



INSPECTION REPORT

A. FINAL INSPECTION REPORT: BY RDR

B. Project code : WORPAR
Workshop : EQUIPROMEX
Item : 682X.2
Drawing Nr : ASSY 100190365 Rev04, BODY 100190366 Rev02
Order Nr :
PO nr : 2748
Inspector : RODRIGO DIAZ
Date : 05/06/2022

C. ACCEPTED FOR DELIVERY BY: RDR

PROGRESS : 100%
ESTIMATED READINESS DATE: 05/06/2022

D. GENERAL CONSIDERATIONS

✓ Painting quality : OK
✓ Welding quality : OK
✓ Cleanliness : OK
✓ Material certificates : OK
✓ Packing quality : OK
✓ Handling, securing facilities: OK
✓ Vessel thickness : OK
✓ Dimensions according drawings : OK
✓ Nozzles orientation and projections : OK
✓ Internals attachments :OK

E. TESTING RESULTS : All tests have been completed with satisfactory results.

Type of test	Degree of examination	Results
Full of water shell side	100%	Satisfactory
R.T. Coils	Spot	Satisfactory

This inspection does not in any way discharge the responsibility of the workshop nor impact on the mechanical warranty



Hydrotest coil side	100%	Satisfactory
PMI	SS material.	Satisfactory
Visual inspection	100%	Satisfactory



270 degrees view. External visual inspection satisfactory, base metal and welding final appearance ok.



90 degrees view.

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The logo for Desmet Ballestra, consisting of the company name in a white sans-serif font on a dark blue rectangular background.

Bottom cone view.



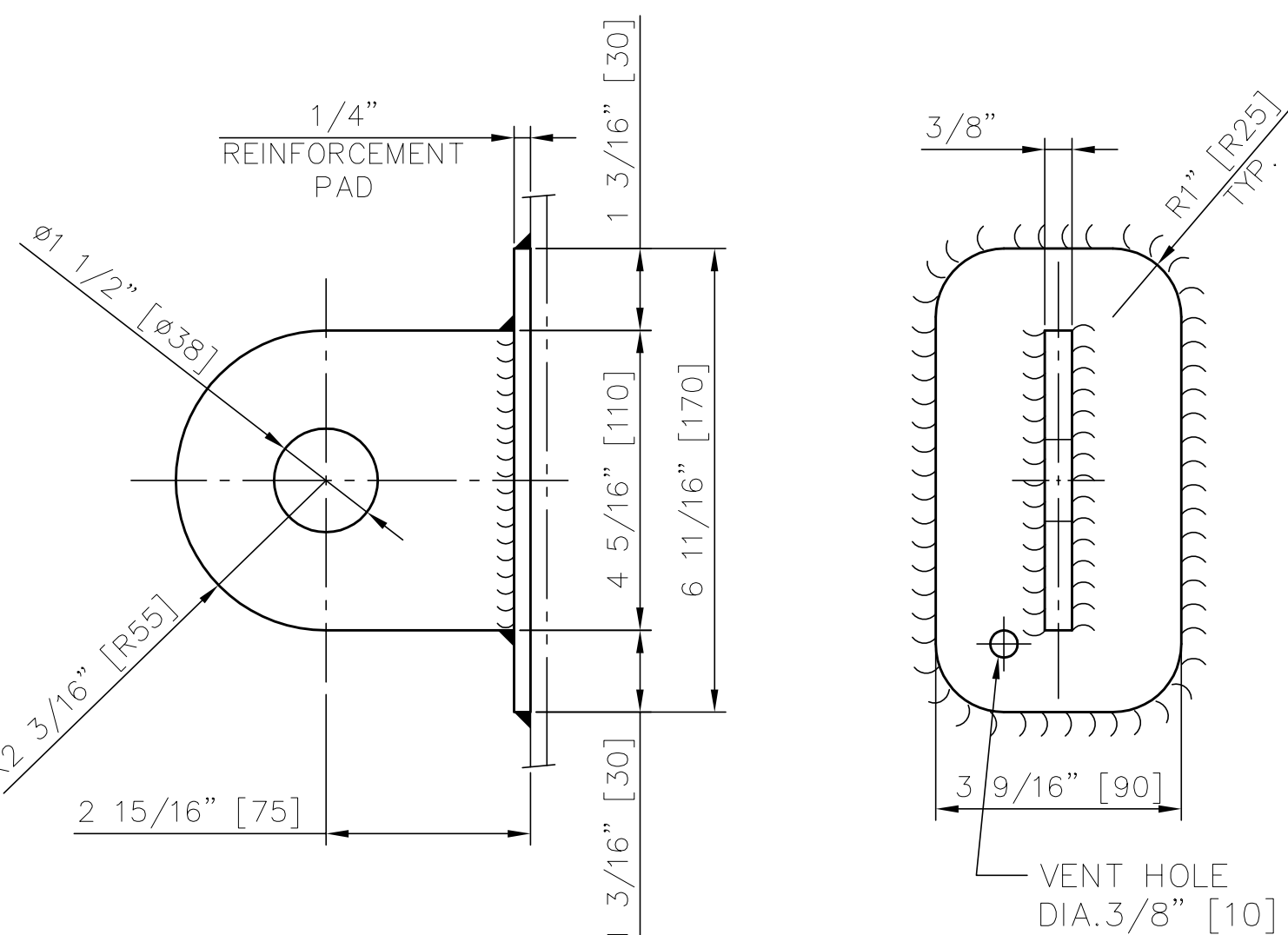
Top view. Shipment preparations are complete.

