



OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT (LOCAL), ISLAMABAD
SCHEDULE OF REQUIREMENT

Material : **SUPPLY,INSTALLATION,COMMISSIONING OF RADIANT COILS
INCLUDING MANIFOLD OF REGENERATION GAS HEATER E-
9901**

Due Date:

Bid Bond Value : RS.170,000/-
Attachment(if any) : YES

Tender Enquiry No: **PROC/LF/PT/17097/17**

EVALUATION WILL BE CARRIED OUT ON FULL

Sr No	Description	Quantity	Make/Brand offered	Unit	Unit Price (PKR) Inclusive Of All Taxes Except GST	Unit Price (PKR) Inclusive of GST	Total Price (PKR) Inclusive of GST	Delivery Period Offered	deviation from Tender Spec.If Any
1	COILS RADIANT INCLUDING MANIFOLDS. JASSY REGENERATION GAS HEATER, TAG NO.E-9901 INSTALLED AT QADIR PUR.AS Per ATTACHED TOR.	1		Number					

Special Note:- The prospective bidders also download the master set of Tender Document

- The prospective bidders may keep in touch with OGDCL web site for downloading the clarifications/amendments (if any) issued by OGDCL.
- DELIVERY PERIOD AT CLAUSE # 22 INCLUDES DISMANTLING OF EXISTING COILS.PAYMENT TERMS IS AFTER DELIVERY & SUCCESSFUL COMMISSIONING OF RADIANT COILS.

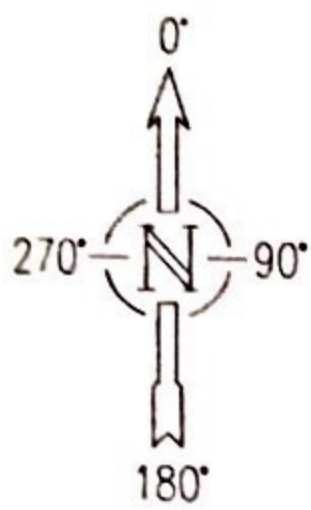
Discount (if any) shall only be entertained on Schedule of Requirement of Bidding Document (Financial Proposal). If the discount is mentioned elsewhere in the bid, the same shall not be entertained.

TENDER # PROC/LF/PT/P&P/QP-17097/17

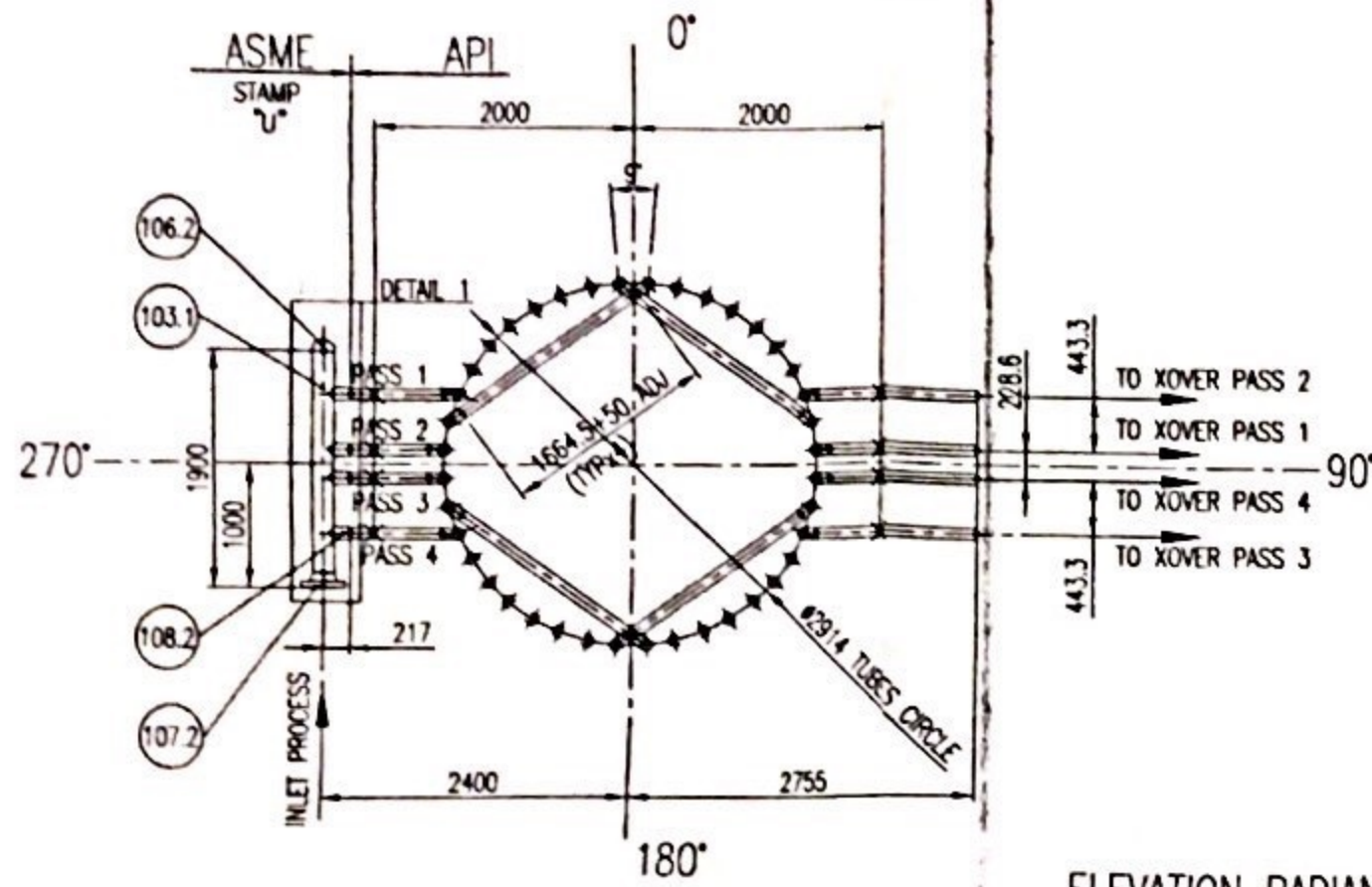
SCOPE / TERMS AND CONDITIONS FOR FABRICATION AND INSTALLATION OF RADIANT COILS INCLUDING MANIFOLD OF REGENERATION GAS HEATER E-9901 AT QADIRPUR PLANT

