

PROJECT:PP-PE PILOT PLANT

Client:



شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

TITLE:DATA SHEET for POWDER BLENDER(SILO) (SI-541/SI-542/SI-543)

Data Sheet for POWDER BLENDER(SILO) (SI-541,SI-542,SI-543)

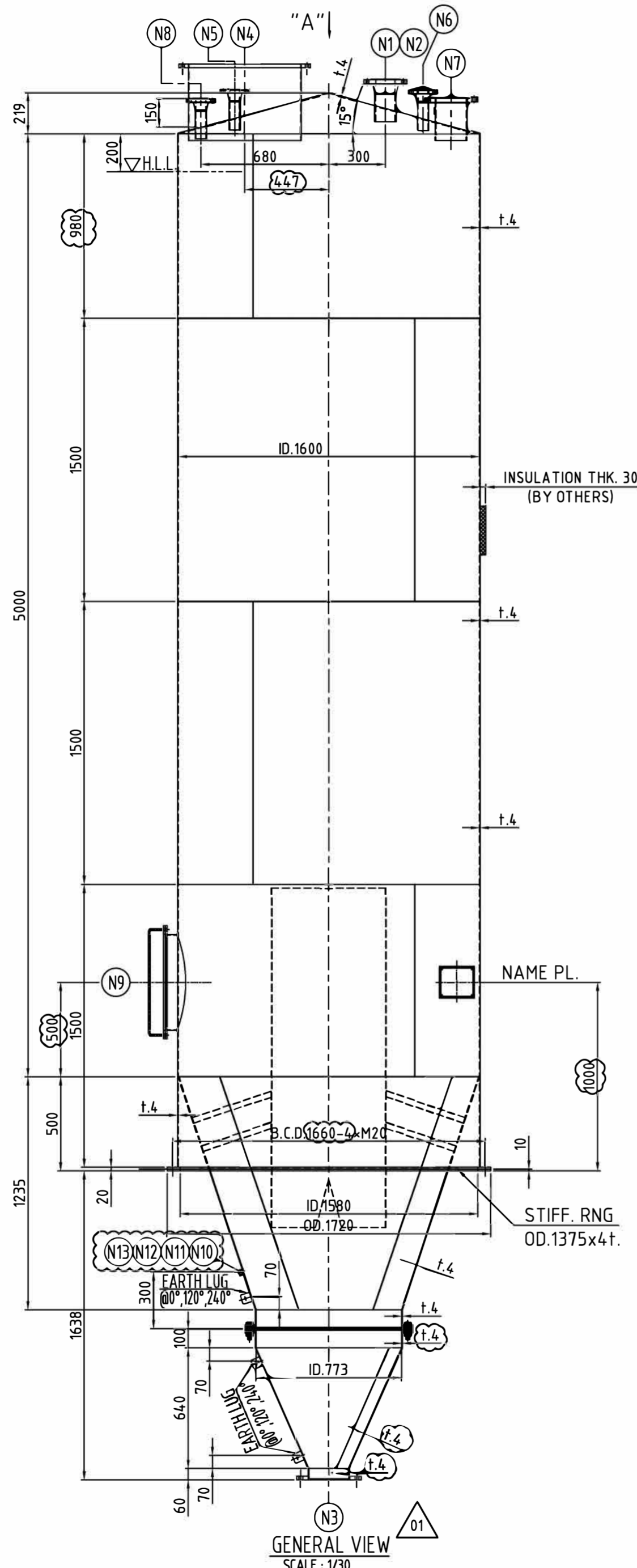
Document No.:

Rev. : 0

Owner Job No.:

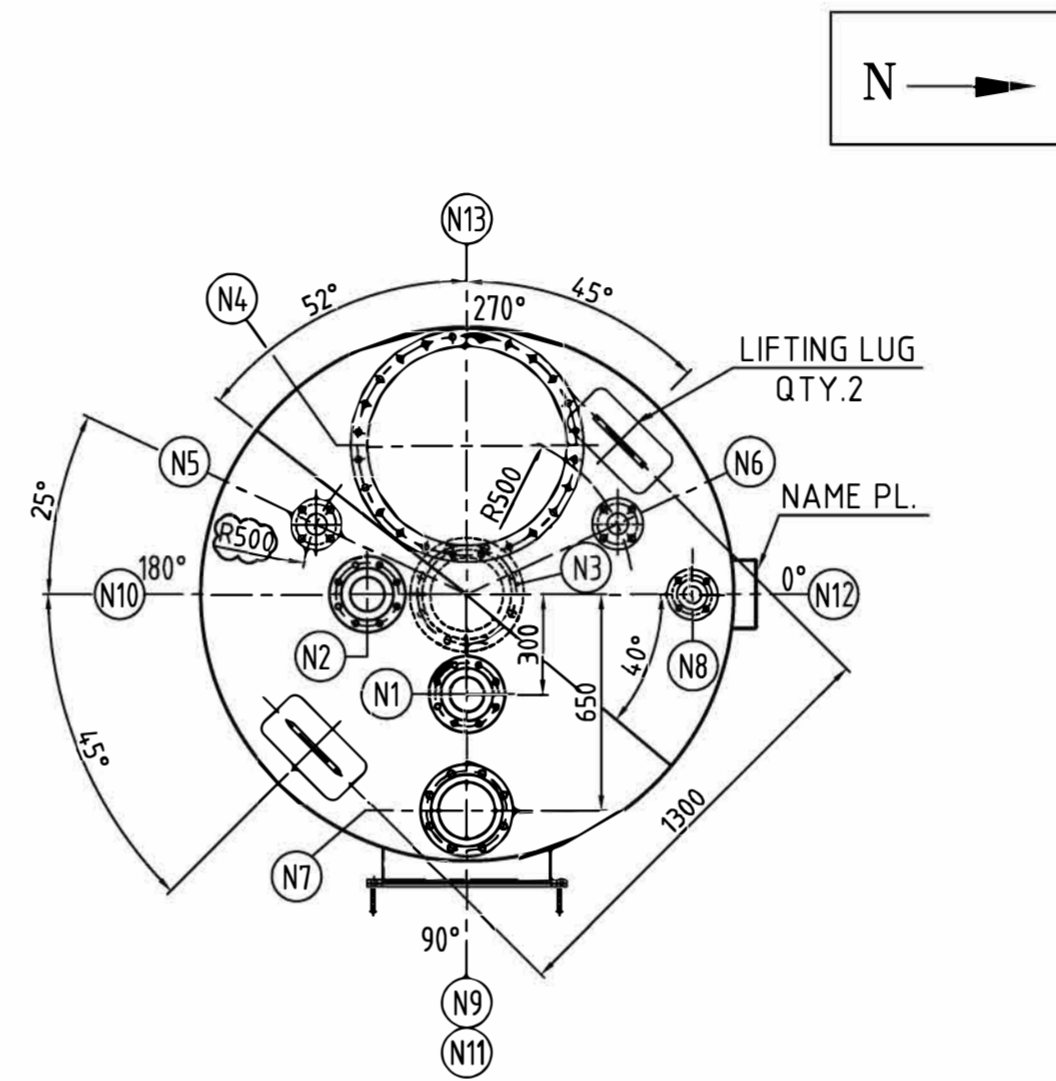
Type: DAS

Page A



LIST OF DRAWINGS		
DOC. TITLE	SHEET NO.	DOC. NO.
GENERAL ARRANGEMENT DRAWING	1 OF 1	VDR-A3-308-002
BODY DETAIL DRAWING	1 OF 1	VDR-A3-308-003
NOZZLES DETAIL DRAWING	1 OF 1	VDR-A3-308-004
MANHOLES DETAIL DRAWING	1 OF 1	VDR-A3-308-005
INTERNAL ATTACHMENT DETAIL DRAWING	1 OF 1	VDR-A3-308-007
EXTERNAL ATTACHMENT DETAIL DRAWING	1 OF 1	VDR-A3-308-008
NAME PLATE DETAIL DRAWING	1 OF 1	VDR-A4-308-009

GENERAL DATA	
DESIGN CODE: ASME SEC.VIII DIV1, ED. 2007	QTY: 3 SET
CONTENT @ NORMAL OPERATION	POLYPROPYLENE
OPERATING PRESSURE :	Barg. --
OPERATING TEMPERATURE :	°C 95
DESIGN PRESSURE (INT./EXT.):	Barg. -0.015 / 0.2
DESIGN TEMPERATURE	°C -28 ~ 120
CONTENT DENSITY (Kg/m ³)	4.00-5.50
PNEUMATIC TEST PRESSURE :	Barg. 0.5
JOINT EFFICIENCY (SHELL/HEAD)	0.85/0.85
RADIOGRAPHY (SHELL/HEAD):	SPOT / SPOT
INSULATION TYPE/THK.	PP/30 mm
CORROSION ALLOWANCE	mm 0
VOLUME	m ³ 11.6
WIND VELOCITY	Km/hr UBC, SPEED=120 Km/hr, I=1.15, EXPOSURE:C
EARTHQUAKE	UBC 1997, ZONE 3, I=1.25, Ca=0.36, Cv=0.54, Nv=1
IMPACT TEST	NO
P.W.H.T.	NO
M.D.M.T. @ D.P.	°C -28
FIRE PROOFING/THK.	NO
PAINTING/CLEANING	°C NO / SEE NOTE "4"
LETHAL SERVICE	NO



WEIGHTS	
FABRICATED:	APP. 1850 Kg
EMPTY:	APP. 1970 Kg
SHOP HYDROTESTS:	APP. 13650 Kg
OPERATING:	APP. 8190 Kg

FOUNDATION LOADING AT BASE (OPERATING)	
WIND SHEAR :	- Kg
EARTHQUAKE SHEAR:	- Kg
WIND MOMENT :	- Kg-m
EARTHQUAKE MOMENT :	- Kg-m

NOZZLE TABLE								
ITEM	SIZE	REQ'D NO.	TYPE	RATE	FACE	PROJ. NOTE 2	REINFORC. SCH./THK. OD.xTHK.	REMARKS
N1	4"	1	W.N.	150#	R.F.	150	40s/-	PRODUCT INLET
N2	4"	1	W.N.	150#	R.F.	150	40s/-	BLENDED
N3	8"	1	S.O.	150#	F.F.	SEE DWG	-	PRODUCT OUTLET
N4	DN 600	1		DIN 28031		270	-/4 mm	FILTER
N5	2"	1	W.N.	150#	R.F.	150	40s/-	LI CONNECTION (LSH)
N6	2"	1	W.N.	150#	R.F.	150	40s/-	LI CONNECTION (LT)
N7	6"	1	S.O.	150#	R.F.	150	40s/-	SAFETY VALVE
N8	2"	1	W.N.	150#	R.F.	150	40s/-	LEAKAGE AIR
N9	DN 500	1		DIN 28031		65	-/4 mm	MANHOLE(WITH COV./BL./N&B.)
N10	1/2"	1	HALF COUPLING	3000#	SEE DWG	-	-	NITROGEN CONNECTION
N11	1/2"	1	HALF COUPLING	3000#	SEE DWG	-	-	CONTROL AIR CONNECTION
N12	1/2"	1	HALF COUPLING	3000#	SEE DWG	-	-	ELECTRICAL CONNECTION
N13	1/2"	1	HALF COUPLING	3000#	SEE DWG	-	-	ELECTRICAL CONNECTION

ORIENTATION VIEW (VIEW "A")
SCALE : 1/30

MATERIALS			
SHELLS / HEADS	SA 240-304L	GASKET	RUBBER
NOZZLE FLANGES W.N.	SA 182-F304L	INTERNAL BOLT/NUT	SA-193 B8 / SA-194 8
NOZZLE FLANGES S.O.	SA 240-304L	EXTERNAL BOLT/NUT	SA-193 B8 / SA-194 8
NOZZLE NECK PIPE	SA 312-304L	INTERNAL WELDED	SA 240-304L
NOZZLE NECK PLATE	SA 240-304L	EXTERNAL WELDED	SA 240-304L
VESSEL SUPPORT	SADDLE	-	FITTING SA 403-304L
	LEG	-	STIFFENING/INSUL. RING SA 240-304L
	LUG	-	LADDER & PLATFORM SA 240-304L
SKIRT	SA 240-304L/St. 37	ANCHOR BOLT	SA 36 (SEE NOTE 5)
REINFORCING PAD	SA 240-304L	INSULATION	---
WEAR PLATE	SA 240-304L		