END REPORT.

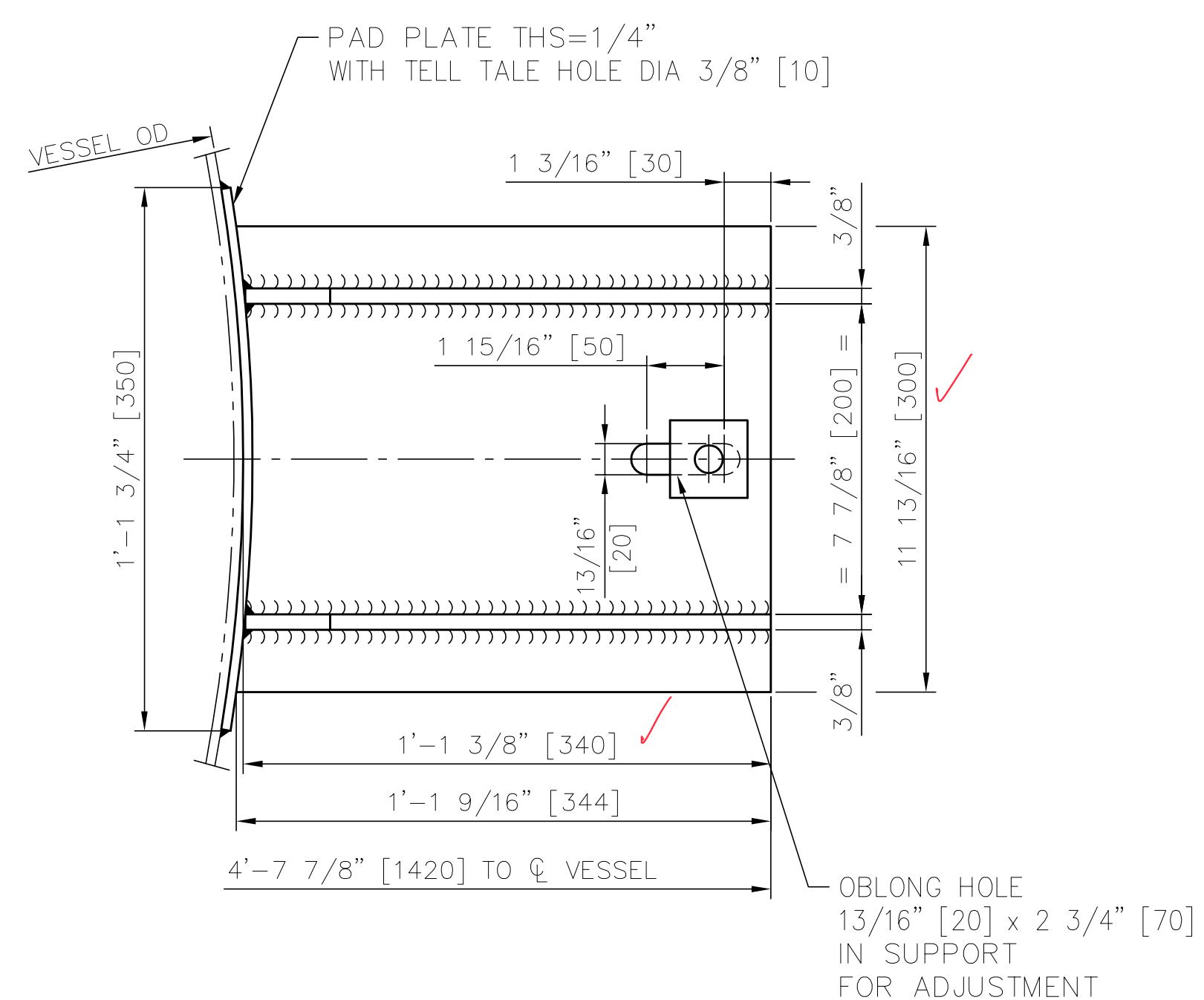
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IF IN DOUBT, ASK – DO NOT SCALE !

