


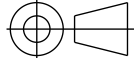
2D CAD drawing

CR_LC_TCP_HOUSING_TYPE_D

DR_35: Addition of a TCPH type D for Port 12

Approval Process			
	Name	Action	Affiliation
Author	Vauquelin J.	24 May 2018:signed	IO/DG/COO/CIO/DO/CAD
Co-Authors			
Reviewers	Dremel M. Dube V. Lachevre F.	25 May 2018:recommended 25 May 2018:recommended (Fast Track) 25 May 2018:recommended	IO/DG/COO/PED/FCED/VS IO/DG/COO/CST/TAD/ICA IO/DG/COO/CIO/DO/CAD
Previous Versions Reviews	Beaudoire S. Bhardwaj A. Jun C. H.* More V. Panayotis S.	24 Apr 2018:recommended v1.0 16 Apr 2018:recommended v1.0 23 Apr 2018:recommended v1.0 11 Apr 2018:recommended v1.0 17 Apr 2018:recommended v1.0	IO/DG/COO/CIO/DO/CAD IO/DG/COO/CST/TAD/ICA IO/DG/COO/CST/TAD/ASU IO/DG/COO/CST/TAD/ICA IO/DG/COO/TED/VSD
Approver	Petit P.	31 May 2018:approved	IO/DG/COO/CST/TAD/ICA
Document Security: Internal Use RO: Bhardwaj Anil			
Read Access	LG: TCPH task force team, LG: Cryostat IO team, AD: ITER, AD: External Collaborators, AD: IO_Director-General, AD: EMAB, AD: Auditors, AD: ITER Management Assessor, project administrator, RO, LG: CAD , AD: DA-IN		

<i>Change Log</i>			
CR_LC_TCP_HOUSING_TYPE_D (WCJL4Z)			
<i>Version</i>	<i>Latest Status</i>	<i>Issue Date</i>	<i>Description of Change</i>
v1.0	Revision Required	04 Apr 2018	
v1.1	Approved	24 May 2018	- addition of tolerances for holes - shifting of the monitoring pipe stubs

	ITER ID_WCJL4Z v1.1	2	3	4	5	6	7	8
A								
B								
C								
D								
E					--A - ADDITION OF TOLERANCES FOR HOLES - SHIFTING OF THE MONITORING PIPE STUB			24.05.18
F					--- FIRST VERSION			03.04.18
	REV No.	DETAILS OF MODIFICATION			SHEET No.	GRID REF	DATE	DCR No.
		DRW CAD ID VSLR2X	APPROVED BY PETITPA	<i>ITER Organization</i>			LEGAL OWNER	
		LINKED EV5 PT ID U2L8RU	TECHNICAL REF VITUPIG	INTERNAL USE				
		LINKED 3D ID - - - - -	DRAWN BY VAUQUEJ	When received pursuant to a contract or agreement, the confidentiality clause therein shall be applicable. When received during tender phase treat as confidential.			 <small>china EU india japan korea russia USA</small>	
		PBS TITLE Cryostat & VVPSS Cryostat Lower Cylinder	SAFETY CLASS ---	DRAWING TITLE CR_LC_TCP_HOUSING_TYPE_D_DET MODIFICATIONS SHEET				
		DATE OF ISSUE 15 May 18	PT MATURITY CD	PT VERSION - - E	QUALITY CLASS ---	DOCUMENT TYPE Part Drawing		
		DR STATUS D	SCALE 1:1	PT STATUS D	FORMAT A3	PBS NUMBER 24 CR LC	DRAWING NUMBER 046022	SHEET 01
		THIRD ANGLE PROJECTION 			N°OF SHEETS 08	REVISION - - A		
	1	2	3	4	5	6	7	8

