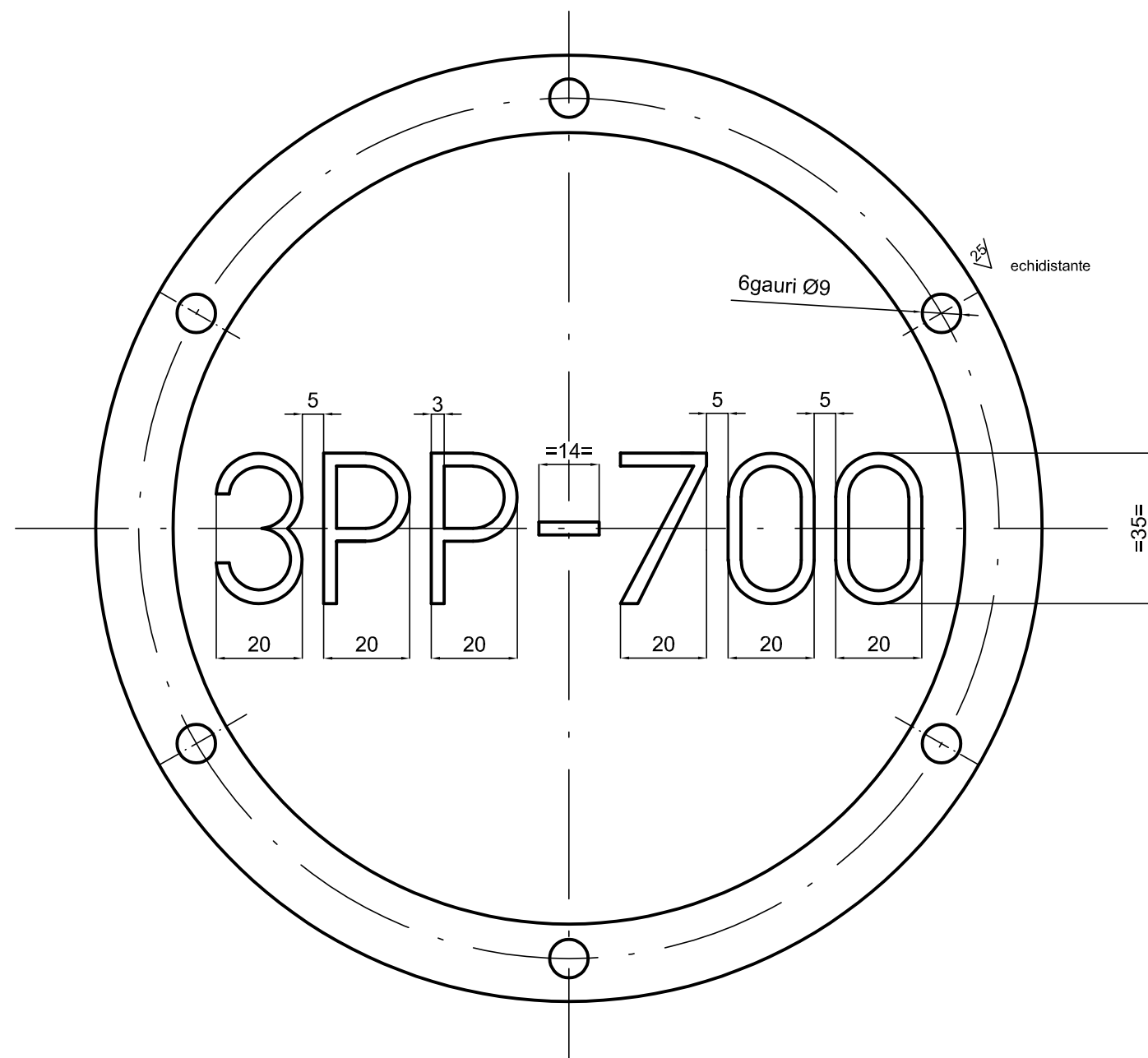
2	Teava L = 20	616.15-01.09.02.0	6	S235 J2 SR EN 10025-2:2019	fara desen	0,019
1	Capac	616.15-01.09.01.0	1	S235 J2 SR EN 10025-2:2019	fara desen	4,730
Poz.	Descriere	Numar Desen/ Stas	Buc.	Material	Observatii	Greutate Kg/buc.
						DEPARTAMENT IPCUP PLOIESTI
Proiectat	ing.S. Tudor			Client	----	
Desenat	Fl. Radu			Proiect	Pompa triplex cu plungere 3 PP-700	
Verificat	Dr.ing.S.Fica			Desen	CAPAC ACCES	
Aprobat	Dr.ing.G.Marin	Greutate:5,533kg		Desen nr. 616.15-01.09.00.0		
1:2,5		Unitate masura:mm		Page: 1/1		Rev. 0
Format: A3 (297x420)		Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553		Data: 06.05.2021		





Lungimea desfasurata L = 315 mm

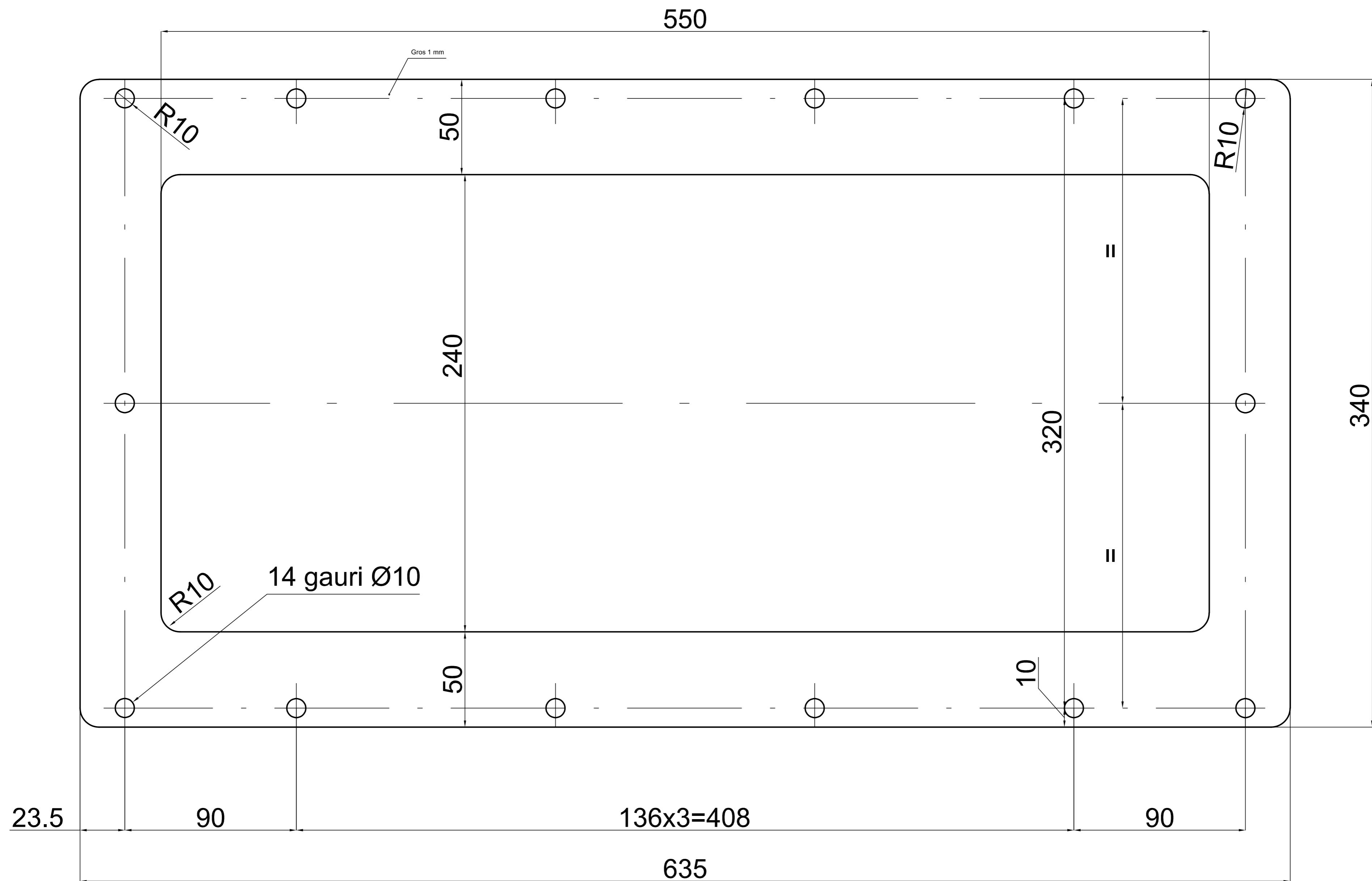


				 INCDIE CPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing.S. Tudor	S235J2 SR EN 10025-2:2019		Client	-----		
Desenat	Fl. Radu			Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing.S.Fica	Greutate: 0,195kg		Desen	MANER		
Aprobat	Dr.ing.G.Marin			Desen nr.		Page:	Rev.
1:1		Unitate masura:mm		616.15-01.09.06.0		1/1	0
		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553					
Format: A4 (210x297)		Data: 06.05.2021					

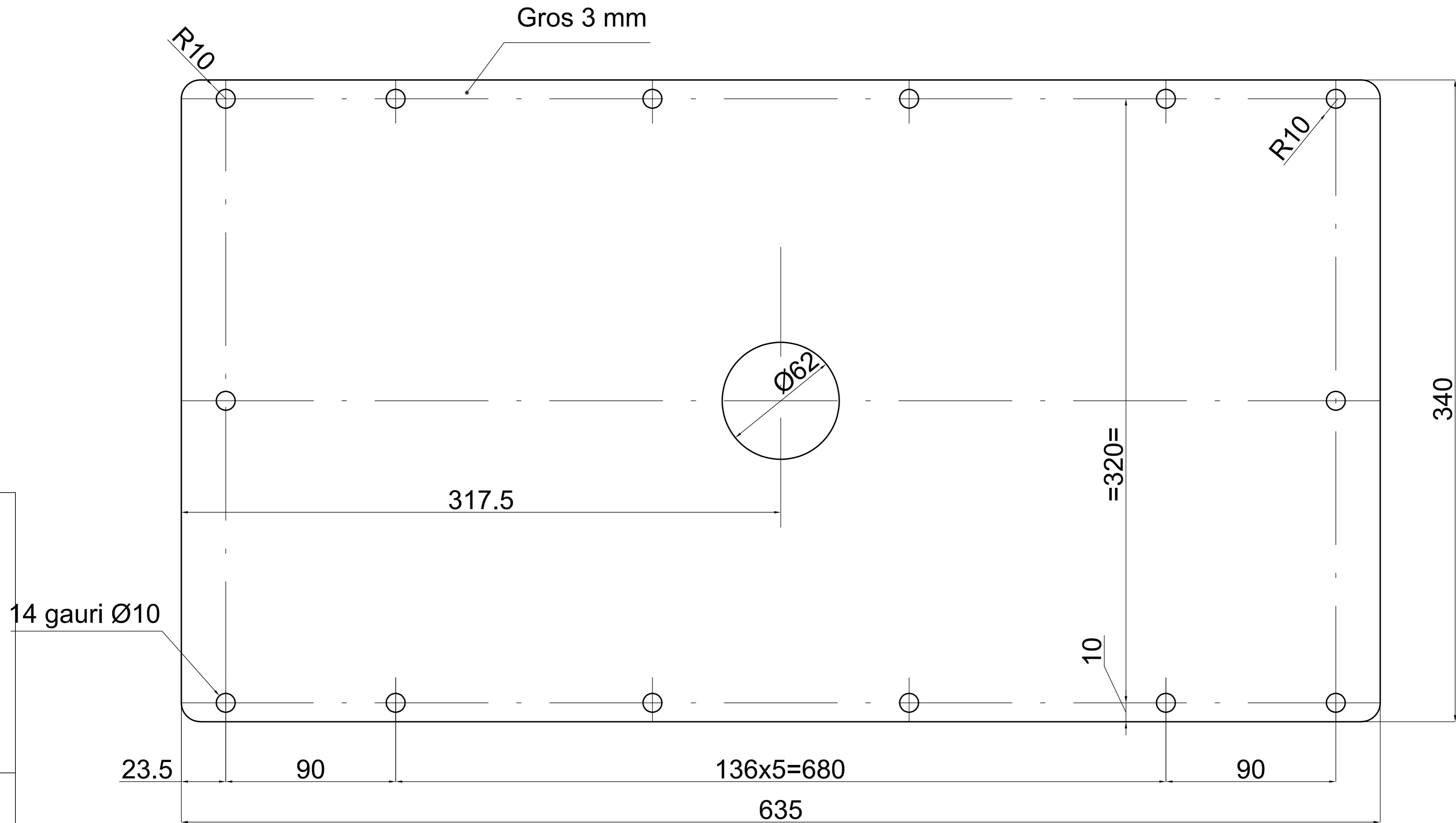


 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOESTI		
Proiectat	ing. S. Tudor	ATN - Cu 8 STAS 201/2 - 80	Client	----
Desenat	E. Toparceanu		Proiect	Pompa triplex cu plungere 3PP - 700
Verificat	ing. S. Fica		Desen	CAPAC 3PP - 700
Aprobat	ing. G. Marin	Weight: 0,7 kg	Desen nr.	616.15-01.00.10.0
1:1		Unitate masura: mm Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553	Page: Rev.	1/1 0
Format: A2 (420x594)	Data: 06.05.2021			





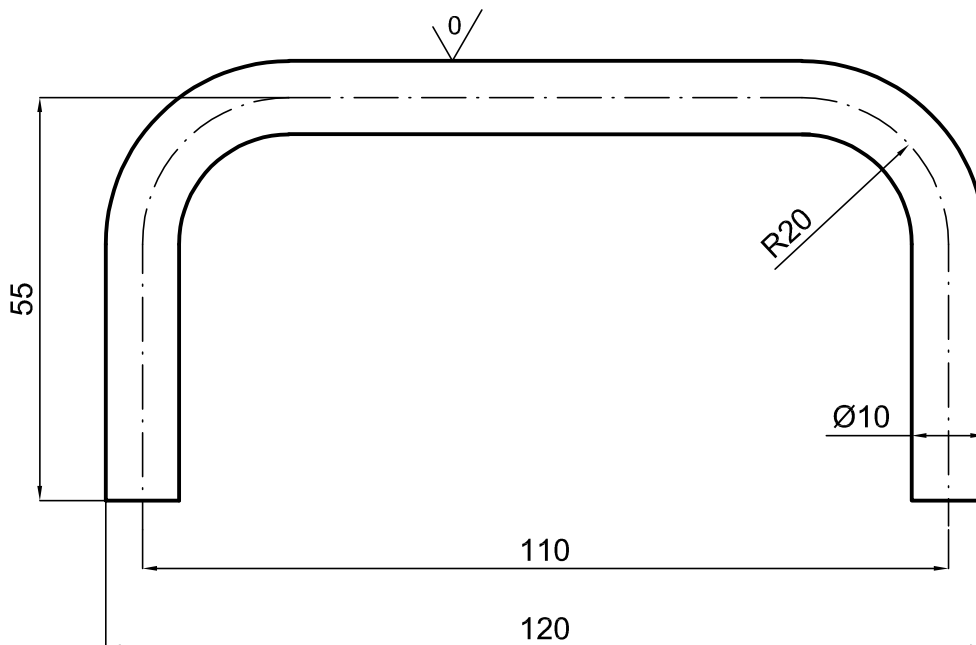
Proiectat		ing. S. Tudor	Carton		INCDIE		DEPARTAMENT	
Desenat		F. Iancu	STAS 3053-86		ICPE-CA		IPCUP	
Verificat		ing. S. Fica	Client		Pompa triplex cu plungeri 3PP - 700		FLORESTI	
Aprobat		ing. G. Marin	Proiect		GARNITURA		Pag: Rev.	
Format:		1:1	Unitate masura: mm		616.15-01.00.13.0		1/1 0	
			Tolerante generale: EN ISO 13920 classes B&F		Date: 10.02.2021			
			Simboluri sudura: EN 22553					



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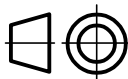
Proiectat		ing. S. Tudor	S235J2		Client	
Desenat		F. Iancu	SR EN 10025-2:2019		Pompa triplex cu plungere 3PP - 700	
Verificat		ing. S. Fica	Unitate masura: mm		Desen	
Aprobat		ing. G. Marin	Tolerante generale: EN ISO 13920 classes B&F Simboluri sudura: EN 22553		CAPAC	
Format:		1:1	Date: 06.05.2021		Drawing No. 616.15-01.00.14.0	
					Pag: Rev. 1/1 0	

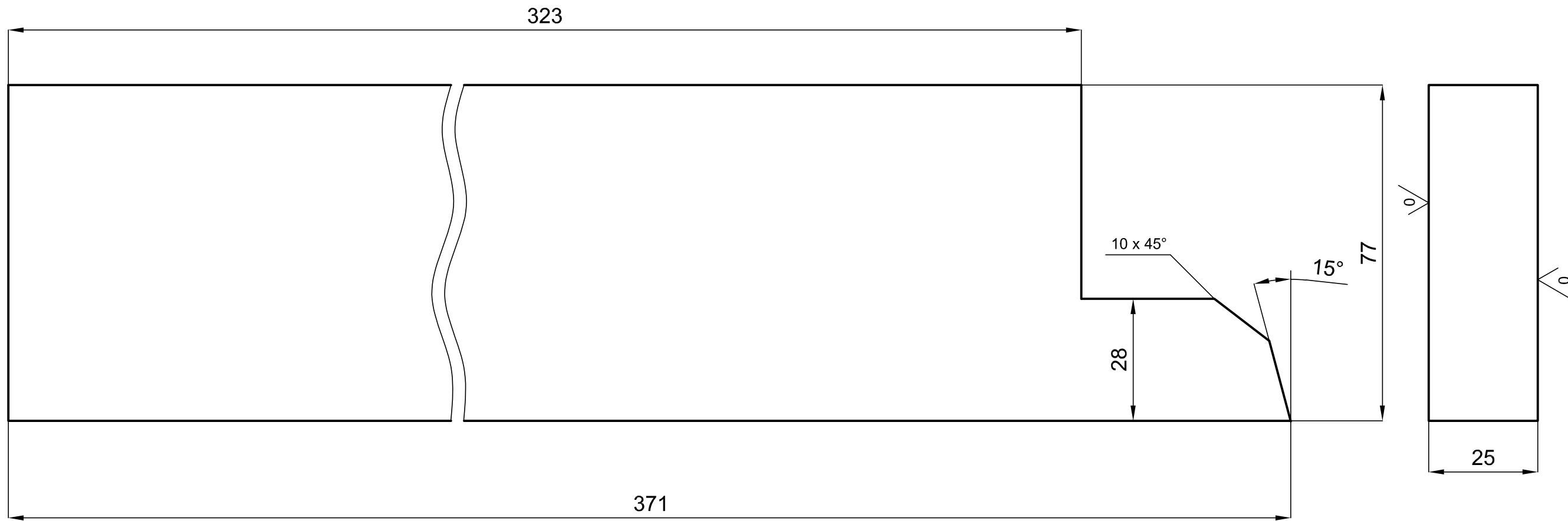



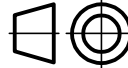


Lungimea desfasurata L = 215 mm

25/

				 INCDIE CPE- CA Bucuresti		DEPARTAMENT IPCUP PLOIESTI	
Proiectat	ing.S. Tudor	S235J2 SR EN 10025-2:2019		Client	-----		
Desenat	Fl. Radu			Proiect	Pompa triplex cu plungere 3 PP-700		
Verificat	Dr.ing.S.Fica	Greutate: 0,066kg		Desen	MANER		
Aprobat	Dr.ing.G.Marin			Desen nr.		Page:	Rev.
1:1		Unitate masura:mm		616.15-01.18.08.0		1/1	
		Tolerante generale: SR EN ISO 13920 clasele B&F Simboluri sudura:SR EN 22553					
Format: A4 (210x297)		Data: 06.05.2021					

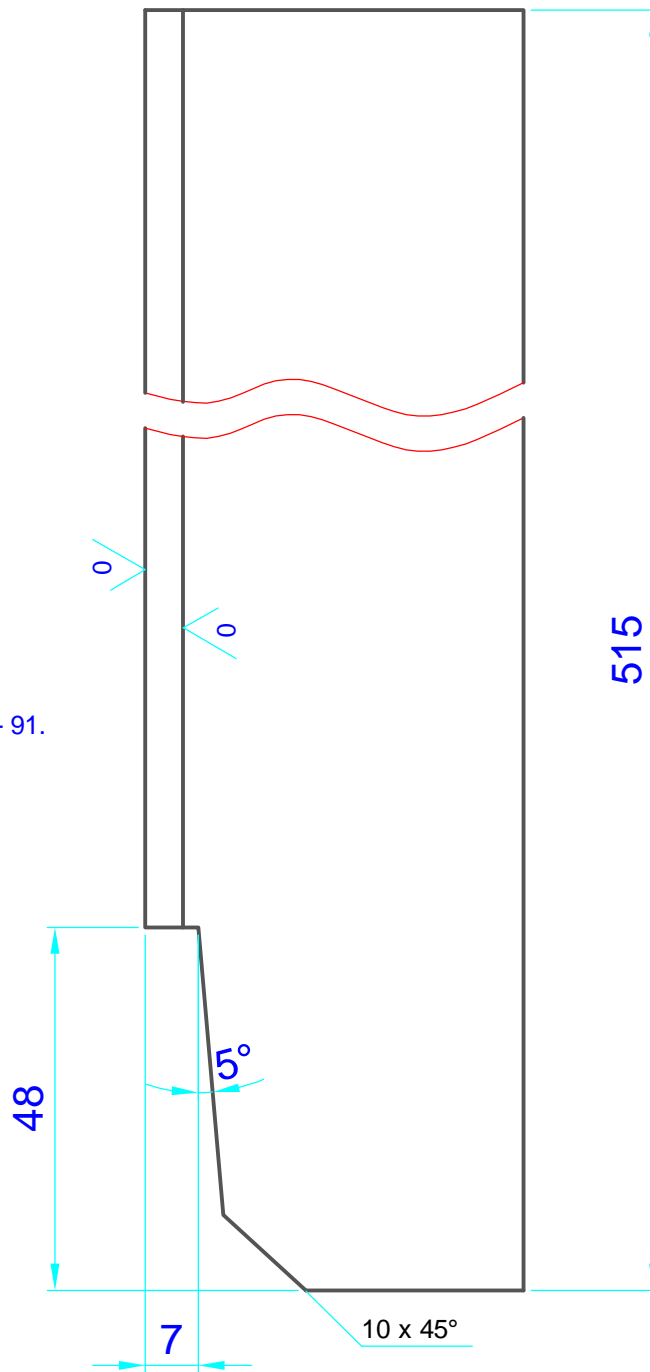


				 INCDIE ICPE-CA BUCURESTI		DEPARTAMENT IPCUP PLOIESTI			
Proiectat	ing. S. Tudor			S355J2 SR EN 10025-2:2019		Client		----	
Desenat	Fl. Radu					Proiect		Pompa triplex cu plungere 3 PP-700	
Verificat	Dr.ing. S. Fica			Greutate: 4,468kg		Desen		SUPORT	
Aprobat	Dr.ing. G. Marin					Desen nr.		Page:	Rev.
1:1				Unitate masura: mm		614.92 - 01.01.16.0		1/1	0
Format: A3 (297x420)		Data: 06.05.2021		Tolerante generale: EN ISO 13920 clasele B&F Simboluri sudura: EN 22553					

ANEXA 2

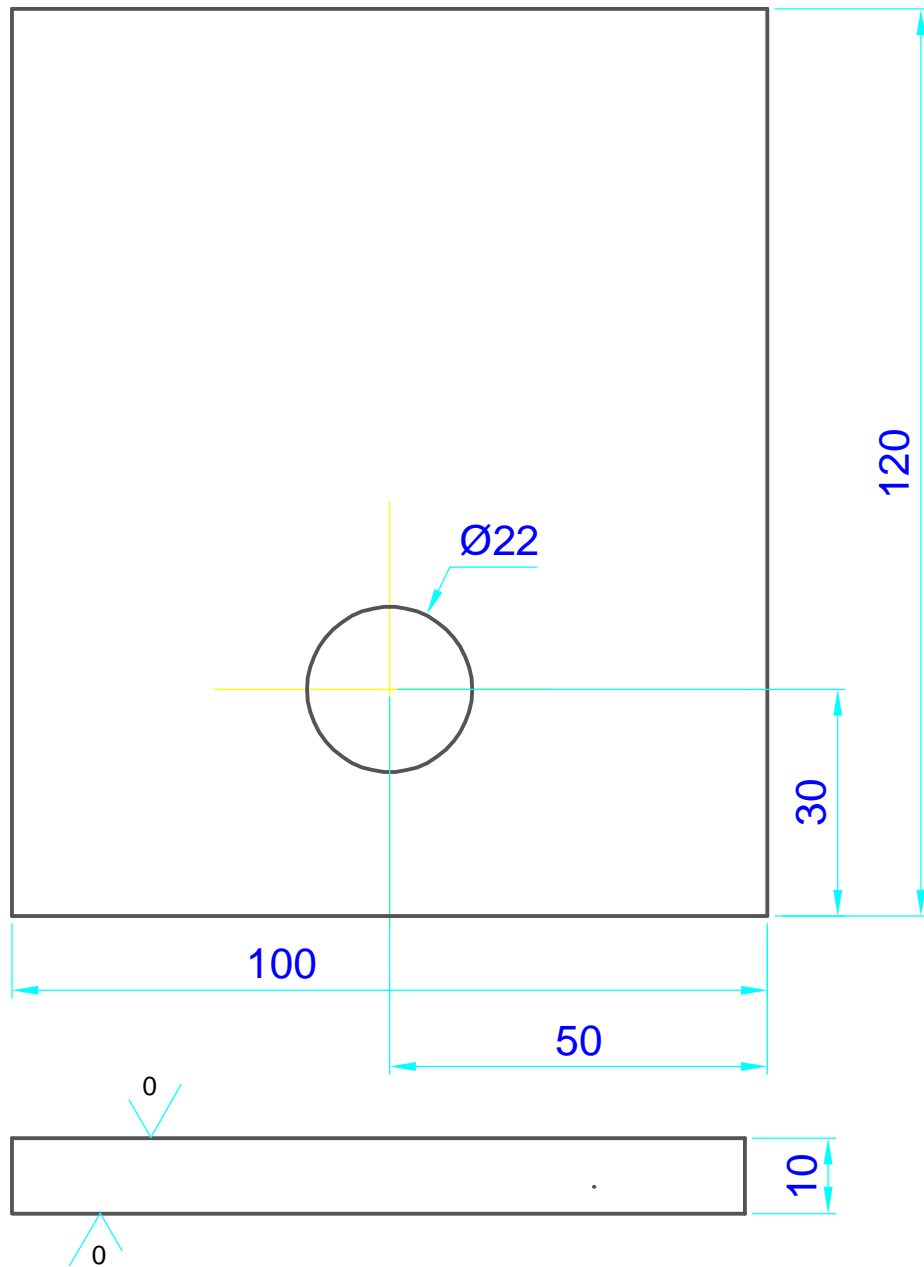
Proiectul Tehnologic pentru
Ansamblul echipament Instalație inovatoare pentru cimentare
și operațiuni speciale la sondă

L 50 x 50 x 5 - STAS 424 - 91.



NOTA
 - 2 bucati vedere ca in desen
 - 2 bucati vedere in oglinda

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 2,160 kg	INOCEM 105.80-02.00.08.0		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Suport		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC/DIE ICPE - CA Bucuresti IPCUP Husi		Data: sept-nov.2022	Platforma			

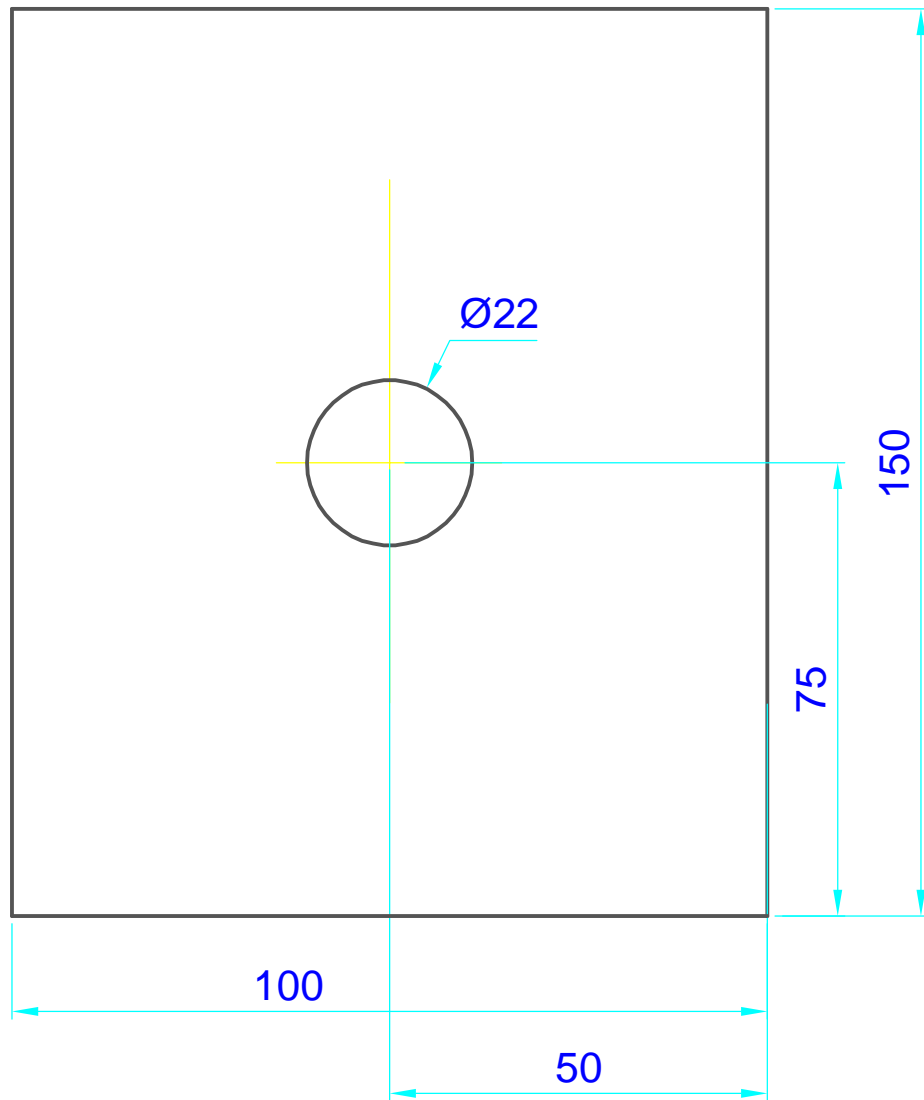


NOTA

- 2 bucati vedere ca in desen
- 2 bucati vedere in oglinda

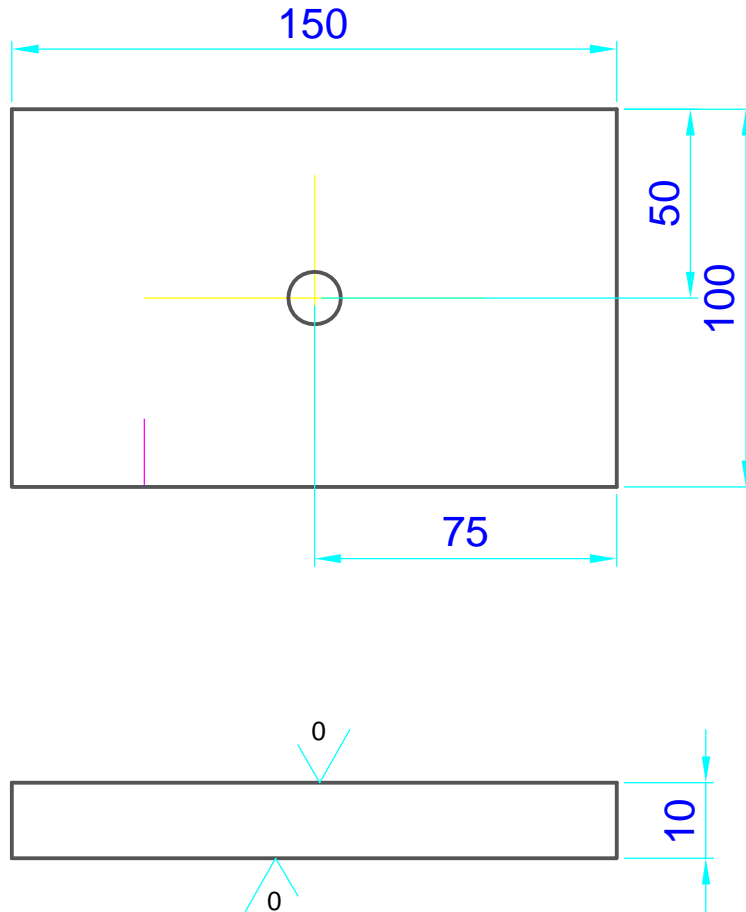
50 ✓✓✓

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat : <i>ing. T. Arhire</i>		S355J2 SR EN 10025-2 2019	Proiect tehnologic <small>PETAL S.A. Husi</small>	F		
	Desenat : <i>ing. P. Baraga</i>					Masa: 0,96 kg	INOCEM 105.80-00.00.00.0
	Verificat : <i>dr. ing. I. Cucos</i>						
	Aprobat : <i>dr. ing. I. Cucos</i>		1 : 1	Placa			
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic <small>PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP Husi</small>		Data: sept-nov.2022	Platforma			



Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga			
	Verificat :	dr. ing. I. Cucos			
	Aprobat :	dr. ing. I. Cucos	1 : 1	Placa Poz 12	
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP Husi			Data: sept-nov.2022	