7- LONGITUDINAL WELDS SHALL BE FLUSH WITH ADJACENT BASE MATERIAL AND POLISHED.
6- INTERNAL SURFACE OF CIRCUMFERENTIAL WELDS AND NOZZLE WELDS TO BE GROUND FLUSH AND POLISHED.
5-MATERIAL FOR ANCHOR BOLTS ARE SA-36 (ALLOWABLE STRESS =110 MPa)
4-VESSEL SHALL BE THOROUGHLY CLEANED INSIDE AND OUTSIDE AND FREE FROM RUST, SLAG, SCALE, WELD SPATTER, AND ANY FOREIGN MATTER.
3-ALL BOLTS SHALL BE STRADDLED THE MAIN AXISES OF VESSEL.
2- PROJECTION OF HORIZONTAL&VERTICAL NOZZLES HAS BEEN MEASURED FROM SHELL OR HEAD WALL SURFACE TO FACE OF FLANGE, UNLESS OTHERWISE NOTED.
1-UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN mm.

NO.	DRAWN BY	DESIGN BY	CHECK BY	APPROVE BY	Description	Date
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CLIENT:
شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

PROJECT TITLE:
PP-PE PILOT PLANT

LICENSOR:
شرکت ملی صنایع پتروشیمی
شرکت پژوهش و فناوری پتروشیمی

VENDOR:

PROJECT NUMBER :
DRAWING TITLE : **GENERAL ARRANGEMENT DRAWING SILO (SI-541, SI-542, SI-453)**

DOC. NO. :
SCALE: AS SHOWN SHEET: 1 OF 1 DWG. SIZE: A3

REFERENCE DRAWINGS

DOC. TITLE	SHEET NO.	DOC. NO.
GENERAL ARRANGEMENT DRAWING	1 OF 1	VDR-A4-308-002

GENERAL NOTES

- 1-UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN mm .
- 2-ALL BOLTS SHALL BE STRADDLED THE MAIN AXISES OF VESSEL.
- 3-ALL BOLTS SHALL BE STRADDLED THE MAIN AXISES OF VESSEL.
- 4.RF FLANGE FACING SHALL BE IN ACCORDANCE WITH ASME B16.5 AND SHALL HAVE SMOOTH FINISH FACING WITH 125 mic.in (3.2 m) TO 250 mic.in (6.35 m)

TOTAL WT.: 80 Kg

ITEM	PARTS NAME	DIMENSIONS	MATERIAL	QTY.	U.WT. Kg.	T.WT. Kg.
9	COUPLING	1/2", HALF COUPLING, 3000#	SA 182-F304L	4	0.1	0.4
8	NOZZLE PIPE	6", SCH.40s, L=216	SA 312-304L	1	6.1	6.1
7	NOZZLE FLANGE	6", S.O., 150#, R.F., THK.20, SEE DET.	SA 240 304L	1	6.0	6.0
6	NOZZLE PIPE	2", SCH.40s, L=143	SA 312-304L	3	0.8	2.4
5	NOZZLE FLANGE	2", W.N., 150#, R.F., SCH.40s,	SA 182-F304L	3	2.7	8.1
4	NOZZLE PIPE	PL.1872x398x4t.	SA 240 304L	1	23.4	23.4
3	NOZZLE FLANGE	DN 600, ACC. TO DIN 28031	SA 240 304L	1	15.7	15.7
2	NOZZLE PIPE	4", SCH.40s, L=143	SA 312-304L	2	2.3	4.3
1	NOZZLE FLANGE	4", W.N., 150#, R.F., SCH.40s,	SA 182-F304L	2	6.8	13.6

PARTS LIST

REVISION	NO.	DRAWN BY	DESIGN BY	CHECK BY	APPROVE BY	Description	Date
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PROJECT TITLE:
PP-PE PILOT PLANT

LICENSOR:

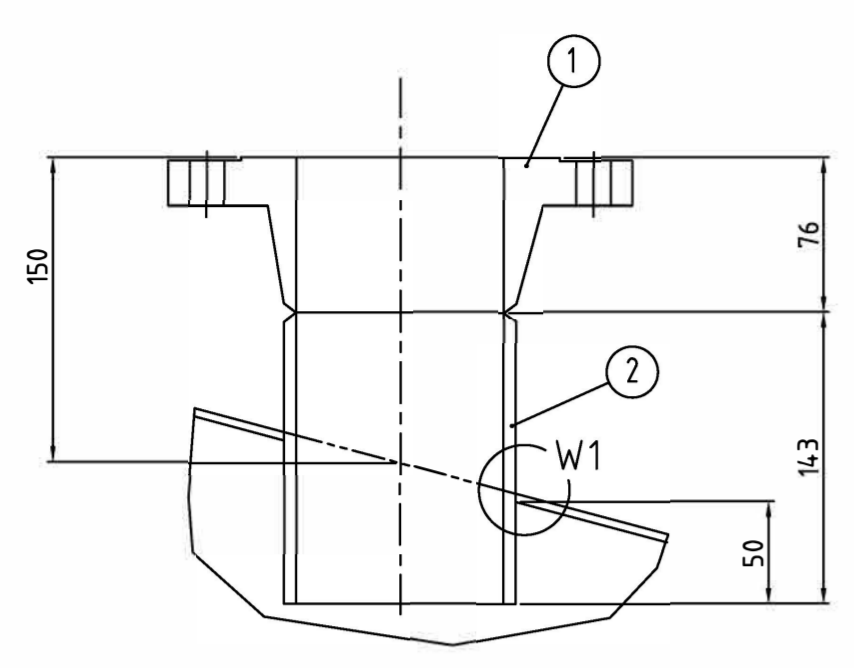


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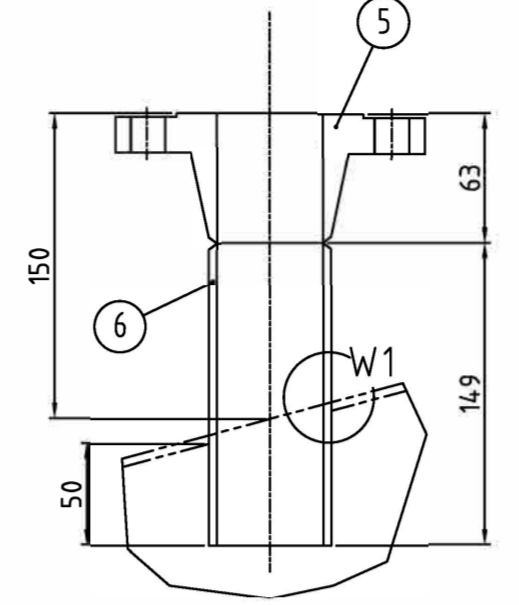
DRAWING TITLE : **NOZZLES DETAIL DRAWING
SILO (SI-541, SI-542, SI-453)**

DOC. NO.:

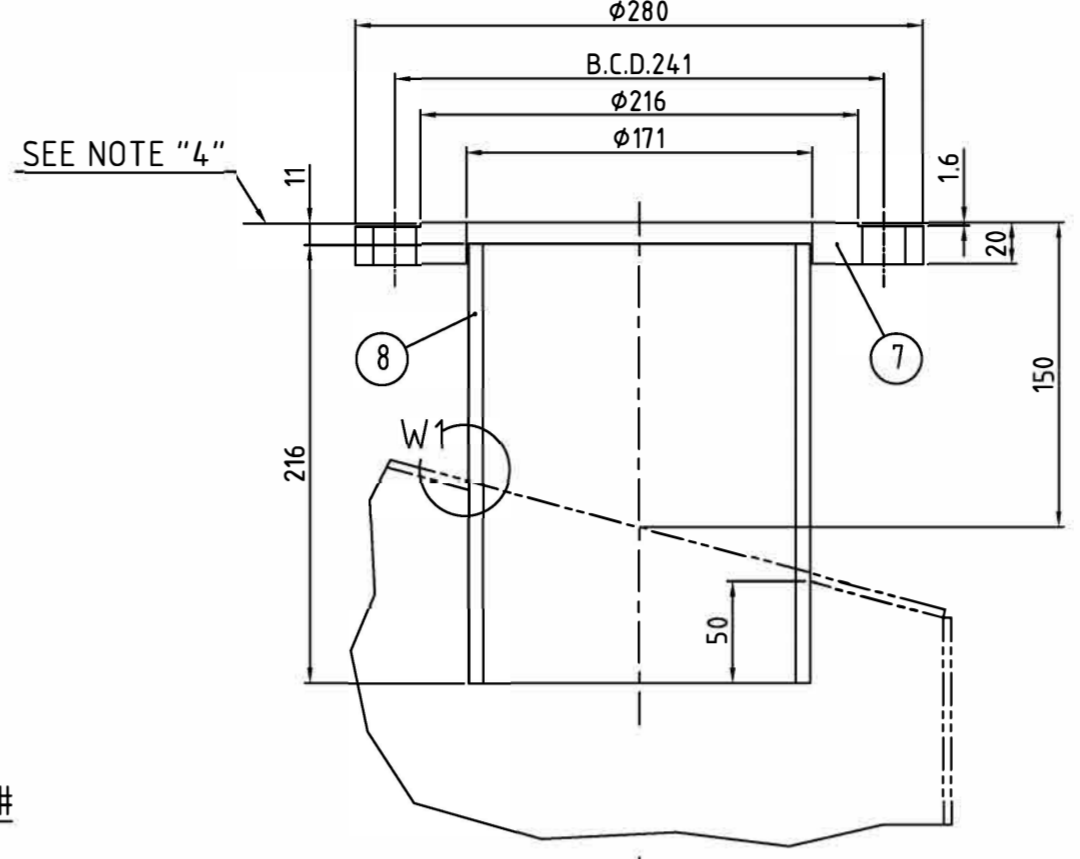
SCALE: AS SHOWN SHEET: 1 OF 1 DWG. SIZE: A3 page 4