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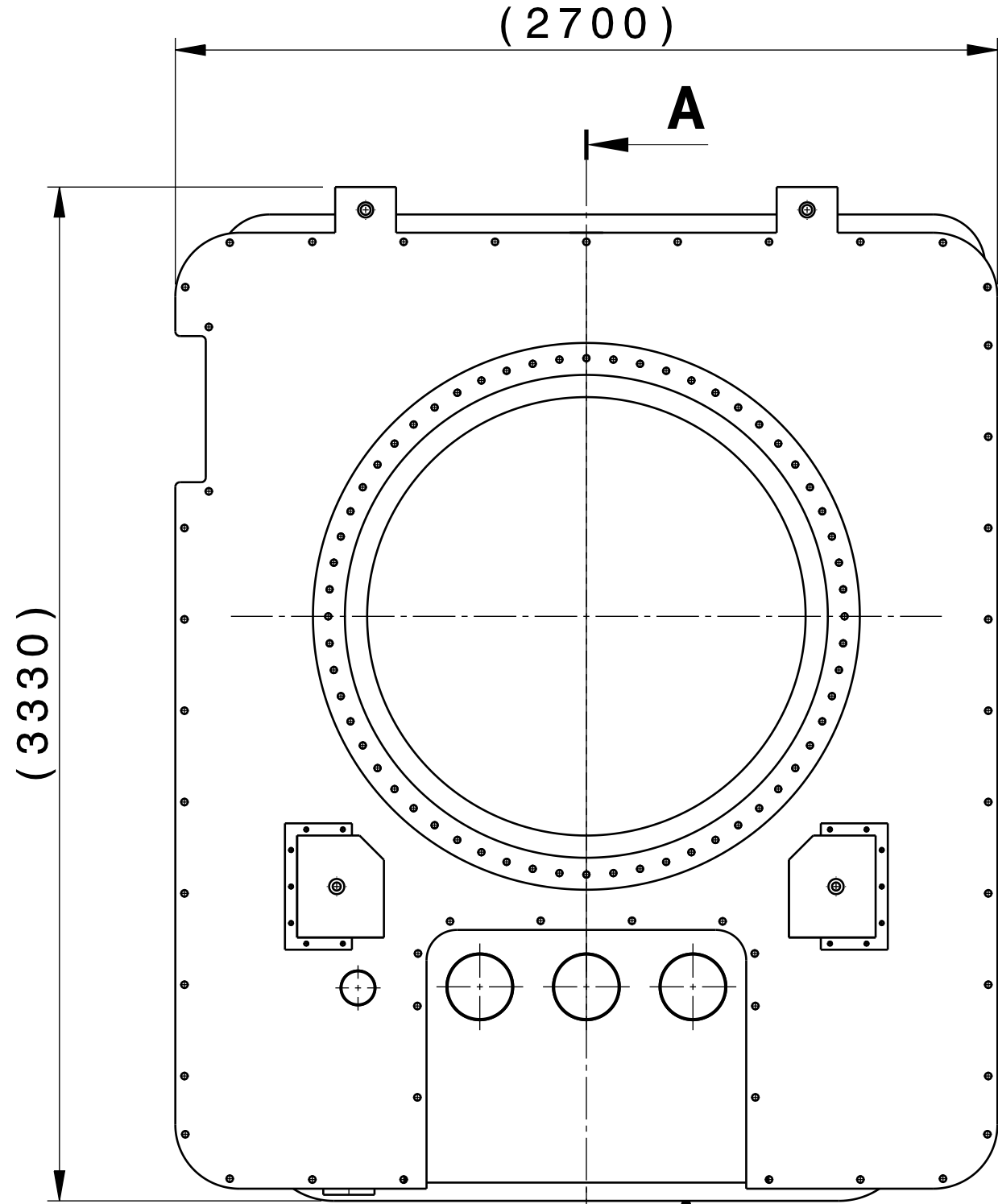
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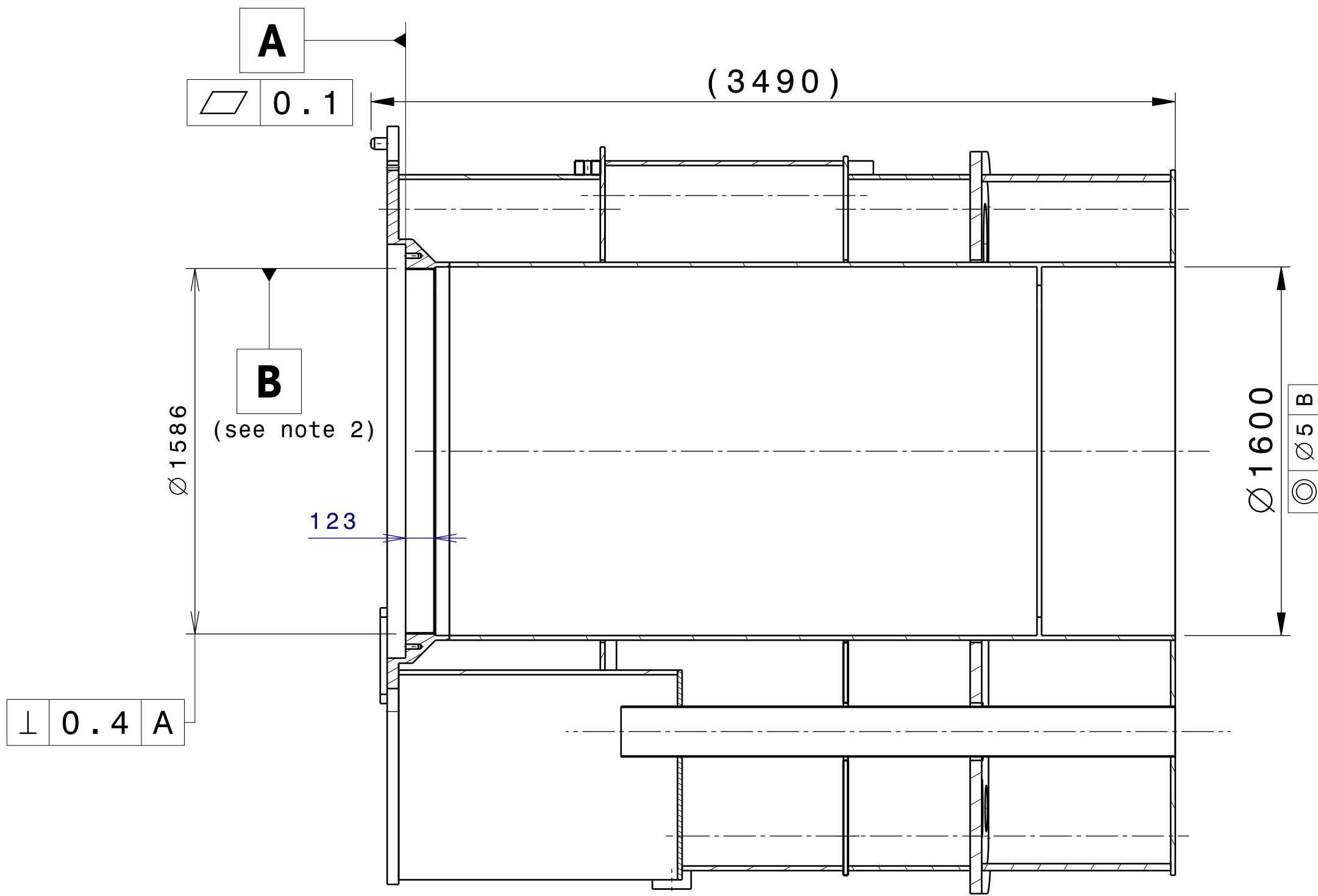
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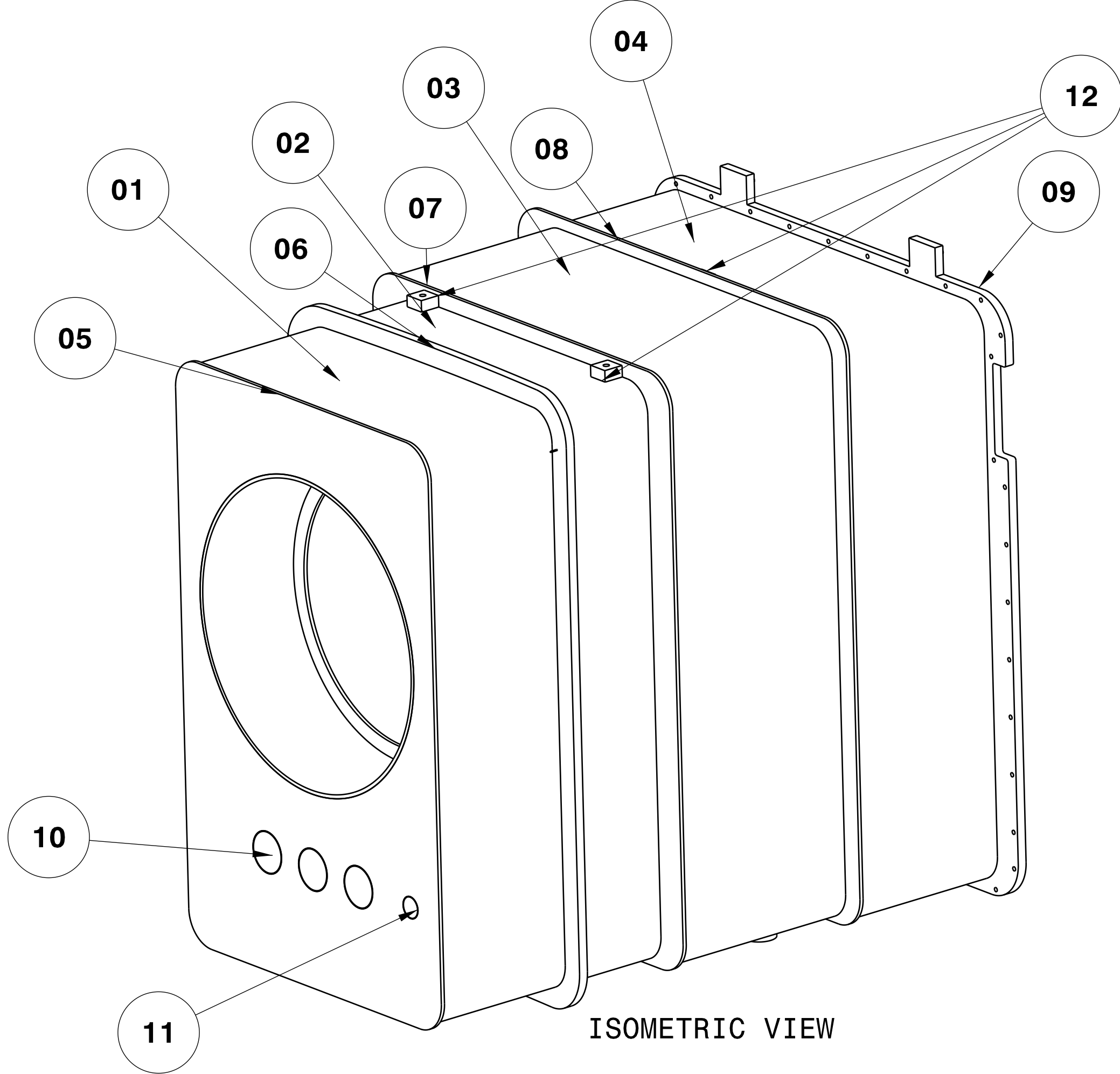
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FRONT VIEW