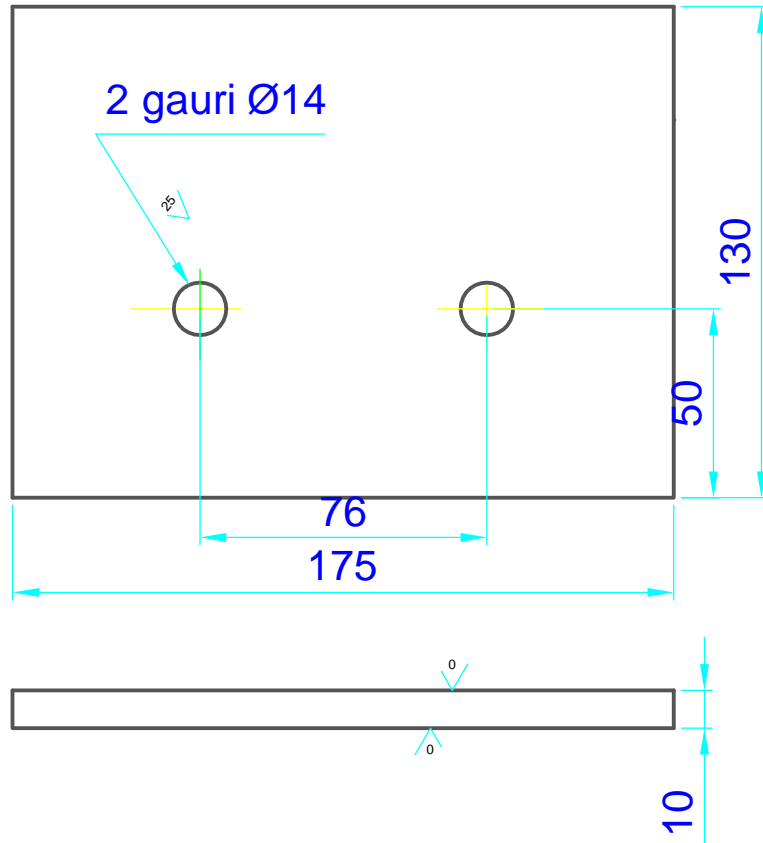
1:2



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Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 1,20 kg	INOCEM 105.80-00.00.00.0		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Placa Poz 13		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		PETAL S.A. Husi	INC DIE ICPE - CA Bucuresti	IPCUP Husi	Data: sept-nov.2022	Platforma

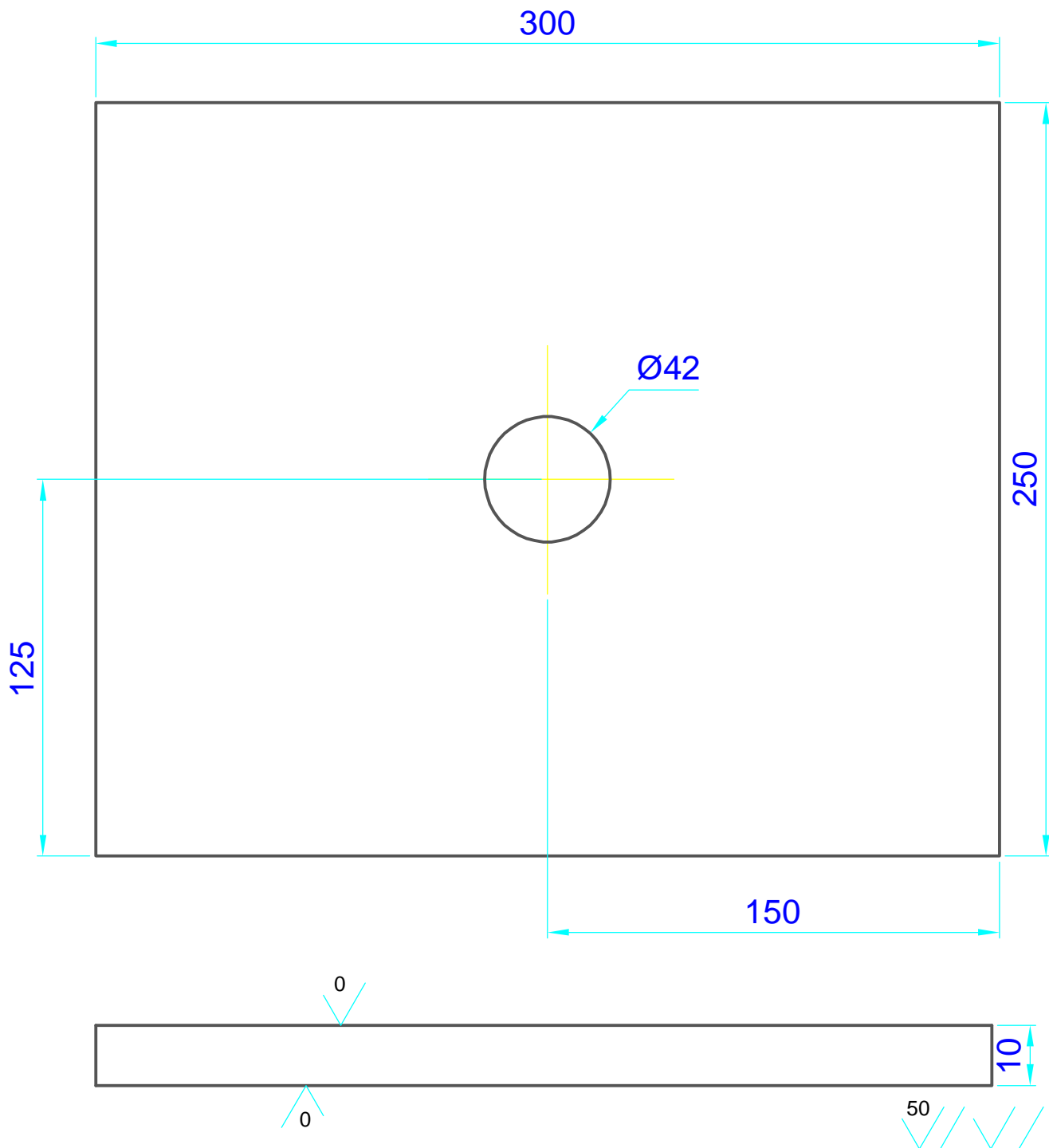
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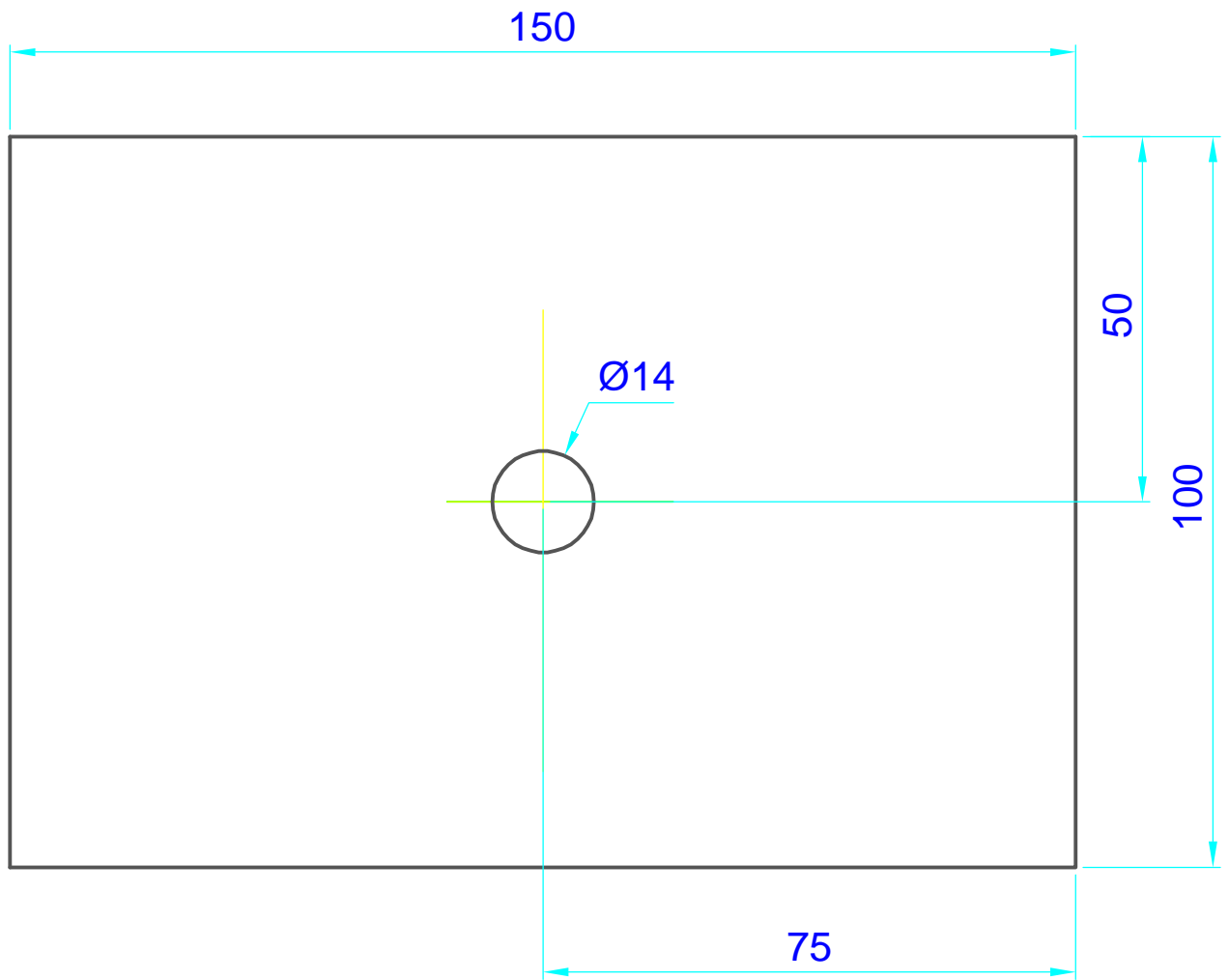
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Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga			
	Verificat :	dr. ing. I. Cucos		Masa: 1,80 kg	
	Aprobat :	dr. ing. I. Cucos	1 : 1	Placa Poz 14	
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi		INC DIE ICPE - CA Bucuresti	IPCUP Husi	Data: sept-nov.2022	Platforma

1:2



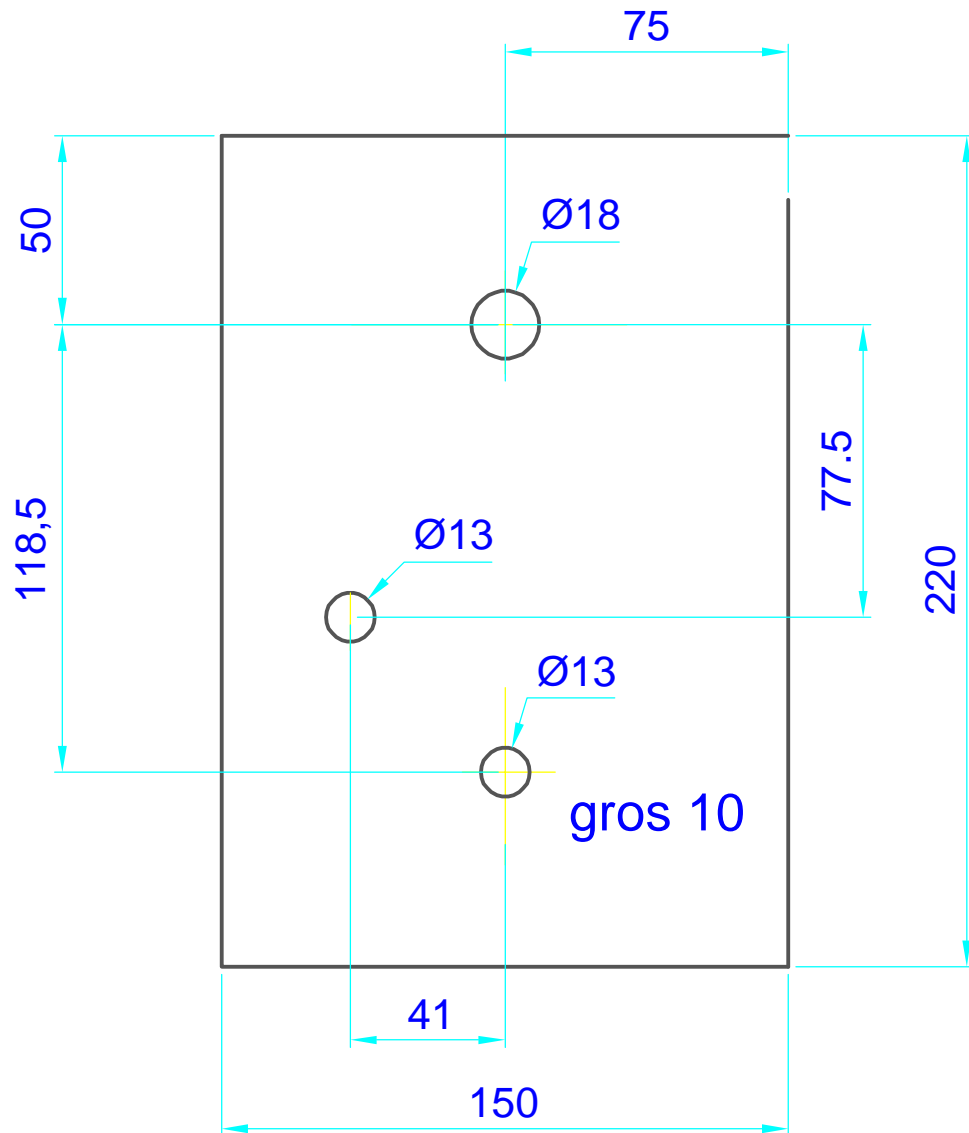
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 5,30 kg	INOCEM 105.80-00.00.00.0		
	Aprobat :	dr. ing. I. Cucos				
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Placa Poz 15		
PETAL S.A. Husi		INC DIE ICPE - CA Bucuresti	IPCUP Husi	Data: sept-nov.2022	Platforma	



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Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 1,20 kg	INOCEM 105.80-00.00.00.0		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Placa poz 16		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		Data: sept-nov.2022		Platforma		

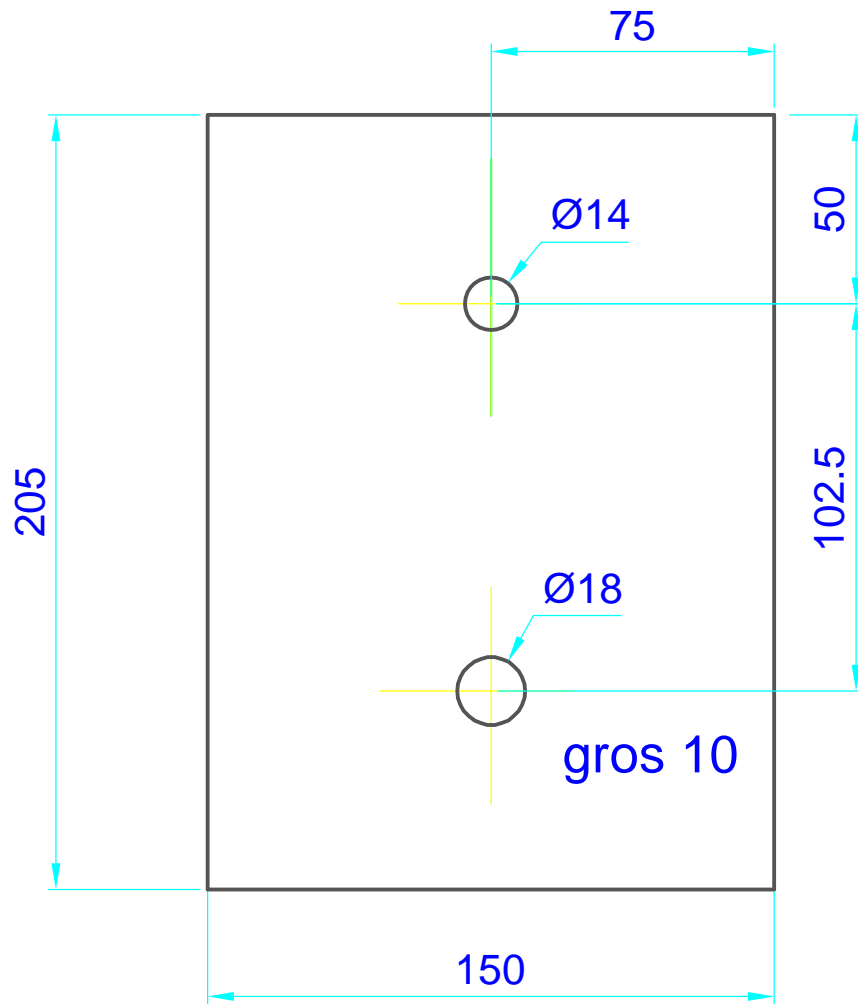
1:2



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Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 2,640 kg	INOCEM 105.80-00.00.00.0		
	Aprobat :	dr. ing. I. Cucos	Placa Poz 17			
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Platforma		
PETAL S.A. Husi		INC DIE ICPE - CA Bucuresti	IPCUP Husi	Data: sept-nov.2022		

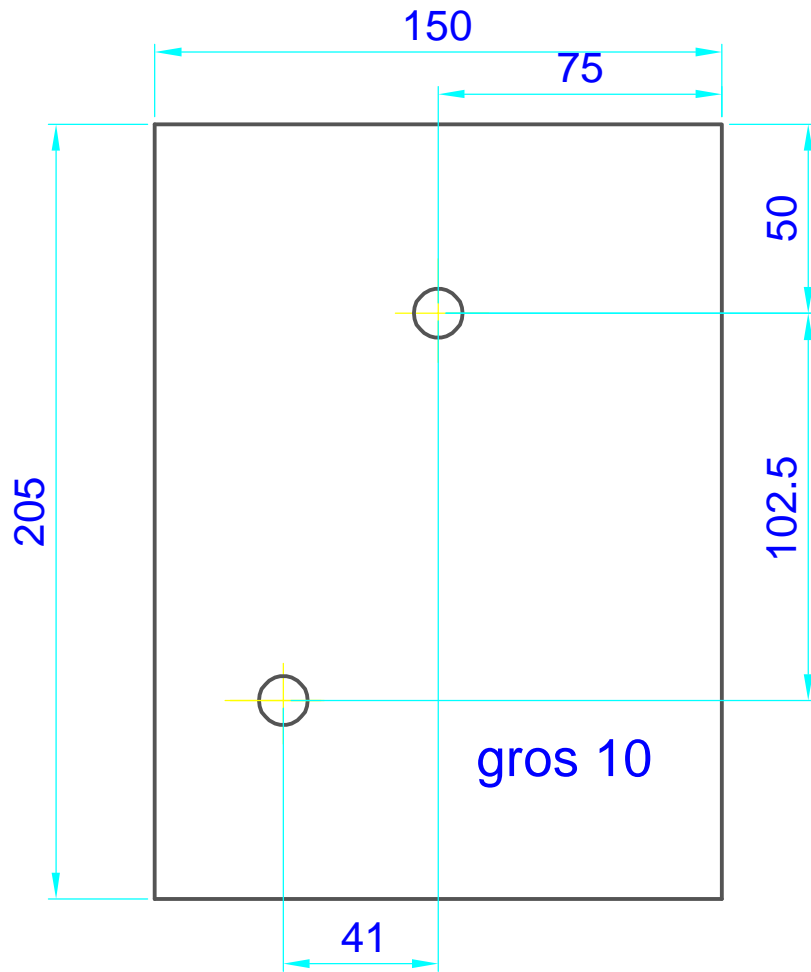
1:2



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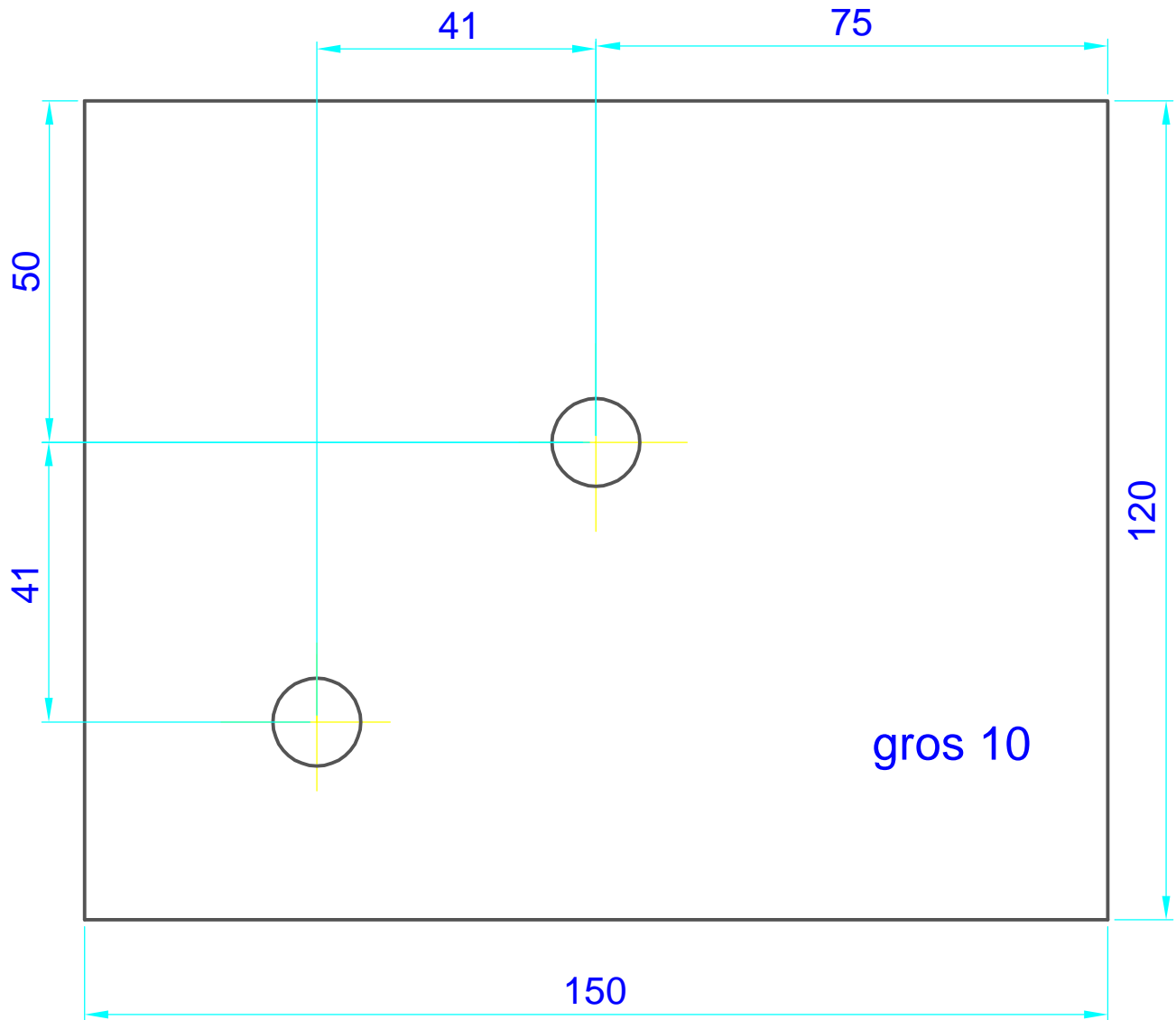
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos		Masa: 2,460 kg	INOCEM 105.80-00.00.00.0	
	Aprobat :	dr. ing. I. Cucos	1 : 1	Placa poz 18		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		INC DIE ICPE - CA Bucuresti	IPCUP Husi	Data: sept-nov.2022	Platforma

1:2

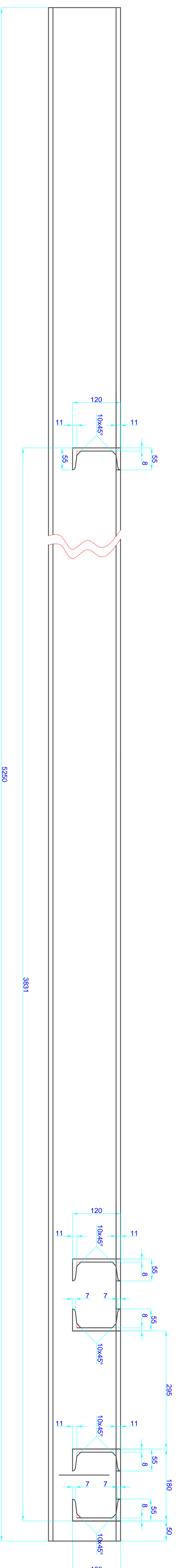


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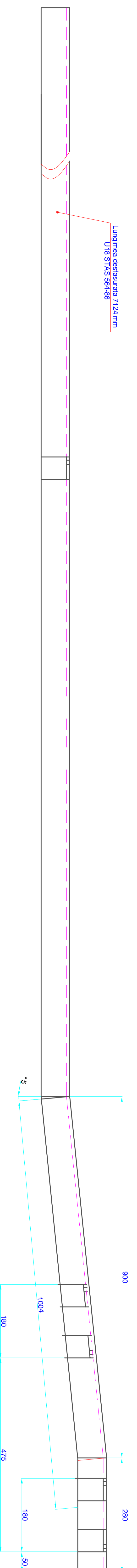
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos	Masa: 2,460 kg	INOCEM 105.80-00.00.00.0		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP Husi			1 : 1	Placa Poz 19		
			Data: sept-nov.2022	Platforma		



Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S355J2 SR EN 10025-2 2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos		Masa: 1,45 kg	INOCEM 105.80-00.00.00.0	
	Aprobat :	dr. ing. I. Cucos	1 : 1	Placa Poz 20		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP Husi		Data: sept-nov.2022	Platforma		

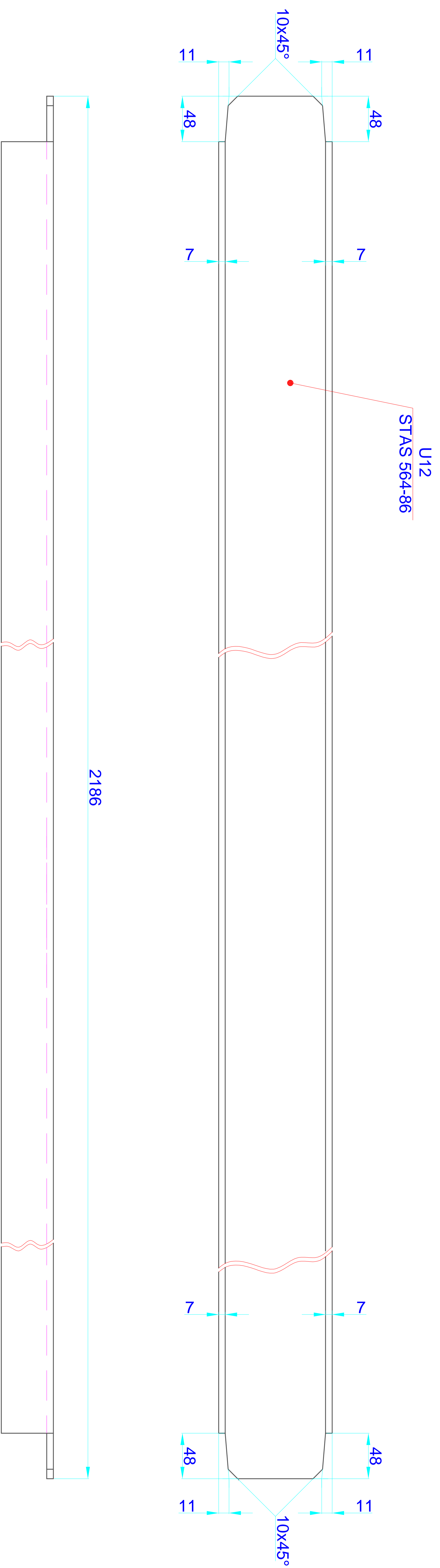


NOTA
 - 1 bucată vedere ca în desen
 - 1 bucată vedere în oglindă



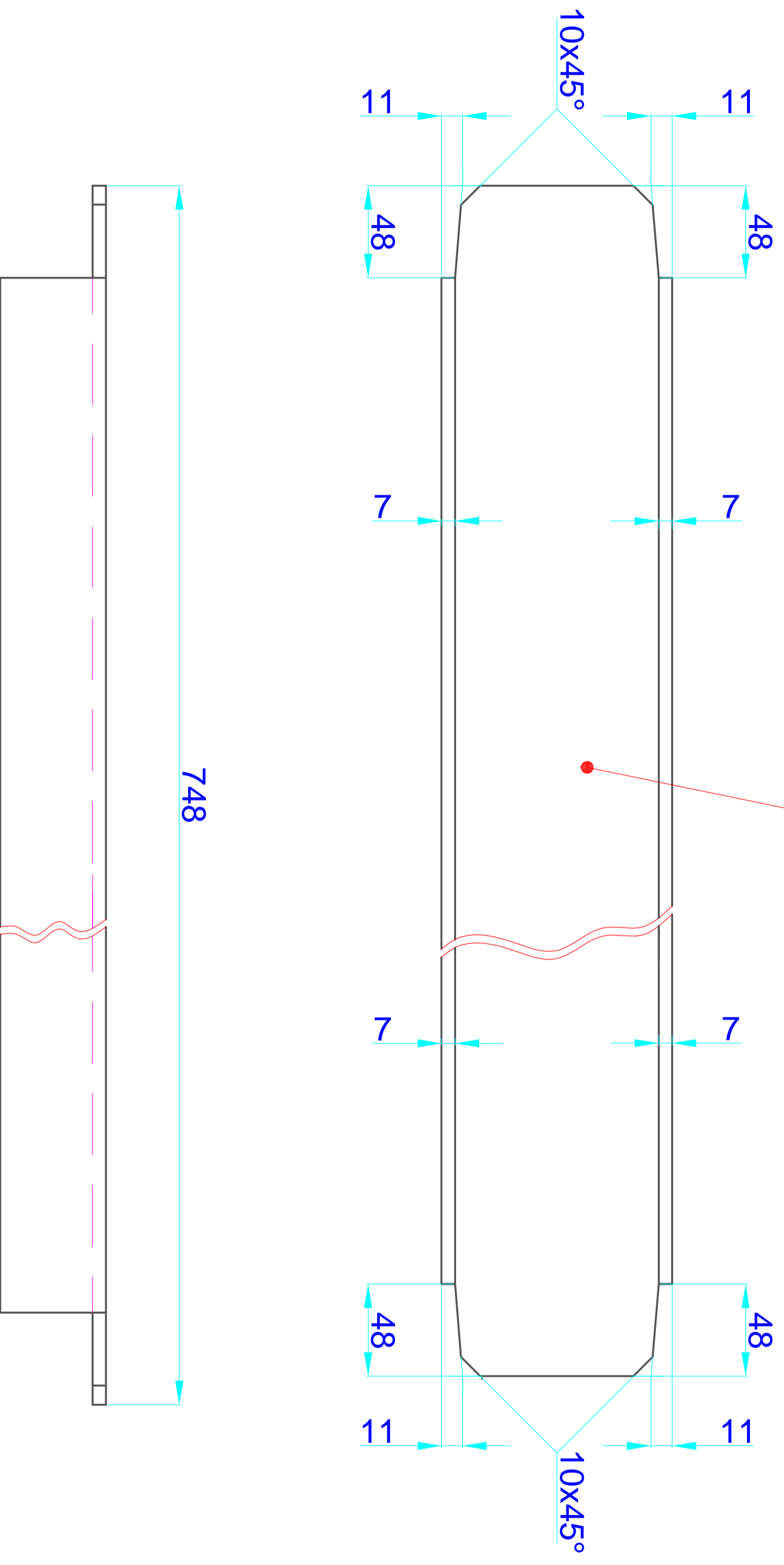
Lungimea deplasurată 7124 mm
 URS STAS 564-88

Tolerante gen. ISO 2678.mk SR EN 22768/1-2		Project tehnologic	
Proiectant: Ing. Z. Anon	Executant: Ing. P. Anon	Proiectant: Ing. Z. Anon	Executant: Ing. P. Anon
Verificat: Ing. P. Anon	Verificat: Ing. P. Anon	Verificat: Ing. P. Anon	Verificat: Ing. P. Anon
SC "PETAL" S.A. HUSI	SC "PETAL" S.A. HUSI	SC "PETAL" S.A. HUSI	SC "PETAL" S.A. HUSI
INCENI c/2023/02	INCENI c/2023/02	INCENI c/2023/02	INCENI c/2023/02
1 : 5	1 : 5	1 : 5	1 : 5
Data: septembrie 2023		Asanare componenta	