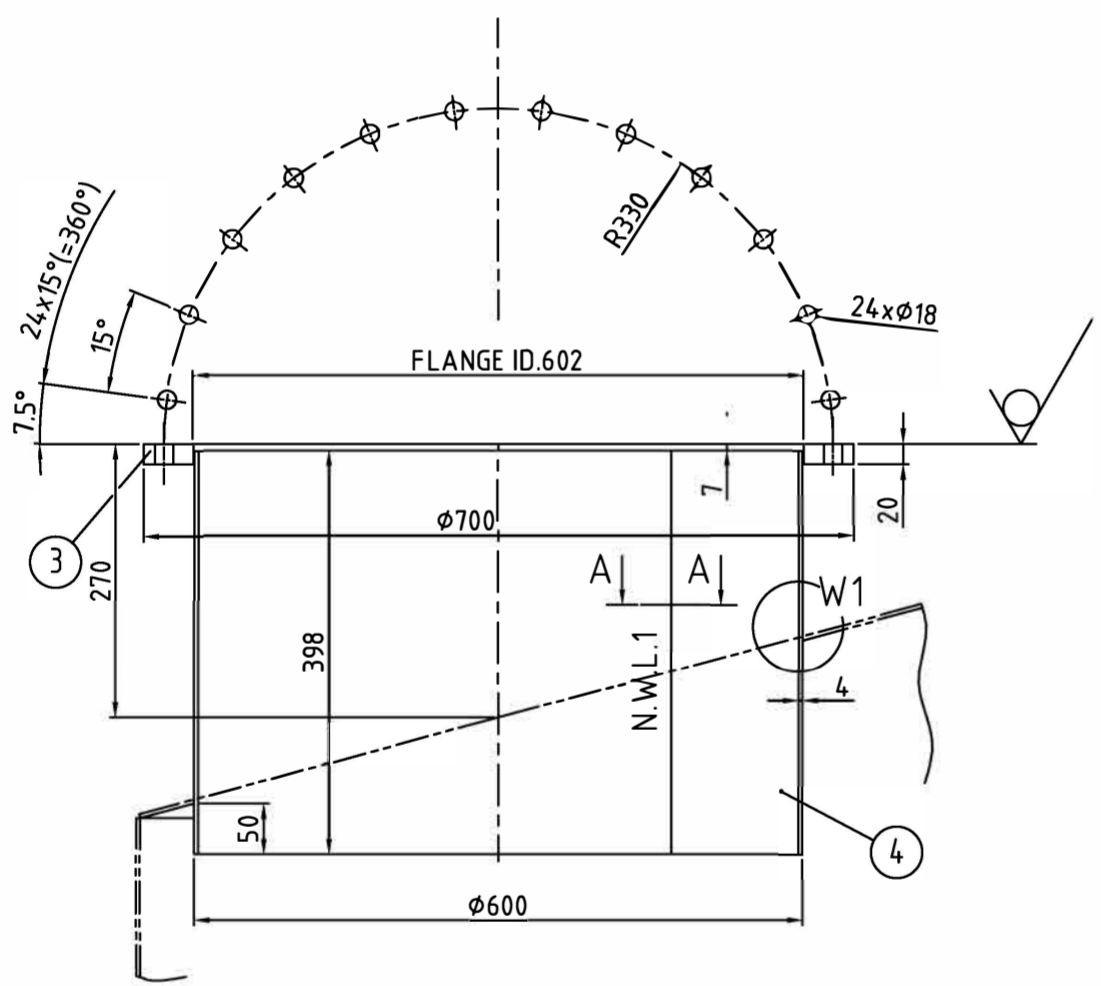
NOZZLE DETAIL "N1 & N2"-4",150#
SCALE : 1/5



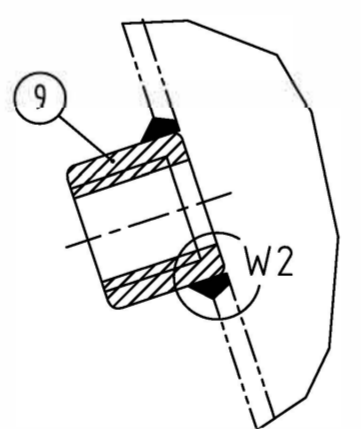
NOZZLE DETAIL "N5, N6, N8"- 2", 150#
SCALE : 1/5



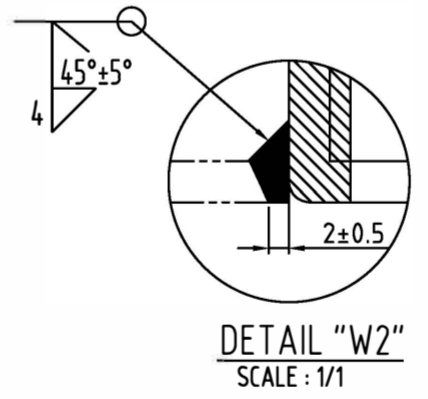
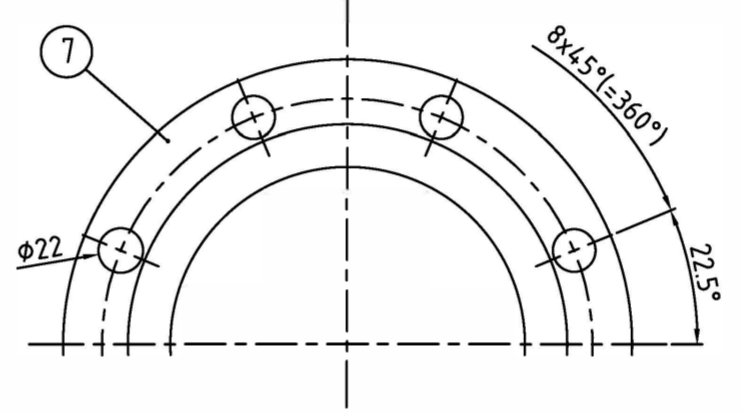
NOZZLE DETAIL "N7"-6"
SCALE : 1/5



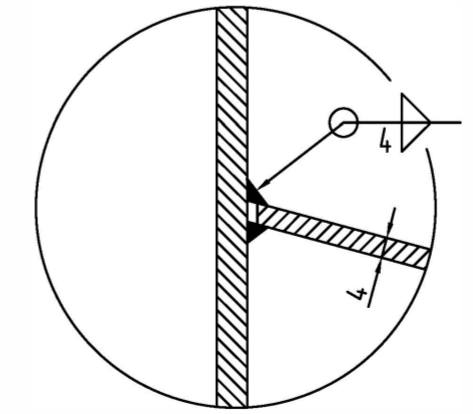
NOZZLE DETAIL "N4"
SCALE : 1/10



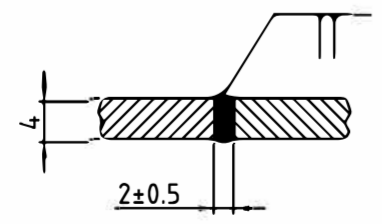
NOZZLE DETAIL "N10-N13"-1/2",3000#
SCALE : 1/2



