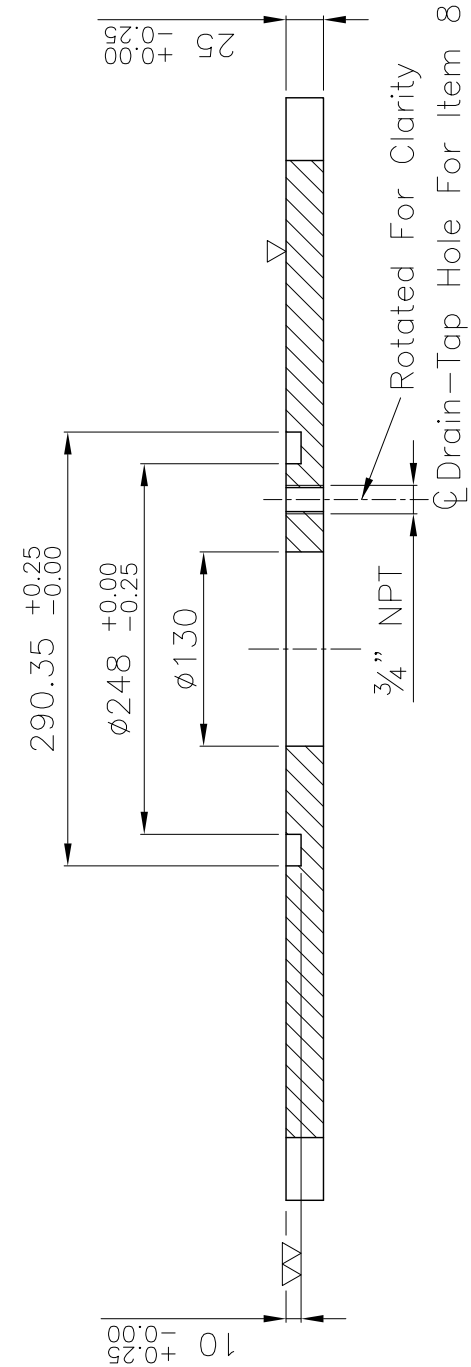