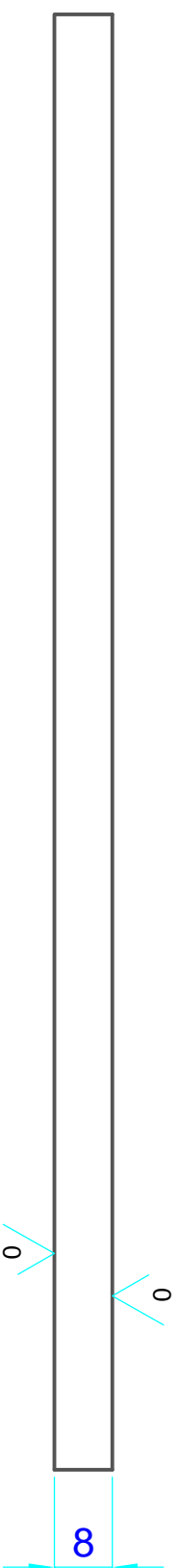
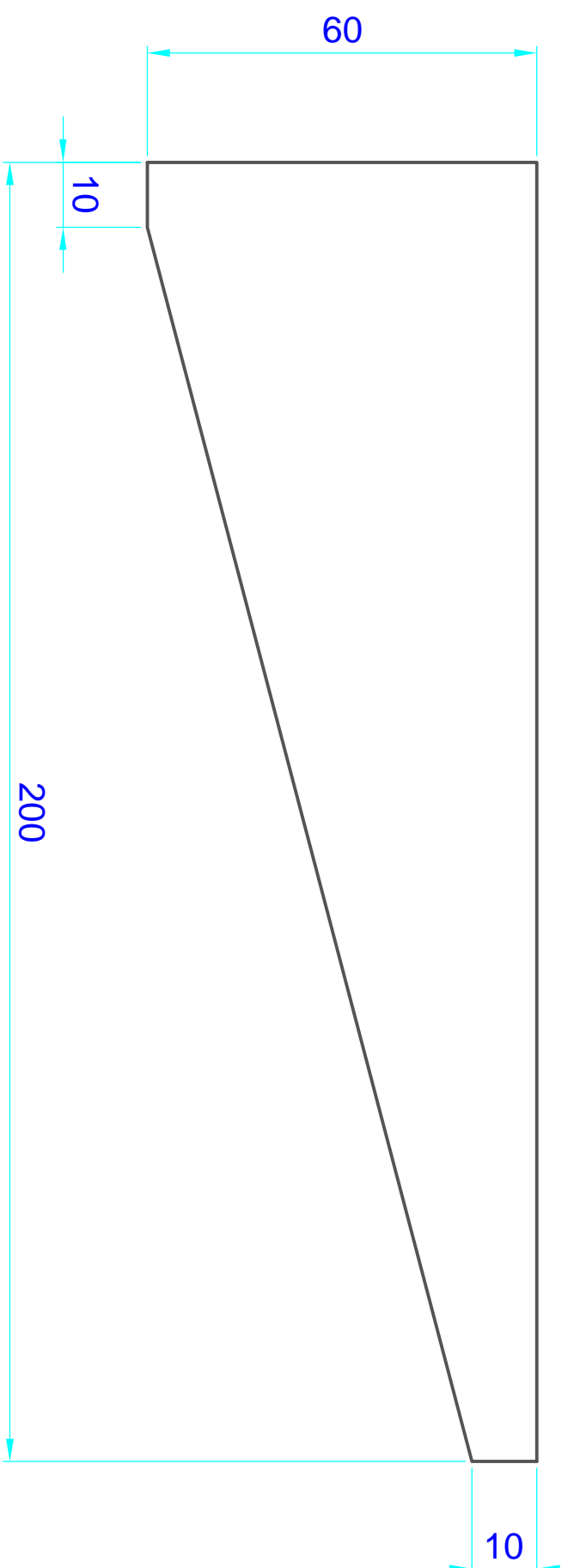


Tolerante gen. ISO.2678.mk. SR EN 22768/1-2					
Proiectat :	ing. T. Athire	SR EN 10252:2019	Project tehnologic		
Desenat :	ing. P. Baraga	Masa: 26,650 kg	INOCEM 105.80-00.00.00.0		
Verificat :	dr. Ing. I. Ciucos	1 : 5	Traversa Poz 6		
Aprobat :	dr. ing. I. Ciucos	Data: sept-nov.2022	Platforma		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMS 120032 Project Tehnic PETAL S.A. HUSI INCDIE ICP-CA BUCURESTI IPOLUP		F			

U12
STAS 564-86

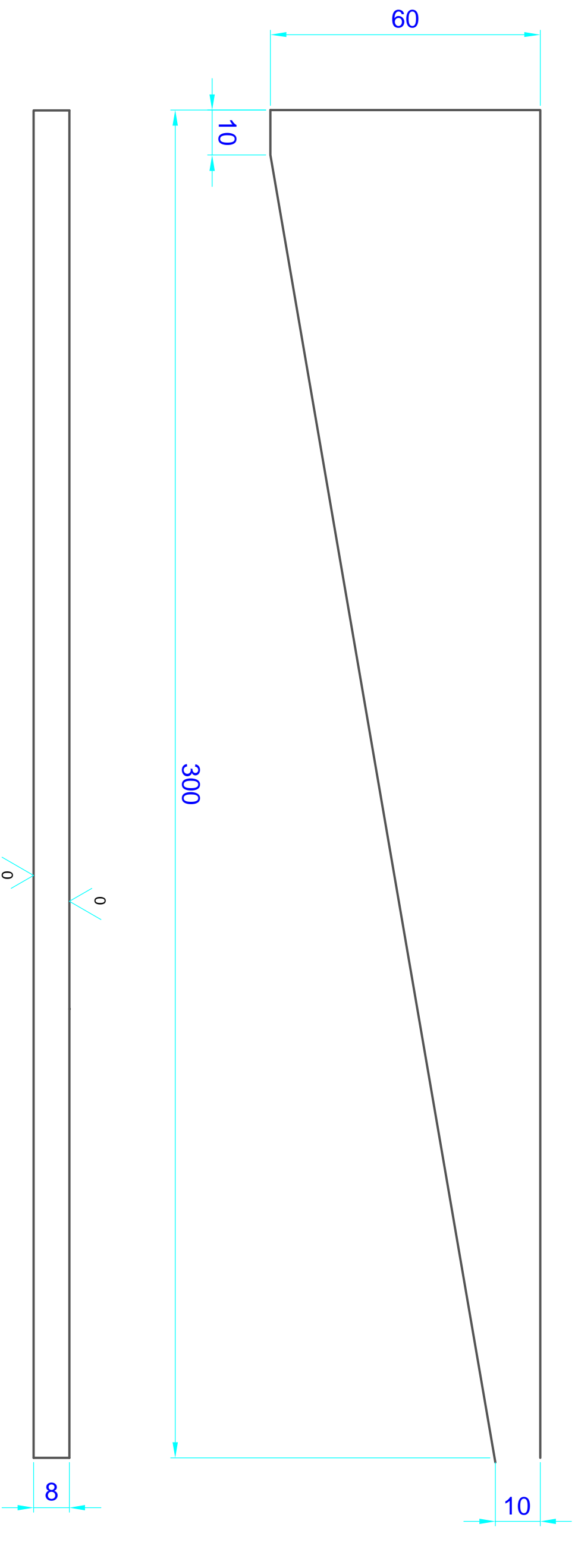


Tolerante gen. ISO 2678.mk. SR EN 22768/1-2		Proiectat : Ing. T. Arina		SR EN 10025-2/010		Proiect tehnologic		PETAL SA	
Desenat : Ing. P. Bărbăra		Verificat : dr. Ing. I. Ciobaș		Masa : 26.650 kg		INOCEM 105.80-00.00.00.0		F	
Aprobat : dr. Ing. I. Ciobaș		S.C. "PETAL" S.A. HUSI INOCEM - cf 260/2020 cod SMS 120032 Proiect Tehnic		Masa : 26.650 kg		INOCEM 105.80-00.00.00.0		Traversa Poz 10	
PETAL SA		INOCEM		Data: sep-nov.2022		Platforma			



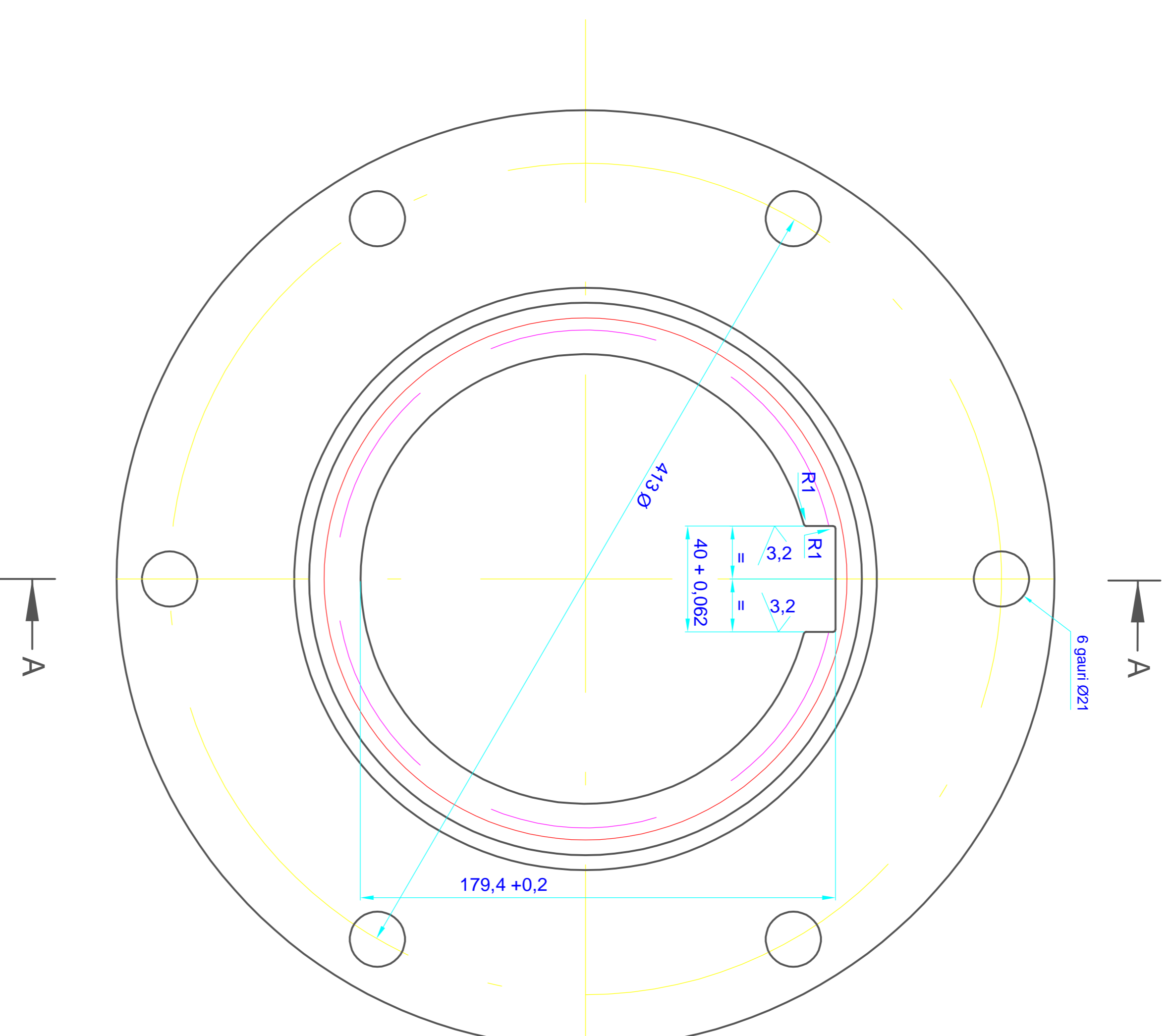
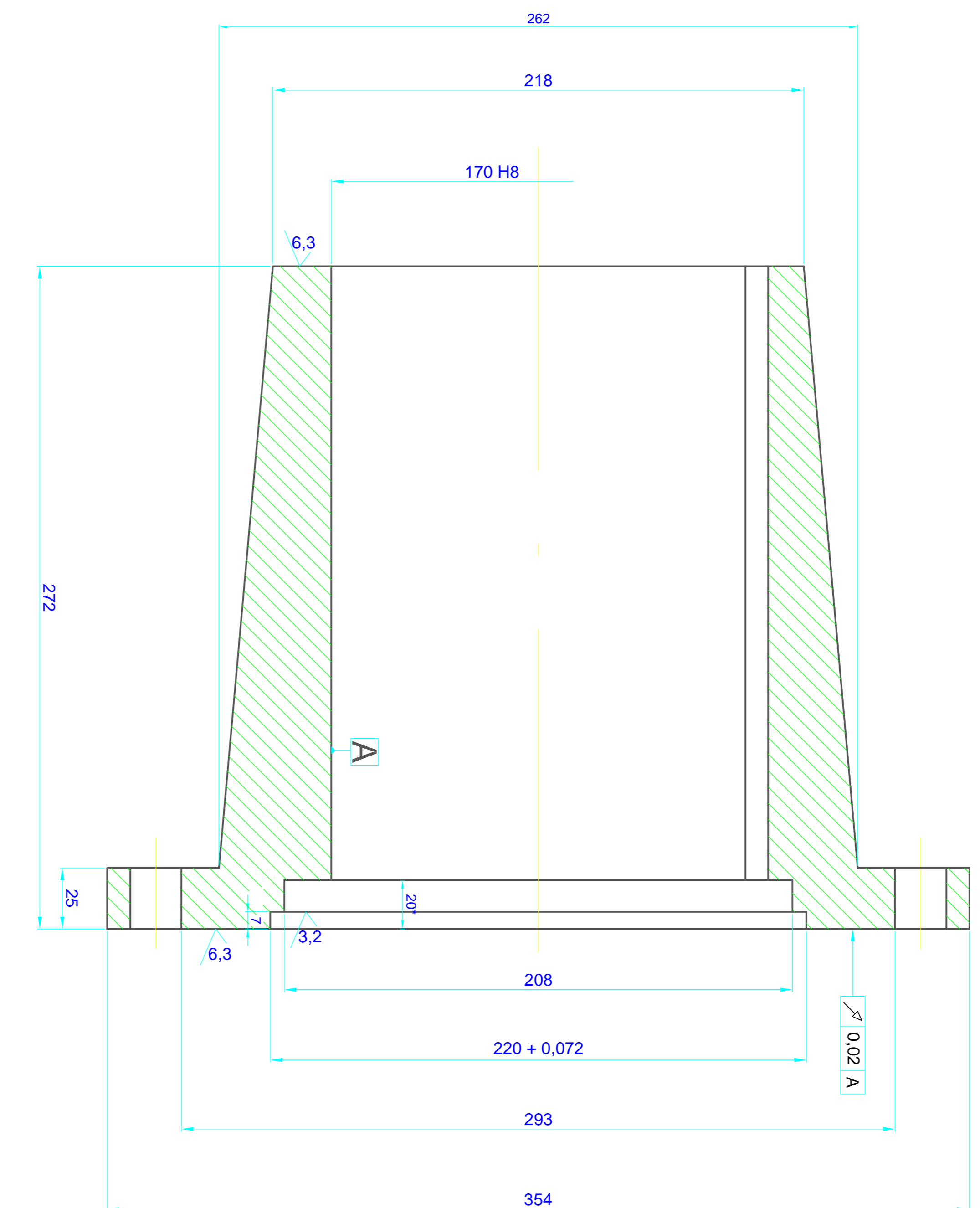
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Tolerante gen. ISO.2678.mk. SR EN 22768/1-2									
Proiectat :	Ing. T. Arhite								
Desenat :	Ing. P. Baraga								
Verificat :	dr. Ing. I. Cucos								
Aprobat :	dr. Ing. I. Cucos								
S.C. "PETAL" S.A. HUSI									
INOCEM - CF 260/2020 cod SMIS 120032									
INOCEM PETAL S.A. Top		INOCEM IGPE-CA Bucuresti		INOCEM IPCUP Iasi					
Masa:		kg							
Data: sept-nov,2022									
Project tehnologic		INOCEM 105.80-00.00.00.0		Platforma					
Nervura Poz 3									
F									



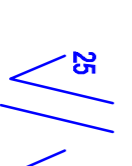
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2							
Proiectat :	ing. T. Athire	SR EN 10255-2:2019	336512	Project tehnologic		PETAL S.A. HUB	F
Desenat :	ing. P. Baraga						
Verificat :	dr. ing. I. Ciucos						
Aprobat :	dr. ing. I. Ciucos						
S.C. "PETAL" S.A. HUSI		Masa :	0,500 kg	INOCEM 105.80-00.00.00.0			
INOCEM - CF 260/2020 cod SMS 120032		1 : 1		Plata Poz 21			
PETAL S.A. HUB		INOCEM IPE-CA BUCHURESTI		IPQUP HUB			
Project Tehnic		Data: sept-nov.2022		Platforma			

Sectiunea A-A

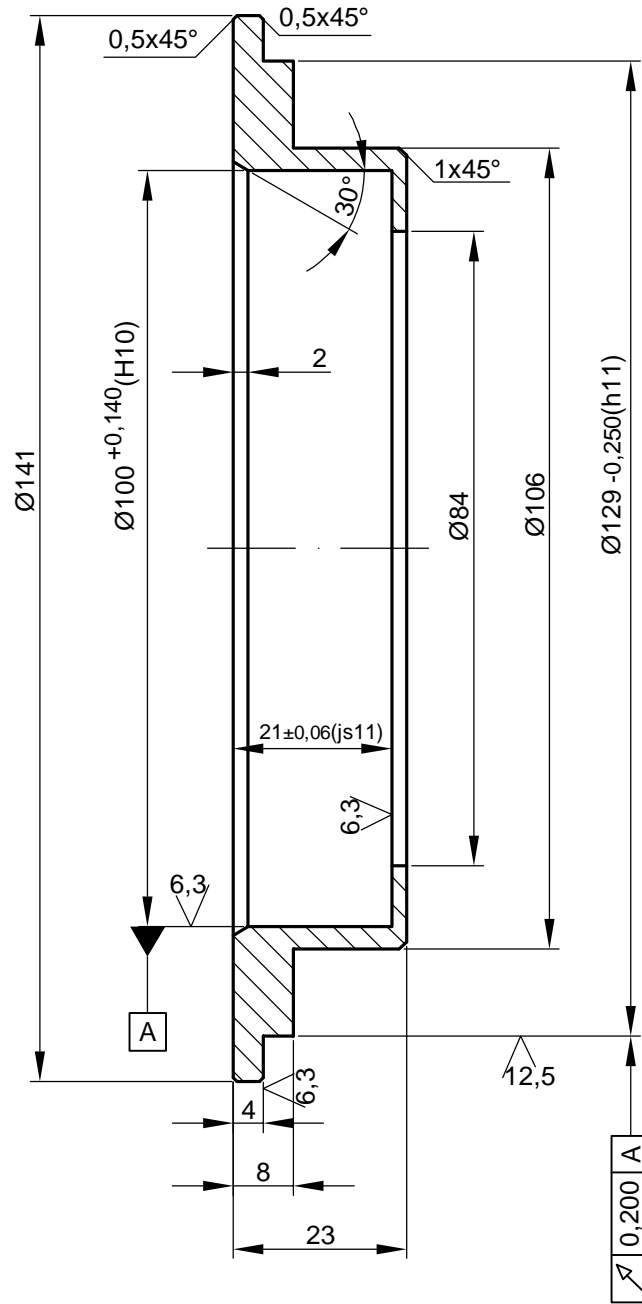


- CONDITII TEHNICE:**
1. Durtatea piesei HB 187-207 daN/mm² ;
 2. Muchiile ascute se vor rotunji R 0,5.
 3. Gaurile Ø21 se vor aleza impreuna cu flansa legatura motor.

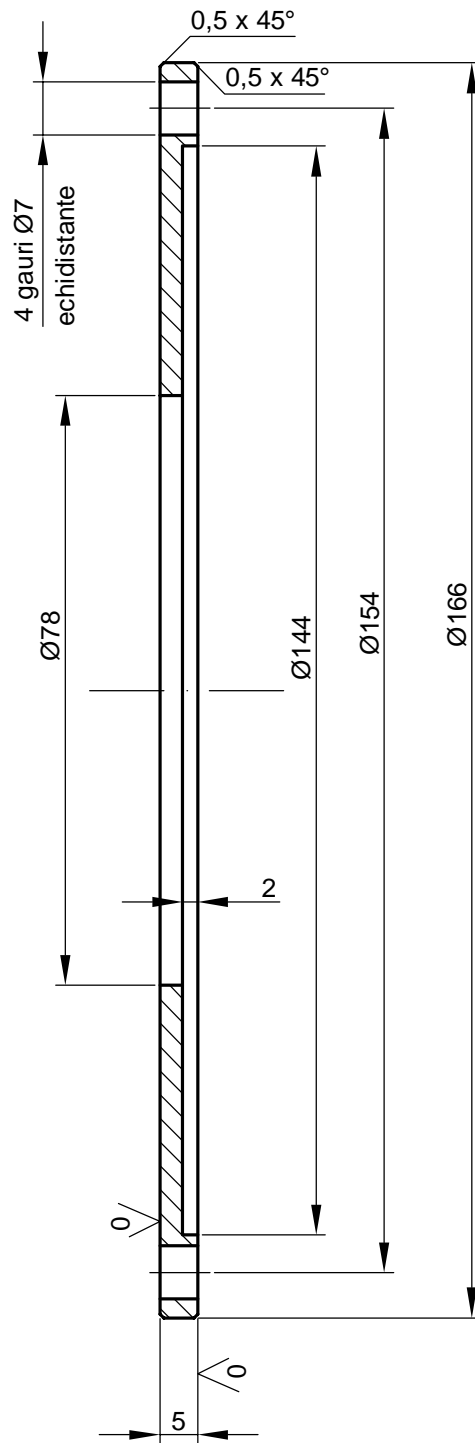
NOTA
Cota notata cu * se definitiveaza in functie de surubul
si salba axului motor



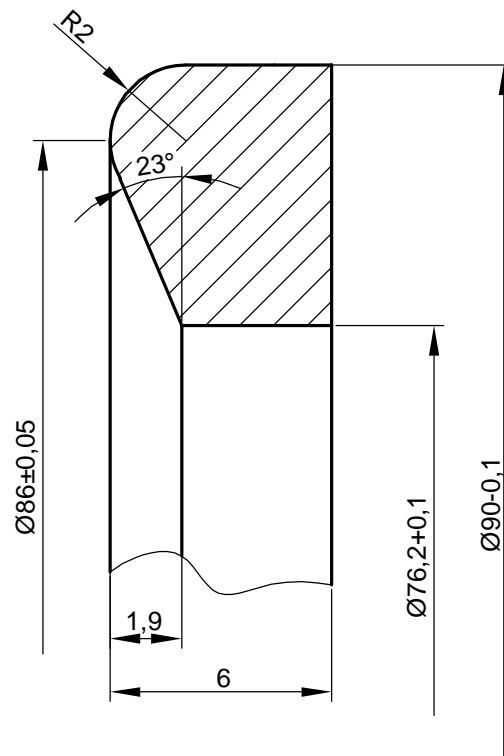
Tolerante gen. ISO 2678.mk. SR EN 22768/1-2		Proiectat : Ing. T. Artime		SR EN 10025-2:2004		Proiect tehnologic		PETAL S.A.	
Desenat : Ing. P. Baraga		Verificat : dr. ing. I. Ciocoi		Masa: Kg		INOCEM 105.80.00.00.00.0		F	
AD/00at : S.C. "PETAL" S.A. HUSI		INOCEM - CF 260/2020 cod SMS 120032		1 : 2		Flansa motor			
PETAL S.A.		INOCEM		Data: sept-nov.2022		LEGATURA MOTOR			



25									
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	OL 37 STAS 500/2-80	Proiect tehnologic	PETAL S.A. Husi	Ca			
	Desenat :	ing. P. Baraga							
	Verificat :	dr. ing. I. Cucos	Masa: 0,700 kg	INOCEM 10-02.19.00.0					
	Aprobat :	dr. ing. I. Cucos							
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi		1 : 1	Caseta					
	Data: sept-nov.2022		Caseta de etansare						

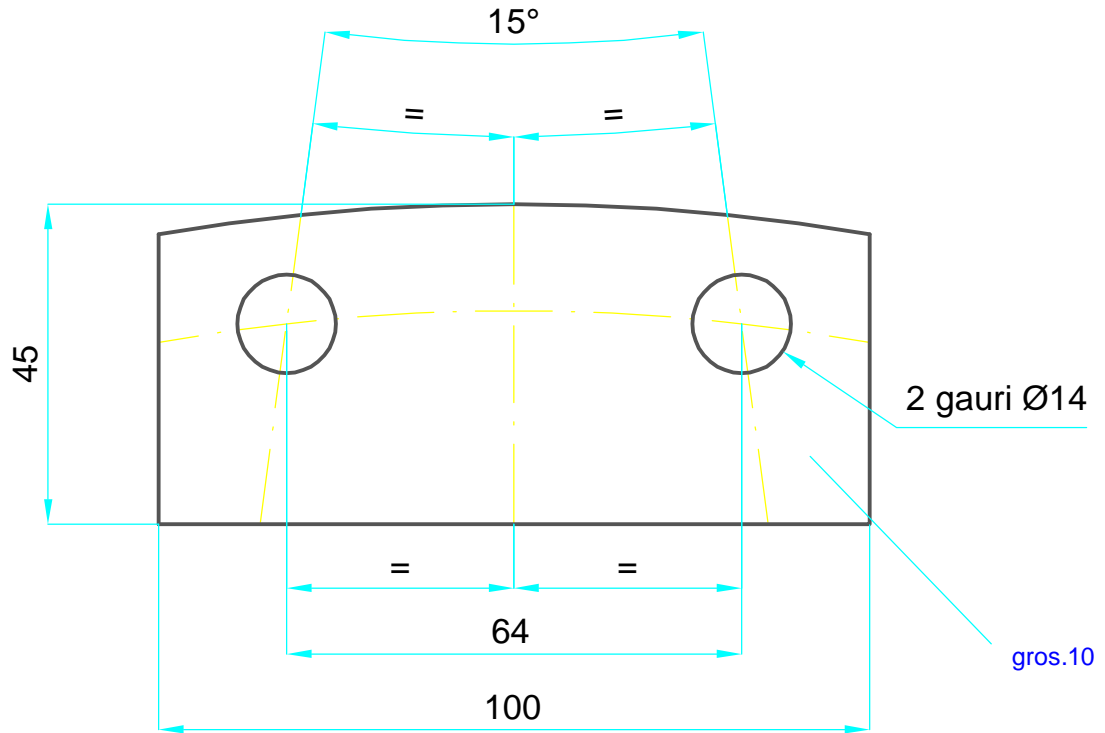


25/									
✓									
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire		OL 52.4	Proiect tehnologic	PETAL S.A. Husi	Ca		
	Desenat :	ing. P. Baraga		STAS 500/2-80					
	Verificat :	dr. ing. I. Cucos		Masa: 0,475 kg	INOCEM 10-02.19.04.0				
	Aprobat :	dr. ing. I. Cucos							
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi			1 : 1	Inel de fixare				
				Data: sept-nov.2022	Caseta de etansare				

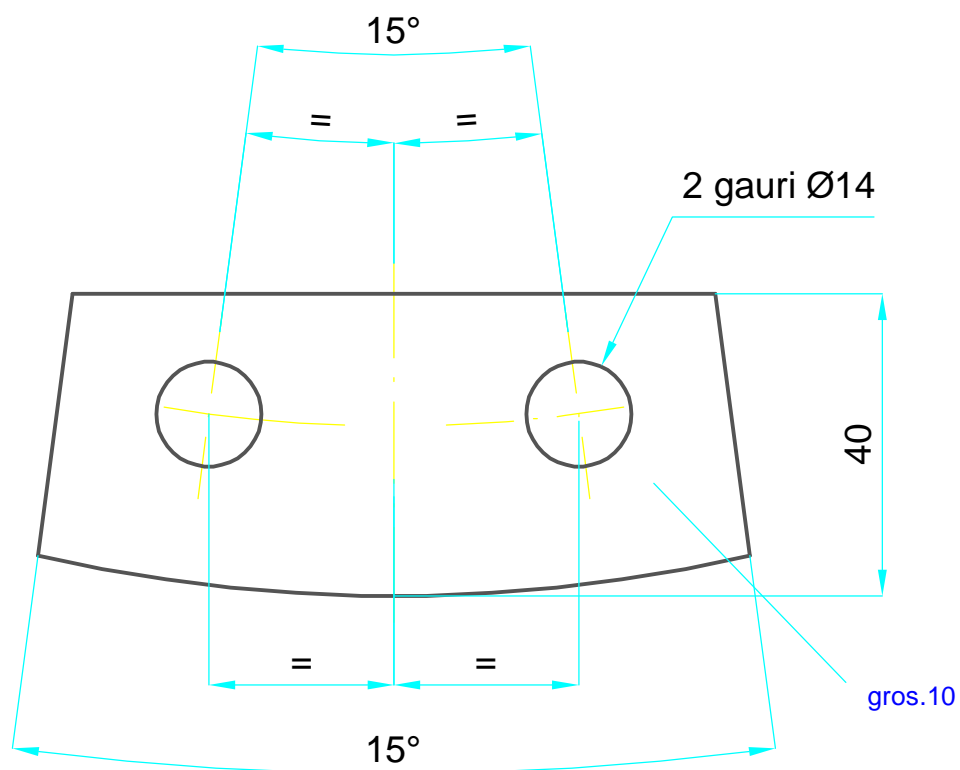


NOTA: Muchiile ascutite se tesesc 1x45°.

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire							
	Desenat :	ing. P. Baraga			CuSn6Zn4Pb4		Proiect tehnologic	PETAL S.A. Husi	Ca
	Verificat :	dr. ing. I. Cucos							
	Aprobat :	dr. ing. I. Cucos			Masa: 0,095 kg		INOCEM 10-02.19.07.0		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi				5 : 1		Inel de presare		
				Data: sept-nov.2022			Caseta de etansare		

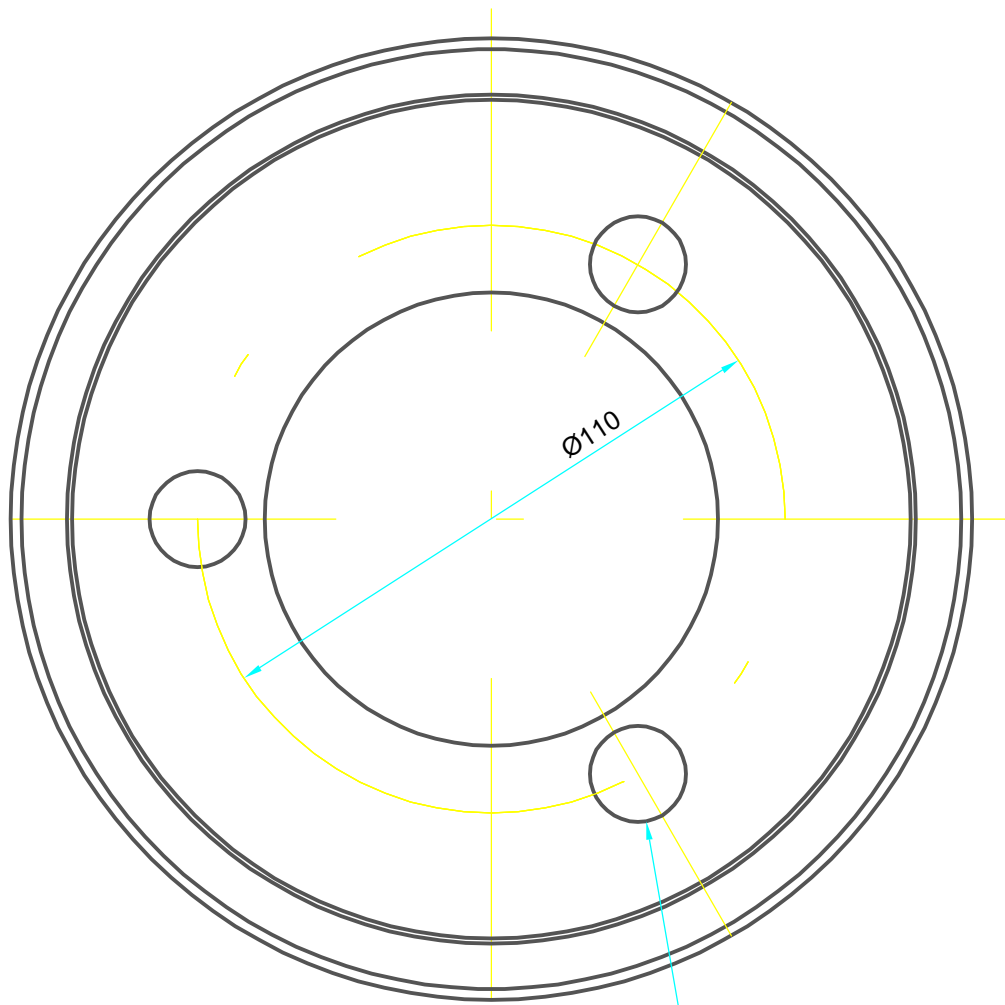
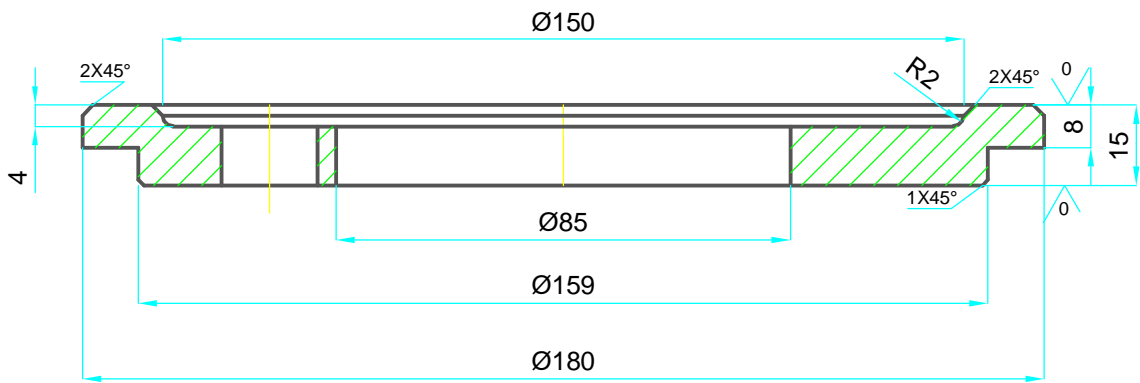


Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Hugi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,345 kg	INOCEM 616.15-02.00.03.0		
	Aprobat :	dr. ing. I. Cucos	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		Sector fixare 2	
PETAL S.A. <small>Hugi</small>		INCIE ICPE-CA <small>Bucur ești</small>	DEPARTAMENT IPCUP <small>PLUKEI</small>	Data: sept-nov.2022		
Mecanism motor ansamblu						