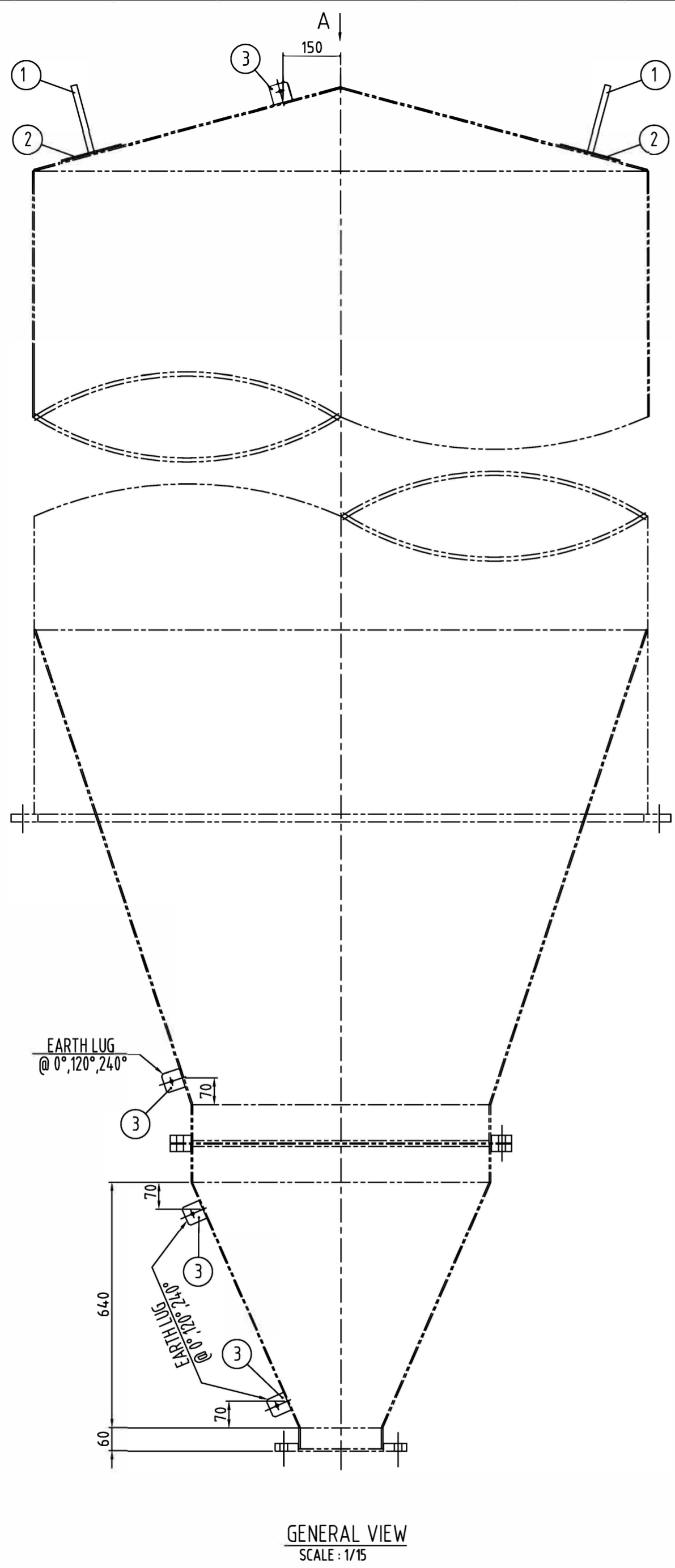
DETAIL "W2"
SCALE : 1/1



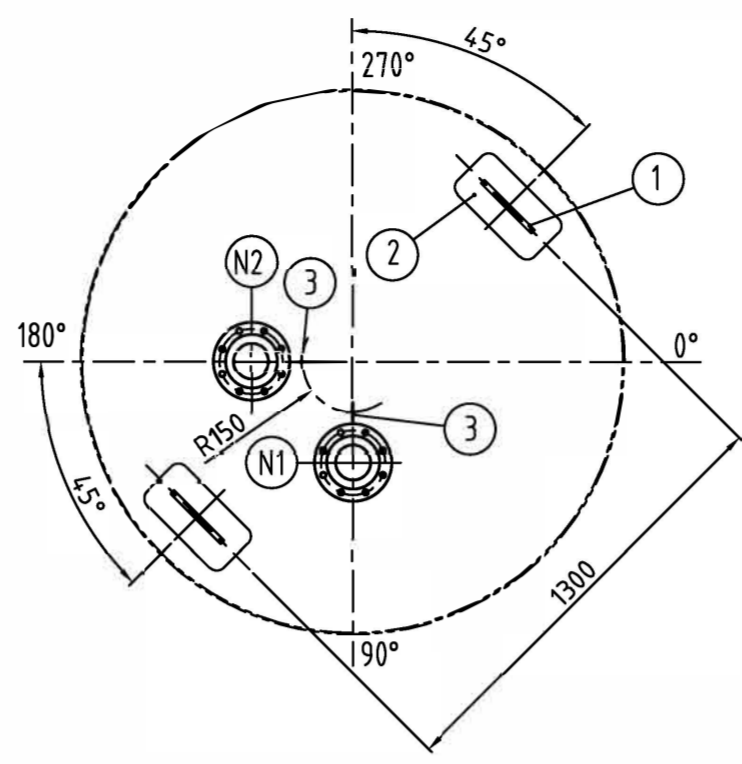
DETAIL "W1"
SCALE : 1/2



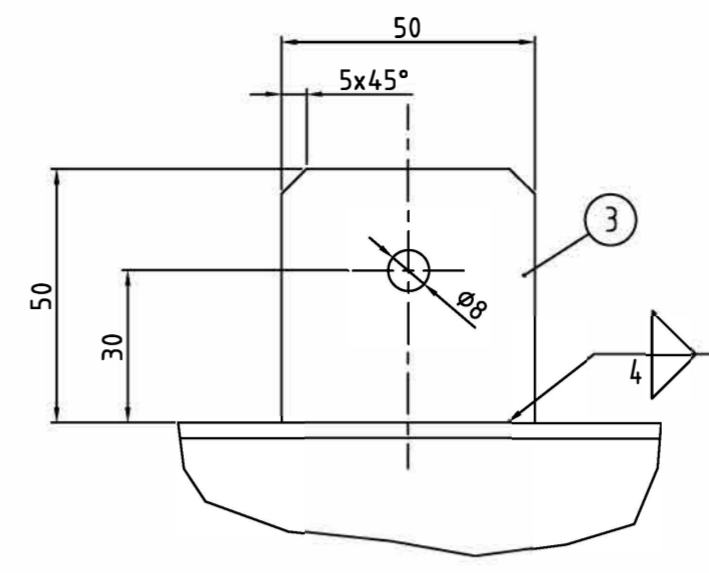
SEC. "A-A" (N.W.L.1)
SCALE : 1/1



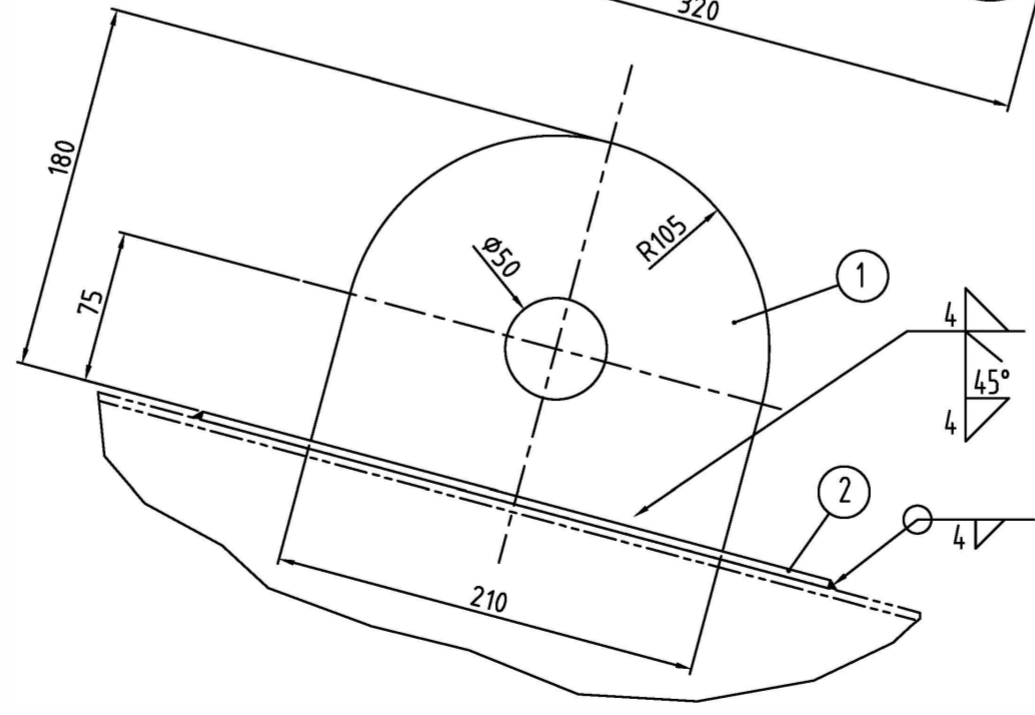
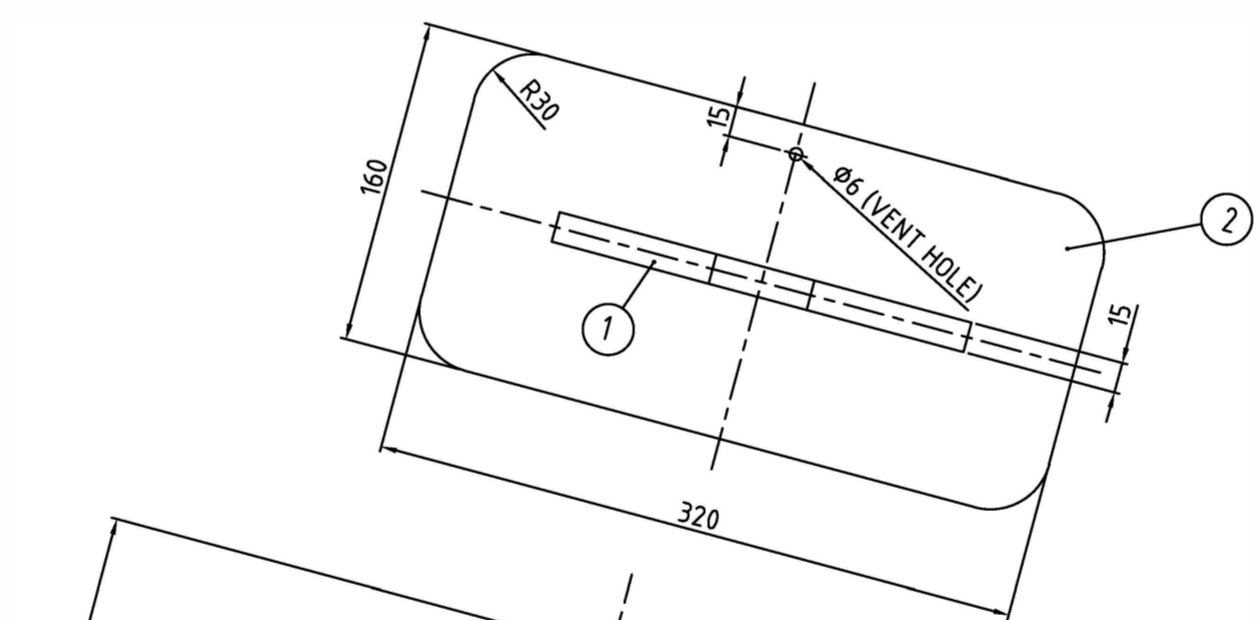
GENERAL VIEW
SCALE : 1/15



VIEW "A"
SCALE : 1/30



EARTHING LUG DETAIL
SCALE : 1/2



LIFTING LUG DETAIL
SCALE : 1/5

REFERENCE DRAWINGS

DOC. TITLE	SHEET NO.	DOC. NO.
GENERAL ARRANGEMENT DRAWING	1 OF 1	VDR-A4-308-002

GENERAL NOTES

- 1-UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN mm .
- 2-ALL VENT HOLES SHALL BE FILLED WITH HEAVY GREASES.