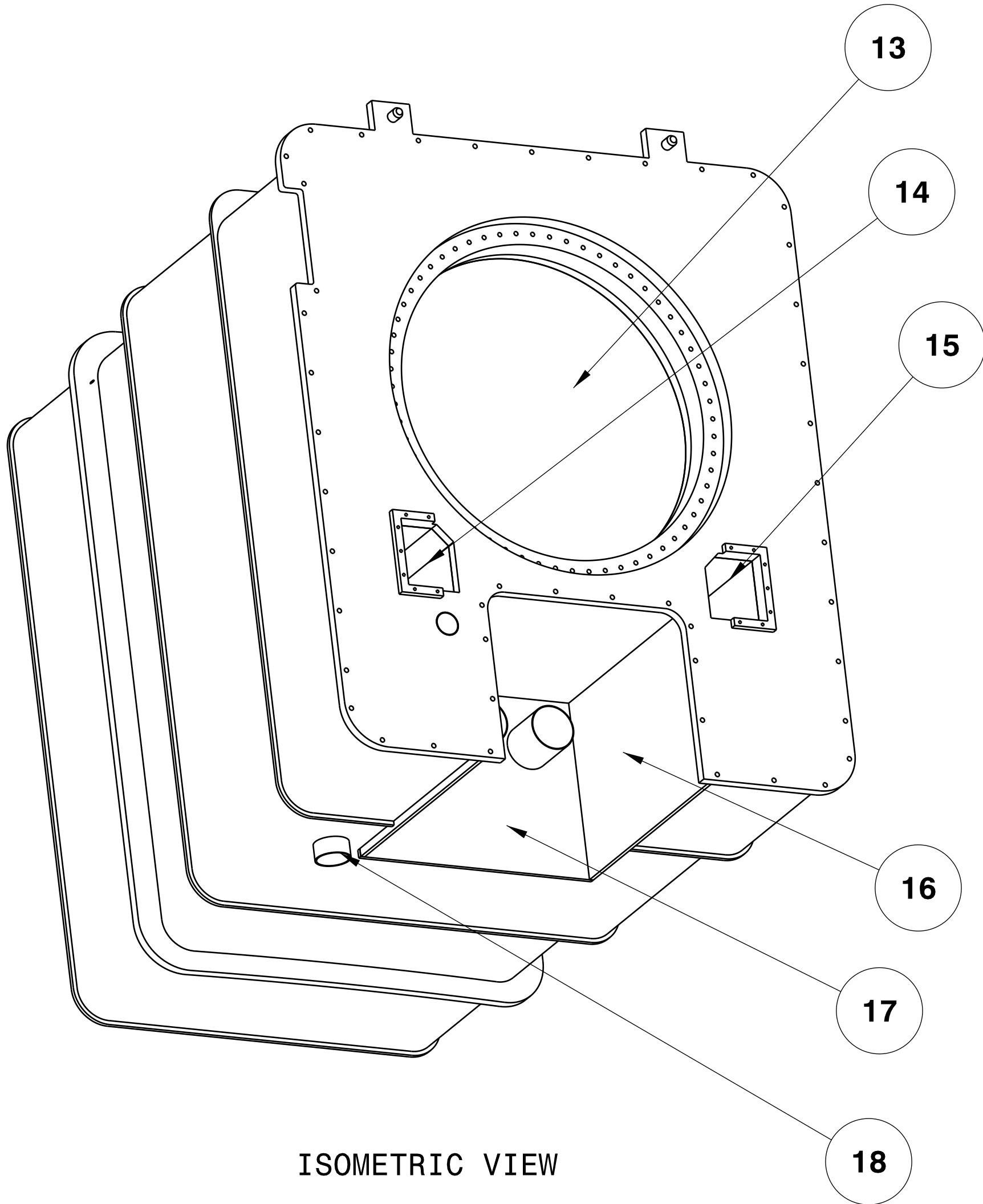


SECTION VIEW A-A





ISOMETRIC VIEW

Bill of material					
Part Number	Part reference	Qty	Material / Ref.	Drawing Number	Remarks
01	TCPH_SHELL_01	1	SS 304/304L	034338	
02	TCPH_SHELL_02	1	SS 304/304L	034338	
03	TCPH_SHELL_06	1	SS 304/304L	034338	
04	TCPH_SHELL_07	1	SS 304/304L	034338	
05	TCPH_VERTICAL_PLATE_01	1	SS 304/304L	034340	
06	TCPH_WALL_FLANGE_02	1	SS 304/304L	034344	
07	TCPH_VERTICAL_PLATE_06	1	SS 304/304L	034340	
08	TCPH_VERTICAL_PLATE_07	1	SS 304/304L	034340	
09	TCPH_CRYOPUMP_FLANGE_01	1	SS 304/304L	034345	
10	TCPH_PIPE_02_DN200	3	SS 304L; DN200;sch:10S; L:2385mm		
11	TCPH_PIPE_01_DN100	1	SS 304L; DN100; sch:10S; L:3420mm		
12	TCPH_LIFTING_PAD	3	SS 304/304L	034353	
13	TCPH_INNER_CYLINDER	1	SS 304/304L	034351	
14	TCPH_LEFT_RH_SOCKET	1	SS 304/304L	034343	
15	TCPH_RIGHT_RH_SOCKET	1	SS 304/304L	034343	
16	TCPH_BOTTOM_SOCKET	1	SS 304/304L	034349	
17	TCPH_BOTTOM_SOCKET_DEEP_01	1	SS 304/304L	034349	
18	TCPH_VACUUM_PIPE_DN150	1	SS 304L; DN150; sch: 40S; L:80mm		



ISOMETRIC VIEW

Notes: 1. ISO 2768 - mK tolerances apply for this sheet unless more stringent tolerances are specified.
ISO 13920-BF to apply for welded parts.
2. The Datum B applies on machined inner surface of the Flange

DRW CAD ID VSLR2X		APPROVED BY PETITPA		ITER Organization INTERNAL USE		LEGAL OWNER 	
LINKED EV5 PT ID U2L8RU		TECHNICAL REF VITUPIG		When received pursuant to a contract or agreement, the confidentiality clause therein shall be applicable. When received during tender phase treat as confidential.			
LINKED 3D ID -----		DRAWN BY VAUQUEJ		DRAWING TITLE CR LC TCP HOUSING TYPE D DET DATUMS AND OVERALL DIMENSIONS			
PBS TITLE Cryostat & VVPS		DATE OF ISSUE/PT MATURITY/PT VERSION 15 May 18 CD --E		SAFETY CLASS ---			
DR STATUS D		SCALE 1:20		PT STATUS D		QUALITY CLASS ---	
THIRD ANGLE PROJECTION 		DOCUMENT TYPE Part Drawing		DRAWING NUMBER 046022			
FORMAT A1		PBS NUMBER 24 CR LC		SHEET 02		N° OF SHEETS 08	
PROJECTION --A		REVISION --A					

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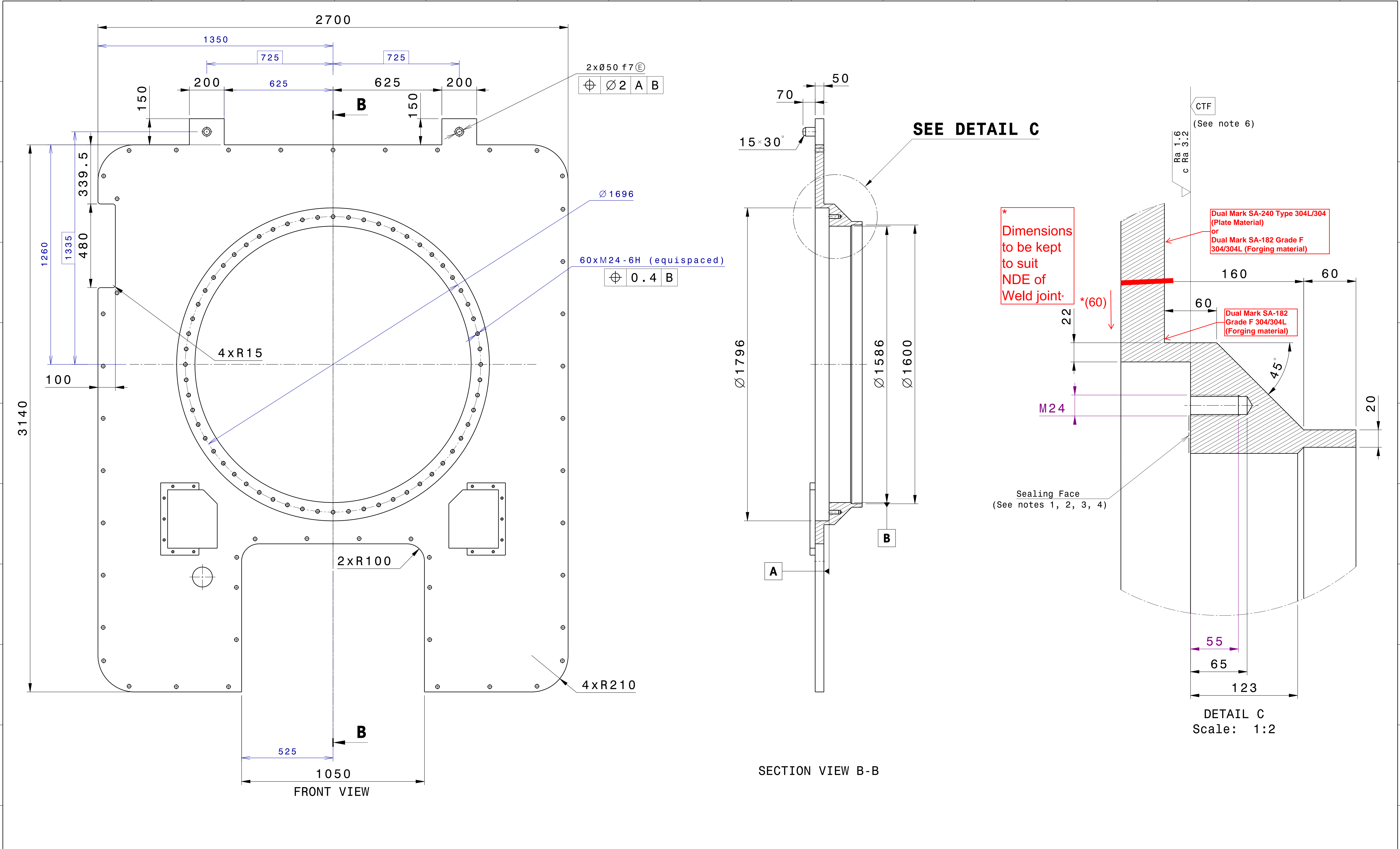
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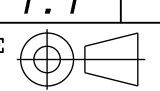
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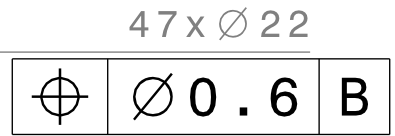
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- Notes:
- Sealing Face must be free from scratches across lay
 - Protect Sealing Face after manufacture by a temporary clean 5mm thick aluminium disc bolted with M24.
 - The machining of the Sealing Face shall follow the circumferential lay of the seal.
 - Drilling of holes shall not damage the Sealing Face.
 - ISO 2768 - mK tolerances apply for this sheet unless more stringent tolerances are specified.
ISO 13920-BF to apply for welded parts.
 - CTF Critical To Function

DRW CAD ID	VSLR2X	APPROVED BY	PETITPA	ITER Organisation	LEGAL OWNER
LINKED RV5 PT ID	U2L8RU	TECHNICAL REF	VITUPIG	INTERNAL USE	
LINKED 3D ID	-----	DRAWN BY	VAUQUEJ	When received pursuant to a contract or agreement, the confidentiality clause therein shall be applicable. When received during tender phase treat as confidential.	
PBS TITLE	Cryostat & VVPS Cryostat Lower Cylinder	SAFETY CLASS	---	DRAWING TITLE	CR_LC_TCP_HOUSING_TYPE_D_DET RH FLANGE 1/2
DATE OF ISSUE	15 May 18	CD	--E	QUALITY CLASS	---
DR STATUS	D	SCALE	1:1	PT STATUS	D
THIRD ANGLE PROJECTION		DOCUMENT TYPE	Part Drawing	DOCUMENT NUMBER	A124CR LC046022
		FORMAT	PBS NUMBER	DRAWING NUMBER	SHEET
					N° OF SHEETS
					REVISION

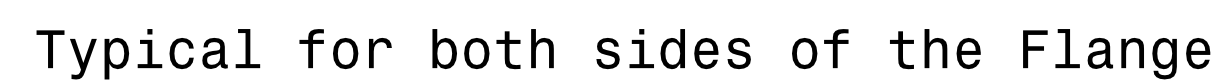


Note: ISO 2768 - mK tolerances apply for this sheet unless more stringent tolerances are specified.
ISO 13920-BF to apply for welded parts.