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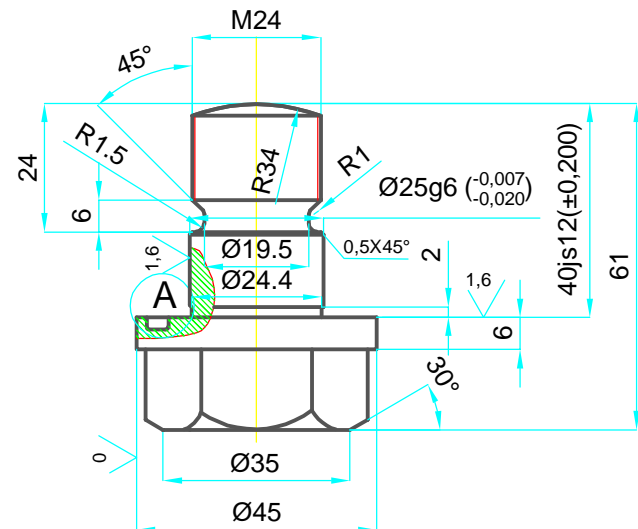
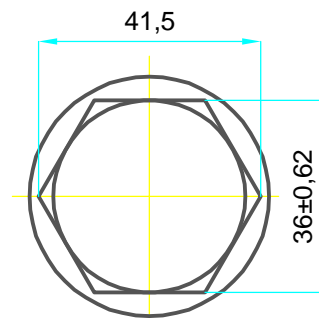
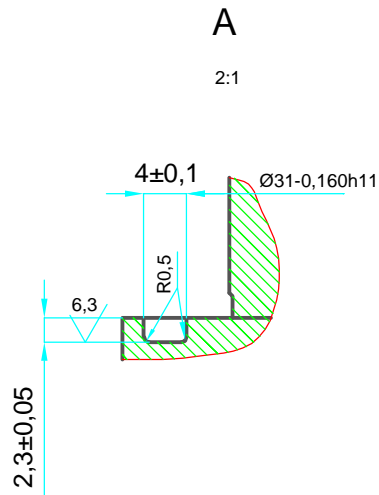
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,280 kg	INOCEM 616.15-00.00.07.0		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Sector de fixare		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP HUSI		Data: sept-nov.2022	Mecanism motor ansamblu		



3 gauri Ø18 echidistante

25

Tolerante gen. ISO 2678.mk. SR EN 22768/1+2	Proiectat :	ing. T. Arhire	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Hog	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos				
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			Masa: 1,460 kg	INOCEM 616.15-02.00.11.0		
PETAL S.A. Hog			INC DIE ICPE-CA Suceava	IPCUP Iasi	1 : 1	
			Data: sept-nov.2022	Capac		
			Mecanism motor ansamblu			

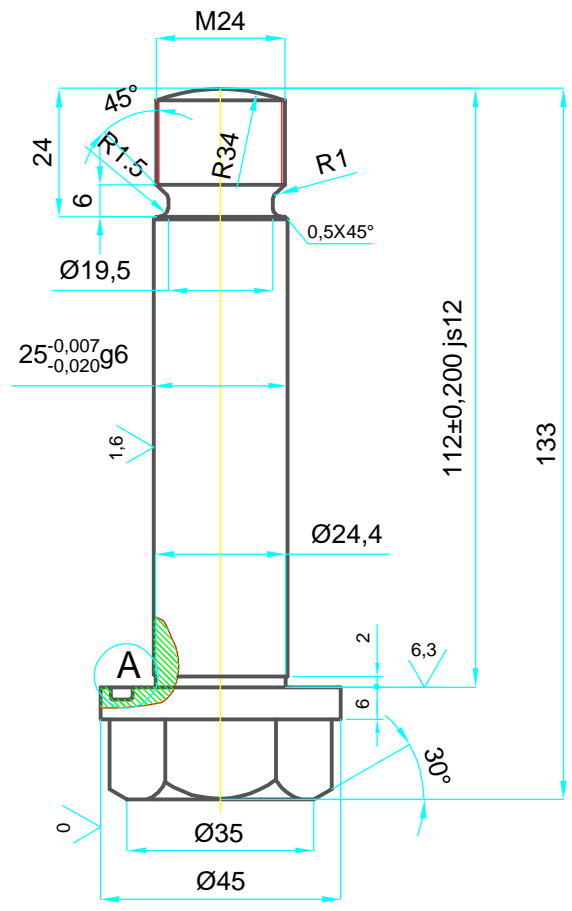
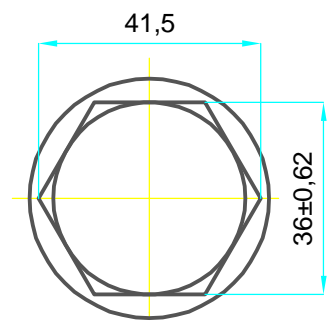
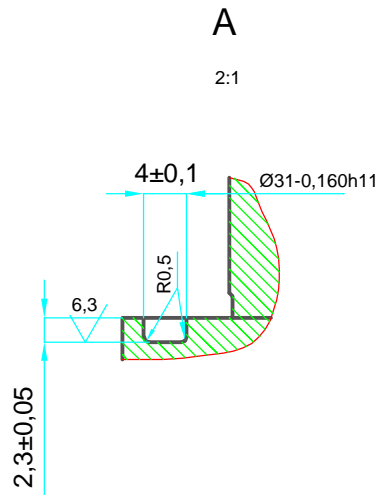


CONDITII TEHNICE

Protejare: AE/OL/Cd 12FI SR EN ISO 2080:2009

25

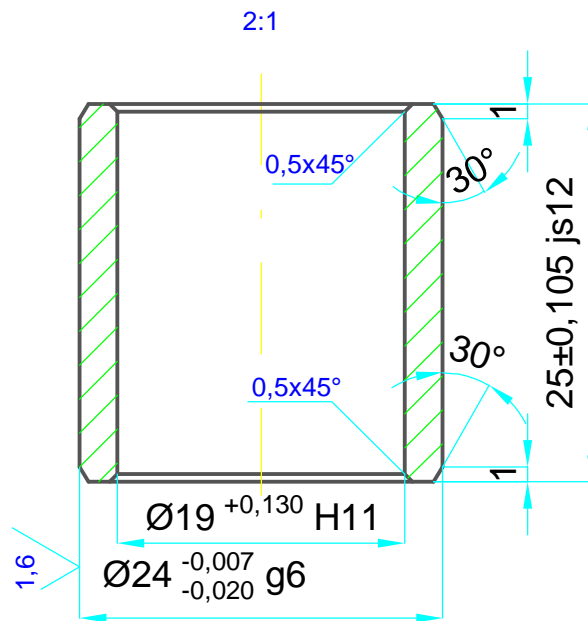
Tolerante gen. ISO 2678.mk. SR EN 22768/1+2	Proiectat :	ing. T. Arhire	C 45 E SR EN 10250/3/2002	Proiect tehnologic	PETAL S.A. Hog	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos				
Masa: 0,265 kg			INOCEM 616.15-02.00.21.0			
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1			Surub de pasuire
PETAL S.A. Hog			INCDIE ICPE-CA Bucuresti			IPCUP Bucuresti
Data: sept-nov.2022			Mecanism motor ansamblu			



CONDITII TEHNICE

Protejare: AE/OL/Cd 12FI SR EN ISO 2080:2009

Tolerante gen. ISO 2678.mk. SR EN 22768/1+2	Proiectat :	ing. T. Arhire	34 CrMo0 SR EN 10250/3/2002	Proiect tehnologic	PETAL S.A. Hog	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos				
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			Masa: 1,460 kg	INOCEM 616.15-02.00.22.0		
PETAL S.A. Hog			1 : 1	Surub pasuire 2		
INC DIE ICPE-CA Bucuresti			Data: sept-nov.2022	Mecanism motor ansamblu		

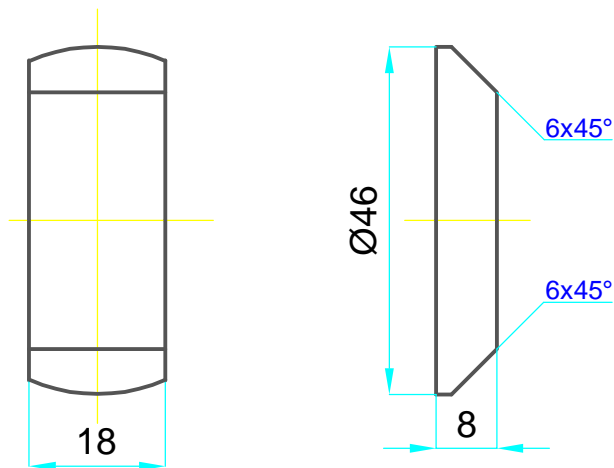


CONDITII TEHNICE

Imbunatatit la duritatea 280.....320 HB.

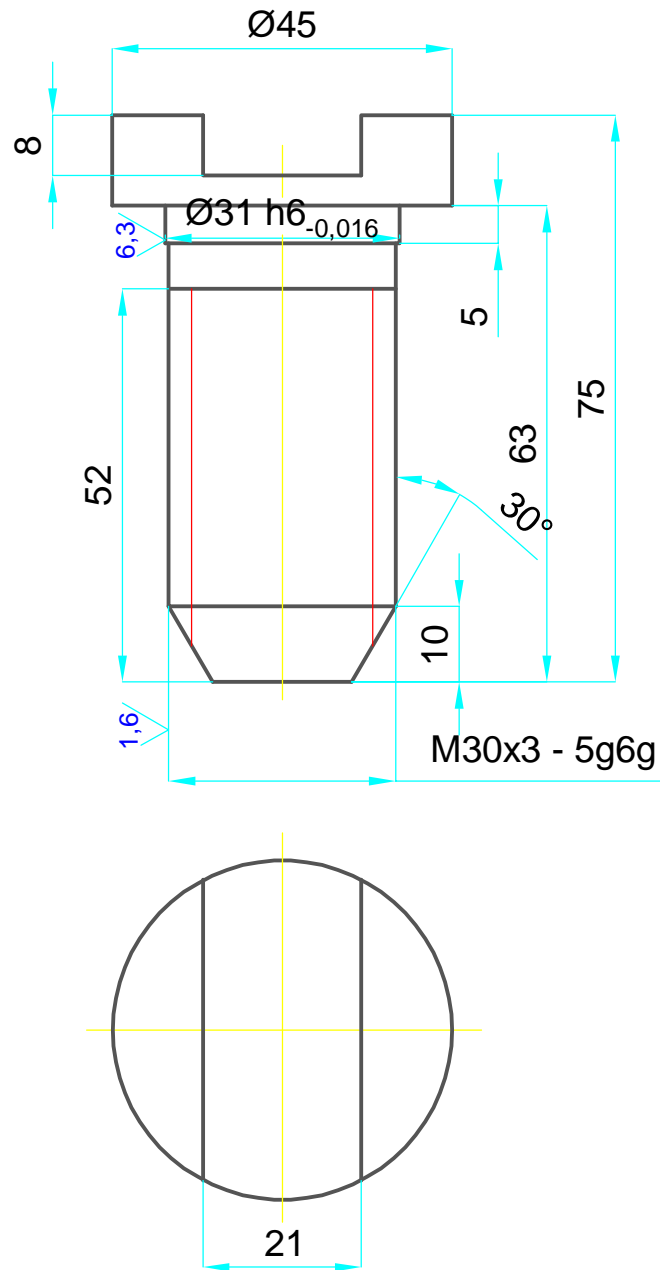
25

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	42CrMo4 SR EN 10250/3/2002	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,033 kg	INOCEM 616.15-02.24.07.0		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Bucsa de centrare		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC/DIE ICPE - CA Bucuresti IPCUP HUSI			Data: sept-nov.2022	Mecanism motor ansamblu		



50

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos	Masa: 0,050 kg	INOCEM 616.15-02.25.03.0		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP HUSI		1 : 1	Punte		
		Data: sept-nov.2022	Mecanism motor ansamblu			

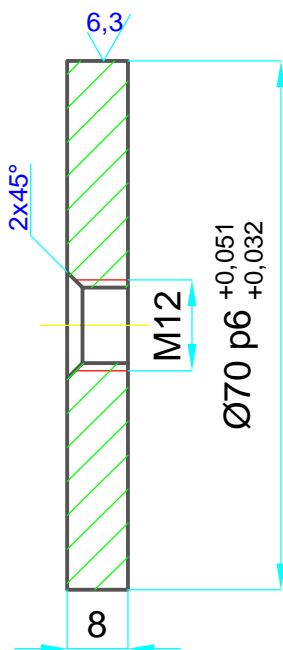


CONDITII TEHNICE

Tratament termic : imbunatatit la duritatea : 230..... 270 HB;
 Protectie: AE / OL / Cd 12 FL SR EN ISO 2082:2018.

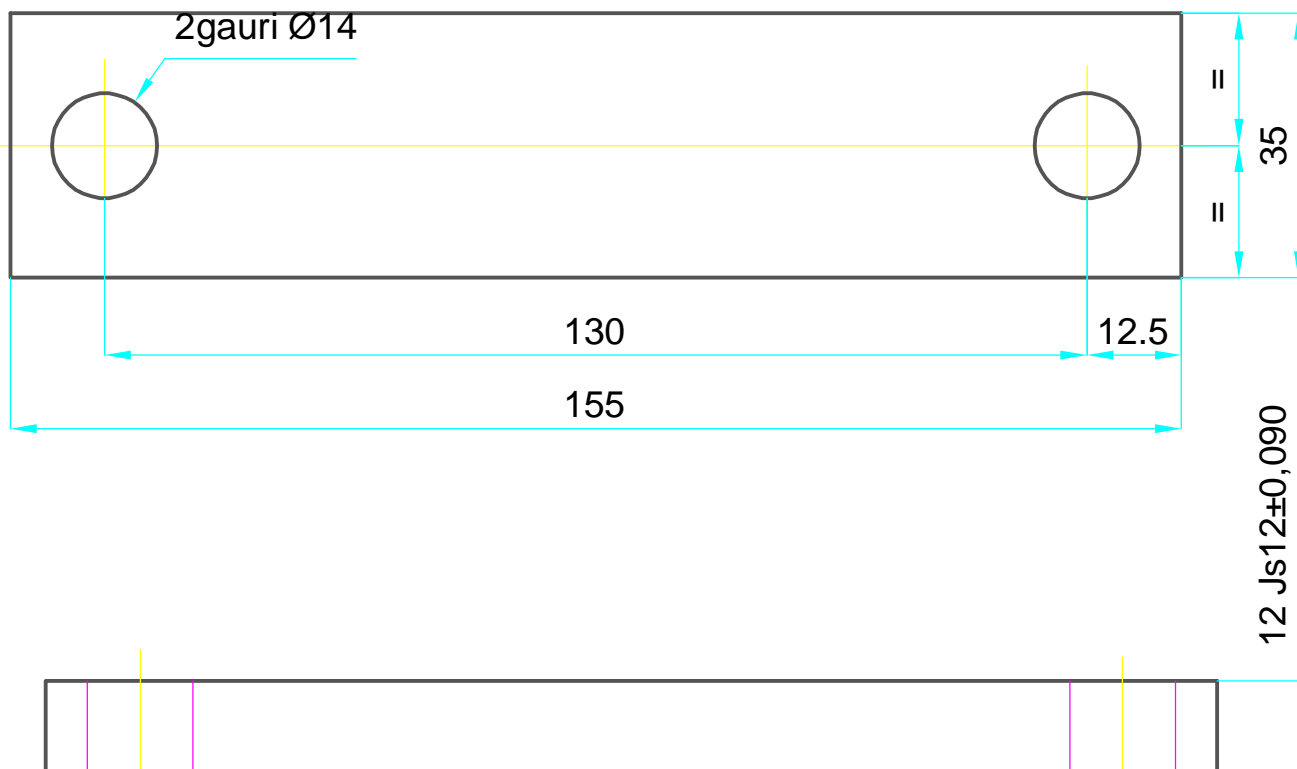
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Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	34CrMo4 SR EN 10250/3/2002	Proiect tehnologic		PETAL S.A. Husi	F		
	Desenat :	ing. P. Baraga		INOCEM 616.15-02.25.02.0					
	Verificat :	dr. ing. I. Cucos	Masa: 0,410 kg						
	Aprobat :	dr. ing. I. Cucos							
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Surub special					
PETAL S.A. Husi		INC DIE ICPE - CA Bucuresti	IPCUP Husi	Data: sept-nov.2022	Mecanism motor ansamblu				



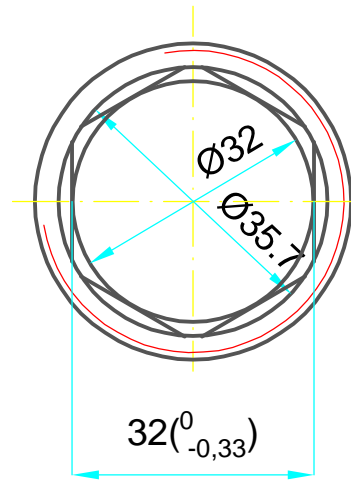
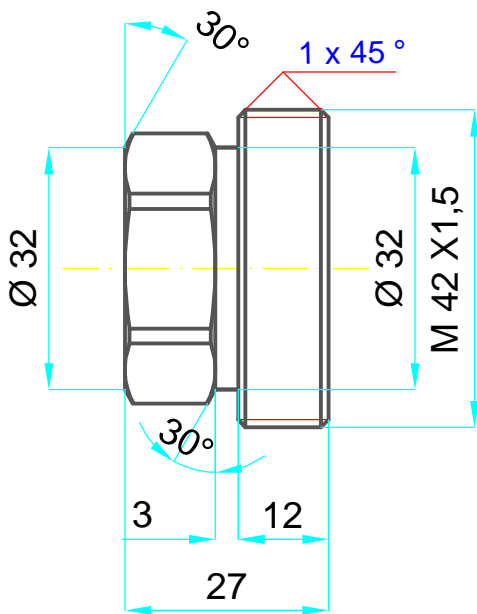
0 ✓ ✓ ✓

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,236 kg	INOCEM 616.15-02.25.08.0		
	Aprobat :	dr. ing. I. Cucos				
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INCDIE ICPE-CA Bucuresti IPCUP HUSI			1 : 1	Capac		
			Data: sept-nov.2022	Mecanism motor ansamblu		



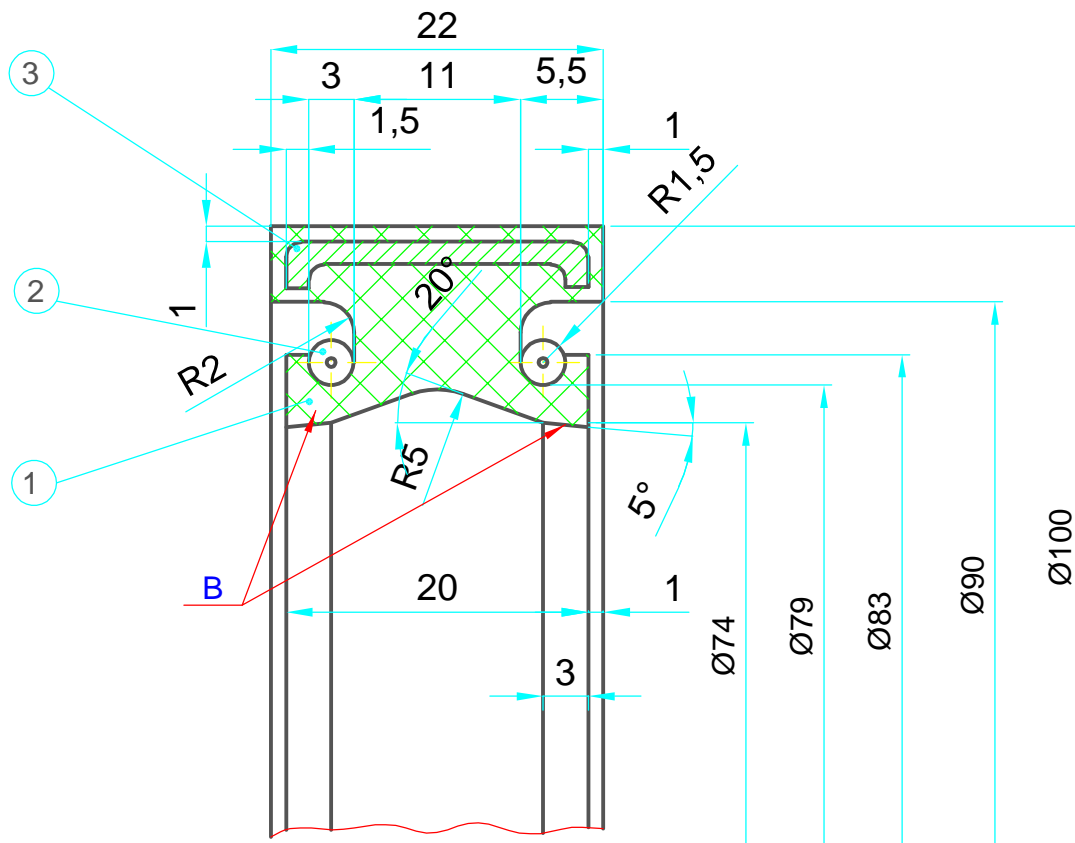
25

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	34CrMo4 SR EN 10250/3/2002	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,490 kg	INOCEM 616.15-02.25.09.0		
	Aprobat :	dr. ing. I. Cucos				
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP HUSI		1 : 1	Pana		
			Data: sept-nov.2022	Mecanism motor ansamblu		



25/ ✓

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	C45E SR EN 10250/2/2002	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,215 kg	INOCEM 616.15-00.00.07.0		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Dop filetat		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC/DIE ICPE-CA Bucuresti IPCUP Husi			Data: sept-nov.2022	Mecanism motor ansamblu		



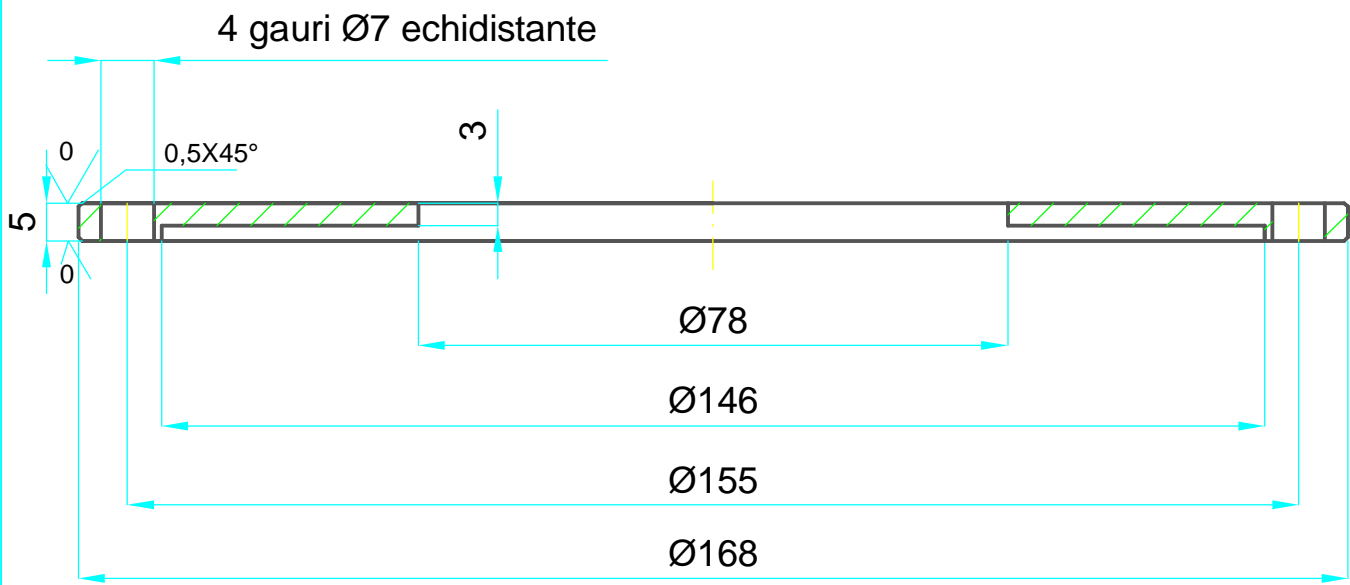
CONDITII TEHNICE

1. Mediu de lucru: ulei hidraulic;
2. Temperatura de lucru $-45^{\circ}\dots+90^{\circ}$;
3. Cotele netolerate se vor incadra in clasa de precizie P2 SR ISO 3302-1:2008;
4. Pe suprafetele de etansare "B" nu se admit bavuri, lipsa de material, impaturiri sau alte defecte care ar periclita buna functionare;
5. Garnitura se va executa din cauciuc tip NBR rezistent la -45° si caracteristici fizico-mecanice conform SR EN 682:2002/A1:2006, clasa PF80A;
6. Garnitura se va marca cu un punct de culare albastru deschis, conform STI $\frac{1}{87}$.

NOTA In cazul executiei la SC AXON SRL garnitura se va executa din cauciuc F2 (STI 4/1-90).

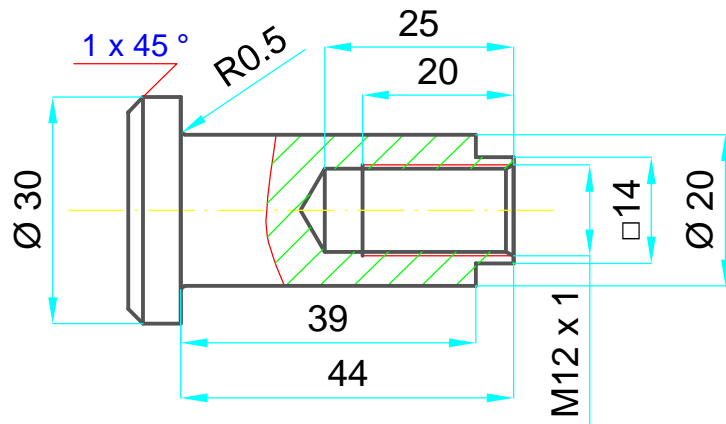
Poz.	Descriere	Numar Desen/ Stas	Buc.	Material	Observatii	Greutate Kg/buc.
3	Armatura	616.15-02.30.03.0	1	S 235 JR SR EN 10025/2:2019		0,076
2	Arc	616.15-02.30.02.0	2	OLC 65A		0,006
1	Garnitura	616.15-02.30.01.0	1	cauciuc	fara desen	0,050

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	Masa: 0,138 kg	INOCEM 616.15-02.30.00.0	Proiect tehologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga					
	Verificat :	dr. ing. I. Cucos					
	Aprobat :	dr. ing. I. Cucos					
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		1 : 1	Garnitura				
PETAL S.A. Husi		INC DIE ICPE - CA Bucuresti	IP CUP Husi		Data: sept-nov.2022 Mecanism motor ansamblu		



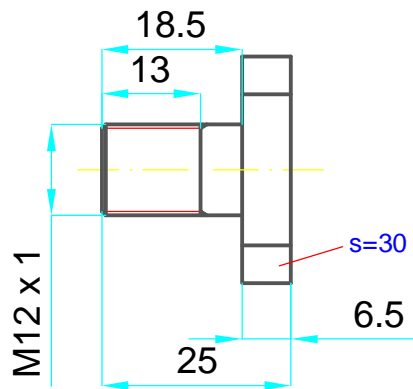
25

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	S 355 J2 SR EN 10025/2/2019	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,520 kg	INOCEM 616.15-02.00.31.0		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Inel de fixare		
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INCDIE ICPE-CA Bucuresti IPCUP Husi			Data: sept-nov.2022	Mecanism motor ansamblu		



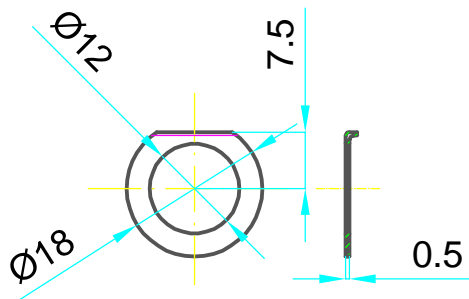
25 ✓ ✓

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	C 45 E SR EN 10250/2/2002	Proiect tehnologic		PETAL S.A. Husi	F		
	Desenat :	ing. P. Baraga		INOCEM 616.15-02.35.02.0					
	Verificat :	dr. ing. I. Cucos	Masa: 0,120 kg						
	Aprobat :	dr. ing. I. Cucos							
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Bolt					
PETAL S.A. Husi		INC DIE ICPE - CA Bucuresti	IPCUP Husi	Data: sept-nov.2022	Mecanism motor ansamblu				



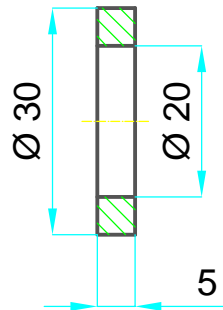
25 ✓ ✓

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	C 45 E SR EN 10250/2/2002	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,033 kg	INOCEM 616.15-02.35.05.0		
	Aprobat :	dr. ing. I. Cucos	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INCDIE ICPE - CA Bucuresti IPCUP HUSI		1 : 1 Surub special	
Data: sept-nov.2022			Mecanism motor ansamblu			



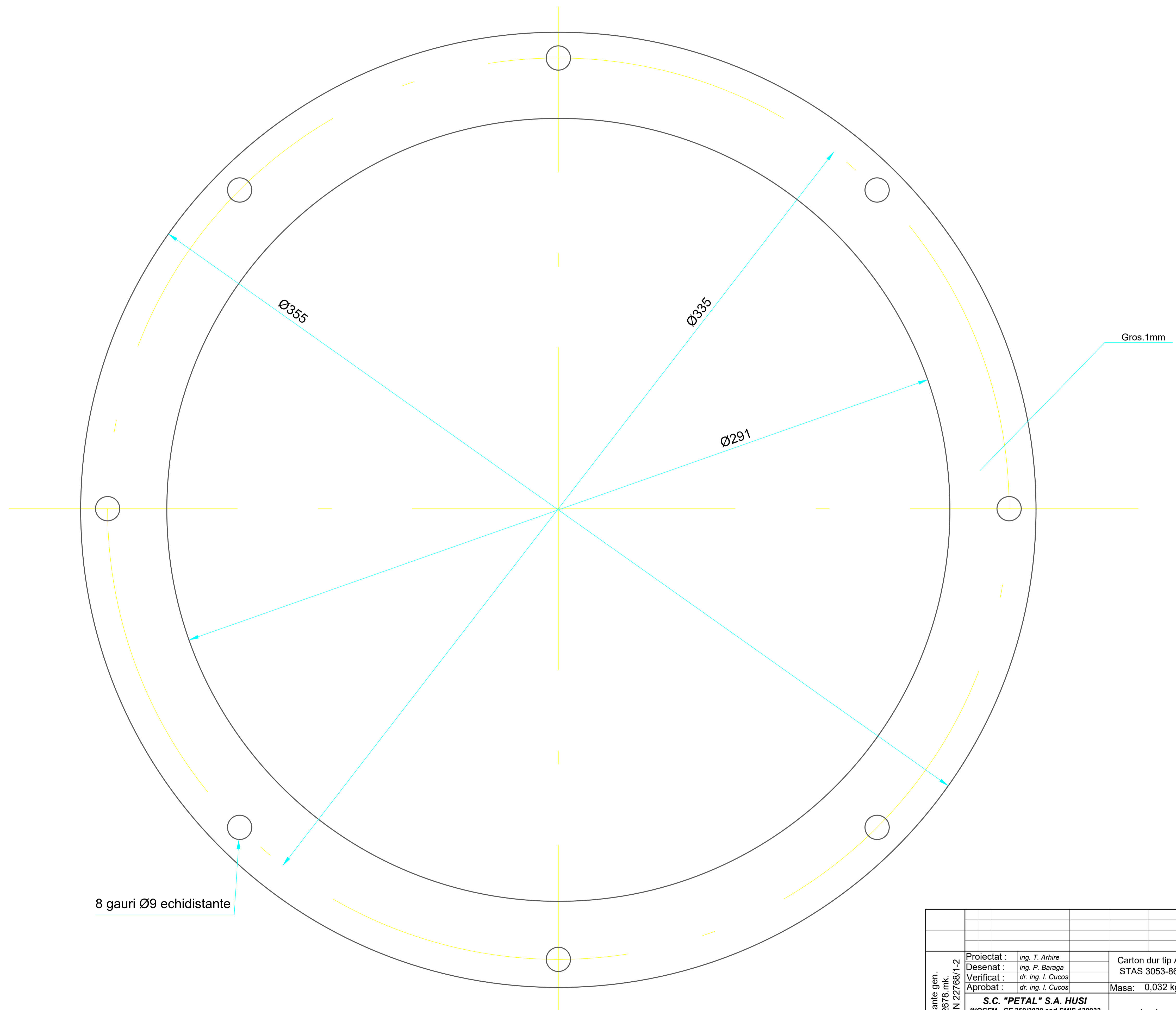
25/ ✓ ✓

Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire		S 355 J2	Proiect tehnologic	PETAL S.A. Husi	F		
	Desenat :	ing. P. Baraga		SR EN 10025/2/2019					
	Verificat :	dr. ing. I. Cucos		Masa: 0,005 kg	INOCEM 616.15-02.35.04.0				
	Aprobat :	dr. ing. I. Cucos							
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INC DIE ICPE - CA Bucuresti IPCUP HUSI			1 : 1	Siguranta				
	Data: sept-nov.2022			Mecanism motor ansamblu					