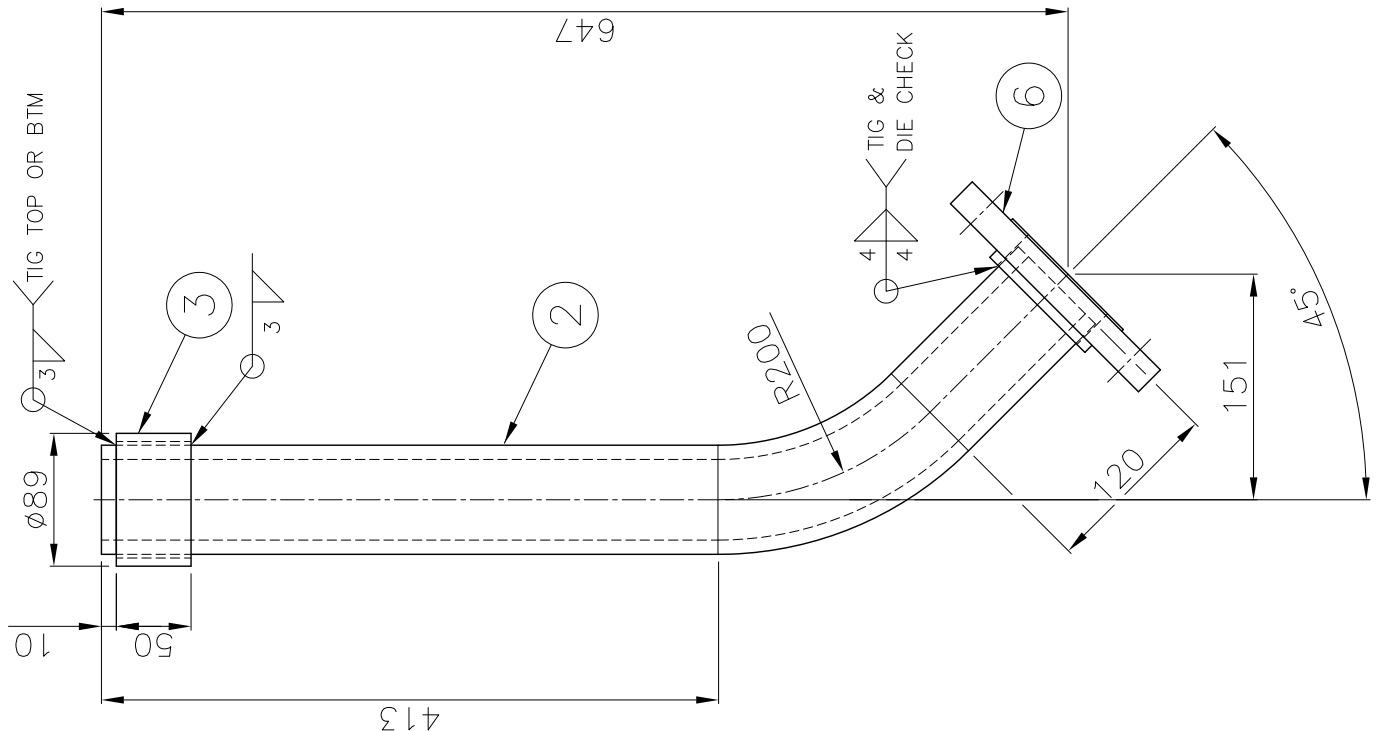