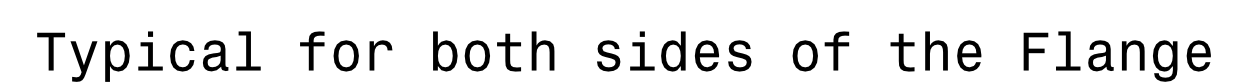
DRW CAD ID		VSLR2X		APPROVED BY		PETITPA		ITER Organization		LEGAL OWNER	
LINKED EVS PT ID		U2L8RU		TECHNICAL REF		VITUPIG		INTERNAL USE When received pursuant to a contract or agreement, the confidentiality clause therein shall be applicable. When received during tender phase treat as confidential.			
LINKED 3D ID		-----		DRAWING TITLE		 CR_LC_TCP_HOUSING_TYPE_D_DET RH_FLANGE 2/2					
PBS STYLE		CRYSTALAT & WPPSS		DRAWN BY		VAUQUEJ					
CRYSTALAT		CRYSTALAT		SAFETY CLASS		---					
Lower Cylinder				QUALITY CLASS		---					
DATE OF ISSUE		PT MATURITY		PT VERSION		PART NUMBER					
15 May 18		CD		- E -		Document Type Part Drawing					
DR STATUS		SCALE		PT STATUS		FORMAT		DRAWING NUMBER		SHEET	
D		1 : 1		D		PBS NUMBER		A1 24 CR LC		04 08	
THIRD ANGLE PROJECTION						046022		04 08		REVISION	
										-- A	




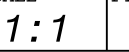
SEE DETAIL H

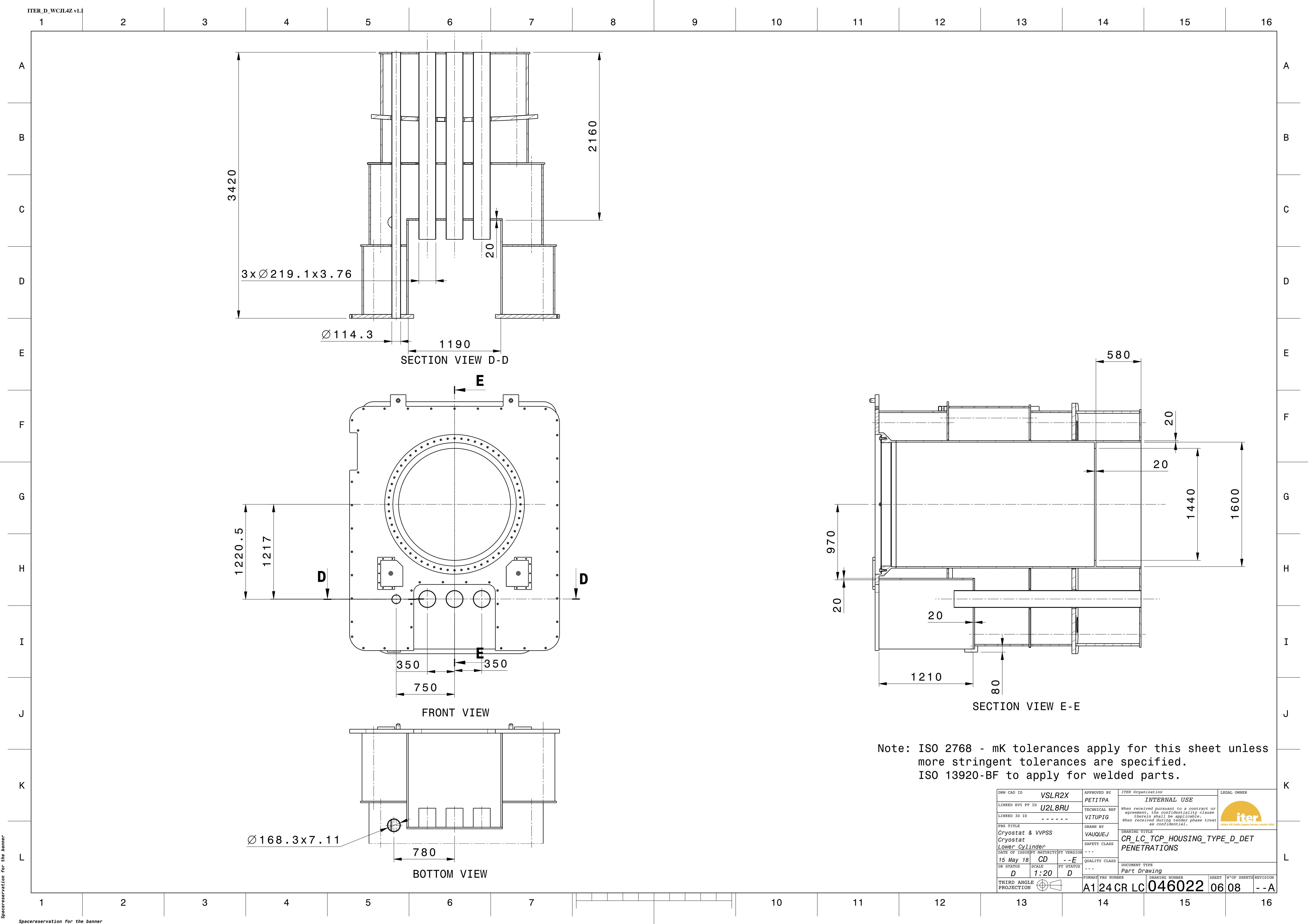


DETAIL H
Scale: 1:1



SECTION CUT I-I
Scale: 1:1

DRW CAD ID VSLR2X		APPROVED BY PETITPA		ITER Organization		LEGAL OWNER	
LINKED EVS PT ID U2L8RU		TECHNICAL REF VITUPTG		INTERNAL USE When received pursuant to a contract or agreement, the confidentiality clause therein shall be applicable. When received during tender phase treat as confidential.		 <small>ITER is an international organization created by treaty</small>	
LINKED 3D ID -----		DRAWN BY VAUQUEJ					
PBS TITLE Cryostat & VPPSS Cryostat Lower Cylinder		SAFETY CLASS ---		DRAWING TITLE CR_LC_TCP_HOUSING_TYPE_D_DET CRYOSTAT WALL FLANGE			
DATE OF ISSUE/PT MATURITY/PT VERSION 15 May 18 CD --E		QUALITY CLASS ---		DOCUMENT TYPE Part Drawing			
DR STATUS D	SCALE 1:1	PT STATUS D					
THIRD LANG PROJECTION		FORMAT	PBS NUMBER A124CR1C	DRAWING NUMBER 046022	SHEET 05	N°OF SHEETS 08	REVISION ---