25/ ✓ ✓

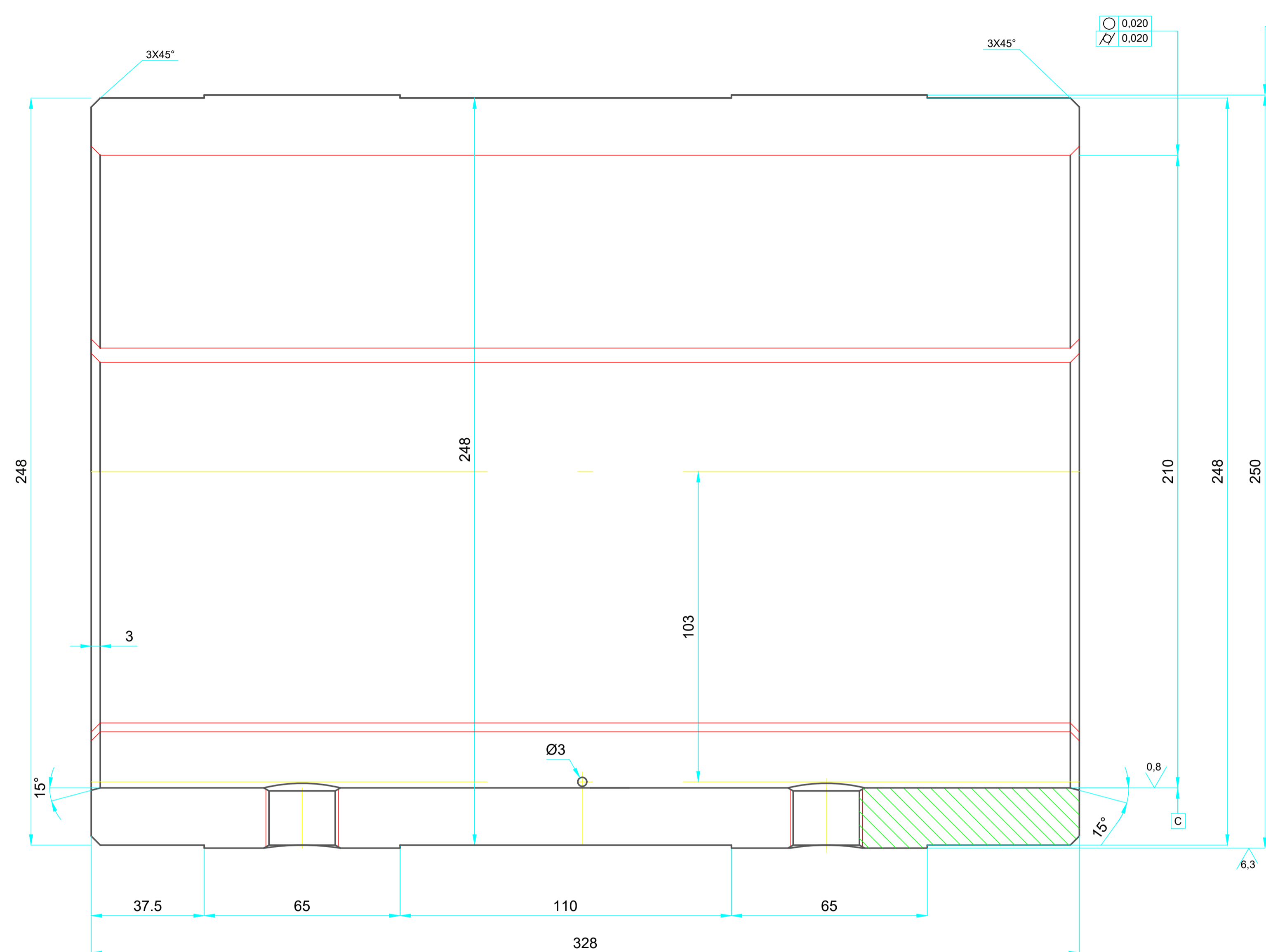
Tolerante gen. ISO.2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	C 45 E SR EN 10250/2/2002	Proiect tehnologic		PETAL S.A. Husi	F		
	Desenat :	ing. P. Baraga		INOCEM 616.15-02.25.03.0					
	Verificat :	dr. ing. I. Cucos	Masa: 0,019 kg						
	Aprobat :	dr. ing. I. Cucos							
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Husi INCDIE ICPE-CA Bucuresti IPCUP Husi			1 : 1	Saiba					
			Data: sept-nov.2022	Mecanism motor ansamblu					



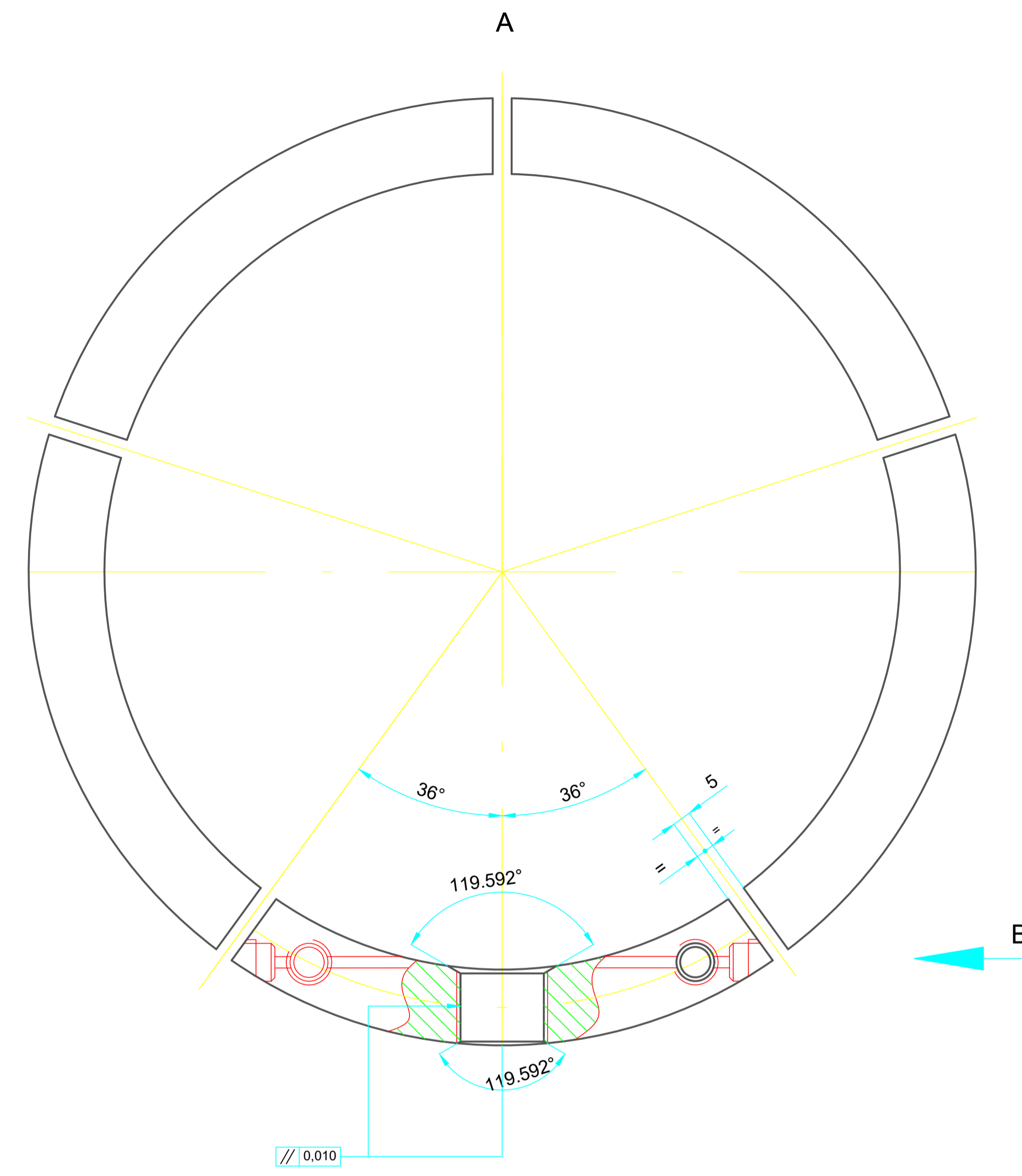
8 gauri Ø9 echidistante

Gros.1mm

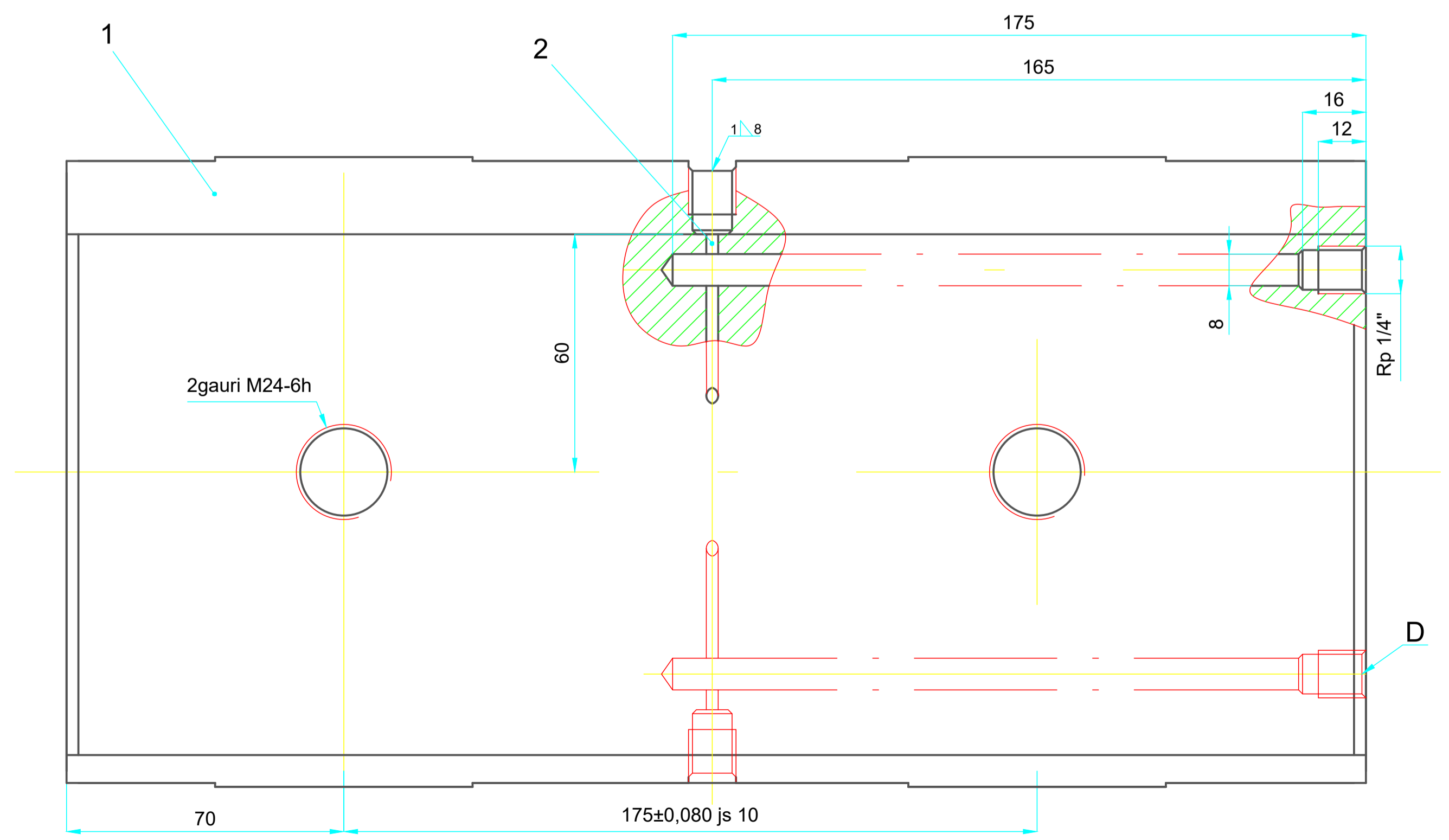
Tolerante gen. ISO 2676.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	Carton dur tip A STAS 3053-86	Proiect tehnologic	PETAL S.A. Hus	F
	Desenat :	ing. P. Baraga	Masa: 0,032 kg	INOCEM 616.15-02.00.17.0		
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos				
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Garnitura	
	PETAL S.A. Hus	INCJIE ICPE-CA Bucuresti	IPCUP Cluj	Data: sept-nov.2022	Mecanism motor ansamblu	



\sqrt{R} 0,060 C
 \circ 0,020 C
 \sqrt{A} 0,020 C

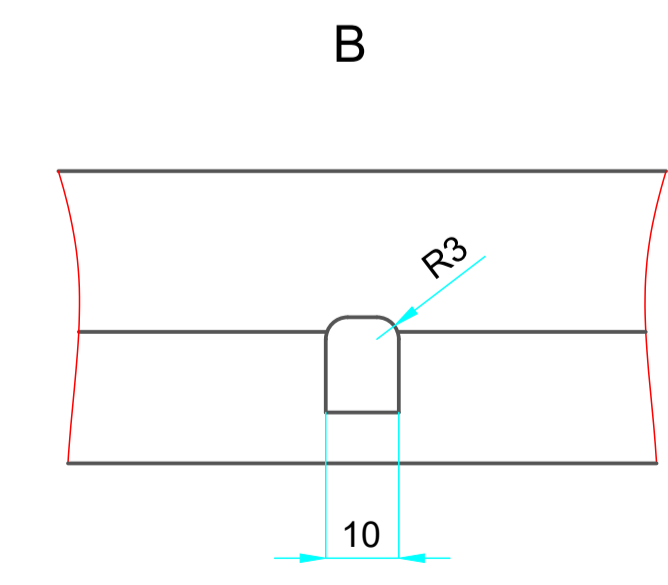


$\sqrt{\text{ }}$ 0,010

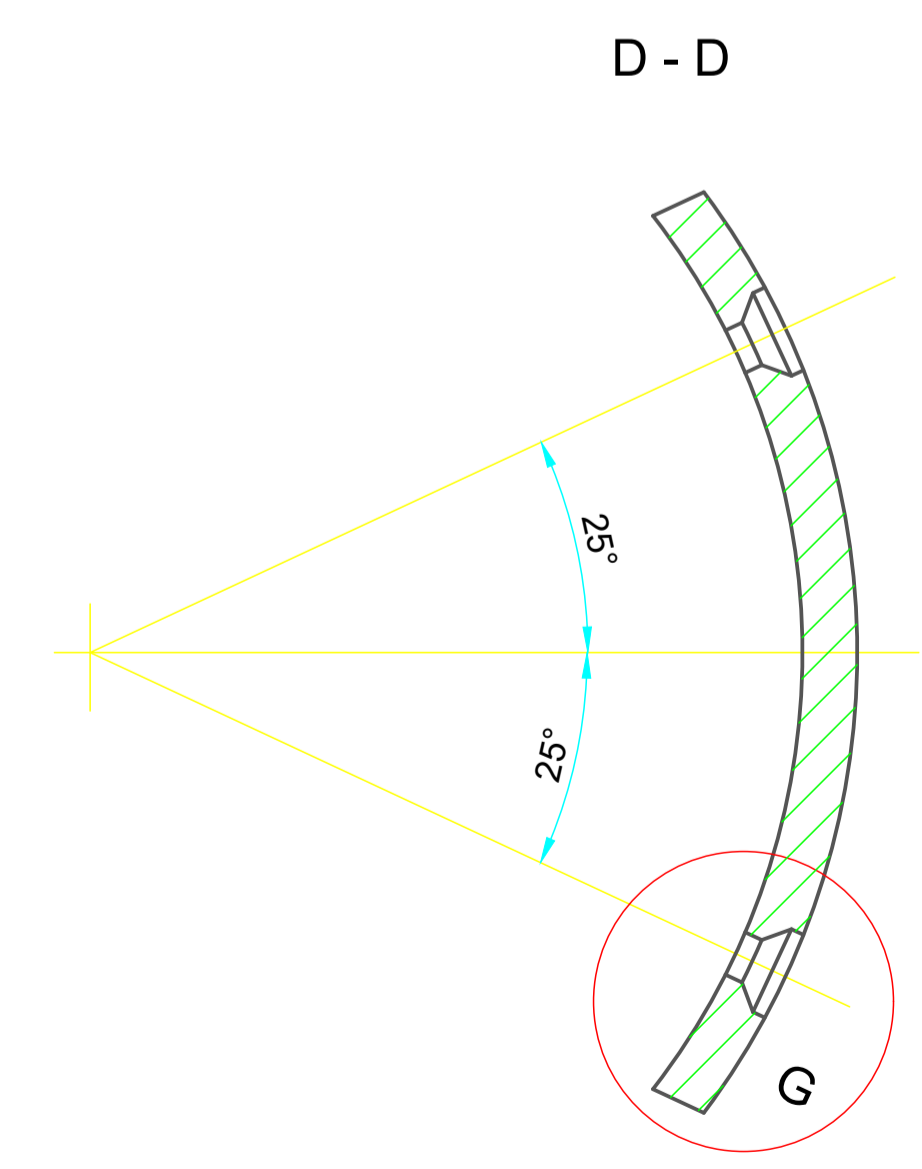
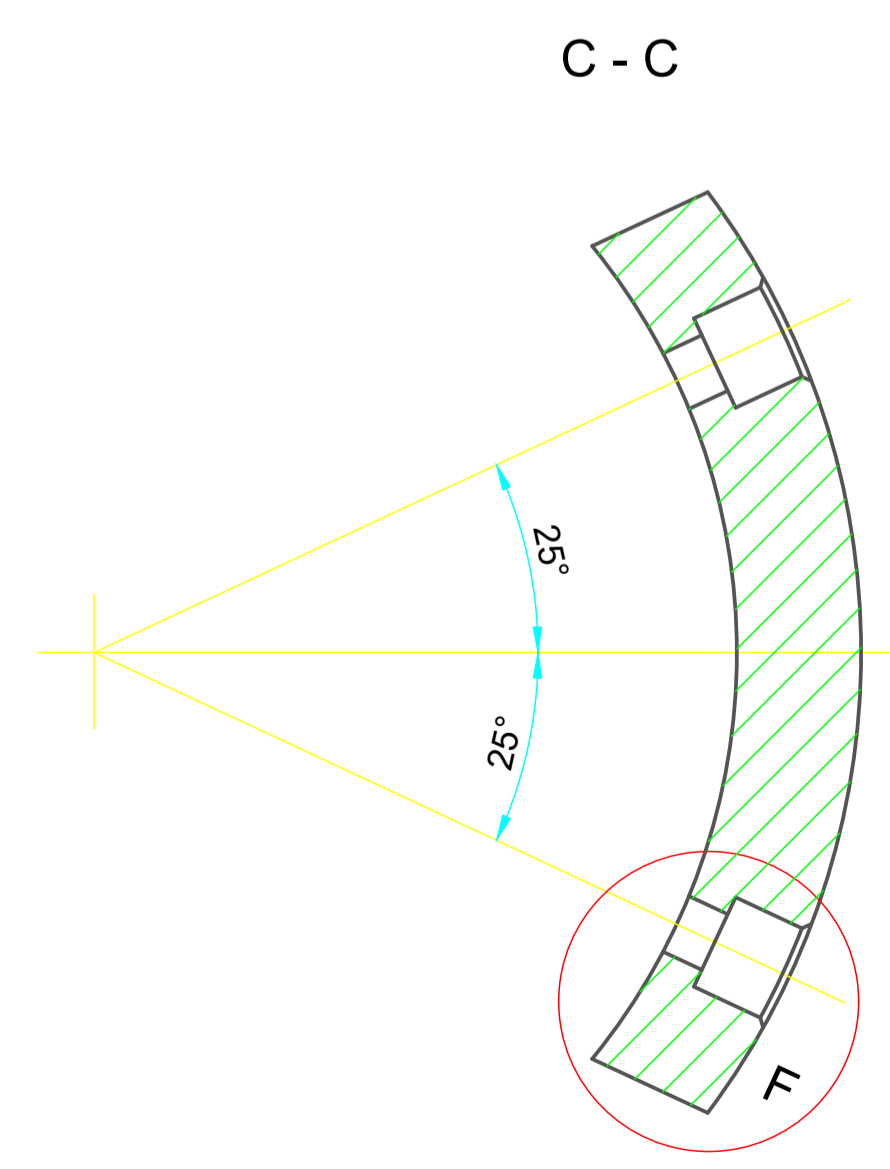
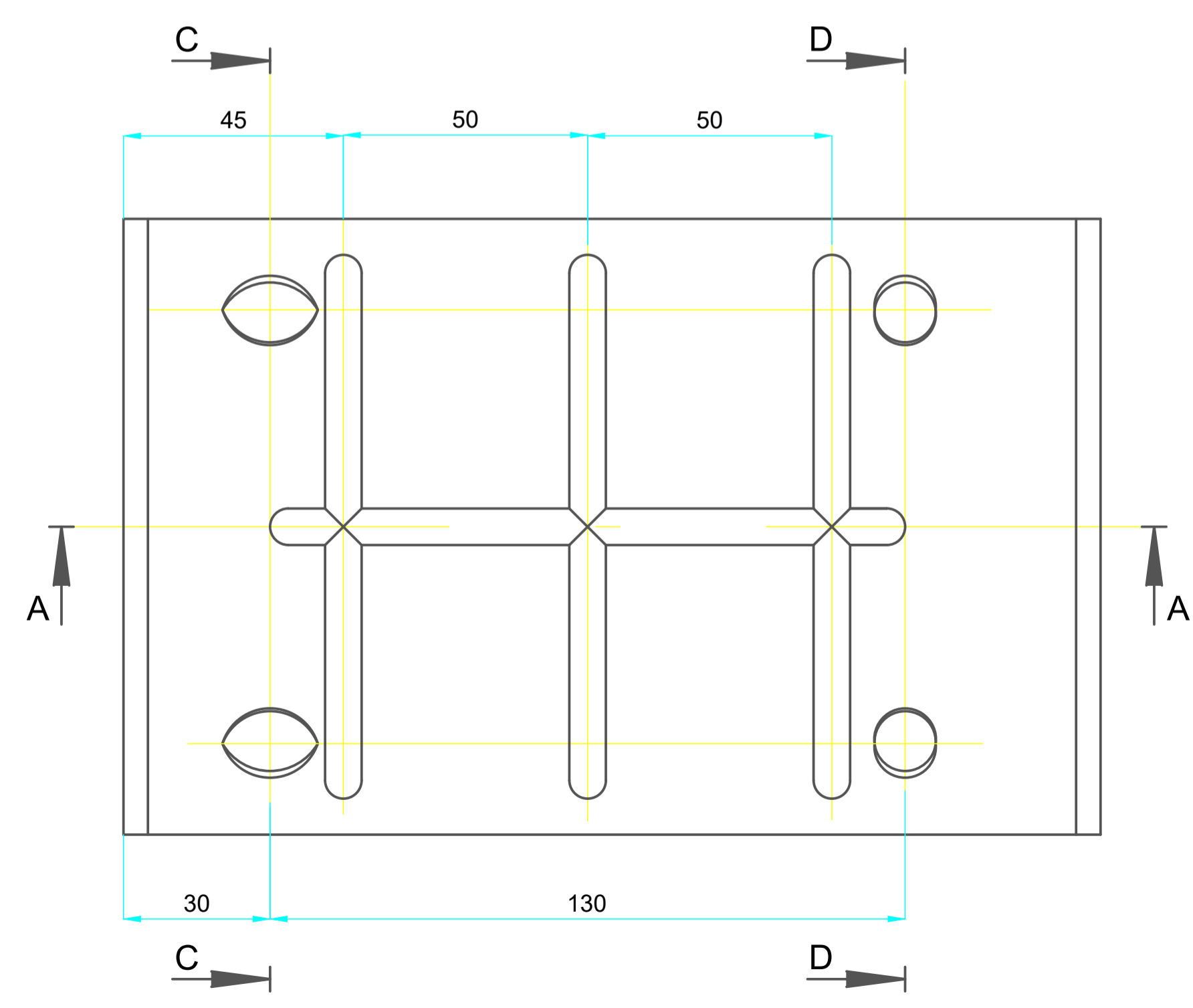
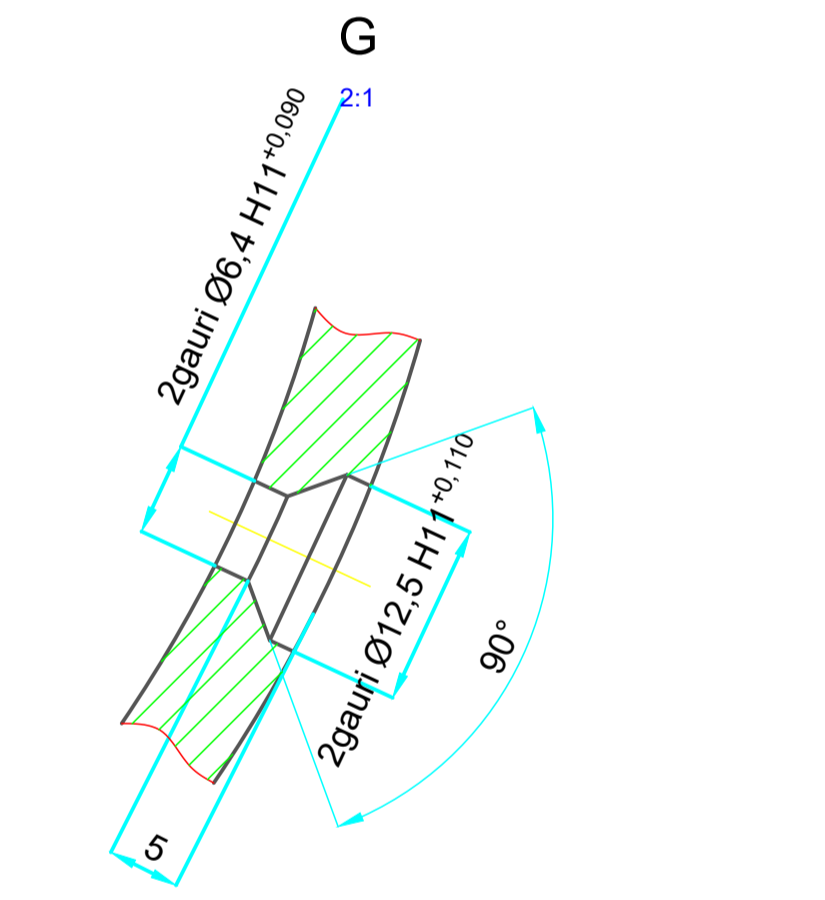
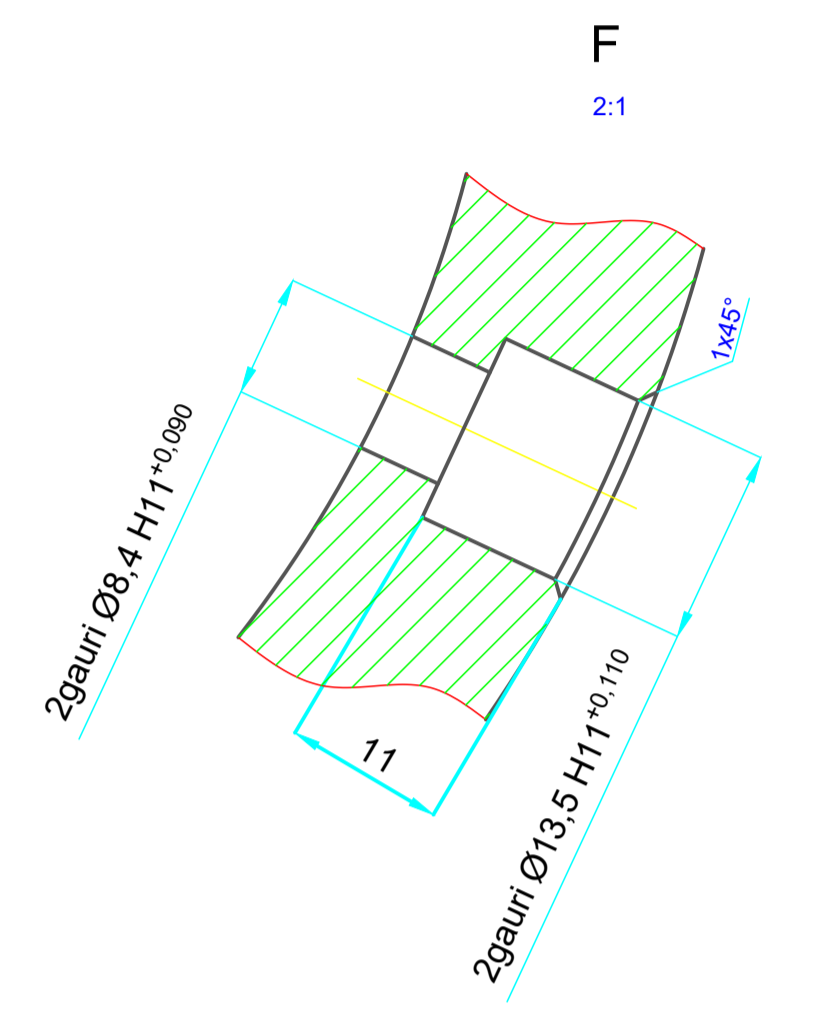
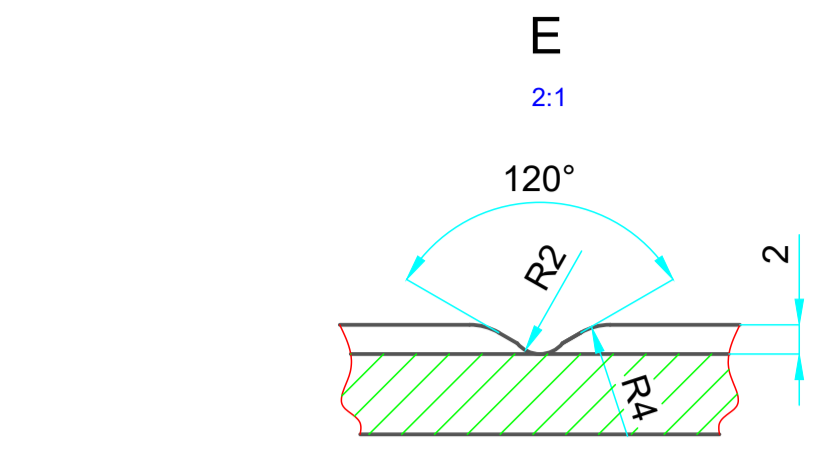
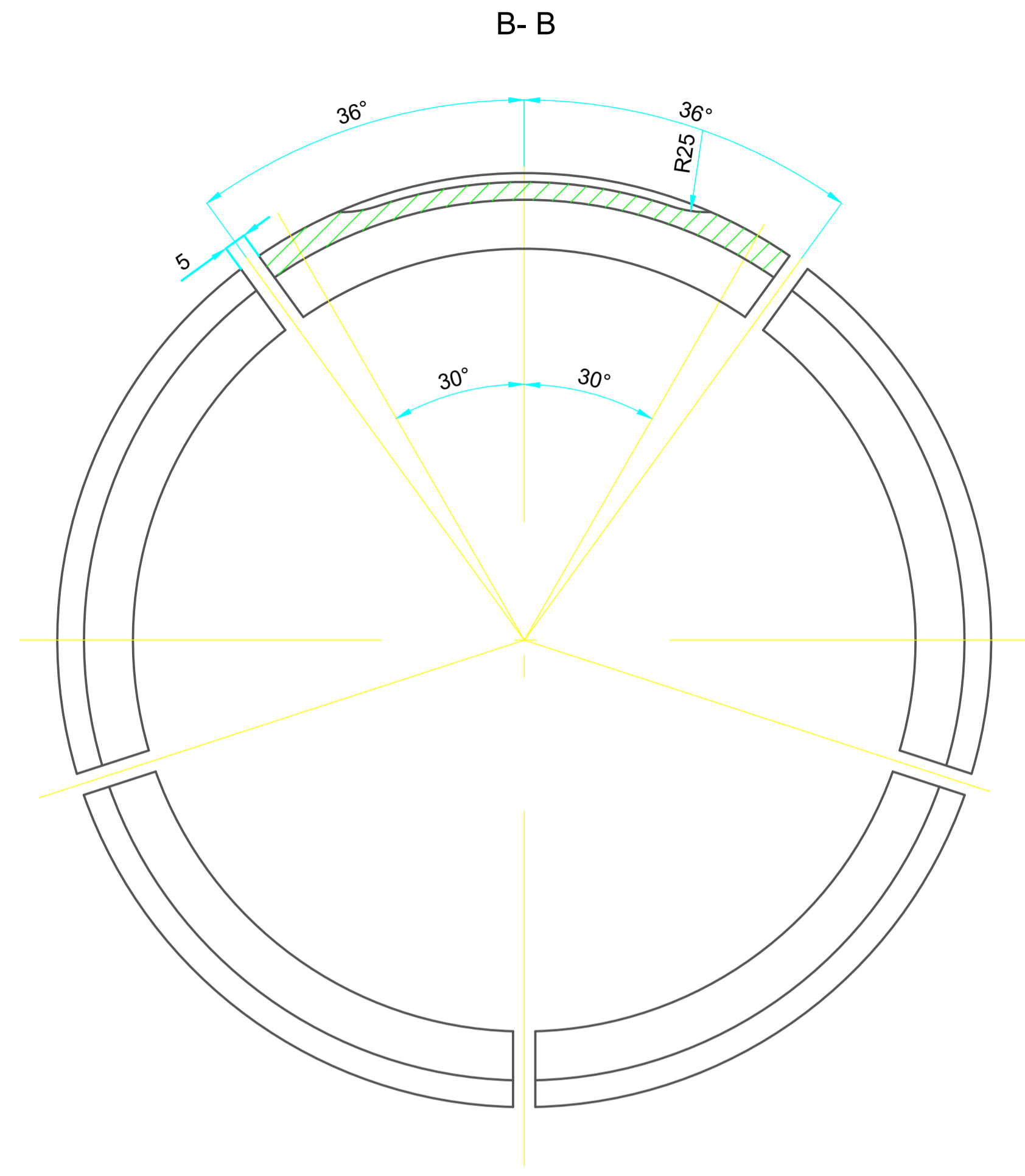
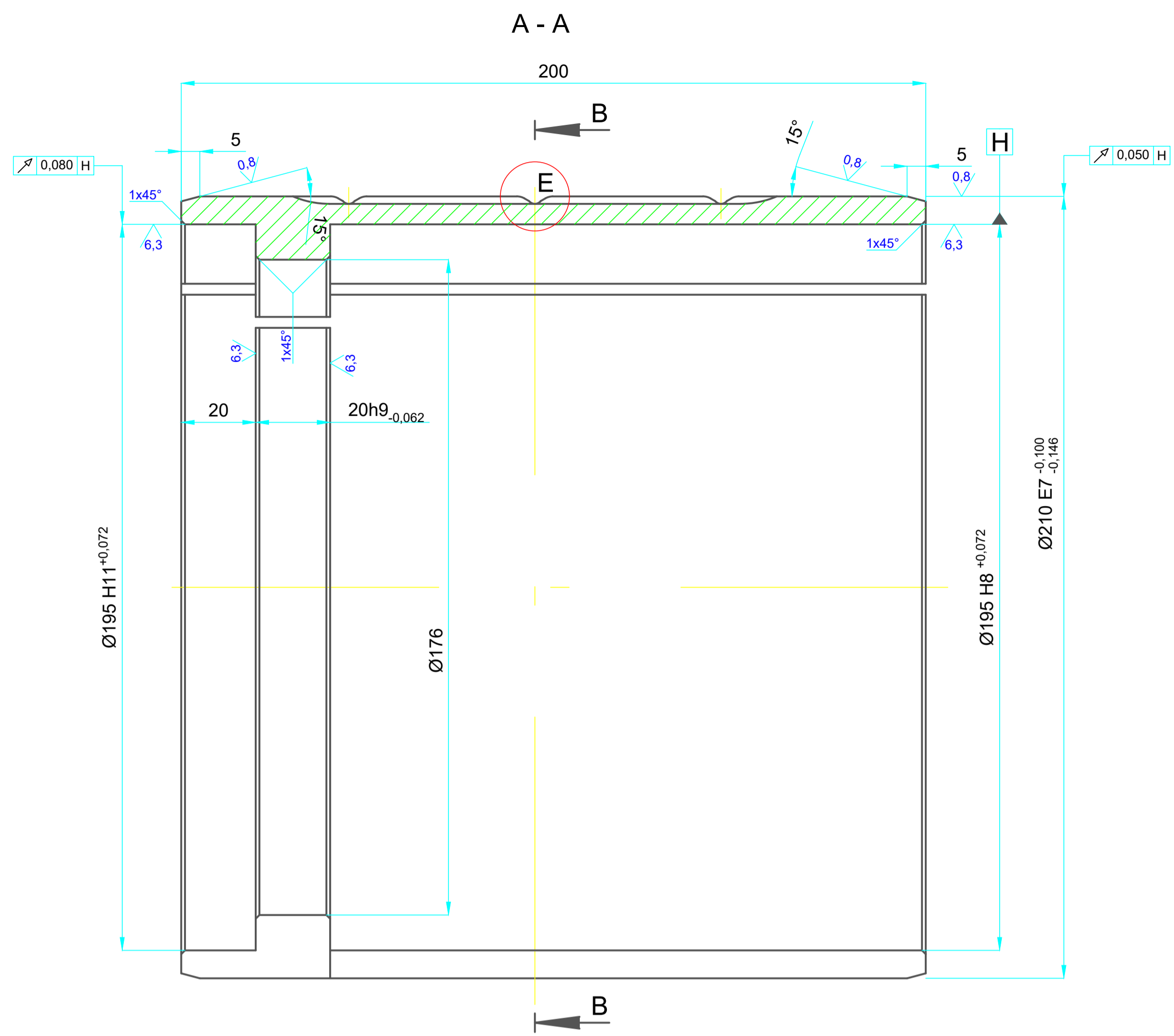


CONDITII TEHNICE

1. Tratament termic: piesa se va cementa pe adancimea de 1.2...1.5 mm si se va cali la duritatea de 54...58 HRC.
La cementare gaurile M24-6H si Rp1/4" se vor proteja.
2. Pentru una bucata din setul de 3 bucati, gaurile Rp1/4" Ø8 si Ø3 se vor executa in pozitia opusa(D) la aceleasi cote.
3. La executia din materialul de inlocuire piesa se va nitruza la adancimea de 0.6 dupa rectificarea si duritatea min. 600 HV.
Gaurile M24 si Rp1/4" se vor proteja la nitruzare.