BILL OF MATERIAL												
FOR: REFORMER TUBE—FEED GAS INLET FLANGE												
DWG: F2-103												
ITEM	QTY	DESCRIPTION	WEIGHT (kg)		MAT'L	REMARKS						
			UNIT	TOTAL								
DETAIL F2-103-A												
1	1	PL 25 x 508 x738	51	51	St37-2							
2	1	PIPE 2 1/2" Sch. 160, L=695	6	6	310S	ASME B36.19M						
3	1	PIPE 3" Sch. 160, L=50	0.56	0.56	310S	ASME B36.19M						
4	2	PIPE 3 1/2", Sch. 10, L=300	2.2	4.4	A53 Gr. B	ASME B36.10M						
5	2	PL 6 x94 O.D.x42 I.D.	0.3	0.6	St37-2							
6	1	FLANGE 2 1/2", 150# R.F. S.O	3.6	3.6	X182-F304	ASME B16.5						
7	1	PL 4 x 140 I.D. x 76 I.D. x 35 LG.	1	1	A240-310S							
8	1	HALF COUPLING & PLUG 3/4"—NPT #3000	—	—	A-105	ASME B16.11						

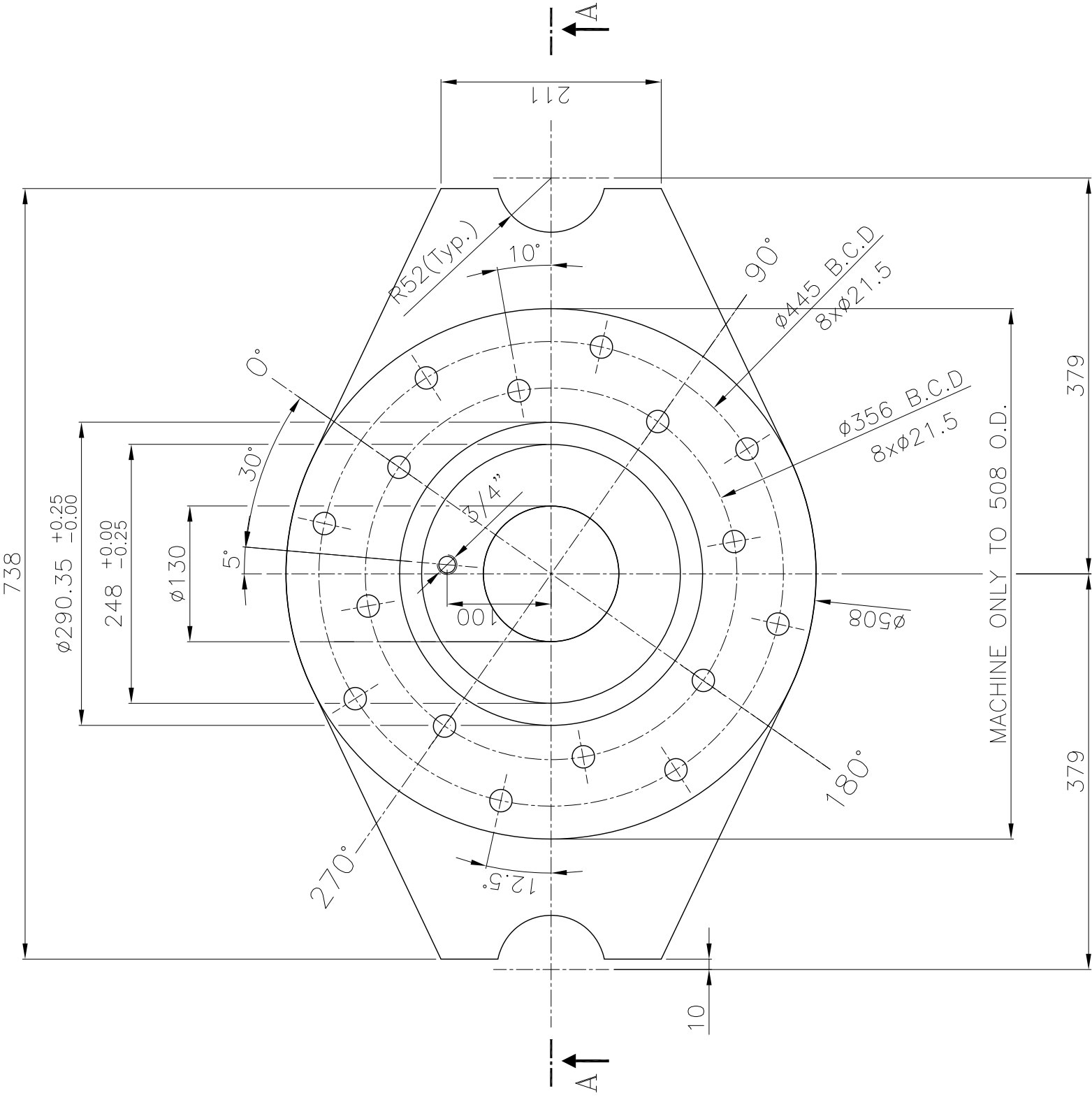
20-3000# THRD. SQ. HD. PLUG

TOTAL APPROX. NET WEIGHT - THIS DRAWING ~67.2 Kg

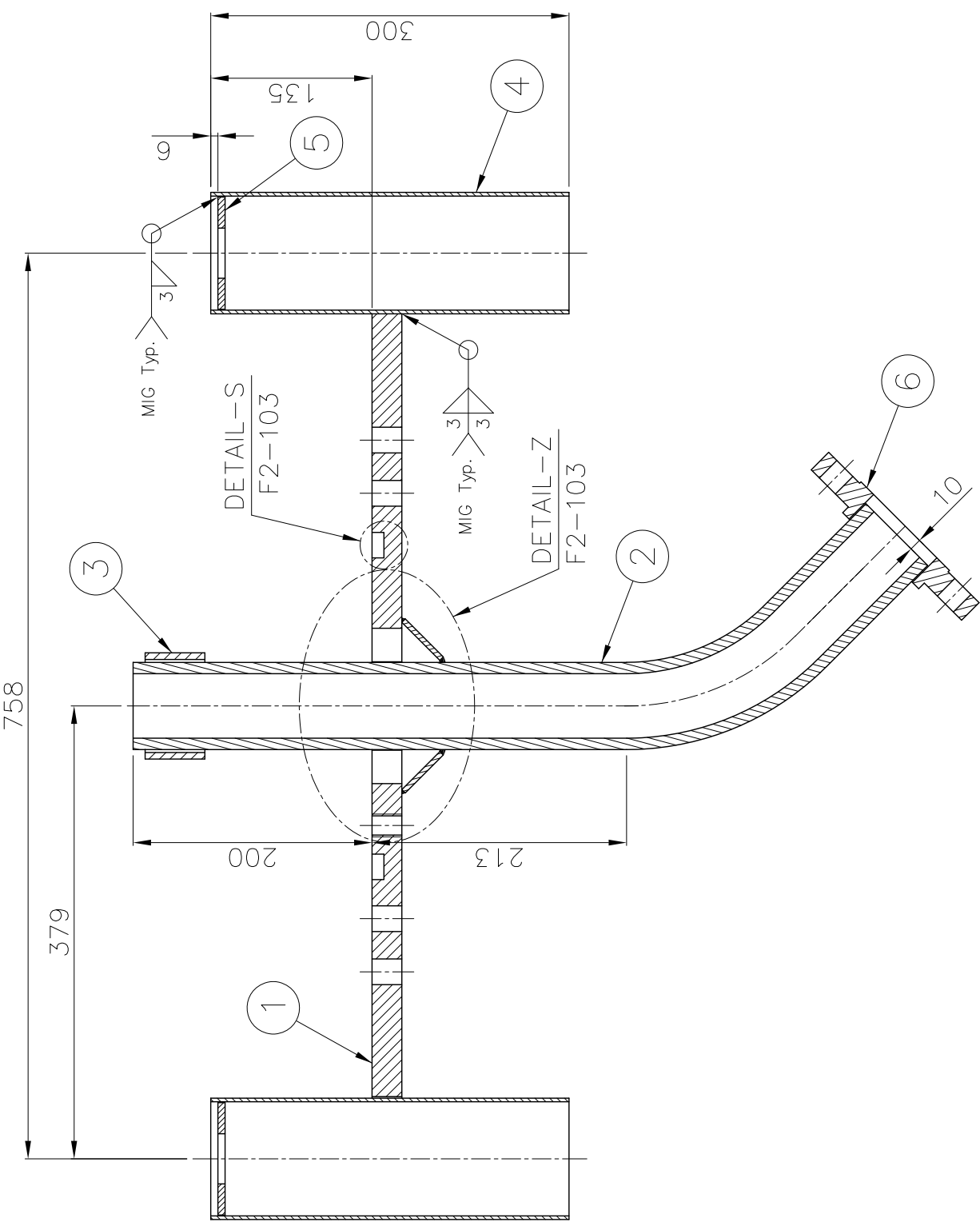
TOTAL APPROX. NET WEIGHT - 540 ASSY'S ~36288 Kg