FORSEE VERTICAL FREE SPACE OF 7' IN LAYOUT FOR REMOVAL OF FILTER LEAVES.



NOTE: ADJUSTMENT PLATE NEEDS TO BE WIRED TO THE SUPPORT



DIRECTLY RIVETED
TO TOP COVER

POS.	SERVICE	QTY	NOMINAL DIA	FLANGE		SCHED / THK.	REINF. PAD O.D x THK.	PROJ. LENGTH	REMARKS REF. DRG.	WELD TYPE
				RATING	TYPE					
N01	CLEAN WATER INLET	1	1"	✓ CLASS 150	SO-RF	SCH 40S		3'-5"		FW02/NW04
N02	OVERFLOW	1	4"	✓ CLASS 150	SO-RF	SCH 40S		4'-1/2"		FW02/NW04
N03	DRAIN	1	4"	✓ CLASS 150	SO-RF	SCH 40S		3'-9 1/4"		FW02/NW04
N04	STEAM INLET TO INTERNAL COIL	1	3/4"	✓ CLASS 150	SO-RF	SCH 40S		3'		FW02/NW01 NW23
N05	CONDENSATE OUTLET FROM INTERNAL COIL	1	3/4"	✓ CLASS 150	SO-RF	SCH 40S		3'		FW02/NW01 NW23
N06	COMPRESSED AIR INLET	1	3/4"	✓ CLASS 150	SO-RF	SCH 40S		4'-1/2"		FW02/NW04
N07	CAUSTIC SODA INLET	1	1/2"	✓ CLASS 150	SO-RF	SCH 40S		4'-1/2"		FW02/NW04
N08	DIRECT STEAM INLET	1	1/2"	✓ CLASS 150	SO-RF	SCH 40S		1'-1 3/4"		FW02/NW04
T01	SEAT FOR TI	1	3/4"NPT	✓ CLASS 150	HALF COUPLING					NW04

LT1-LT2	LIFTING TRUNNIONS	2						SEE DETAIL	
TL1	TAILING LUG	1						SEE DETAIL	
LL1	LIFTING LUG (COVER)	1						SEE DETAIL	
SL1-SL4	SUPPORTS	4						SEE DETAIL	
NP1	NAMEPLATE	1						00190368	
SAF1	WARNING PLATE TYPE-10	1						00430535	