TOTAL WT.: 12.3 Kg

ITEM	PARTS NAME	DIMENSIONS	MATERIAL	QTY.	U.WT. Kg.	T.WT. Kg.
3	EARTH LUG	PL.50x50x4t	SA 240 304L	11	0.1	1.1
2	LIFTING LUG PAD	PL.320x160x4t	SA 240 304L	2	1.6	3.2
1	LIFTING LUG	PL.210x180x15t	SA 240 304L	2	4.0	8.0

PARTS LIST

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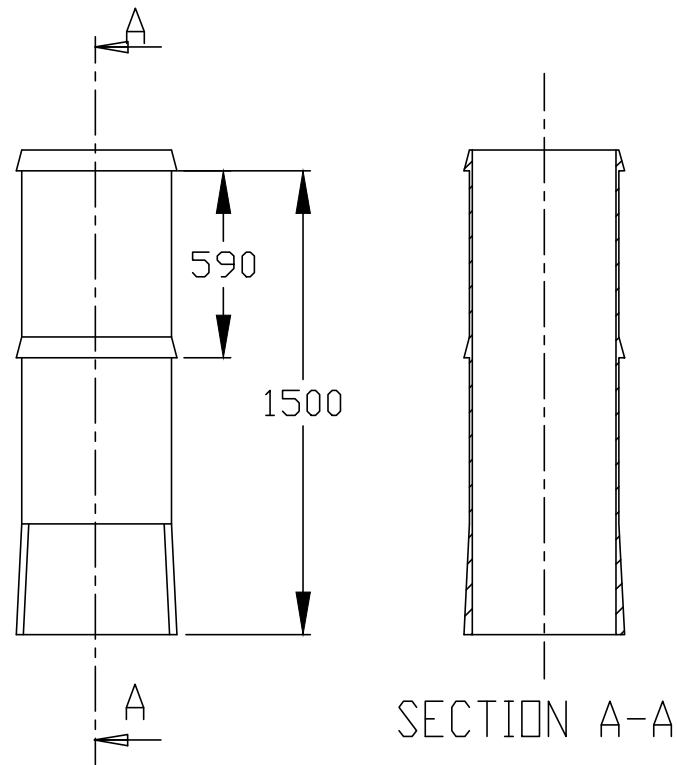
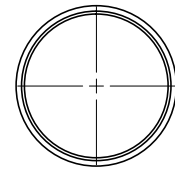
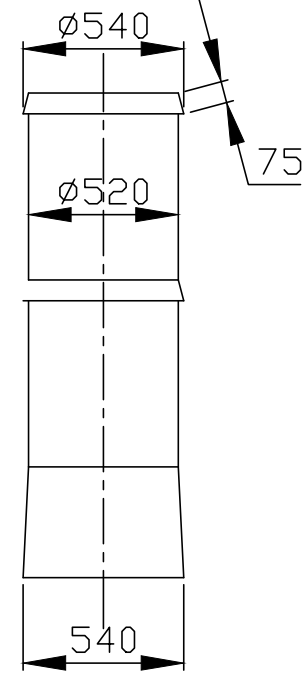


PROJECT TITLE:
PP-PE PILOT PLANT

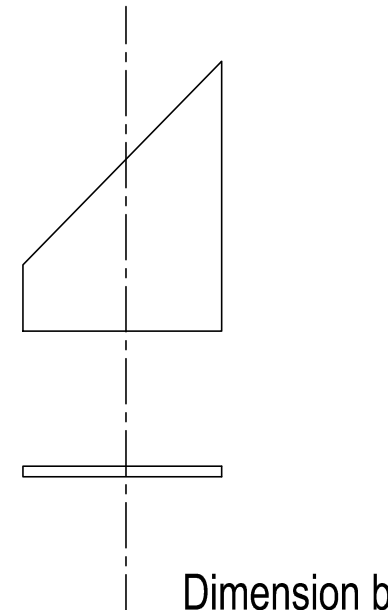
LICENSOR:

PROJECT NUMBER :

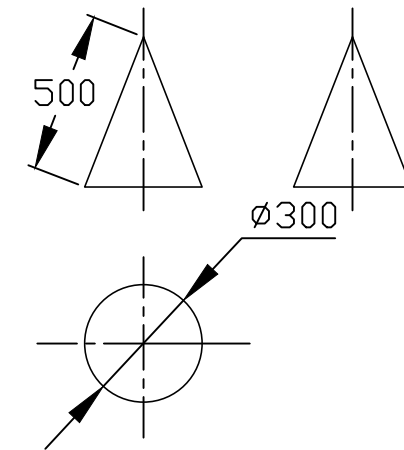
DRAWING TITLE : **EXTERNAL ATTACHMENT DET. DRAWING
SILO (SI-541, SI-542, SI-453)**



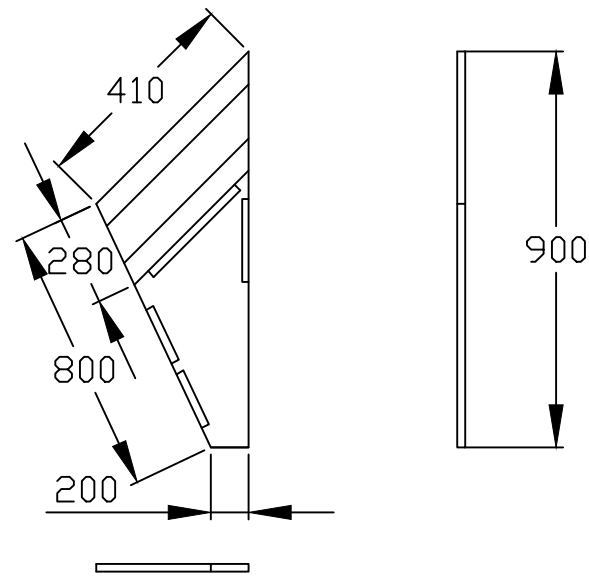
Thickness:4 mm



Dimension by vendor
Support
Thickness:4 mm
Quantity: 4




Strobilus
Thickness:4 mm



Support
Thickness:4 mm
Quantity: 4


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 شرکت ملی صنایع پتروشیمی
 شرکت پژوهش و فناوری پتروشیمی

PROJECT NUMBER :

DRAWING TITLE : **INTERNAL ATTACHMENT DET. DRAWING
SILO (SI-541, SI-542, SI-453)**

DOC. NO.:

SCALE: AS SHOWN | SHEET: 1 OF 1 | DWG. SIZE: A3 | page 6