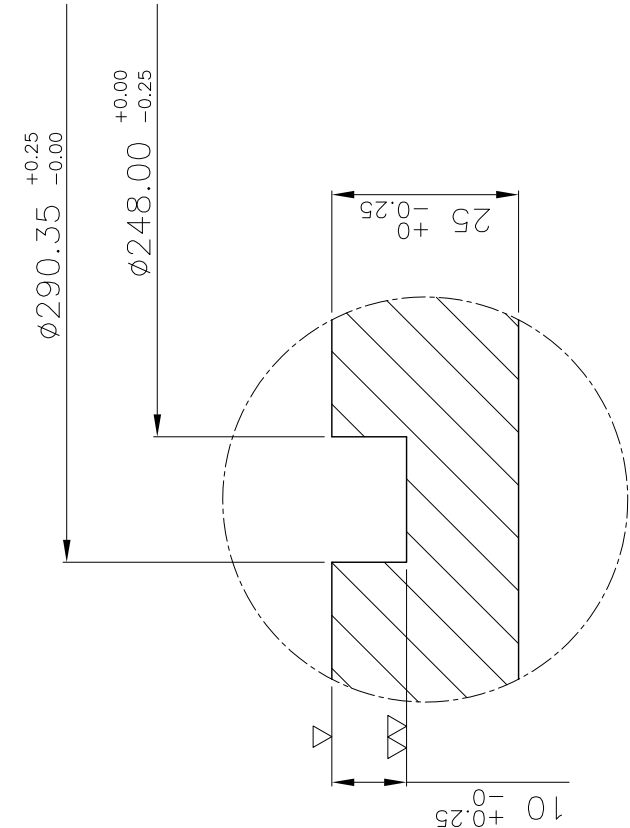
SECTION "A-A"
SCALE 1:5 F2-103



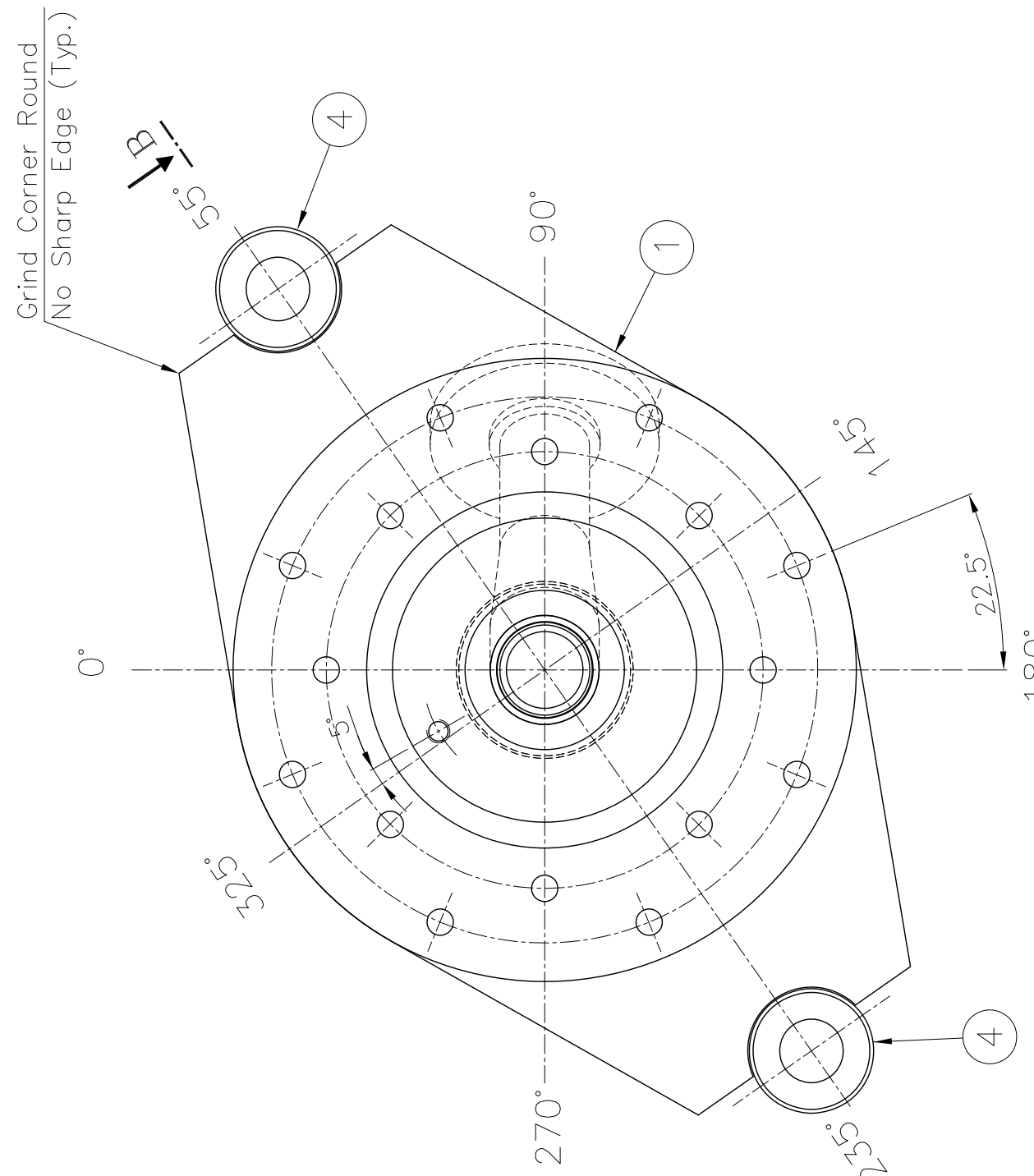
DETAIL ITEM 01
SCALE 1:5 F2-103



SECTION B-B (DETAIL F2-103-A)
SCALE 1:5 F2-100



DETAIL-S
SCALE 1:1 F2-103



Feed Gas Inlet Flange
SCALE 1:5 F2-103

NOTES:

1. ALL SURFACES TO BE WELDED SHALL BE CLEAN AND FREE FROM MILL SCALE, FLAKE RUST, OR PITTING.
2. ALL WELDS TO BE GAS-TIGHT, CONTINUOUS, AND TO DEVELOP FULL STRENGTH OF CONNECTING MEMBERS, UNLESS NOTED OTHERWISE.
3. ALL ALLOY/ALLOY AND ALLOY/MILD STEEL WELDS TO BE MADE WITH GTAW PROCESS. USING INCONEL FILLER METAL E309L-16 & E316L & E308L.
4. ALL EDGES TO BE BROKEN UNLESS NOTED OTHERWISE.
5. DELETED
6. ALL EXPOSED CARBON STEEL SHALL BE PREPARED. PRIMED COATED. AND FINISHED PAINTED PER SPECIFICATION.


REFERENCE DRAWINGS:

F2-100 REFORMER TUBE ASSEMBLY

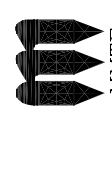
2	Jun. 2019	T.O-158.170.186	AS BUILT	F.K.A. Co./F.K.A. Co.	F.K.A. Co.
3	Oct. 2016	To. 116	ISSUED FOR CONSTRUCTION	AFRADI FANPOUR RASTEGAR	