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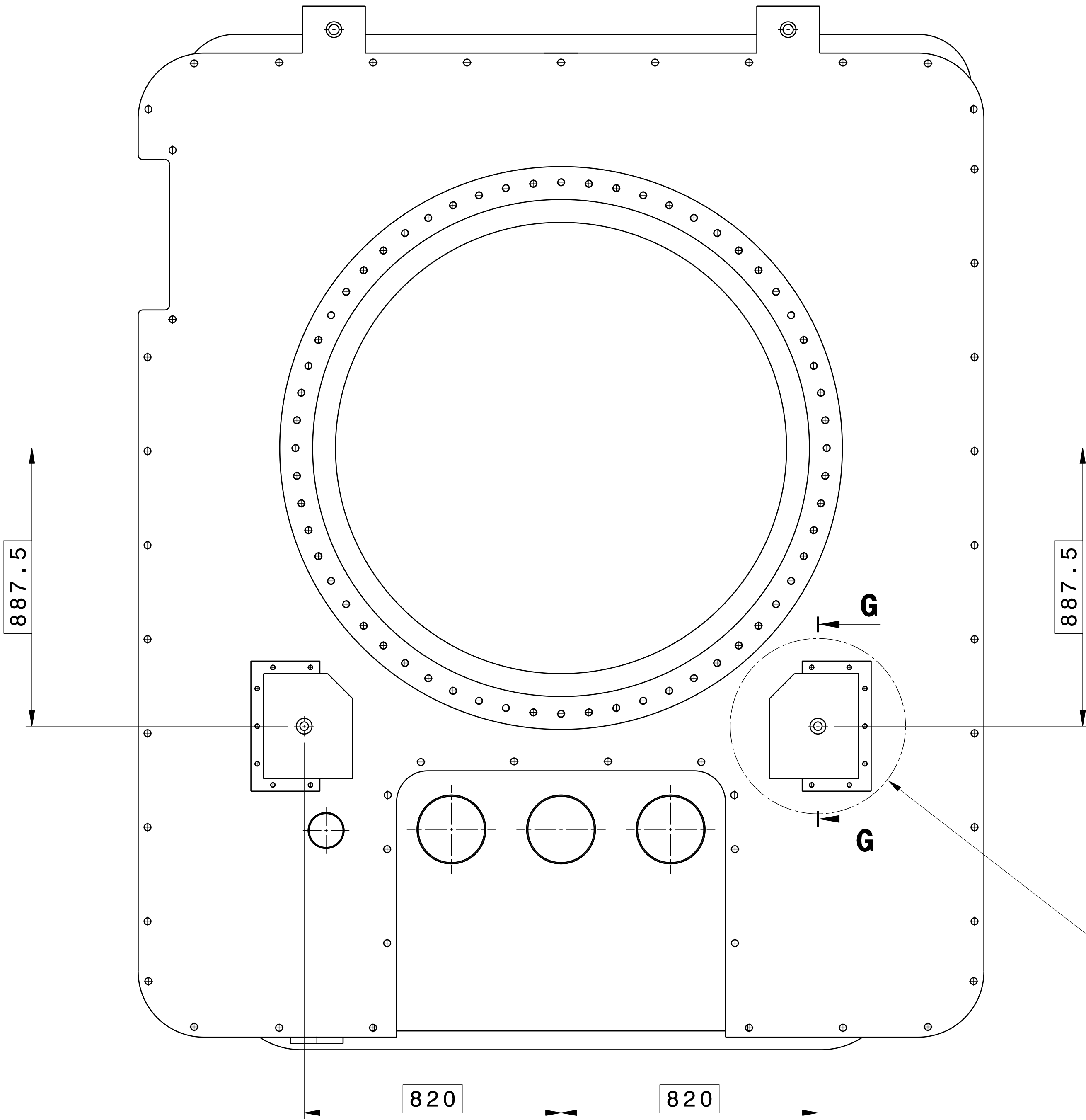
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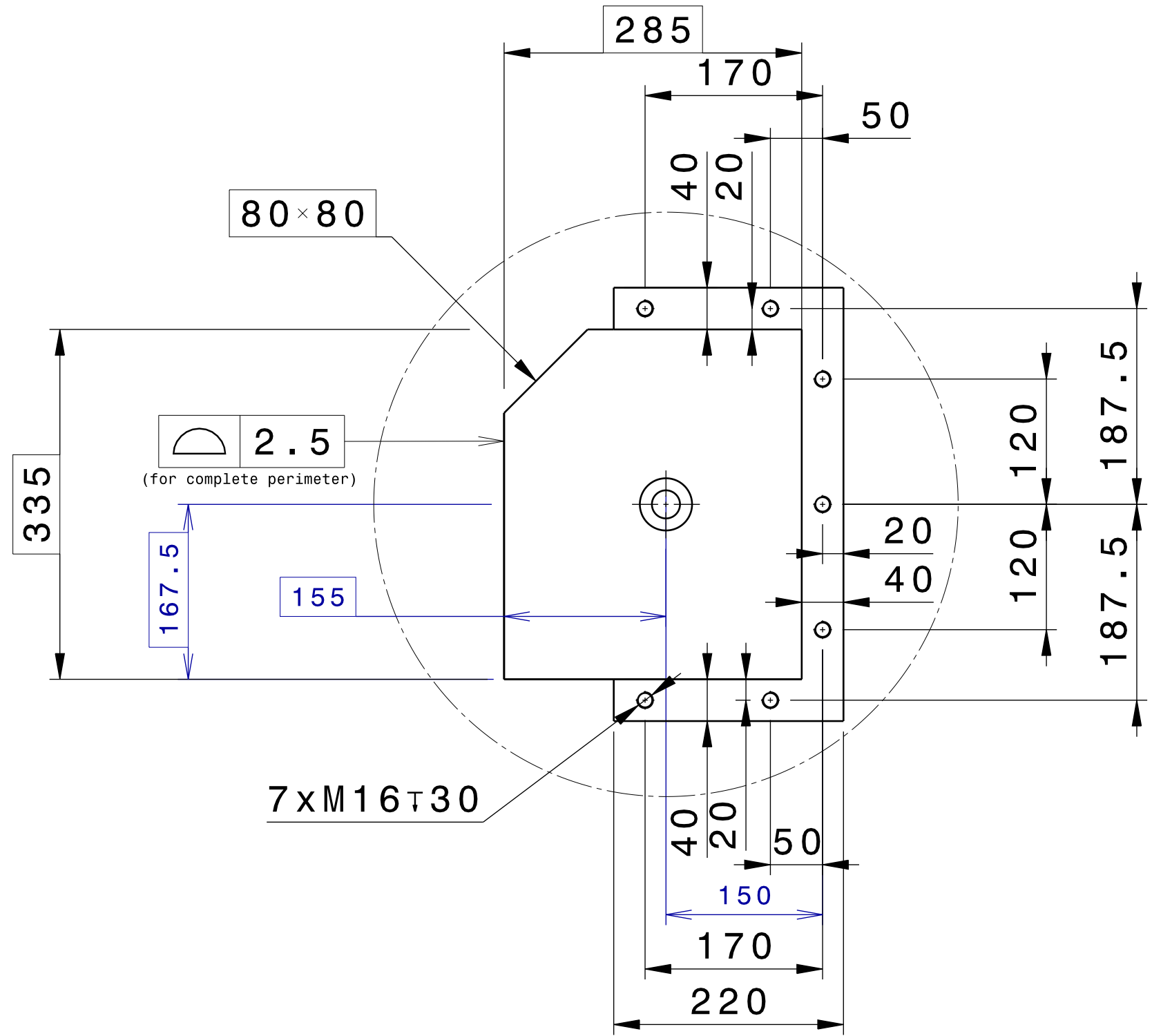
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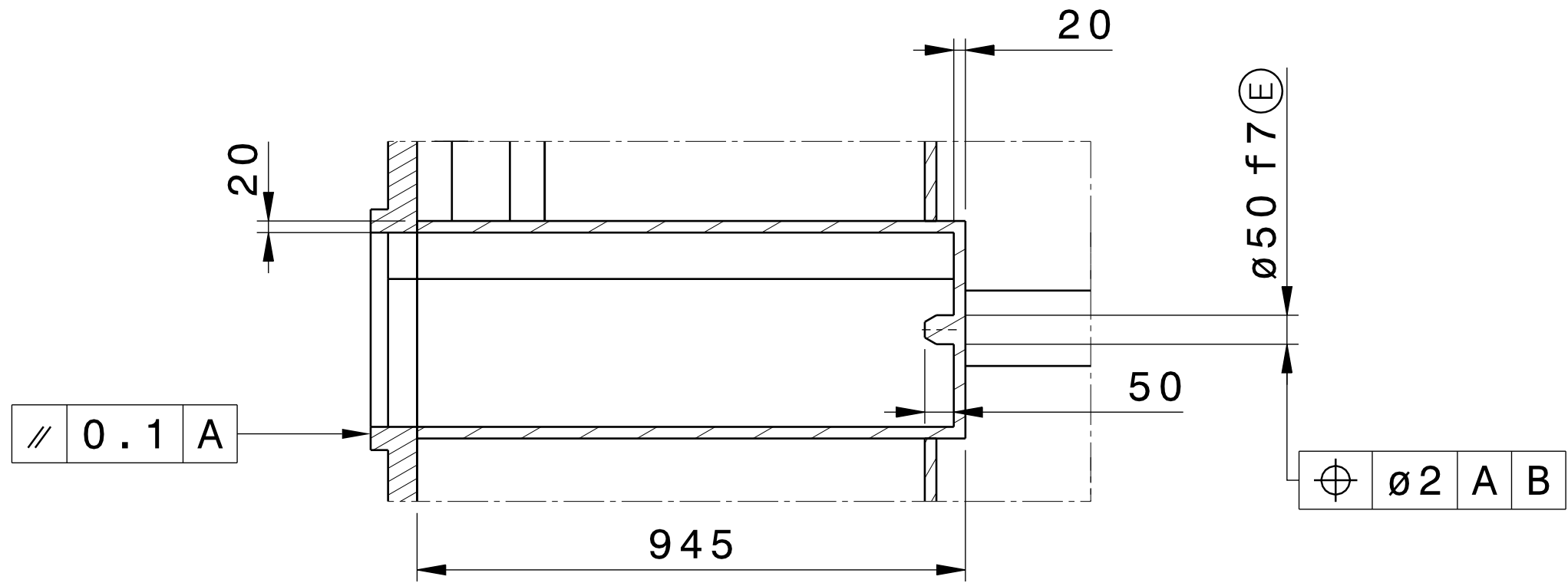
FRONT VIEW
Scale: 1:10

SEE DETAIL F



Typical for this socket and its symmetrical


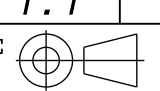
DETAIL F
Scale: 1:5



Typical for this socket and its symmetrical

SECTION VIEW G-G
Scale: 1:10

Note: ISO 2768 - mK tolerances apply for this sheet unless more stringent tolerances are specified.
ISO 13920-BF to apply for welded parts.