2	Stift cilindric Ø3x6	614.92-02.19.02.0	1	S235 J2 SR EN 10025/2-2019	fara desen	0,00015
1	Glisiera	614.92-02.19.01.0	1	16 Mn Cr5 SR EN ISO 683-3-2019	fara desen	6,840
Poz.	Descriere	Numar Desen/ Stas	Buc.	Material	Observatii	Greutate Kg/buc.
Proiectat : ing. T. Arhire Desenat : ing. P. Baraga Verificat : dr. ing. I. Cucos Aprobat : dr. ing. T. Cucos		Masa: 6,84 kg		INOCEM 616.15-02.19.00.0		Mm
Tolerante gen. ISO 2678 mk SR EN 22768/1-2		S.C. "PETAL" S.A. HUSI INOCEM - CF 260/200 cod SMS 120032 Proiect Tehnic		Proiect tehnologic PETAL S.A. Glisiera inferioara		1 : 1
PETAL S.A.		INOCEM		Data: sept-nov.2022		Mecanism motor ansamblu

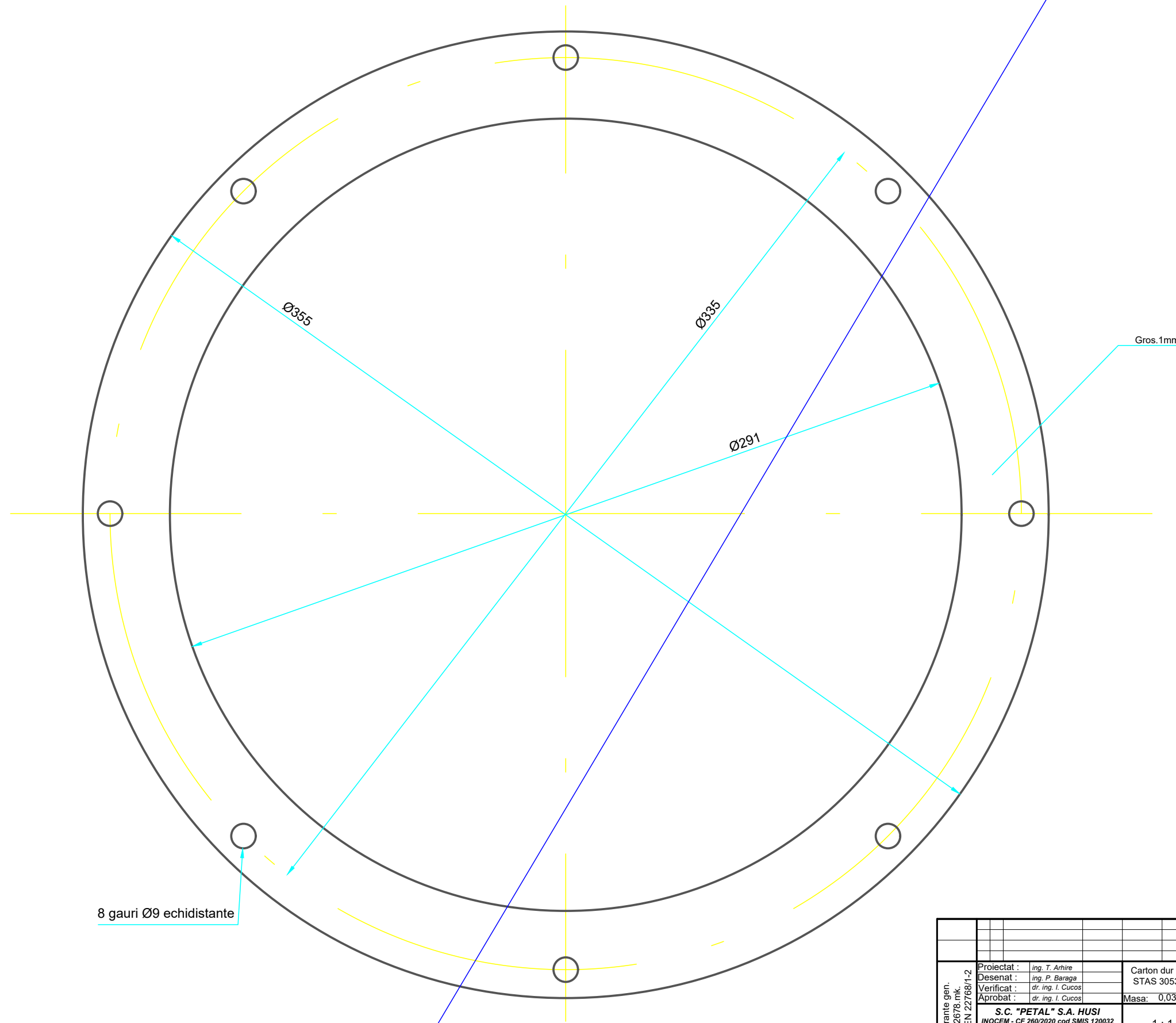


CONDITII TEHNICE

- Pe suprafata cilindrica Ø210 e7, nu se admit defecte de turnare;
- Pe celelalte suprafete se admit defecte de turnare negrupate daca adancimea lor nu depaseste 2mm, iar suprafata unui defect este de max. 10mm²;
- Numarul maxim de defecte : 5.

12.5 ✓✓

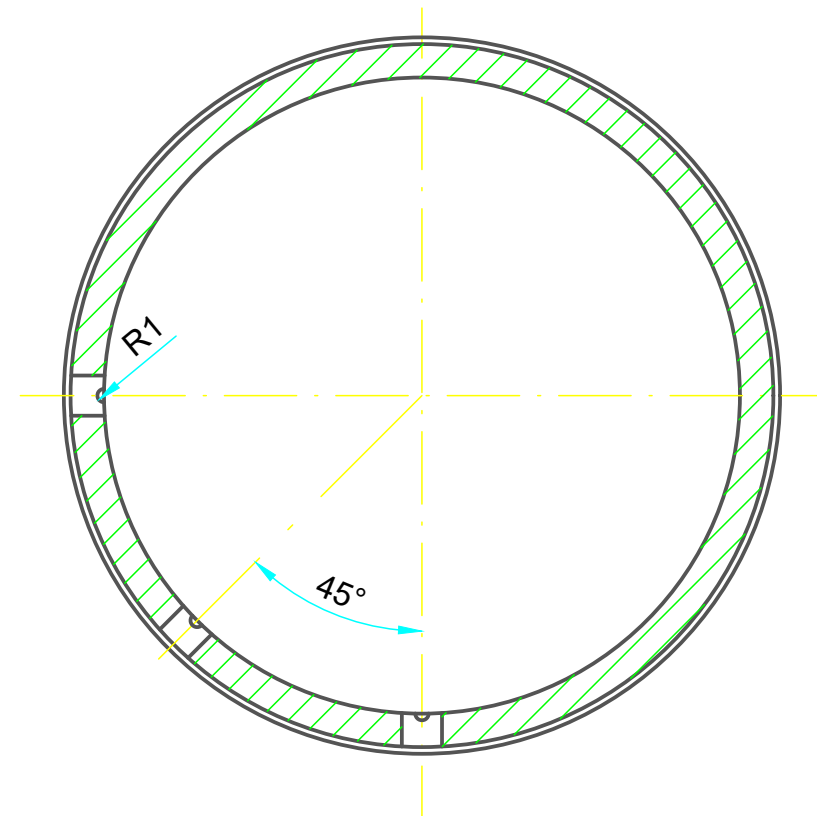
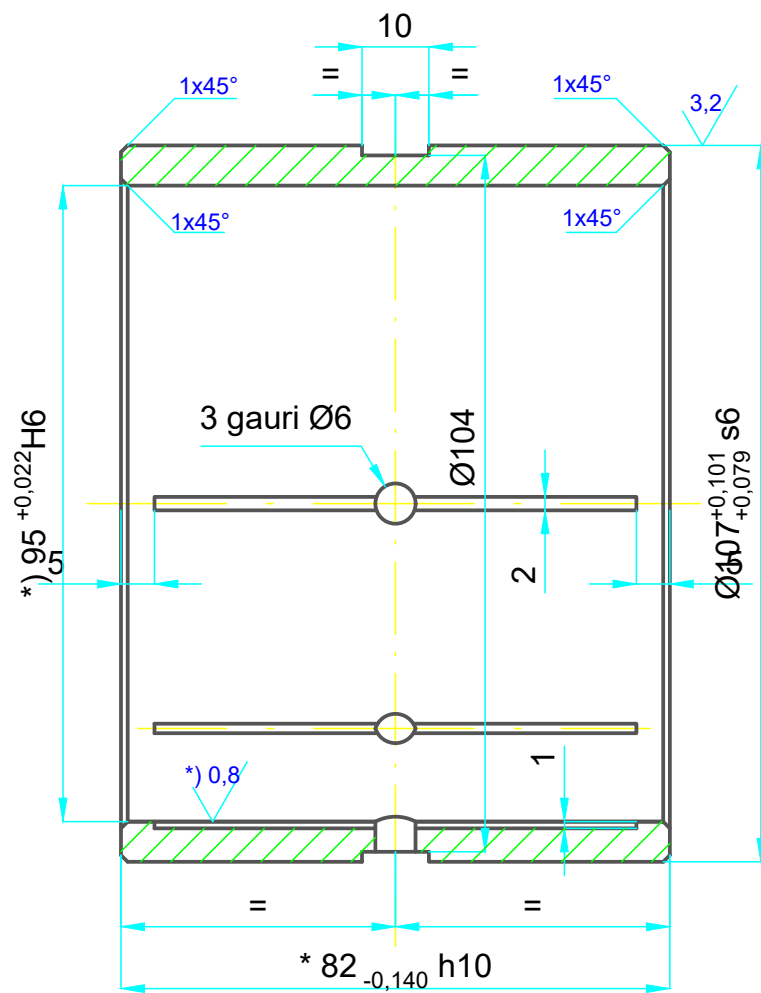
Tolerante gen. ISO 2678 mk. SR EN 22768/1-2	Proiectat : ing. T. Arhire	CuPbSn10	Proiect tehnologic	PETAL S.A.	F
	Desenat : ing. P. Baraga	SR EN 1982/2018	Masa: 1,840 kg	INOCEM 616.15-02.25.04.0	
	Verificat : dr. ing. I. Cucos		1 : 1	Patina	
	Aprobat : dr. ing. T. Cucos			Mecanism motor ansamblu	
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2000 cod SMS 120032 Proiect Tehnic				
	PETAL S.A.	INOCEM			
			Data: sept-nov. 2022		



8 gauri Ø9 echidistante

Gros.1mm

Tolerante gen. ISO 2678. mtk. SR EN 22768/1-2	Proiectat :	ing. T. Athire	Carton dur tip A STAS 3053-86	Proiect tehnologic	F
	Desenat :	ing. P. Baraga	Masa: 0,032 kg	INOCEM 616.15-02.00.17.0	
	Verificat :	dr. ing. I. Cucos	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic		
	Aprobat :	dr. ing. I. Cucos	1 : 1	Garnitura	
			Data: sept-nov.2022	Mecanism motor ansamblu	

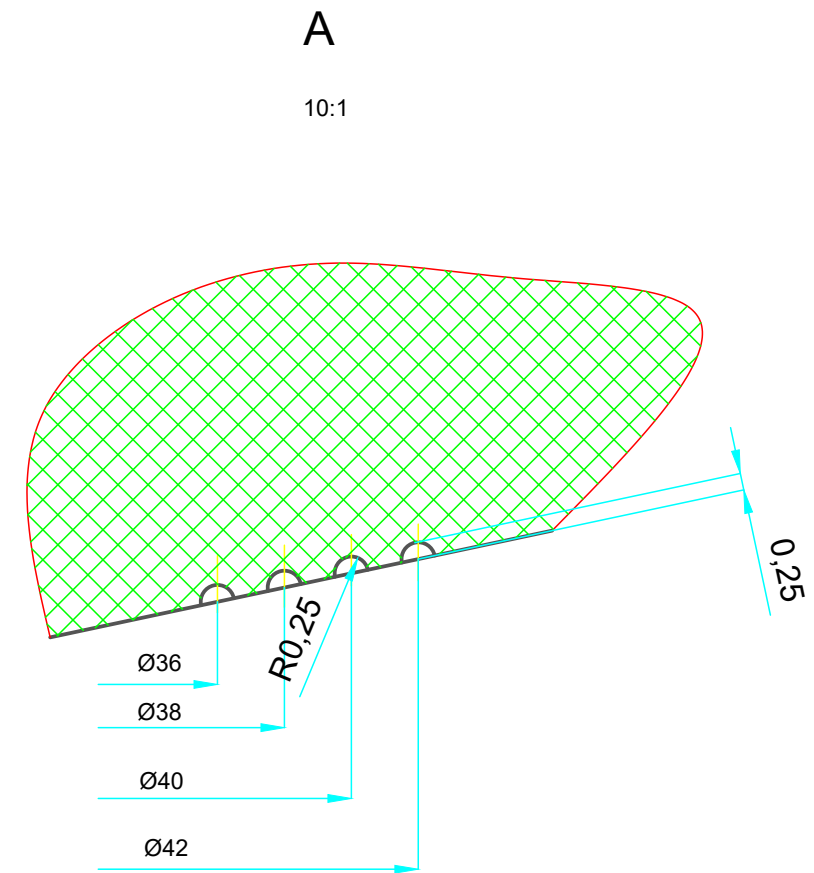
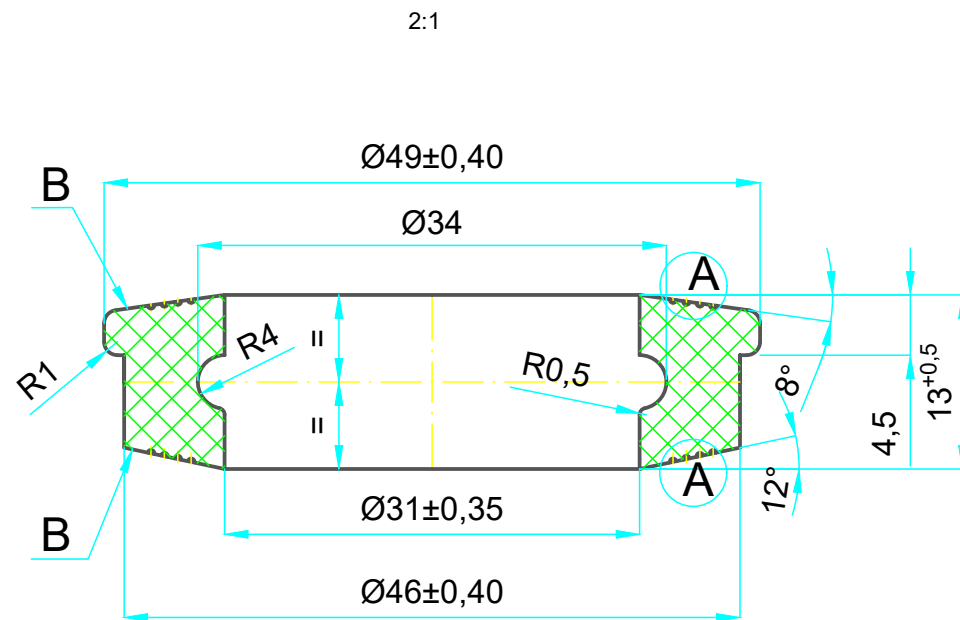


12,5

NOTA

Cotele marcate cu *) se vor executa dupa operatia de presare in corpul bielei.

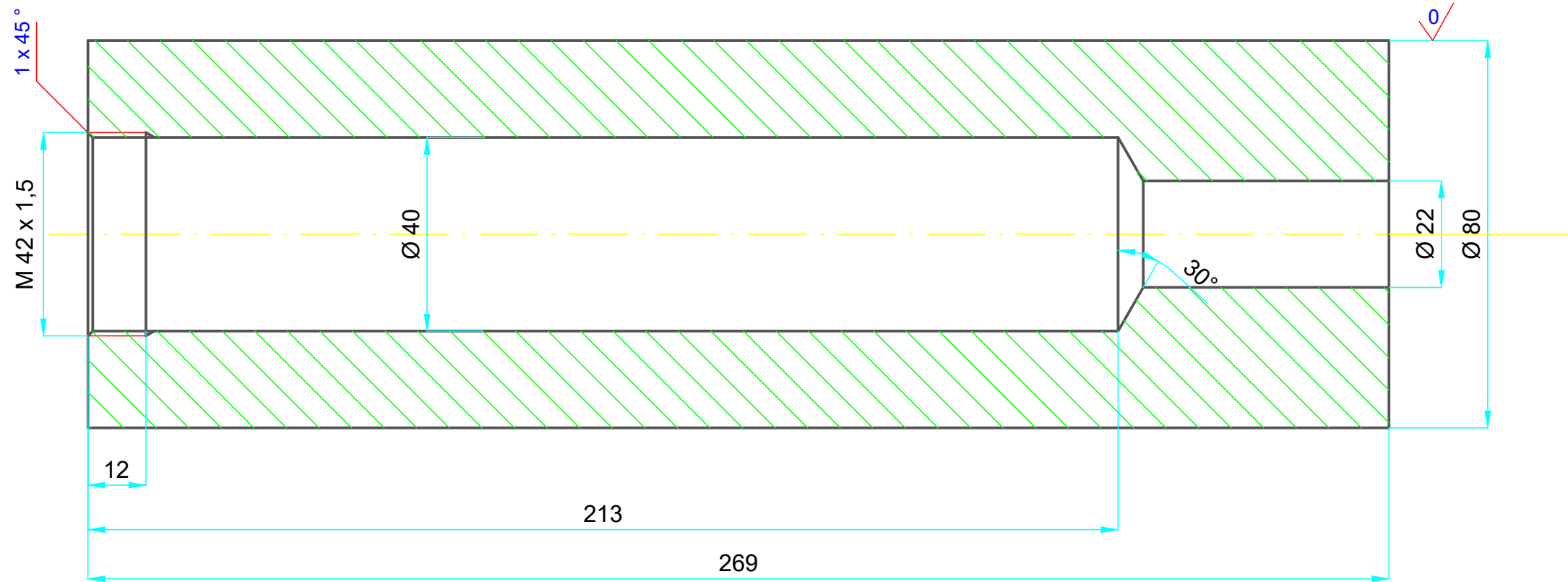
Tolerante gen. ISO 2678.mk. SR EN 22768/1-2	Proiectat :	ing. T. Arhire	CuPbSn10 SR EN 1982/2018	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 1,360 kg	INOCEM 616.15-02.24.02.0		
	Aprobat :	dr. ing. I. Cucos	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			
			1 : 1	Bucsa		
			Data: sept-nov.2022	Mecanism motor ansamblu		



CONDITII TEHNICE

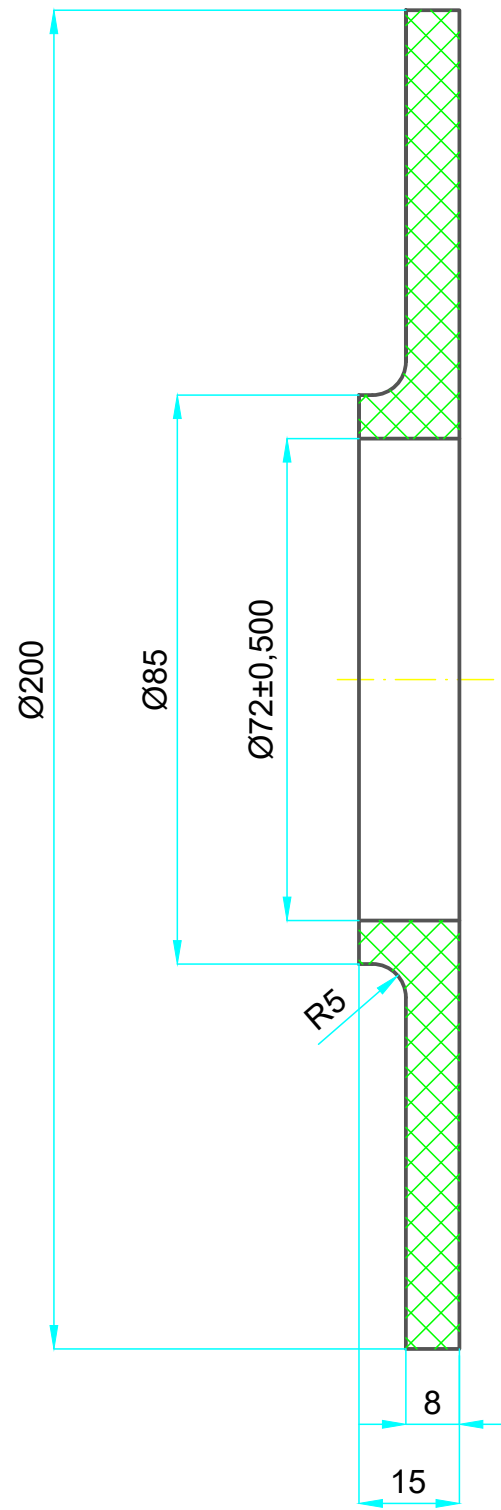
1. Mediul de lucru: pasta de ciment, noroide foraj, titei, fluide acide si bazice.
2. Temperatura de lucru: -45...+80°C.
3. Cotele netolerate se vor incadra in clasa de precizie P2 SR ISO 3302-1:2008.
4. Pe suprafetele de etansare "B" nu se admit bavuri, lipsa de material, impaturiri sau alte defecte care ar periclita buna functionare.
5. Garnitura se va executa din cauciuc tip NBR rezistent la -45°C si caracteristici fizico-mecanice conf. SR EN 682:2002/A1, CLASA PF-80A.
6. Garnitura se va marca cu un punct de culoare albastru deschis, conform STI 1/87.

Tolerante gen. ISO 2678.mk SR EN 22768/1-2	Proiectat :	ing. T. Arhire	Cauciuc	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos				
	Aprobat :	dr. ing. I. Cucos				
			Masa: 0,013 kg	INOCEM 616.15-00.00.26.0		
	S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Garnitura	
	PETAL S.A. Husi	INC DIE ICPE- GA Bucuresti	IPCUP Husi	Data: sept-nov.2022	Mecanism motor ansamblu	



25 ✓✓

Tolerante gen. ISO 2678.mk SR EN 22768/1-2	Proiectat :	ing. T. Arhire	C45E SR EN 10250/2/2002	Proiect tehnologic	PETAL S.A. Husi	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 6,509 kg	INOCEM 616.15-02.27.01.0		
	Aprobat :	dr. ing. I. Cucos	INOCEM 616.15-02.27.01.0			
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic			1 : 1	Corp tija		
PETAL S.A. Husi			INC DIE ICPE-CA Bucuresti	IPCUP Husi	Data: sept-nov.2022	
Mecanism motor ansamblu						



Tolerante gen. ISO 2678.mk SR EN 22768/1-2	Proiectat :	ing. T. Arhire	Cauciuc PF80A SR EN 682/2002/A1/2006	Proiect tehnologic	PETAL S.A. Huși	F
	Desenat :	ing. P. Baraga				
	Verificat :	dr. ing. I. Cucos	Masa: 0,230 kg	INOCEM 616.15-00.00.34.0		
	Aprobat :	dr. ing. I. Cucos	Disc protector			
S.C. "PETAL" S.A. HUSI INOCEM - CF 260/2020 cod SMIS 120032 Proiect Tehnic PETAL S.A. Huși INCDIE ICPE- GA București IPCUP Ploiești			1 : 1	Mecanism motor ansamblu		
			Data: sept-nov.2022			

ANEXA 3

Documentatia Tehnica electrica pentru
Ansamblul echipament Instalatie inovatoare pentru cimentare
și operațiuni speciale la sondă

1

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B

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C

C

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E

E

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1

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	Parameter	D at a s e t	Parameter text	Offline value VECTOR_02	U n i t	Modifiabl e to	Acce s s l e v e l	Mi n i m u m	Maxi m u m
1	r2		Drive operating display	[31] [31] Ready to power-up - set "ON/OFF1" = "0/1" (p0840)			1		
2	<input type="checkbox"/> p5[0]		BOP operating display selection, Parameter number	2		Operation	2	0	65535
3	p6		BOP operating display mode	[4] p0005		Operation	3		
4	p10		Drive, commissioning parameter filter	[0] Ready		Ready to run	1		
5	<input type="checkbox"/> p13[0]		BOP user-defined list	0		Operation	3	0	65535
6	p15		Macro drive object	0		Commissioning (P10=1)	1	0	999999
7	r20		Speed setpoint, smoothed	0.0	R P M		2		
8	r21		CO: Actual speed, smoothed	0.0	R P M		2		
9	r22		Speed actual value rpm, smoothed	0.0	R P M		2		
10	r24		Output frequency, smoothed	0.0	H Z		3		
11	r25		CO: Output voltage, smoothed	0.0	V r m s		2		
12	r26		CO: DC link voltage, smoothed	13.3	V		2		
13	r27		CO: Absolute actual current, smoothed	0.04	A r m s		2		
14	r28		Modulation depth, smoothed	0.0	%		3		
15	r29		Current actual value field-generating smoothed	0.00	A r m s		3		
16	r30		Current actual value, torque-generating smoothed	0.00	A r m s		3		
17	r31		Actual torque smoothed	-0.00	N m		2		
18	r32		CO: Active power actual value, smoothed	0.00	k W		2		
19	r33		Torque utilization, smoothed	0.0	%		3		
20	r35		CO: Motor temperature	20.0	° C		2		
21	r36		Power unit overload I2t	0.0	%		3		
22	<input type="checkbox"/> r37[0]		CO: Power unit temperatures, Maximum inverter	22	° C		3		
23	r38		Power factor, smoothed	0.00			3		

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1	Parameter	D a t a s e t	2 Parameter text	3 Offline value VECTOR_02	U n i t	4 Modifiabl e to	Acce ss level	Mi ni mu m	Maxi mum
24	p45		Smoothing time constant, display values	1.00	m s	Operation	2	0	200
25	<input type="checkbox"/> r46		CO/BO: Missing enable sig	40001C09H			1		
26	r47		Motor data ident. routine and speed controller optimization	[0] No measurement			1		
27	<input type="checkbox"/> r49[0]		Motor data set/encoder data set effective, Motor Data Set MDS effective	0			2		
28	<input type="checkbox"/> r50		CO/BO: Command Data Set CDS effective	0H			2		
29	<input type="checkbox"/> r51		CO/BO: Drive Data Set DDS effective	0H			2		
30	<input type="checkbox"/> r56		CO/BO: Status word, closed-loop control	3H			3		
31	r60		CO: Speed setpoint before the setpoint filter	0.00	R P M		3		
32	<input type="checkbox"/> r61[0]		CO: Speed actual value motor encoder, Encoder 1	0.00	R P M		2		
33	r62		CO: Speed setpoint after the filter	0.00	R P M		3		
34	<input type="checkbox"/> r63[0]		CO: Actual speed value, Unsmoothed	0.00	R P M		3		
35	r64		CO: Speed controller system deviation	0.00	R P M		3		
36	r65		Slip frequency	0.00	H z		3		
37	r66		CO: Output frequency	0.00	H z		3		
38	r67		Output current, maximum	1357.50	A r m s		3		
39	<input type="checkbox"/> r68[0]		CO: Absolute current actual value, Unsmoothed	0.03	A r m s		3		
40	<input type="checkbox"/> r69[0]		Phase current, actual value, Phase U	-0.03	A		3		
41	r70		CO: Actual DC link voltage	13.30	V		3		
42	r71		Maximum output voltage	-0.7	V r m s		3		
43	r72		CO: Output voltage	0.0	V r m s		3		
44	r73		Maximum modulation depth	99.3	%		3		
45	r74		CO: Modulat_depth	0.00	%		3		
46	r75		CO: Current setpoint, field-generating	0.00	A r m s		3		

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Parameter	Data set	Parameter text	Offline value VECTOR_02	Unit	Modifiable to	Access level	Minimum	Maximum
47	r76	CO: Current actual value, field-generating	0.00	A r m s		3		
48	r77	CO: Current setpoint, torque-generating	0.00	A r m s		3		
49	r78	CO: Current actual value, torque-generating	0.00	A r m s		3		
50	r79	CO: Torque setpoint total	0.00	N m		3		
51	<input type="checkbox"/> r80[0]	CO: Torque actual value, Unsmoothed	0.00	N m		3		
52	r81	CO: Torque utilization	0.0	%		3		
53	<input type="checkbox"/> r82[0]	CO: Active power actual value, Unsmoothed	0.00	k W		3		
54	r83	CO: Flux setpoint	0.0	%		3		
55	<input type="checkbox"/> r84[0]	CO: Flux actual value, Unsmoothed	0.0	%		3		
56	r87	CO: Actual power factor	0.000			3		
57	<input type="checkbox"/> r89[0]	Actual phase voltage, Phase U	-0.4	V		3		
58	r94	CO: Transformation angle	0.00	°		3		
59	p100	IEC/NEMA mot stds	[0] IEC-Motor (50 Hz, SI units)		Commissioning (P10=1)	1		
60	r103	Application-specific view	0			2		
61	p105	Activate/de-activate drive object	[1] Activate drive object		Ready to run	2		
62	r106	Drive object active/inactive	[1] Drive object active			2		
63	r107	Drive object type	[12] VECTOR			2		
64	<input type="checkbox"/> r108	Drive object, function module	104H			2		
65	r111	Basis sampling time selection	1			3		
66	p112	Sampling times pre-setting p0115	[1] xLow		Commissioning (P9=3)	3		
67	p113	Pulse frequency, minimum selection	1.250	k H z	Commissioning (P9=3)	3	1	2
68	<input type="checkbox"/> r114[0]	Pulse frequency, minimum recommended, if only the actual drive is changed	0.000	k H z		3		
69	<input type="checkbox"/> p115[0]	Sampling times for internal control loops, Current controller	400.00	μ s	Commissioning (P9=3)	3	0	16000
70	<input type="checkbox"/> r116[0]	Drive object clock cycle recommended, Change, only for the actual drive object	0.00	μ s		3		
71	p120	Number of Power unit Data Sets (PDS)	1		Commissioning (P9=3)	2	1	8
72	p124[0]	P Power unit detection via LED	0		Operation	2	0	1