ITEM	MATERIAL	CERT	ITEM	MATERIAL	CERT	
SHELL/CONE/TOP COVER	SA-240 304	✓	LIFTING	PAD PLATE	SA-240 304	✓
NOZZLES NECKS	PIPE/FLAT TP304	✓	TRUNNIONS	PIPE/PLATE	SA-106 B/SA-36	
NOZZLES FLANGES	SA-182 F304	✓	TAILING LUG	PAD PLATE	SA-240 304	
INTERNAL COIL	SA-312 TP304	✓		PIPE/PLATE	SA-106 B/SA-36	
INTERNAL COIL FLANGES	SA-182 F304	✓	INTERNALS		SA-240 304/SA-312 TP304	
SUPPORTS	PAD PLATE	✓	SEAT FOR TI		SA-403 WP304	
	PLATE/FLAT	✓	SUPPORT FOR NAMEPLATE		SA-240 304	
GASKET	GARLOCK 3500		EXTERNAL BOLTS & NUTS (UNC)		SA-193 B7/SA-194 2H	

EQUIPMENT			SHELL	INTERNAL COIL
PRESSURE	OPERATING	barg	ATM	3 (43.5 psig)
	DESIGN	barg	ATM	4 (58 psig)
	TEST	barg	FILL WITH WATER <i>OK</i>	5.2 (75.4 psig) <i>OK</i>
TEMPERATURE	OPERATING	°C	143 (149° F)	143 (289.4° F)
	DESIGN	°C	100 (212° F)	193.33 (380° F)
	TEST	°C	AMBIENT	AMBIENT
MIN. DESIGN METAL TEMP.		°C	-10 (14° F)	
CORROSION	STAINLESS STEEL	mm	0	0
ALLOWANCE	CARBON STEEL	mm	1.6 (1/16")	1.6 (1/16")
RADIOGRAPHY			NONE	SPOT <i>OK</i>
MIN. JOINT EFFICIENCY			0.7	0.85
HEAT TREATMENT			NONE	
DESIGN CODE			ASME SEC. VIII DIV.1 Ed:2019	
WIND / SEISMIC DESIGN			101 mph / SDS = 1.077g, SD1 = 0.664g (ASCE 7-16)	
FLUID			HOT WATER AND CAUSTIC SODA	STEAM
FLUID GROUP			NA	NA
PED 2014/68/EU			NA	
ASME "U" STAMP			NO	
WEIGHT	EMPTY	kg	1720 (3791.95 lbs)	
	ASSEMBLED	kg	1720 (3791.95 lbs)	
	INSULATION	kg	144 (317.46 lbs)	
	OPERATING	kg	13535.8 (29848 lbs)	
	FULL OF WATER	kg	12168 (26825.8 lbs)	
VOLUME		m ³	10.3 (363.74 ft3)	0.0051 (0.18 ft3)
HEAT TRANSFER AREA		m ²		1.1 (11.84 ft2)
INSULATION	SURFACE AREA / THK.	m ² /mm	24 / 50 (258.33 ft2 / 2")	
INSPECTED BY			DESMET BALLESTRA	

NOTE:

1. OPERATING FLUID DENSITY = 982 kg/m³ (61.3 lbs/ft³).
2. FILTER ELEMENTS WEIGHT ARE INCLUDED IN OPERATING WEIGHT.

003	03.02.2022	NOTE ADDED AND OPERATING WEIGHT UPDATED.			NSB	
002	23.09.2021	PLAN-ORIENTATION & COIL AREA AND VOLUME UPDATED AS MARKED			KSM	
001	30.07.2021	NORTH DIRECTION IN PLAN VIEW AND THICKNESS UPDATED AS MARKED			KSM	
REV	DATE	DESCRIPTION OF MODIFICATION		NBR OF MOD	BY	
Desmet Ballestra Group			DOCUMENT TYPE	ASSY		
			PROJECT DESCRIPTION	WORPAR		
ITEM NBR DISPOSITION	682X,2 (19-D-872)		SECD	PKK	SCALE	FORMAT
DOCUMENT DESCRIPTION	FILTER ELEMENT CLEANING TABLE		PROC.E	GVK		A1
			PROJ.M	JCG		
			DOM	PRA	AUTHOR	SHN
			DATE	DRAWING NUMBER		REVISION
V=10.3-D=2160-H=2500-S=1			24.04.2021	100190365		003

IF IN DOUBT, ASK 1 CAD DRWG
DO NOT SCALE ! DO NOT MODIFY