DRW CAD ID	VSLR2X	APPROVED BY	PETITPA	ITER Organisation	LEGAL OWNER
LINKED RV5 PT ID	U2L8RU	TECHNICAL REF	VITUPIG	INTERNAL USE	
LINKED 3D ID	-----	DATE OF ISSUE	15 May 18	When received pursuant to a contract or agreement, the confidentiality clause therein shall be applicable. When received during tender phase treat as confidential.	
PBS TITLE	Cryostat & VVPS	DRAWN BY	VAUQUEJ	DRAWING TITLE	CR_LC_TCP_HOUSING_TYPE_D_DET
Cryostat		SAFETY CLASS	---	RH SOCKETS	
Lower Cylinder		QUALITY CLASS	---		
DATE OF ISSUE	15 May 18	SCALE	1:1	DOCUMENT TYPE	Part Drawing
PT STATUS	D	PT STATUS	D	FORMAT	A1
THIRD ANGLE PROJECTION		PBS NUMBER	24	DRAWING NUMBER	CR LC 046022
		SHEET	07	N° OF SHEETS	08
		REVISION	--		A

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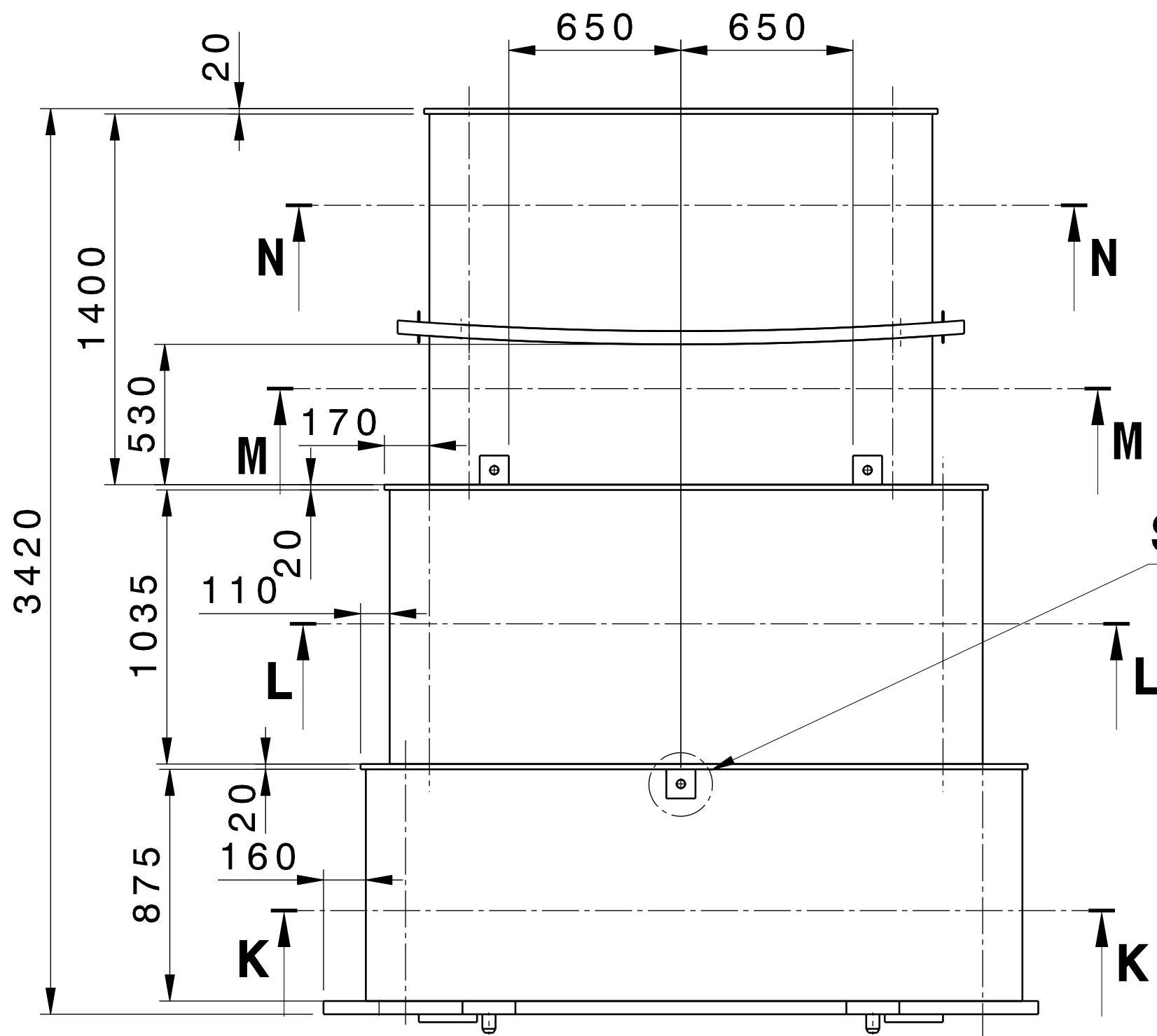
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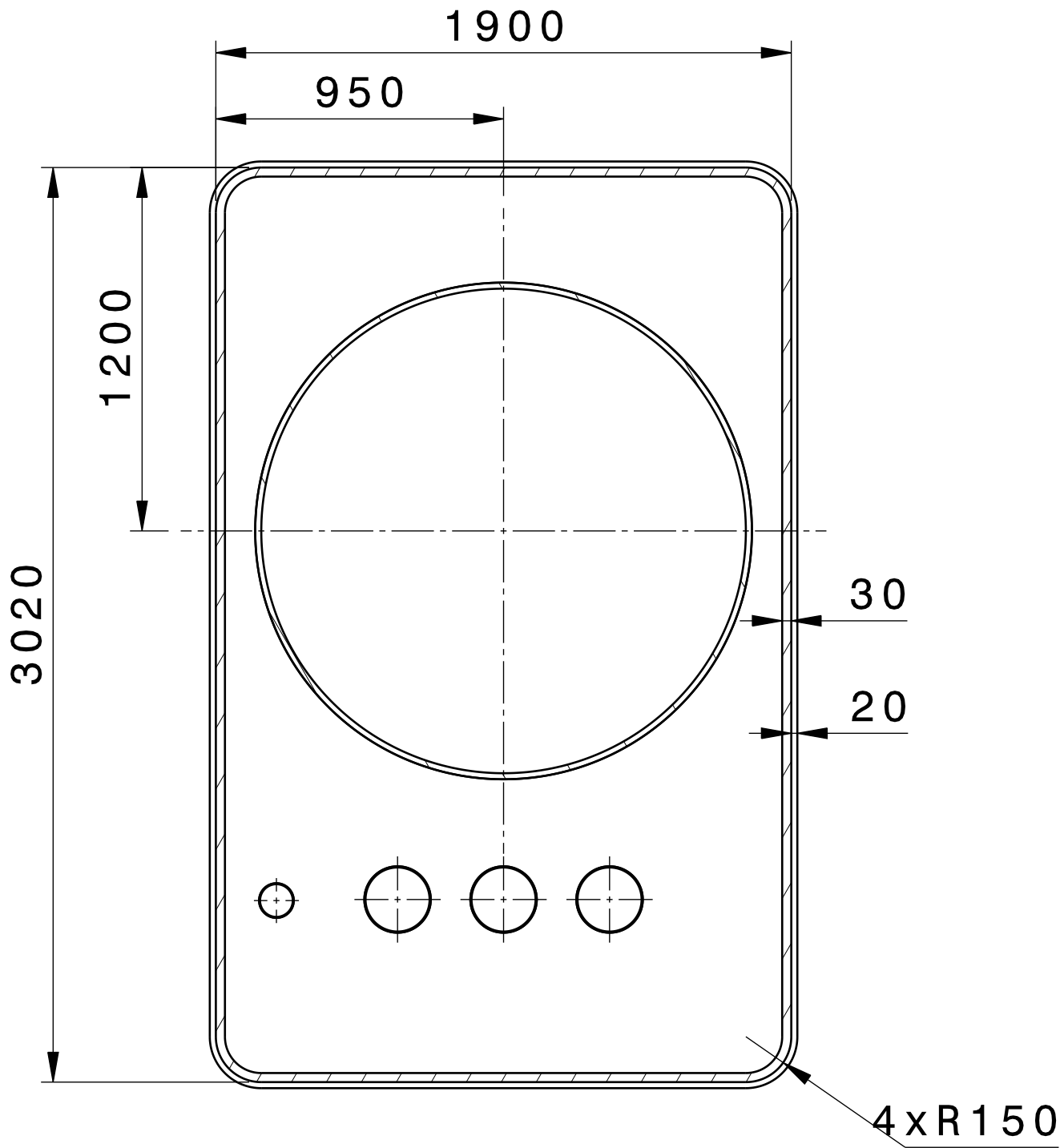
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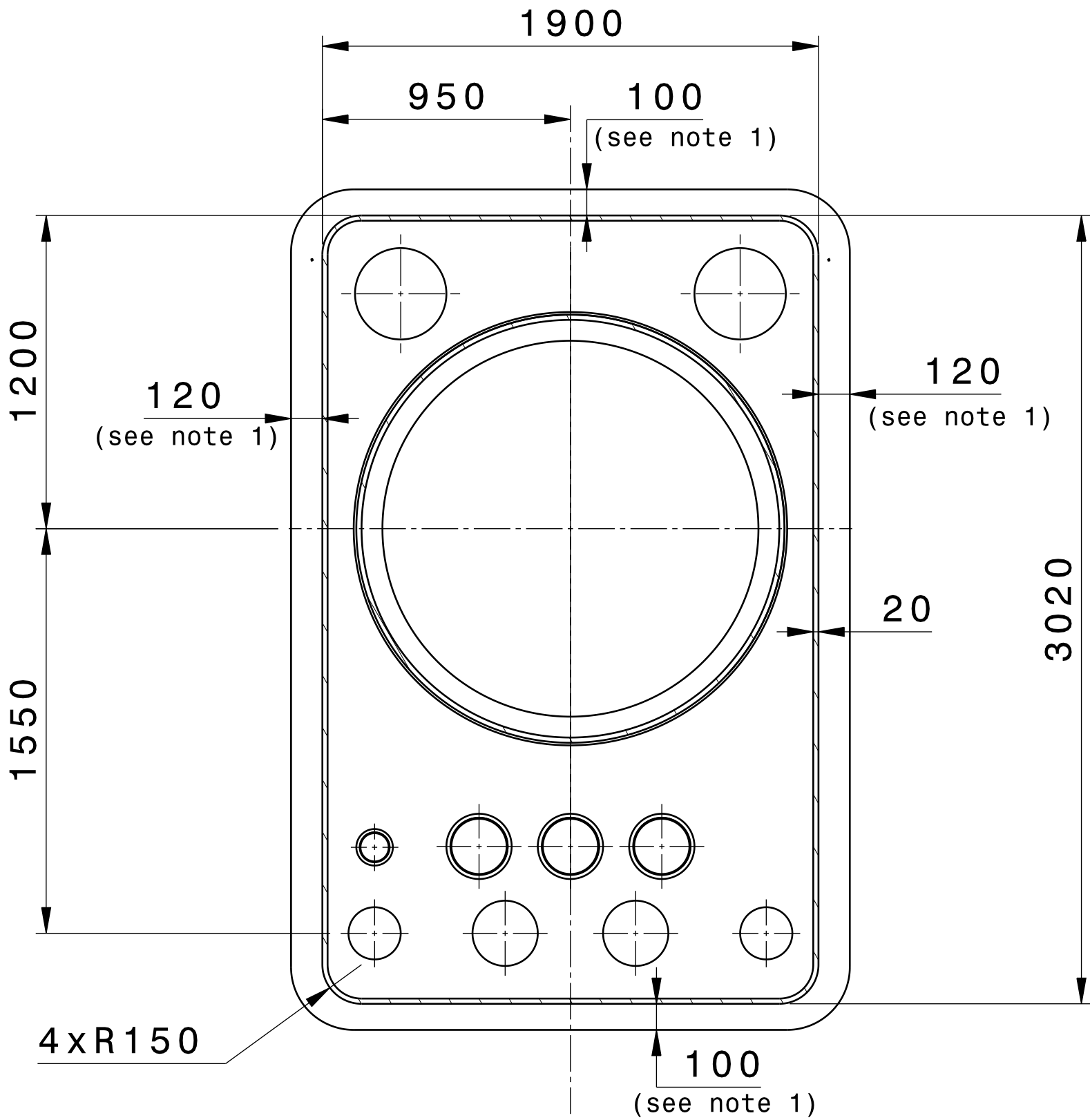
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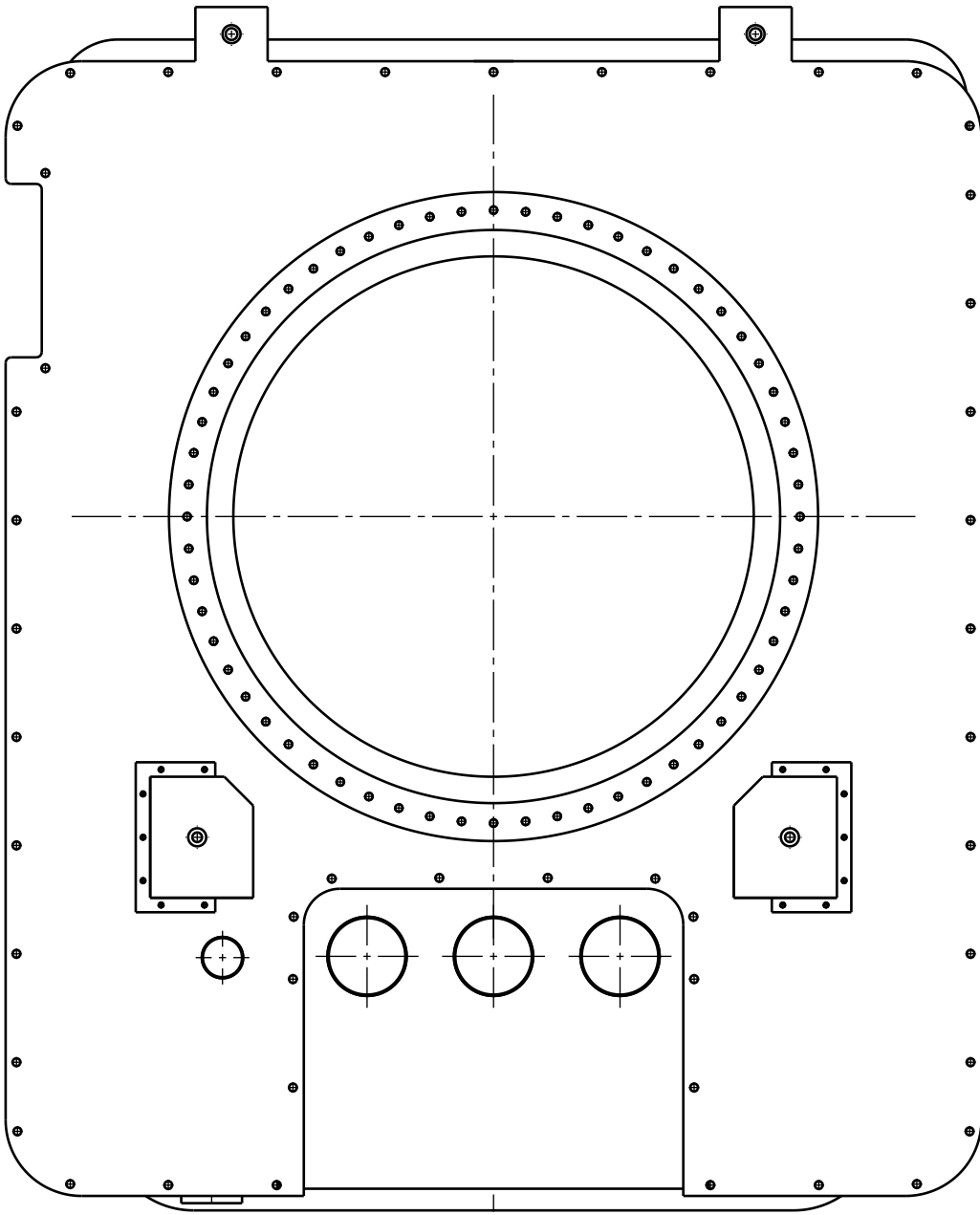
TOP VIEW