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1	Parameter	D a t a s e t	2 Parameter text	3 Offline value VECTOR_02	U n i t	Modifi a b i l e t o	4 Acce s s l e v e l	Mi n i m u m	Ma x i m u m
99	r203[0]	P	Actual power unit type	[100] SINAMICS S			3		
100	<input type="checkbox"/> r204[0]	P	Power unit hardware properties	1H			3		
101	p205		Power unit application	[0] Load duty cycle with high overload for vector drives		Commissi o n i n g (P10=1)	2		
102	<input type="checkbox"/> r206[0]		Rated power unit power, Rating plate	1000.00	k W		2		
103	<input type="checkbox"/> r207[0]		Rated power unit current, Rating plate	1025.00	A r m s		2		
104	r208		Rated power unit line supply voltage	690	V r m s		2		
105	<input type="checkbox"/> r209[0]		Power unit, maximum current, Catalog	1500.00	A r m s		2		
106	p210		Drive unit line supply voltage	925	V	Ready to run	3	1	63000
107	p230		Drive filter type, motor side	[0] No filter		Commissi o n i n g (P10=1,2)	1		
108	p233		Power unit motor reactor	0.000	m H	Operation	2	0	1000
109	p234		Power unit sinusoidal filter capacitance	0.000	μ F	Operation	2	0	1000
110	p235		Number of reactors connected in series	1		Commissi o n i n g (P10=1,2)	1	1	3
111	p251[0]	P	Operating hours counter, power unit fan	23	h	Ready to run	3	0	42949 67295
112	p278		DC link voltage undervoltage threshold reduction	0	V	Ready to run	3	-80	0
113	<input type="checkbox"/> p287[0]		Ground fault monitoring thresholds, Threshold for pulse inhibit	6.0	%	Ready to run	3	0	100
114	r289		Maximum power unit output current	1499.97	A r m s		3		
115	p290		Power unit overload response	[2] Reduce I_output or f_output and f_pulse (not using I2t)		Ready to run	3		
116	r293		CO: Power unit alarm threshold model temperature	47	° C		3		
117	p294		Power unit alarm with I2t overload	95.0	%	Operation	3	10	100
118	p295		Fan run-on time	0	s	Operation	1	0	600
119	r296		DC link voltage undervoltage threshold	579	V		2		
120	r297		DC link voltage overvoltage threshold	1165	V		2		
121	p300[0]	M	Motor type selection	[1] Induction motor (rotating)		Commissi o n i n g (P10=1,3)	1		
122	p301[0]	M	Motor code number selection	0		Commissi o n i n g (P10=1,3)	1	0	65535

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Parameter	D at a s e t	Parameter text	Offline value VECTOR_02		U n i t	Modifiabl e to	Acce s s level	Mi n i mu m	Maxi mu m
123	r302[0]	M	Motor code number of motor with DRIVE-CLiQ	0			2		
124	<input type="checkbox"/> r303[0]	M	Motor status word from motor with DRIVE-CLiQ	0H			2		
125	p304[0]	M	Rated motor voltage	660	V r m s	Commissi oning (P10=1,3)	1	0	20000
126	p305[0]	M	Rated motor current	905.00	A r m s	Commissi oning (P10=1,3)	1	0	10000
127	p307[0]	M	Rated motor power	750.00	k W	Commissi oning (P10=1,3)	1	-100000	100000
128	p308[0]	M	Rated motor power factor	0.870		Commissi oning (P10=1,3)	1	0	1
129	p310[0]	M	Rated motor frequency	50.00	H z	Commissi oning (P10=1,3)	1	0	3000
130	p311[0]	M	Rated motor speed	995.0	R P M	Commissi oning (P10=1,3)	1	0	210000
131	r313[0]	M	Motor pole pair number, actual (or calculated)	3			2		
132	p314[0]	M	Motor pole pair number	0		Commissi oning (P10=1,3)	2	0	127
133	p320[0]	M	Motor rated magnetization current/short-circuit current	294.769	A r m s	Operation	3	0	5000
134	p322[0]	M	Maximum motor speed	0.0	R P M	Commissi oning (P10=1,3)	2	0	210000
135	r330[0]	M	Rated motor slip	0.250	H z		3		
136	r331[0]	M	Motor magnetizing current/short-circuit current actual	294.769	A r m s		3		
137	r332[0]	M	Rated motor power factor	0.870			3		
138	r333[0]	M	Rated motor torque	7197.96	N m		3		
139	p335[0]	M	Motor cooling type	[1] Forced cooling		Ready to run	1		
140	r336[0]	M	Rated motor frequency actual	50.00	H z		3		
141	r337[0]	M	Rated motor EMF	576.29	V r m s		3		
142	r339[0]	M	Rated motor voltage	660.00	V r m s		3		
143	p340[0]	D	Automatic calculation of motor/control parameters	[0] No calculation		Ready to run	2		
144	p341[0]	M	Motor moment of inertia	40.245037	k g m ²	Operation	3	0	100000

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Parameter	D at a s e t	Parameter text	Offline value VECTOR_02	U n i t	Modifiabl e to	Acce s s level	Mi n i mu m	Maxi mu m
170	r396[0]	M	Rotor resistance, actual	0.00267	O h m		3	
171	p400[0]	E	Enc type selection	[0] No encoder		Commissi oning (P10=1,4)	1	
172	p401[0]	E	Encoder type, OEM selection	0		Commissi oning (P10=1,4)	2	0 32767
173	p402[0]	E	Gearbox type selection	[9999] Gearbox, user-defined		Commissi oning (P10=1,4)	1	
174	<input type="checkbox"/> p404[0]	E	Encoder configuration effective	0H		Commissi oning (P10,4)	3	
175	<input type="checkbox"/> p405[0]	E	Square-wave encoder track A/B	FH		Commissi oning (P10,4)	3	
176	p407[0]	E	Linear encoder grid division	16000	n m	Commissi oning (P10,4)	3	0 25000 0000
177	p408[0]	E	Rotary encoder pulse No.	2048		Commissi oning (P10,4)	3	0 16777 215
178	<input type="checkbox"/> p410[0]	E	Encoder inversion actual value	0H		Commissi oning (P10,4)	3	
179	<input type="checkbox"/> p411[0]	E	Measuring gearbox, configuration	0H		Commissi oning (P10,4)	1	
180	p412[0]	E	Measuring gearbox, rotary absolute gearbox, revolutions, virtual	4096		Commissi oning (P10,4)	1	0 41943 03
181	p413[0]	E	Measuring gearbox, position tracking tolerance window	0.00		Commissi oning (P10,4)	3	0 4.294 97E+ 09
182	p418[0]	E	Fine resolution Gx_XIST1 (in bits)	11		Commissi oning (P10,4)	3	2 18
183	p419[0]	E	Fine resolution absolute value Gx_XIST2 (in bits)	9		Commissi oning (P10,4)	3	2 18
184	<input type="checkbox"/> p420[0]	E	Encoder connection	0H		Commissi oning (P10,4)	3	
185	p421[0]	E	Absolute encoder rotary multi-turn resolution	4096		Commissi oning (P10,4)	3	0 65535
186	p422[0]	E	Absolute encoder linear measuring step resolution	100	n m	Commissi oning (P10,4)	3	0 42949 67295
187	p423[0]	E	Absolute encoder rotary single-turn resolution	8192		Commissi oning (P10,4)	3	0 10737 41823
188	p424[0]	E	Encoder, linear zero mark distance	20	m m	Commissi oning (P10,4)	3	0 65535
189	p425[0]	E	Encoder, rotary zero mark distance	2048		Commissi oning (P10,4)	3	0 16777 215
190	p427[0]	E	Encoder SSI baud rate	100	k H z	Commissi oning (P10,4)	3	0 65535

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Parameter	D at a s e t	Parameter text	Offline value VECTOR_02	U n i t	Modifiabl e to	Acce s s l e v e l	Mi n i m u m	Maxi m u m
215	<input type="checkbox"/> r466[0]	Encoder 2 identification number/serial number				3		
216	<input type="checkbox"/> r467[0]	Encoder 3 identification number/serial number				3		
217	<input type="checkbox"/> r477[0]	CO: Measuring gearbox, position difference, Encoder 1	0			1		
218	<input type="checkbox"/> r479[0]	CO: Diagnostics encoder position actual value Gn_XIST1, Encoder 1	0			3		
219	<input type="checkbox"/> p480[0]	CI: Signal source for encoder control word Gn_STW, Encoder 1	0		Ready to run	3		
220	<input type="checkbox"/> r481[0]	CO: Encoder status word Gn_ZSW, Encoder 1	4000H			3		
221	<input type="checkbox"/> r482[0]	CO: Encoder actual position value Gn_XACT1, Encoder 1	0			3		
222	<input type="checkbox"/> r483[0]	CO: Encoder actual position value Gn_XACT2, Encoder 1	0			3		
223	<input type="checkbox"/> r484[0]	CO: Redundant coarse encoder position + CRC Gn_XIST1, Encoder 1	0H			3		
224	<input type="checkbox"/> r485[0]	CO: Measuring gearbox, encoder raw value incremental, Encoder 1	0			1		
225	<input type="checkbox"/> r486[0]	CO: Measuring gearbox, encoder raw value absolute, Encoder 1	0			1		
226	<input type="checkbox"/> r487[0]	Diagnostic encoder control word Gn_STW, Encoder 1	0H			3		
227	<input type="checkbox"/> p488[0]	Measuring probe 1 input terminal, Encoder 1	[0] No meas probe		Operation	3		
228	<input type="checkbox"/> p489[0]	Measuring probe 2 input terminal, Encoder 1	[0] No meas probe		Operation	3		
229	p491	Motor encoder fault response ENCODER	[0] Encoder fault results in OFF2		Ready to run	3		
230	p492	Square-wave encoder, maximum speed difference per sampling cycle	23.2	R P M	Operation	3	0	21000 0
231	<input type="checkbox"/> p495[0]	Equivalent zero mark, input terminal, Encoder 1	[0] No equivalent zero mark (evaluation of the encoder zero mark)		Operation	3		
232	p500	Technology application	[0] Standard drive (VECTOR)		Ready to run	2		
233	p505	Selecting the system of units	[1] System of units SI		Commissioning (P10,5)	1		
234	p570	Inhibit list: Number of effective values	0		Operation	2	0	50
235	<input type="checkbox"/> p571[0]	Inhibit list, motor/closed-loop control parameter calculation	[0] No parameter		Operation	2		
236	p572[0]	D Activate inhibit list	[0] No		Operation	2		
237	p573	Inhibit automatic reference value calculation	[1] Yes		Operation	2		
238	p578[0]	D Calculate parameters that are dependent on the technology/units	[0] No calculation		Ready to run	2		

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Parameter	D at a s e t	Parameter text	Offline value VECTOR_02	U n i t	Modifiabi e to	Acce s s level	Mi n i mu m	Maxi mu m
267	<input type="checkbox"/> p821[0]	C BI: Drive data set selection DDS bit 1	0		Ready to run	3		
268	<input type="checkbox"/> p822[0]	C BI: Drive data set selection DDS bit 2	0		Ready to run	3		
269	<input type="checkbox"/> p823[0]	C BI: Drive data set selection DDS bit 3	0		Ready to run	3		
270	<input type="checkbox"/> p824[0]	C BI: Drive data set selection DDS bit 4	0		Ready to run	3		
271	p826[0]	M Motor changeover, motor number	0		Commissioning (P10,3)	2	0	15
272	p827[0]	M Motor changeover status word bit number	0		Commissioning (P10,3)	2	0	15
273	<input type="checkbox"/> p828[0]	C BI: Motor changeover, feedback signal	0		Ready to run	3		
274	<input type="checkbox"/> r830	CO/BO: Motor changeover, status word	0H			2		
275	<input type="checkbox"/> p831[0]	BI: Motor changeover, contactor feedback, Feedback signal contactor 0	0		Operation	3		
276	<input type="checkbox"/> r832	CO/BO: Mot. changeover, contactor feedback sig. status word	0H			2		
277	<input type="checkbox"/> p833	Data set changeover configuration	2H		Commissioning (P10,15)	2		
278	<input type="checkbox"/> r835	CO/BO: Motor data set changeover status word	0H			2		
279	<input type="checkbox"/> r836	CO/BO: Command Data Set CDS selected	0H			2		
280	<input type="checkbox"/> r837	CO/BO: Drive Data Set DDS selected	0H			2		
281	<input type="checkbox"/> r838[0]	Motor/encoder data set selected, Motor Data Set MDS selected	0			2		
282	p839	Motor changeover contactor control delay time	0	m s	Commissioning (P10,3)	2	0	500
283	<input type="checkbox"/> p840[0]	C BI: ON/OFF1	VECTOR_02 : r2090.0		Ready to run	3		
284	<input type="checkbox"/> p844[0]	C BI: 1. OFF2	VECTOR_02 : r2090.1		Ready to run	3		
285	<input type="checkbox"/> p845[0]	C BI: 2. OFF2	1		Ready to run	3		
286	<input type="checkbox"/> p848[0]	C BI: 1. OFF3	VECTOR_02 : r2090.2		Ready to run	3		
287	<input type="checkbox"/> p849[0]	C BI: 2. OFF3	1		Ready to run	3		
288	<input type="checkbox"/> p852[0]	C BI: Enable operation	VECTOR_02 : r2090.3		Ready to run	3		
289	<input type="checkbox"/> p854[0]	C BI: Master ctrl by PLC	VECTOR_02 : r2090.10		Ready to run	3		
290	<input type="checkbox"/> p855[0]	C BI: Unconditionally release holding brake	0		Ready to run	3		
291	<input type="checkbox"/> p856[0]	C BI: Enable speed controller	1		Ready to run	3		
292	p857	Power unit monitoring time	6000.0	m s	Ready to run	2	10 0	60000
293	<input type="checkbox"/> p858[0]	C BI: Unconditionally close holding brake	0		Ready to run	2		

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294	p860	BI: Line cont. fdbk sig	VECTOR_02 : r863.1		Ready to run	3			
295	p861	Line contactor monitoring time	100	m s	Ready to run	2	0	5000	
296	p862	Power unit ON delay	0	m s	Ready to run	3	0	65000	
297	<input type="checkbox"/> r863	CO/BO: Drive coupling status word/control word	0H			2			
298	p864	BI: Infeed operation	1		Ready to run	2			
299	p895[0]	P BI: Activate/de-activate power unit components	1		Ready to run	1			
300	<input type="checkbox"/> r896	BO: Parking axis, status word	0H			2			
301	p897	BI: Parking axis selection	0		Ready to run	2			
302	<input type="checkbox"/> r898	CO/BO: Control word sequence control	1406H			2			
303	<input type="checkbox"/> r899	CO/BO: Status word sequence control	22B1H			2			
304	p922	PROFIdrive telegram selection	[999] Free telegram configuration with BICO		Ready to run	1			
305	p925	PROFIdrive clock synchronous sign-of-life tolerance	1		Operation	3	0	65535	
306	r930	PROFIdrive operating mode	1			3			
307	r944	Counter for fault buffer changes	0			2			
308	<input type="checkbox"/> r945[0]	Fault code	0			2			
309	<input type="checkbox"/> r947[0]	Fault number	0			3			
310	<input type="checkbox"/> r948[0]	Fault time received in milliseconds	0	m s		3			
311	<input type="checkbox"/> r949[0]	Fault value	0			3			
312	p952	Fault cases, counter	0		Operation	3	0	65535	
313	p970	Reset drive parameters	[0] Inactive		Commissioning (P10,30)	2			
314	p971	Save drive object parameters	[0] Inactive		Operation	1			
315	<input type="checkbox"/> r975[0]	Drive object identification, Company (Siemens = 42)	42			2			
316	<input type="checkbox"/> r979[0]	PROFIdrive encoder format, Header	21265			3			
317	<input type="checkbox"/> p1000[0]	C Macro Connector Inputs (CI) for speed setpoints	0		Ready to run	1	0	99999	
318	p1001[0]	D CO: Fixed speed setpoint 1	0.000	R P M	Operation	2	-210000	210000	
319	p1002[0]	D CO: Fixed speed setpoint 2	0.000	R P M	Operation	2	-210000	210000	
320	p1003[0]	D CO: Fixed speed setpoint 3	0.000	R P M	Operation	2	-210000	210000	
321	p1004[0]	D CO: Fixed speed setpoint 4	0.000	R P M	Operation	2	-210000	210000	

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345	<input type="checkbox"/> p1041[0]	C	BI: Motorized potentiometer manual/automatic	0			Ready to run	3		
346	<input type="checkbox"/> p1042[0]	C	CI: Motorized potentiometer automatic setpoint	0			Ready to run	3		
347	<input type="checkbox"/> p1043[0]	C	BI: Motorized potentiometer accept setpoint	0			Ready to run	3		
348	<input type="checkbox"/> p1044[0]	C	CI: Motorized potentiometer setting value	0			Ready to run	3		
349	r1045		CO: Mot. potentiometer speed setp. in front of ramp-fct. gen.	0.000		R P M		3		
350	p1047[0]	D	Motorized potentiometer ramp-up time	10.000		s	Operation	2	0	1000
351	p1048[0]	D	Motorized potentiometer ramp-down time	10.000		s	Operation	2	0	1000
352	r1050		CO: Motor. potentiometer setpoint after the ramp-function generator	0.000		R P M		3		
353	<input type="checkbox"/> p1055[0]	C	BI: Jog bit 0	0			Ready to run	3		
354	<input type="checkbox"/> p1056[0]	C	BI: Jog bit 1	0			Ready to run	3		
355	p1058[0]	D	Jog 1 speed setpoint	0.000		R P M	Ready to run	2	-210000	210000
356	p1059[0]	D	Jog 2 speed setpoint	0.000		R P M	Ready to run	2	-210000	210000
357	p1063[0]	D	Speed limit setpoint channel	210000.000		R P M	Operation	1	0	210000
358	<input type="checkbox"/> p1070[0]	C	CI: Main setpoint	Input_output_component_1 : r4055[0]			Ready to run	3		
359	<input type="checkbox"/> p1071[0]	C	CI: Main setpoint scaling	100%			Ready to run	3		
360	r1073		CO: Main setpoint effective	0.000		R P M		3		
361	<input type="checkbox"/> p1075[0]	C	CI: Suppl setpoint	VECTOR_02 : r1050			Ready to run	3		
362	<input type="checkbox"/> p1076[0]	C	CI: Supplementary setpoint scaling	100%			Ready to run	3		
363	r1077		CO: Supplementary setpoint effective	0.000		R P M		3		
364	r1078		CO: Total setpoint effective	0.000		R P M		3		
365	p1080[0]	D	Minimum speed	0.000		R P M	Ready to run	1	0	19500
366	p1082[0]	D	Maximum speed	1000.000		R P M	Ready to run	1	0	210000
367	p1083[0]	D	CO: Speed limit in positive direction of rotation	210000.000		R P M	Operation	2	0	210000
368	r1084		Speed limit positive effective	1000.000		R P M		3		

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473	p1322[0]	D	V/f control programmable characteristic frequency 2	0.00	H z	Operation	3	0	3000
474	p1323[0]	D	V/f control programmable characteristic voltage 2	0.0	V r m s	Operation	3	0	10000
475	p1324[0]	D	V/f control programmable characteristic frequency 3	0.00	H z	Operation	3	0	3000
476	p1325[0]	D	V/f control programmable characteristic voltage 3	0.0	V r m s	Operation	3	0	10000
477	p1326[0]	D	V/f control programmable characteristic frequency 4	50.00	H z	Operation	3	0	10000
478	p1327[0]	D	V/f control programmable characteristic voltage 4	660.0	V r m s	Operation	3	0	10000
479	<input type="checkbox"/> p1330[0]	C	CI: V/Hz control independent voltage setpoint	0		Ready to run	3		
480	p1335[0]	D	Slip compensation, scaling	0.0	%	Operation	2	0	600
481	p1336[0]	D	Slip compensation limit value	250.00	%	Operation	2	0	600
482	r1337		Actual slip compensation	0.00	%		3		
483	p1338[0]	D	V/f mode resonance damping gain	1.00		Operation	3	0	100
484	p1339[0]	D	V/f mode resonance damping filter time constant	20.00	m s	Operation	3	1	1000
485	p1340[0]	D	I_max frequency controller proportional gain	0.000		Operation	3	0	0.5
486	p1341[0]	D	I_max frequency controller integral time	2.100	s	Operation	3	0	50
487	r1343		I_max controller frequency output	0.00	R P M		3		
488	r1344		I_max controller voltage output	0	V r m s		3		
489	p1345[0]	D	I_max voltage controller proportional gain	0.120		Operation	3	0	10000
490	p1346[0]	D	I_max voltage controller integral time	0.053	s	Operation	3	0	50
491	p1349[0]	D	V/f mode resonance damping maximum frequency	45.00	H z	Operation	3	0	3000
492	p1350[0]	D	Soft starting	[0] Off		Operation	3		
493	<input type="checkbox"/> p1356[0]	C	CI: V/f control, angular setpoint	0		Operation	3		
494	p1358[0]	D	Angular difference, symmetrizing, actual angle	0		Operation	3	0	1
495	r1359		CO: Angular difference	0.00	°		3		
496	<input type="checkbox"/> p1400[0]	D	Speed control configuration	8021H		Operation	2		
497	<input type="checkbox"/> p1401[0]	D	Flux control configuration	EH		Operation	3		
498	<input type="checkbox"/> p1402[0]	D	Closed-loop current control and motor model configuration	1H		Operation	3		

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576	<input type="checkbox"/> p1540[0]	C	CI: Torque limit speed controller upper scaling	100%		Ready to run	3	
577	<input type="checkbox"/> p1541[0]	C	CI: Torque limit. speed controller lower scaling	100%		Ready to run	3	
578	<input type="checkbox"/> p1545[0]	C	BI: Activates travel to a fixed stop	0		Ready to run	3	
579	<input type="checkbox"/> r1547[0]		CO: Torque limit for speed controller output, Upper limit	12447.65	N m		3	
580	<input type="checkbox"/> p1551[0]	C	BI: Torque limit variable/fixed signal source	1		Operation	3	
581	<input type="checkbox"/> p1552[0]	C	CI: Torque limit upper scaling without offset	100%		Ready to run	3	
582	<input type="checkbox"/> p1554[0]	C	CI: Torque limit lower scaling without offset	100%		Ready to run	3	
583	<input type="checkbox"/> p1555[0]	C	CI: Power limit	100%		Ready to run	3	
584	p1556[0]	D	Power limit scaling	0.00		Ready to run	2	0 3.40282E+38
585	<input type="checkbox"/> p1569[0]	C	CI: Supplementary torque 3	VECTOR_02 : r3841		Ready to run	2	
586	p1570[0]	D	CO: Flux setpoint	100.0	%	Operation	2	50 200
587	p1574[0]	D	Voltage reserve dynamic	10.0	V r m s	Operation	3	0 150
588	p1580[0]	D	Efficiency optimization	0	%	Operation	2	0 100
589	p1582[0]	D	Flux setpoint smoothing time	20	m s	Operation	3	4 5000
590	p1584[0]	D	Field weakening operation, flux setpoint smoothing time	0	m s	Operation	3	0 20000
591	p1586[0]	D	Field weakening characteristic, scaling	100.0	%	Operation	3	80 120
592	p1596[0]	D	Field weakening controller integral-action time	50	m s	Operation	3	10 10000
593	r1598		CO: Total flux setpoint	0.0	%		3	
594	p1610[0]	D	Torque setpoint static (SLVC)	55.0	%	Operation	2	0 200
595	p1611[0]	D	Supplementary accelerating torque (SLVC)	30.0	%	Operation	2	0 200
596	p1616[0]	D	Current setpoint smoothing time	40	m s	Operation	3	4 10000
597	r1650		Current setpoint torque-generating before filter	-0.00	A r m s		3	
598	r1651		CO: Torque setpoint, function generator	0.00	N m		3	
599	<input type="checkbox"/> p1655[0]		CI: Current setpoint filter natural frequency tuning, Filter 1	100%		Operation	3	
600	<input type="checkbox"/> p1656[0]	D	Activates current setpoint filter	1H		Operation	3	
601	p1657[0]	D	Current setpoint filter 1 type	[1] Low pass: PT2		Operation	3	

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602	p1658[0]	D	Current setpoint filter 1 denominator natural frequency	1999.0	H z	Operation	3	0.5	16000
603	p1659[0]	D	Current setpoint filter 1 denominator damping	0.700		Operation	3	0.001	10
604	p1660[0]	D	Current setpoint filter 1 numerator natural frequency	1999.0	H z	Operation	3	0.5	16000
605	p1661[0]	D	Current setpoint filter 1 numerator damping	0.700		Operation	3	0	10
606	p1662[0]	D	Current setpoint filter 2 type	[1] Low pass: PT2		Operation	3		
607	p1663[0]	D	Current setpoint filter 2 denominator natural frequency	1999.0	H z	Operation	3	0.5	16000
608	p1664[0]	D	Current setpoint filter 2 denominator damping	0.700		Operation	3	0.001	10
609	p1665[0]	D	Current setpoint filter 2 numerator natural frequency	1999.0	H z	Operation	3	0.5	16000
610	p1666[0]	D	Current setpoint filter 2 numerator damping	0.700		Operation	3	0	10
611	p1699		Filter data acceptance	0		Operation	3	0	1
612	p1715[0]	D	Current controller P gain	0.240		Operation	3	0	100000
613	p1717[0]	D	Current controller integral-action time	6.40	m s	Operation	3	0	1000
614	r1728		De-coupling voltage, in-line axis	0	V r m s		3		
615	r1729		De-coupling voltage, quadrature axis	0	V r m s		3		
616	r1732		CO: Direct-axis voltage setpoint	0.0	V r m s		3		
617	r1733		CO: Quadrature-axis voltage setpoint	0.0	V r m s		3		
618	p1740[0]	D	Gain resonance damping for sensorless closed loop control	0.025		Operation	3	0	10
619	p1744[0]	D	Motor model speed threshold stall detection	40.00	R P M	Operation	3	0	210000
620	p1745[0]	D	Motor model error threshold stall detection	60.0	%	Operation	3	0	1000
621	<input type="checkbox"/> p1750[0]	D	Motor model configuration	0H		Operation	3		
622	<input type="checkbox"/> r1751		Motor model status	E00DH			3		
623	p1752[0]	D	Motor model changeover speed operation with encoder	200.0	R P M	Operation	3	0	210000
624	p1753[0]	D	Motor model changeover speed hysteresis operation with encoder	25.0	%	Operation	3	0	90
625	p1755[0]	D	Motor model changeover speed sensorless operation	66.7	R P M	Operation	3	0	210000

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626	p1756	Motor model changeover speed hysteresis sensorless operation	75.0	%	Operation	3	0	95
627	p1758[0]	D Motor model changeover delay time closed/open-loop control	1000	m s	Operation	3	100	10000
628	p1759[0]	D Motor model changeover delay time open/closed loop control	0	m s	Operation	3	0	2000
629	p1760[0]	D Motor model with encoder speed adaptation Kp	0.240		Operation	3	0	10000
630	p1761[0]	D Motor model with encoder speed adaptation Tn	150	m s	Operation	3	0	1000
631	p1764[0]	D Motor model without encoder speed adaptation Kp	0.480		Operation	3	0	10000
632	p1767[0]	D Motor model without encoder speed adaptation Tn	31	m s	Operation	3	1	200
633	r1770	Motor model speed adaptation proportional component	0.00	R P M		3		
634	r1771	Motor model speed adaptation I comp.	0.00	R P M		3		
635	r1779	Motor model absolute flux	0.00	%		3		
636	<input type="checkbox"/> p1780[0]	D Motor model adaptation configuration	34H		Operation	3		
637	p1781[0]	D Motor model Rs adaptation integral time	1000	m s	Operation	3	10	10000
638	r1782[0]	D Motor model Rs adaptation corrective value	0.00000	O h m		3		
639	p1783[0]	D Motor model Rs adaptation Kp	0.100		Operation	3	0	1
640	p1785[0]	D Motor model Lh adaptation Kp	0.000		Operation	3	0	1
641	p1786[0]	D Motor model Lh adaptation integral time	1000	m s	Operation	3	10	10000
642	r1787[0]	D Motor model Lh adaptation corrective value	0.03940	m H		3		
643	p1800[0]	D Pulse frequency	1.250	k H z	Operation	2	1	16
644	r1801	Actual pulse frequency	0.000	k H z		3		
645	p1802[0]	D Modulator mode	[4] SVM/FLB without overcontrol		Ready to run	3		
646	p1803[0]	D Maximum modulation depth	106.0	%	Operation	3	20	150
647	p1820[0]	D Direction reversal output phases	[0] Off		Commissioning (P10,3)	3		
648	p1821[0]	D Direction reversal rotating field	[0] No direction of reversal		Commissioning (P10,3)	3		
649	p1825	Converter valve threshold voltage	0.8	V r m s	Operation	3	0	100

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650	p1828	Compensation valve lockout time phase U	2.89	μs	Operation	3	0	1E+06	
651	p1829	Compensation valve lockout time phase V	2.89	μs	Operation	3	0	1E+06	
652	p1830	Compensation valve lockout time phase W	2.89	μs	Operation	3	0	1E+06	
653	p1832	Dead time compensation current level	23.2	A r m s	Operation	3	0	10000	
654	<input type="checkbox"/> r1837	Gating unit configuration	410H			3			
655	<input type="checkbox"/> p1840[0]	D Actual value correction configuration	1H		Ready to run	3			
656	p1900	Motor data identification and rotating measurement	[0] Inhibited		Ready to run	1			
657	<input type="checkbox"/> p1909[0]	M Motor data identification control word	60H		Ready to run	3			
658	p1910	Motor data identification selection	[0] Inhibited		Ready to run	2			
659	<input type="checkbox"/> p1959[0]	D Rotating measurement configuration	1FH		Ready to run	2			
660	p1960	Rotating measurement selection	[0] Inhibited		Ready to run	2			
661	p1961	Saturation characteristic speed to determine	40	%	Operation	3	26	75	
662	p1965	Speed_ctrl_opt speed	40	%	Operation	3	10	75	
663	p1967	Speed_ctrl_opt dynamic factor	100	%	Operation	3	1	400	
664	r1968	Speed_ctrl_opt dynamic factor actual	0.00000	%		3			
665	r1973	Rotating measurement, encoder test pulse number determined	0			3			
666	p1982[0]	M Pole position identification selection	[0] Pole position identification off		Ready to run	3			
667	r1984	Pole position identification, angular difference	0.00	°		3			
668	r1985	Pole position identification, saturation characteristic	0	A r m s		3			
669	r1987	Pole position identification trigger characteristic	0	%		3			
670	p1991[0]	M Motor changeover, angular commutation correction	0	°	Ready to run	3	-180	180	
671	p1999[0]	M Ang. commutation offset calibr. and pole position ID - scaling	100	%	Operation	3	10	5000	
672	p2000	Reference speed reference frequency	1000.00	R P M	Ready to run	2	6	210000	
673	p2001	Reference voltage	1000	V r m s	Ready to run	3	10	100000	
674	p2002	Reference current	1357.50	A r m s	Ready to run	3	0.1	100000	

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735	r2131	CO: Actual fault code	0			3			
736	r2132	CO: Actual alarm code	0			3			
737	<input type="checkbox"/> r2133[0]	Fault value for float values	0			3			
738	<input type="checkbox"/> r2134[0]	Alarm value for float values	0.00			3			
739	<input type="checkbox"/> r2135	CO/BO: Status word faults/alarms 2	0H			2			
740	<input type="checkbox"/> r2136[0]	Fault time removed in days	0			3			
741	<input type="checkbox"/> r2138	CO/BO: Control word faults/alarms	0H			2			
742	<input type="checkbox"/> r2139	CO/BO: Status word faults/alarms 1	0H			2			
743	p2140[0]	D Hysteresis speed 2	4.98	R P M	Operation	3	0	300	
744	p2141[0]	D Speed threshold 1	9.95	R P M	Operation	3	0	210000	
745	p2142[0]	D Hysteresis speed 1	4.98	R P M	Operation	3	0	300	
746	<input type="checkbox"/> p2144[0]	C BI: Motor stall monitoring enable (negated)	0		Operation	3			
747	<input type="checkbox"/> r2145[0]	Alarm time received in days	0			3			
748	<input type="checkbox"/> r2146[0]	Alarm time removed in days	0			3			
749	<input type="checkbox"/> p2148[0]	C BI: Ramp-function generator active	VECTOR_02 : r1199.2		Operation	3			
750	<input type="checkbox"/> p2149[0]	D Monitoring configuration	1H		Operation	3			
751	p2150[0]	D Hysteresis speed 3	4.98	R P M	Operation	3	0	300	
752	<input type="checkbox"/> p2151[0]	C CI: Speed setpoint for messages/signals	VECTOR_02 : r1170		Ready to run	3			
753	p2153[0]	D Speed actual value filter time constant	50	m s	Operation	3	0	1E+06	
754	<input type="checkbox"/> p2154[0]	C CI: Speed setpoint 2	0		Ready to run	3			
755	p2155[0]	D Speed threshold 2	597.00	R P M	Operation	3	0	210000	
756	p2156[0]	D On delay, comparison value reached	0.0	m s	Operation	2	0	10000	
757	p2161[0]	D Speed threshold 3	9.95	R P M	Operation	3	0	210000	
758	p2162[0]	D Hysteresis speed n_act > n_max	99.50	R P M	Operation	2	0	60000	
759	p2163[0]	D Speed threshold 4	100.00	R P M	Operation	2	0	210000	
760	p2164[0]	D Hysteresis speed 4	10.00	R P M	Operation	2	0	200	
761	p2166[0]	D Off delay n_act = n_set	200.0	m s	Operation	2	0	10000	
762	p2167[0]	D Switch-on delay n_act = n_set	1000.0	m s	Operation	2	0	10000	