2	Oct. 2015	SIZE OF REFORMER TUBE CHANGED	ISSUED FOR CONSTRUCTION	AFRADI FANPOUR RASTEGAR	
1	Jan. 2014		ISSUED FOR CONSTRUCTION	MUSAVI ABEDI M.A.EHVAE	

Project:	DATE	DESCRIPTION	PURPOSE OF ISSUE	PREPARE	CHECK	APPROVE
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KOWSAR GISD MEGA MODULE PROJECT



شرکت گیس د کوارس
GISD Co.



شرکت مهندسی معدنی و متالورژیکی
MINES & METALS TECHNOLOGICAL ENGINEERING CO.

Client's Project		Project Code	Main Contractor	Area Code	Plant Group	Equipment Code	Document Type	Eng. Discipline	Serial No.
GISD		7-2	119	1008	7	RM	04	M	103
SIGNATURE		DATE		designation:					
DESIGNED		MMTE		Jan. 2014					
PREPARED		MUSAVI		Jan. 2014					
CHECKED		ABEDI		Jan. 2014					
APPROVED		M.A.EHVAE		Jan. 2014					

UNLESS OTHERWISE SPECIFIED

(S)	3RD ANGLE PROJECTION
SURFACE FINISH DIN 3141 RANGE 2	
TOLERANCES & FITS: MACHINED SURFACES DIN 7168"MED" WELDED CONSTRUCTION ACC. TO "AWS"	BREAK ALL MACHINED SHARP EDGES BY 1x45° ALL DIM IN MILLIMETER