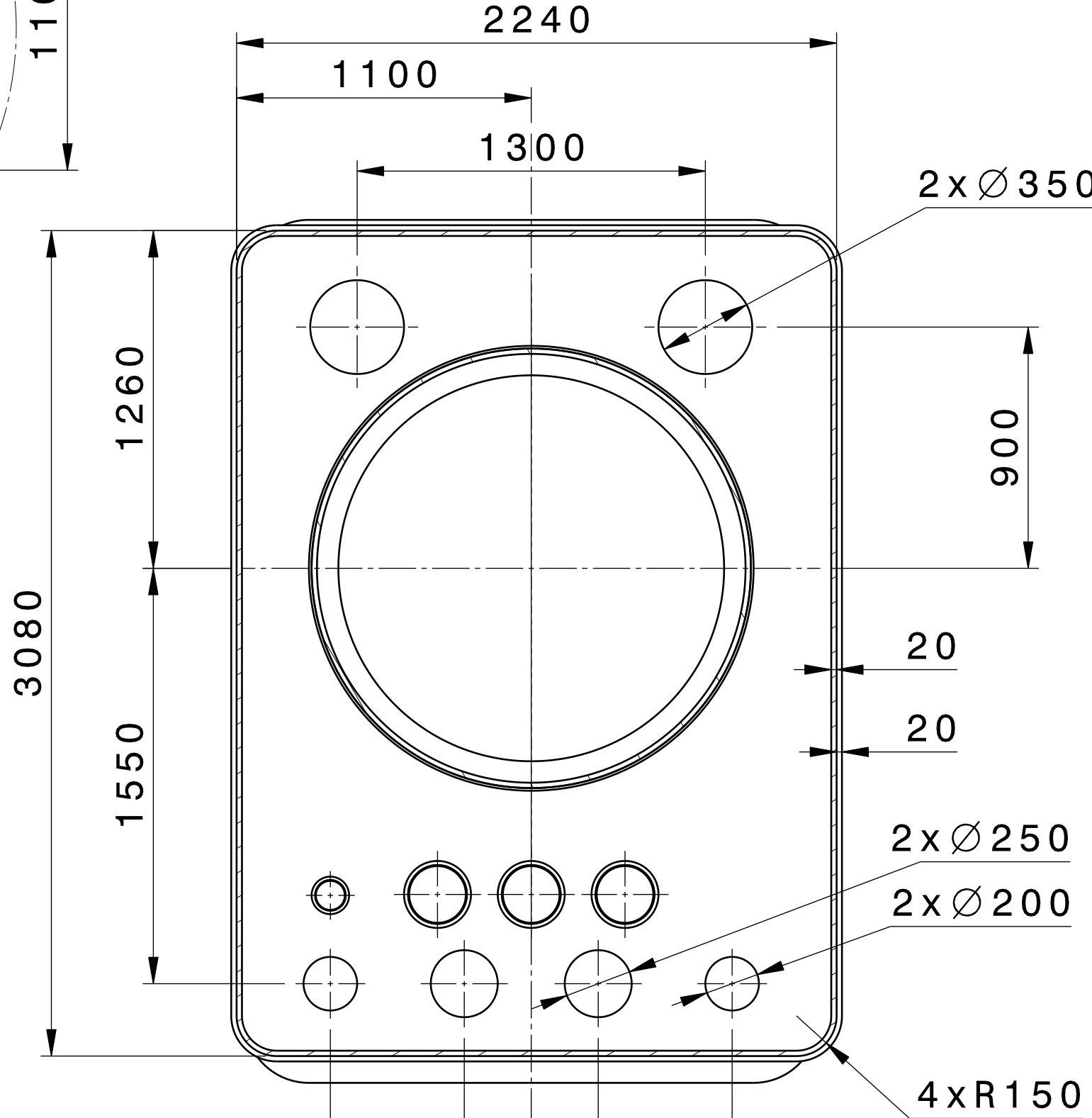
SECTION VIEW N-N



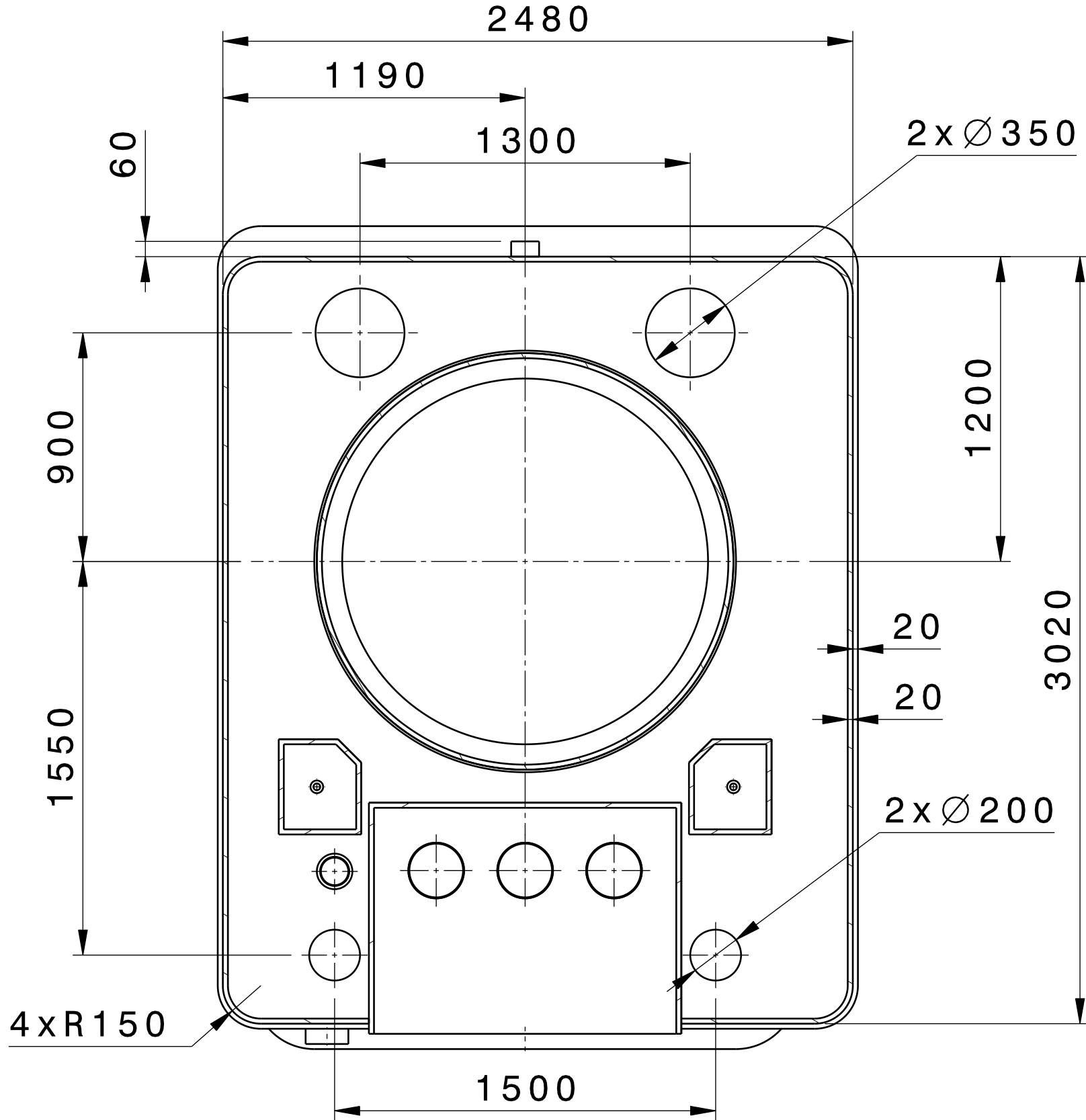
SECTION VIEW M-M



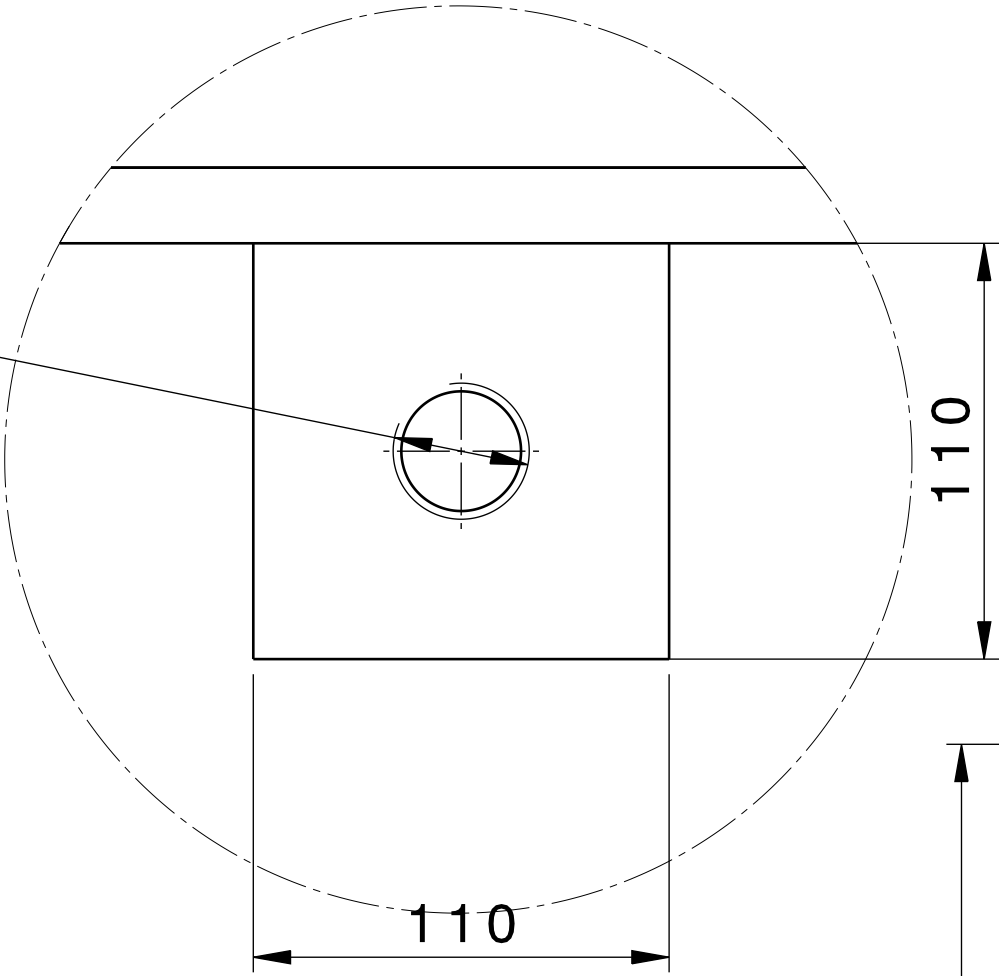
FRONT VIEW



SECTION VIEW L-L



SECTION VIEW K-K



DETAIL J
Scale: 1:2

- Notes:
1. These values are nominal values. They can change according to the custom machining of the Cryostat Wall Flange (See sheet 5).
 2. ISO 2768 - mK tolerances apply for this sheet unless more stringent tolerances are specified. ISO 13920-BF to apply for welded parts.
 3. Design of lug shall be finalized at the time of handling based on handling analysis

DRW CAD ID	VSLR2X	APPROVED BY	PETITPA	ITER Organization	LEGAL OWNER
LINKED RV5 PT ID	U2L8RU	TECHNICAL REF	VITUPIG	INTERNAL USE	
LINKED 3D ID	-----	DATE OF ISSUE	15 May 18	When received pursuant to a contract or agreement, the confidentiality clause therein shall be applicable. When received during tender phase treat as confidential.	
PBS TITLE	Cryostat & VVPS	DRAWN BY	VAUQUEJ	CR_LC_TCP_HOUSING_TYPE_D_DET	
DATE OF ISSUE	15 May 18	SAFETY CLASS	---	MAIN STRUCTURE	
DR STATUS	D	QUALITY CLASS	---	Part Drawing	
SCALE	1:1	DOCUMENT TYPE	Part Drawing		
THIRD ANGLE PROJECTION		FORMAT	A1	DRAWING NUMBER	
		PBS NUMBER	24	SHEET	
			CR LC	N° OF SHEETS	
			046022	REVISION	
			08 08		
			--A		