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791	<input type="checkbox"/> p3111[0]	C	BI: External fault 3, enable	1		Operation	3		
792	<input type="checkbox"/> p3112[0]	C	BI: External fault 3 enable negated	0		Operation	3		
793	<input type="checkbox"/> r3113		CO/BO: NAMUR message bit bar	0H			3		
794	p3660[0]		VSM input line supply voltage, voltage scaler	0.00	%	Ready to run	3	0	10000
795	r3661[0]		CO: VSM input line supply voltage u1 - u2	0.00	V		3		
796	r3662[0]		CO: VSM input line supply voltage u2 - u3	0.00	V		3		
797	<input type="checkbox"/> r3664[0]		CO: VSM temperature evaluation, status	0H			3		
798	p3665[0]		VSM temperature evaluation, sensor type	[0] No sensor		Ready to run	3		
799	r3666[0]		CO: VSM temperature KTY	0.0	°C		3		
800	p3667[0]		VSM line filter overtemperature alarm threshold	150.00	°C	Ready to run	3	0	301
801	p3668[0]		VSM line filter overtemperature shutdown threshold	180.00	°C	Ready to run	3	0	301
802	p3669[0]		VSM line filter overtemperature hysteresis	3.00	K	Ready to run	3	1	50
803	p3670[0]		VSM 10 V input CT gain	1.000	A	Ready to run	3	0	1000
804	r3671[0]		CO: VSM 10 V input CT 1 actual value	0.00	A		3		
805	r3672[0]		CO: VSM 10 V input CT 2 actual value	0.00	A		3		
806	r3673[0]		CO: VSM 10 V input 1 actual value	0.00	V		3		
807	r3674[0]		CO: VSM 10 V input 2 actual value	0.00	V		3		
808	p3800[0]	D	Sync-line-drive activation	[0] Sync-line-drive de-activated		Ready to run	2		
809	p3801[0]	D	Sync-line-drive, drive object number	1		Ready to run	2	1	62
810	<input type="checkbox"/> p3802[0]	C	BI: Sync-line-drive enable	0		Ready to run	2		
811	<input type="checkbox"/> r3803		CO/BO: Sync-line-drive control word	0H			2		
812	r3804		CO: Sync-line-drive target frequency	0.00	H z		2		
813	r3805		CO: Sync-line-drive frequency difference	0.00	H z		2		
814	p3806[0]	D	Sync-line-drive frequency difference threshold value	0.10	H z	Operation	2	0	1
815	r3808		CO: Sync-line-drive phase difference	0.00	°		2		
816	p3809[0]	D	Sync-line-drive phase setpoint	0.00	°	Operation	2	-180	179.9
817	p3811[0]	D	Sync-line-drive frequency limiting	0.20	H z	Operation	2	0	1
818	r3812		CO: Sync-line-drive correction frequency	0.00	H z		2		

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Parameter	D at a set	Parameter text	Offline value VECTOR_02	U nit	Modifiabl e to	Acce ss level	Mi ni mu m	Maxi mu m	
819	p3813[0]	D	Sync-line-drive phase synchronism threshold value	2.00	°	Operation	2	1	20
820	r3814		CO: Sync-line-drive voltage difference	0.00	V r m s		2		
821	p3815[0]	D	Sync-line-drive voltage difference threshold value	10.00	%	Operation	2	0	10
822	<input type="checkbox"/> r3819		CO/BO: Sync-line-drive status word	0H			2		
823	p3820[0]	D	Friction characteristic, value n0	73.67	R P M	Ready to run	2	0	21000 0
824	p3821[0]	D	Friction characteristic, value n1	76.00	R P M	Ready to run	2	0	21000 0
825	p3822[0]	D	Friction characteristic, value n2	90.00	R P M	Ready to run	2	0	21000 0
826	p3823[0]	D	Friction characteristic, value n3	113.33	R P M	Ready to run	2	0	21000 0
827	p3824[0]	D	Friction characteristic, value n4	136.67	R P M	Ready to run	2	0	21000 0
828	p3825[0]	D	Friction characteristic, value n5	160.00	R P M	Ready to run	2	0	21000 0
829	p3826[0]	D	Friction characteristic, value n6	300.00	R P M	Ready to run	2	0	21000 0
830	p3827[0]	D	Friction characteristic, value n7	533.33	R P M	Ready to run	2	0	21000 0
831	p3828[0]	D	Friction characteristic, value n8	766.67	R P M	Ready to run	2	0	21000 0
832	p3829[0]	D	Friction characteristic, value n9	1000.00	R P M	Ready to run	2	0	21000 0
833	p3830[0]	D	Friction characteristic, value M0	0.00	N m	Ready to run	2	-1E+06	1E+06
834	p3831[0]	D	Friction characteristic, value M1	0.00	N m	Ready to run	2	-1E+06	1E+06
835	p3832[0]	D	Friction characteristic, value M2	0.00	N m	Ready to run	2	-1E+06	1E+06
836	p3833[0]	D	Friction characteristic, value M3	0.00	N m	Ready to run	2	-1E+06	1E+06
837	p3834[0]	D	Friction characteristic, value M4	0.00	N m	Ready to run	2	-1E+06	1E+06
838	p3835[0]	D	Friction characteristic, value M5	0.00	N m	Ready to run	2	-1E+06	1E+06
839	p3836[0]	D	Friction characteristic, value M6	0.00	N m	Ready to run	2	-1E+06	1E+06
840	p3837[0]	D	Friction characteristic, value M7	0.00	N m	Ready to run	2	-1E+06	1E+06

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Parameter	D a t a s e t	Parameter text	Offline value VECTOR_02	U n i t	Modifiabl e to	Acce s s l e v e l	Mi n i m u m	Maxi m u m	
892	p9319	SI motion fine resolution G1_XIST1 (Motor Module)	11		Commissi oning (P10,95)	3	2	18	
893	p9320	SI motion spindle pitch (Motor Module)	10.0000	m m	Commissi oning (P10,95)	3	0.1	8388	
894	<input type="checkbox"/> p9321[0]	SI motion gearbox encoder/load denominator (Motor Module), Gearbox 1	1		Commissi oning (P10,95)	3	1	21470 00000	
895	<input type="checkbox"/> p9322[0]	SI motion gearbox encoder/load numerator (Motor Module), Gearbox 1	1		Commissi oning (P10,95)	3	1	21470 00000	
896	p9326	SI motion encoder assignment (Motor Module)	1		Commissi oning (P10,95)	3	1	3	
897	<input type="checkbox"/> p9328[0]	SI Motion Sensor Module Node Identifier (Motor Module)	0H		Commissi oning (P10,95)	3	0H	FFH	
898	p9330	SI motion standstill tolerance (Motor Module)	1.000	m m	Commissi oning (P10,95)	3	0	100	
899	<input type="checkbox"/> p9331[0]	SI motion SLS limit values (Motor Module), Limit value SLS1	2000.00	m m / m i n	Commissi oning (P10,95)	3	0	1E+0 6	
900	p9342	SI motion act val comparison tol (crosswise) (Motor Module)	0.1000	m m	Commissi oning (P10,95)	3	0.0 01	360	
901	p9346	SI motion SSM velocity limit (Motor Module)	20.00	m m / m i n	Commissi oning (P10,95)	3	0	1E+0 6	
902	p9348	SI motion SBR actual velocity tolerance (Motor Module)	300.00	m m / m i n	Commissi oning (P10,95)	3	0	12000 0	
903	p9349	SI motion slip velocity tolerance (Motor Module)	6.00	m m / m i n	Commissi oning (P10,95)	3	0	6000	
904	p9351	SI Motion SLS changeover delay time (Motor Module)	100000.00	μ s	Commissi oning (P10,95)	3	0	6E+0 8	
905	p9352	SI Motion transition time STOP C to SOS (Motor Module)	100000.00	μ s	Commissi oning (P10,95)	3	0	6E+0 8	
906	p9353	SI Motion transition time STOP D to SOS (Motor Module)	100000.00	μ s	Commissi oning (P10,95)	3	0	6E+0 8	
907	p9355	SI motion transition time STOP F to STOP B (Motor Module)	0.00	μ s	Commissi oning (P10,95)	3	0	6E+0 8	
908	p9356	SI motion pulse cancelation delay time (Motor Module)	100000.00	μ s	Commissi oning (P10,95)	3	0	6E+0 8	
909	p9357	SI motion pulse cancelation test time (Motor Module)	100000.00	μ s	Commissi oning (P10,95)	3	0	1E+0 7	

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931	p9500	SI motion monitoring clock cycle (Control Unit)	12.00	m s	Commissi o n i n g (P10,95)	3	0.5	25
932	<input type="checkbox"/> p9501	SI motion enable safety functions (Control Unit)	0H		Commissi o n i n g (P10,95)	3		
933	p9502	SI motion axis type (Control Unit)	[0] Linear axis		Commissi o n i n g (P10,95)	3		
934	p9510	SI Motion clock-cycle synchronous PROFIBUS master	[0] No clock-cycle synchronous PROFIBUS master		Commissi o n i n g (P10,95)	3		
935	<input type="checkbox"/> p9516	SI motion motor encoder config., safety-relevant functions (CU)	0H		Commissi o n i n g (P10,95)	3		
936	p9517	SI motion linear scale grid division (Control Unit)	16000.00	n m	Commissi o n i n g (P10,95)	3	0	2.5E+08
937	p9518	SI motion encoder pulses per revolution (Control Unit)	2048		Commissi o n i n g (P10,95)	3	0	100000
938	p9519	SI motion fine resolution G1_XIST1 (Control Unit)	11		Commissi o n i n g (P10,95)	3	2	18
939	p9520	SI motion spindle pitch (Control Unit)	10.0000	m m	Commissi o n i n g (P10,95)	3	0.1	8388
940	<input type="checkbox"/> p9521[0]	SI motion gearbox encoder/load denominator (Control Unit), Gearbox 1	1		Commissi o n i n g (P10,95)	3	1	214700000
941	<input type="checkbox"/> p9522[0]	SI motion gearbox encoder/load numerator (Control Unit), Gearbox 1	1		Commissi o n i n g (P10,95)	3	1	214700000
942	p9526	SI motion encoder assignment second channel	1		Commissi o n i n g (P10,95)	3	1	3
943	p9530	SI motion standstill tolerance (Control Unit)	1.000	m m	Commissi o n i n g (P10,95)	3	0	100
944	<input type="checkbox"/> p9531[0]	SI motion SLS (SG) limit values (Control Unit), Limit value SLS1	2000.00	m m / m i n	Commissi o n i n g (P10,95)	3	0	1E+06
945	p9533	SI motion SLS setpoint velocity limiting (Control Unit)	80.000	%	Operati o n	3	0	100
946	p9542	SI motion act val comparison tol (crosswise) (Control Unit)	0.1000	m m	Commissi o n i n g (P10,95)	3	0.001	360
947	p9546	SI motion SSM (SGA n < nx) velocity limit n_x (CU)	20.00	m m / m i n	Commissi o n i n g (P10,95)	3	0	1E+06
948	p9548	SI motion SBR actual velocity tolerance (Control Unit)	300.00	m m / m i n	Commissi o n i n g (P10,95)	3	0	120000
949	p9549	SI motion slip velocity tolerance (Control Unit)	6.00	m m / m i n	Commissi o n i n g (P10,95)	3	0	6000

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Parameter	D a t a s e t	Parameter text	Offline value VECTOR_02	U n i t	Modifiab le to	Acce ss level	Mi ni mu m	Maxi mu m
971	p9700	SI Motion copy function	[0] [00 hex] Copy function ended		Operation	3		
972	p9701	Acknowledge SI motion data	[0] [00 hex] Data unchanged		Operation	3		
973	p9705	BI: SI Motion: Test stop signal source	0		Commissioning (P10,95)	3		
974	<input type="checkbox"/> r9710[0]	SI motion diagnostics result list 1, Result list, second channel	0H			3		
975	<input type="checkbox"/> r9711[0]	SI motion diagnostics result list 2, Result list, second channel	0H			3		
976	r9712	SI motion diagnostics position action value motor side	0			3		
977	<input type="checkbox"/> r9713[0]	SI motion diagnostics position action value load side, Load-side actual value on the Control Unit	0			3		
978	r9714	SI motion diagnostics velocity actual value load side	0			3		
979	<input type="checkbox"/> r9719	CO/BO: SI motion control signals 2	0H			3		
980	<input type="checkbox"/> r9720	CO/BO: SI Motion control signals integrated in the drive	0H			3		
981	<input type="checkbox"/> r9721	CO/BO: SI motion status signals	0H			3		
982	<input type="checkbox"/> r9722	CO/BO: SI motion status signals integrated in the drive	0H			3		
983	<input type="checkbox"/> r9723	CO/BO: SI Motion diagnostic signals integrated in the drive	0H			3		
984	r9724	SI Motion crosswise comparison clock cycle	0.00	m s		3		
985	r9725	SI motion, diagnostics STOP F	0			3		
986	<input type="checkbox"/> r9728[0]	SI motion actual checksum, SI parameters, Checksum over SI parameters for motion monitoring	C7D5F7C4H			3		
987	<input type="checkbox"/> p9729[0]	SI motion reference checksum, SI parameters, Checksum over SI parameters for motion monitoring	0H		Commissioning (P10,95)	3	0H	FFFF FFFF H
988	<input type="checkbox"/> r9733[0]	CO: SI Motion effective setpoint speed limiting, Setpoint limiting positive	0.0000	R P M		3		
989	<input type="checkbox"/> r9735[0]	SI motion diagnostics result list 3, Result list, second channel	0H			3		
990	<input type="checkbox"/> r9736[0]	SI motion diagnostics result list 4, Result list, second channel	0H			3		
991	<input type="checkbox"/> r9737[0]	SI motion diagnostics result list 5, Result list, second channel	0H			3		
992	<input type="checkbox"/> r9738[0]	SI motion diagnostics result list 6, Result list, second channel	0H			3		

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1019	p9850	SI SGE changeover tolerance time (Motor Module)	500000.00	μs	Commissioning (P10,95)	3	0	2E+06	
1020	p9852	SI Safe Stop 1 delay time (Motor Module)	0.00	ms	Commissioning (P10,95)	3	0	300000	
1021	p9858	SI transition time STOP F to STOP A (Control Unit)	0.00	μs	Commissioning (P10,95)	3	0	3E+07	
1022	<input type="checkbox"/> r9870[0]	SI version safety functions integrated in drive (Motor Module), Safety Version (major release)	2			3			
1023	<input type="checkbox"/> r9871	SI common functions (Motor Module)	DH			3			
1024	<input type="checkbox"/> r9872	CO/BO: SI status list (Motor Module)	0H			2			
1025	r9880	SI monitoring clock cycle (Motor Module)	16.00	ms		3			
1026	<input type="checkbox"/> r9881[0]	SI Motion Sensor Module Node Identifier second channel	30H			3			
1027	<input type="checkbox"/> r9890[0]	SI version (Sensor Module), Safety Version (major release)	0			3			
1028	<input type="checkbox"/> r9894[0]	SI crosswise comparison list (Motor Module)	1			3			
1029	r9895	SI diagnostics STOP F (Motor Module)	0			2			
1030	r9898	SI actual checksum SI parameters (Motor Module)	73DA52EDH			3			
1031	p9899	SI reference checksum SI parameters (Motor Module)	0H		Commissioning (P10,95)	3	0H	FFFF FFFF H	

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S.C. ICPE-ACTEL S.A.

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Manufacturer: S.C. ICPE ACTEL S.A.

End user: PETAL SA

Equipment: Pupitru Comanda

Description: INSTALATIE INOVATOARE PENTRU CIMENTARE SI OPERATIUNI SPECIALE

Draw. no. / Revision: M878/E22-1.1

Responsible for project: Eng. Marin Cristinel

Designed: Ing. Marin Cristinel

Checked by: Ing. Laurentiu Codreanu

Approved by: Ing. Potarniche Ion

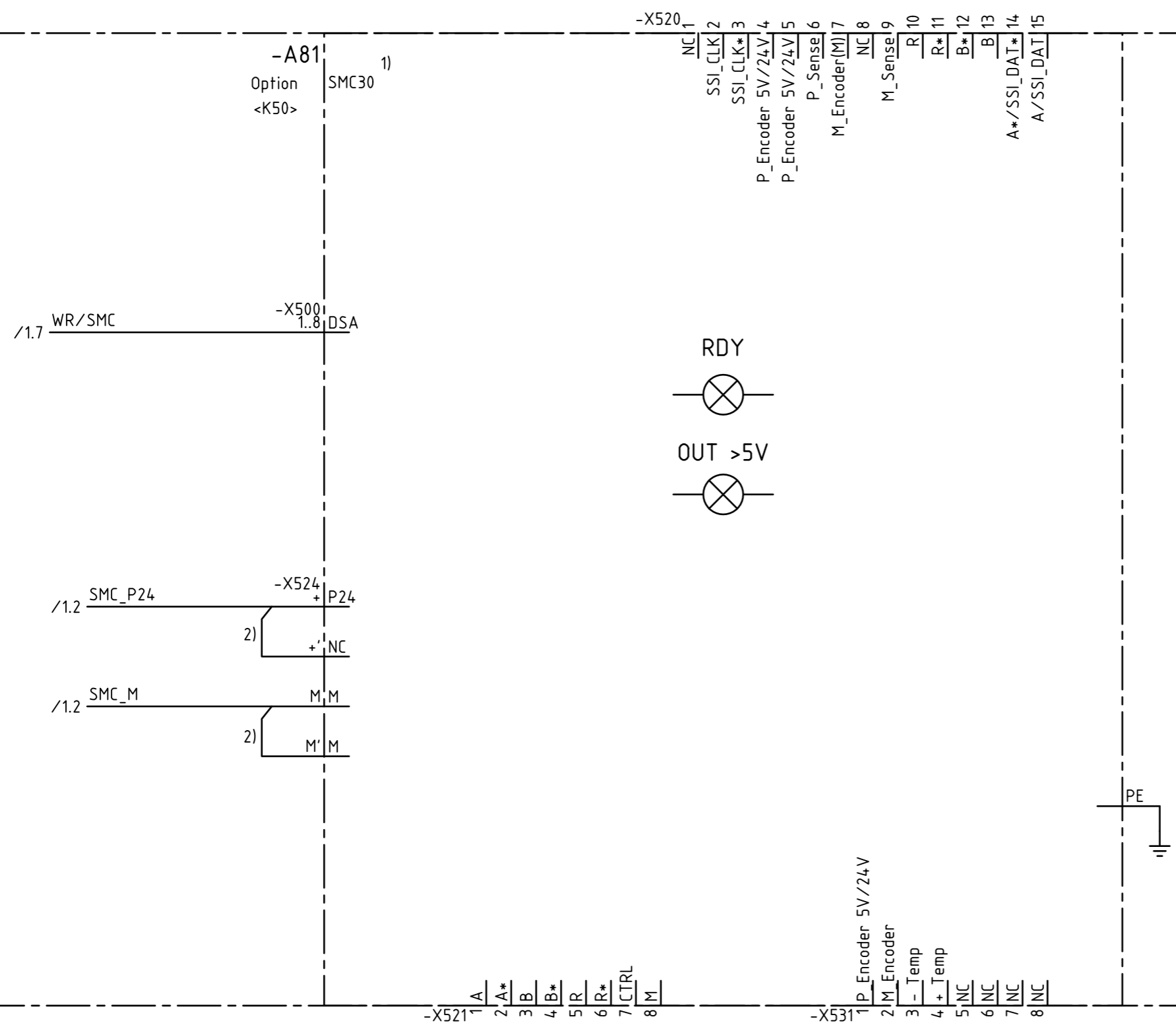
Creation date: 12-Aug-08

Modification date: 01-Nov-22

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Project: N-W91238151130001_E_AB
 ELCAD-VERSION: 7.4.0
 D:/ABLAGEN/ANLAGEN/0001238151_130_AB/N-W91238151130001_E_AB.pro
 ELCAD-Projektstruktur: Circuit diagram | 4 | 1



No. < >
 1) See the operating instructions
 2) Jumper already in the connector

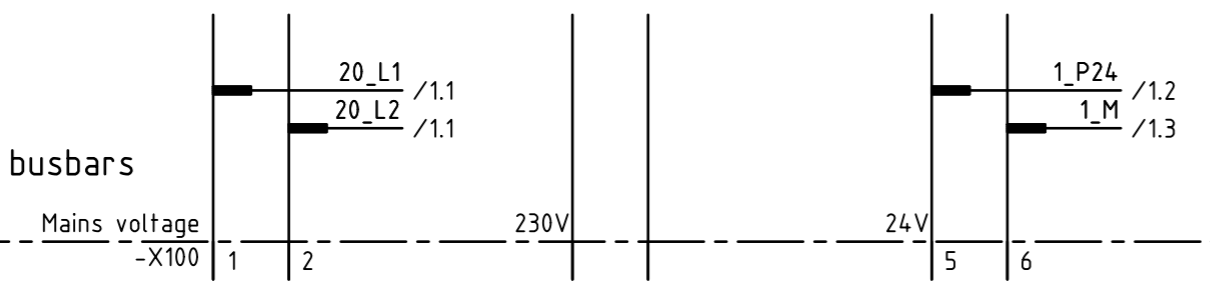
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 D02+K08+K50+K90+M27+M87
 Y11+X30
 100

Date		07.05.2008		Siemens AG A&D LD Nürnberg Vo		SINAMICS S120 CABINET MODULE N-W91238151130001		TE001.001		
Drawn		SYSTEM						+H.A50		
AB	-	07.05.08	Syst. Appr.					Sheet 4+		
Rev.	Remarks	Date	Name	Norm	s. Artus-Symbol	Orig./Repl.f./Repl.by	Circuit diagram	FS-SP		57 Sh

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 ELCAD-VERSION: 7.4.0
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Auxiliary busbars



No.	< >
100	6SL3720-1TG41-0AA0-Z D02+K08+K50+K90+M27+M87 Y11+X30

Date	07.05.2008	 A&D LD Nürnberg Vo	SINAMICS S120 CABINET MODULE N-W91238151130001	TE001.001					
Drawn	SYSTEM		+H.A50						
AB	-	07.05.08	Syst. Appr.	Sheet5+					
Rev.	Remarks	Date	Name	Norm	s. Artus-Symbol	Orig./Repl.f./Repl.by	Circuit diagram	FS-SP	57 Sh

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 ELCAD-VERSION: 7.4.0
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 ELCAD-Projektstruktur: Circuit diagram | 22 | |

Auxiliary busbars

Mains voltage
 -X100

230V

24V

2_P24 /21.3
 2_M /21.3

No.
 < >

6SL3730-1TH41-8BC0-Z
 D02+M87+Y11+X30

100

Date	07.05.2008
Drawn	SYSTEM
AB	-
07.05.08	Syst. Appr.
Rev.	Remarks
Date	Name
Norm	s. Artus-Symbol
Orig./Repl.f./Repl.by	

Siemens AG
 A&D LD
 Nürnberg Vo

SINAMICS S120 CABINET MODULE
 N-W91238151130001

TE003.001
 +H.A50

FS-SP Sheet22+
 57 Sh

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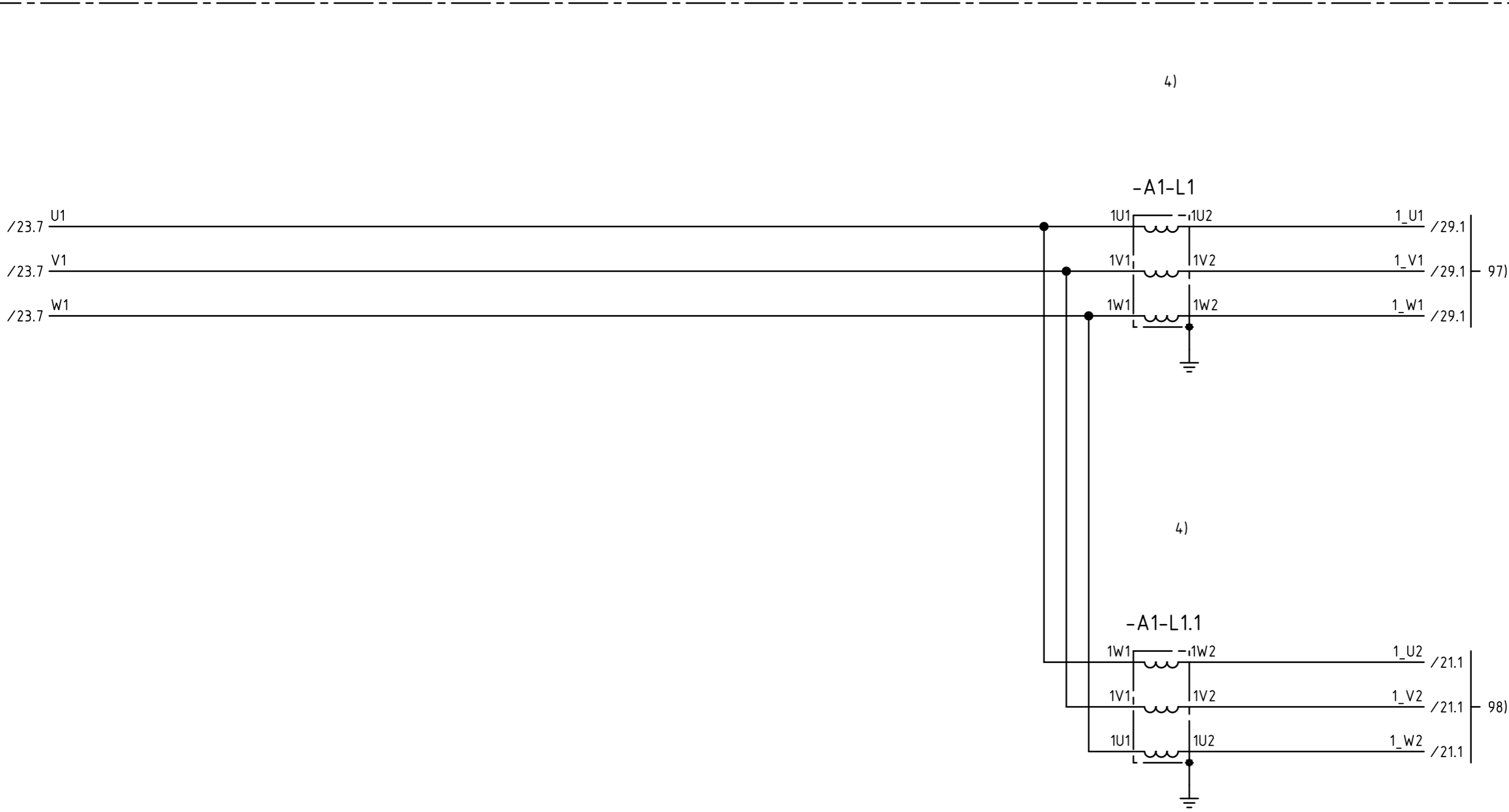
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A B C D E F

1 2 3 4 5 6 7 8

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Project: N-W91238151130001_E_AB
 ELCAD-VERSION: 7.4.0
 D:/ABLAGEN/ANLAGEN/0001238151_130_AB/N-W91238151130001_E_AB.pro
 ELCAD-Projektstruktur: Circuit diagram | 24 | |



No.	< >
4)	Line reactor
97)	Connection to Infeed
98)	Connection to Infeed 2

6SL3700-0LG43-2BA0-Z
 D02+K76+L25+L43+L87+M87
 Y11

100

Date	07.05.2008
Drawn	SYSTEM
AB	-
07.05.08	Syst. Appr.
Rev.	Remarks
Date	Name
Norm	s. Artus-Symbol
Orig./Repl.f./Repl.by	

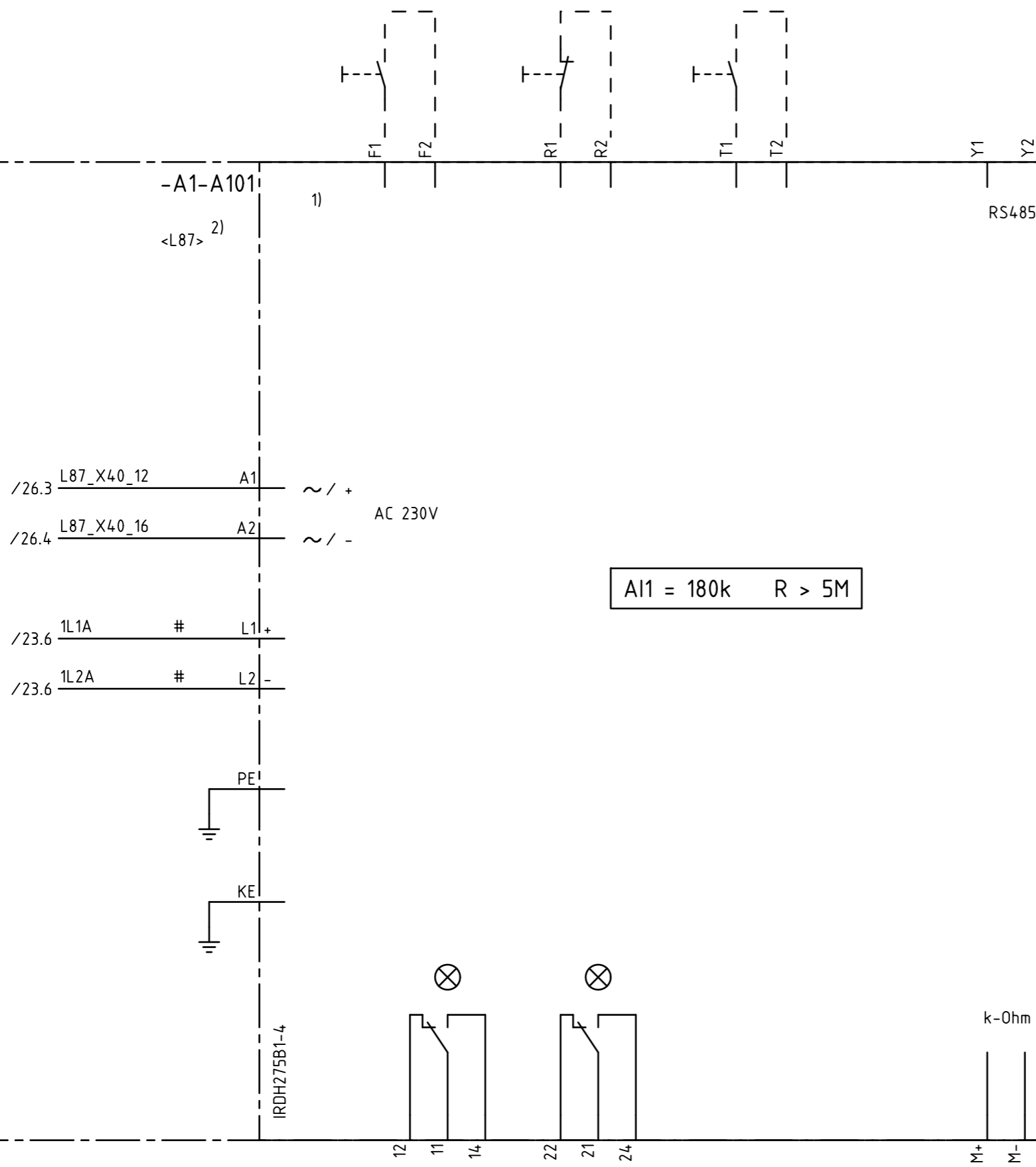
Siemens AG
 A&D LD
 Nürnberg Vo

SINAMICS S120 CABINET MODULE
 N-W91238151130001

TE003.002
 +H.A25
 FS-SP
 Sheet24+
 57 Sh

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Project: N-W91238151130001_E_AB
 ELCAD-VERSION: 7.4.0
 D:/ABLAGEN/ANLAGEN/0001238151_130_AB/N-W91238151130001_E_AB.pro
 ELCAD-Projektstruktur: Circuit diagram | 28 | |



A1 = 180k R > 5M

No.
 < >
 1) See the operating instructions
 2) Insulation monitor
 # Short circuit-proof configuration

6SL3700-0LG43-2BA0-Z
 D02+K76+L25+L43+L87+M87
 Y11
 100

Date	07.05.2008
Drawn	SYSTEM
AB	-
07.05.08	Syst. Appr.
Rev.	Remarks
Date	Name
Norm	s. Artus-Symbol
Orig./Repl.f./Repl.by	

Siemens AG
 A&D LD
 Nürnberg Vo

SINAMICS S120 CABINET MODULE
 N-W91238151130001

TE003.002
 +H.A25

FS-SP Sheet28+
 57 Sh

39.		?		XI1.24
		Pupitru ACF		Dulap actionare (D1)
40.	Alimentare Pupitru ACF, 230Vca, 50Hz	X1	<i>12x1.5 mm2</i>	X23
41.	Alimentare rezistenta incalzire Pupitru	X2		X24
42.	Stop de urgenta	X3		X25
43.		X4		X26
44.	Alimentare Pupitru ACF, 230Vca, 50Hz	X5		X27
45.		X6		X28
46.	Impunere turatie	X7		X29
47.		X8		X30