1. All the specifications / dimensions should be as per drawing No. 00-FD-401 (Radiant Coils) of regeneration gas heater at PT-2.
2. The total scope covers fabrication, supply & installation (including all material) of one complete set of radiant coils including manifold. **Dismantling of existing coils, arrangements for dismantling including scaffolding, Insulation removal/ reinstallation, crane arrangement etc will be in bidder scope.**
3. Material specifications: strictly as per drawing.
4. X-Ray / Radiography: 100% (It is mentioned as 100% in drawings for cross over & 20 % for coils but 20% should also be considered as 100 %).
5. Applicable code: ASME VIII div. 1 2001 edition, API 530, ANSI B16-25/1996.
6. Only U-stamp & R-Stamp authorized manufacturers will be considered for technical evaluation, valid U-Stamp/R-Stamp Certificate to be provided along with technical bid.
7. R-stamp/ U-stamp is required as mentioned in the drawing.
8. Bidder shall submit the quality assurance plan along with technical bid.
9. Bidder can visit Qadirpur gas field for further understanding / clarification (if required) with the prior approval from OGDCL before submission of the technical bid.
10. OGDCL will provide food & residential camp facility for contractor manpower during installation activities as per their grade. Arrangement for Shifting of Manpower from camp to plant is in bidder scope.
11. OGDCL will provide raw water & electricity at site for the installation activities. Plant crane, Welding Machines etc. will not be provided for any dismantling/ Installation activity.
12. Bidder shall be responsible transportation of all coils, cross over, manifold to Qadirpur after its shop fabrication for installation activities.
13. Bidder shall arrange all consumables, tools, equipment & manpower required for installation activities as per scope.
14. Stage inspection (after shipment of material) and during fabrication will be carried out at manufacturer works by OGDCL representative (as per mutually agreed quality inspection plan).
15. Bidder will arrange hydro-test after completion of field welds at Qadirpur plant.

- 16.** All the BOQ mentioned in the drawings should be included in the scope of work / supply, bidder shall arrange all material as mentioned in the drawing required for fabrication of radiant coils, & manifold etc.
- 17.** The tube support gussets as per drawing no. 00-FD-401, item No. 601.1.2 should be fabricated & welded at site keeping view the actual position / dimensions as its fabrication detail is not available at drawing.
- 18.** Bidder will be responsible for the welding / installation of field weld at Qadirpur after welding all shop weld joints at its works.
- 19.** Bidder shall arrange NDT/Radiography/ X-ray at Qadirpur plant at its own for the field weld joints.
- 20.** Bidder shall submit all NDT reports along with supply for inspection / acceptance of the coils, manifold etc.
- 21.** One pass is developed in the drawings for radiant coils whereas bidder will provide all passes as mentioned in the drawing.
- 22.** The delivery period is 04 Month after issuance of Purchase order. It include the Material Dismantling/ Procurement/ Fabrication at contractor Site/ field fabrication / welding / installation / testing activities/ Handing over to OGDCL.
- 23.** Arrangement of Hydrottest will in bidder scope.
- 24.** 01 extra set of Gasket to be provided by the bidder.
- 25.** Bidder should clarify all technical detail, drawings before submission of the bid, as no extension in delivery period will be allowed due to any technical clarification of drawings, size, specification etc after issuance of purchase order.
- 26.** Bidder should have experience of 10 years for fabrication of high pressure vessels / heat exchangers and must submit a list of his clients to which equipment of similar nature has been supplied most recently. It should clearly mentioned the detail of product / equipment & year of supply.
- 27.** All material should be of American / European / Japanese origin (valid with ISO 9001 certifications) and MTC to be provided during fabrication phase.
- 28.** Guarantee / warrantee of the equipment for a period of 01 year after being taken into service or 18 months after installation at site, whichever completes earlier.
- 29.** Bidder should submit the as built drawings (03 Sets) in hard and soft form with dozier. Also submit the RAR form sealed and duly signed by authorized ASME inspector.
- 30.** Bidder should submit the execution plan with the technical bid on PRIMAVERA. Execution plan will be considered for technical evaluation.
- 31.** Make of each Item (e.g. Tubes, Bends, Flanges, Gaskets, etc.) should be defined in the Technical Bid.
- 32.** All the above terms & conditions should be clearly confirmed in technical bid and any non-compliance with the above terms and conditions should also be clearly mentioned in the bid.



RADIANT COIL
(PLAN VIEW FOR 1 HEATER)



INLET RAD. MANIFOLD

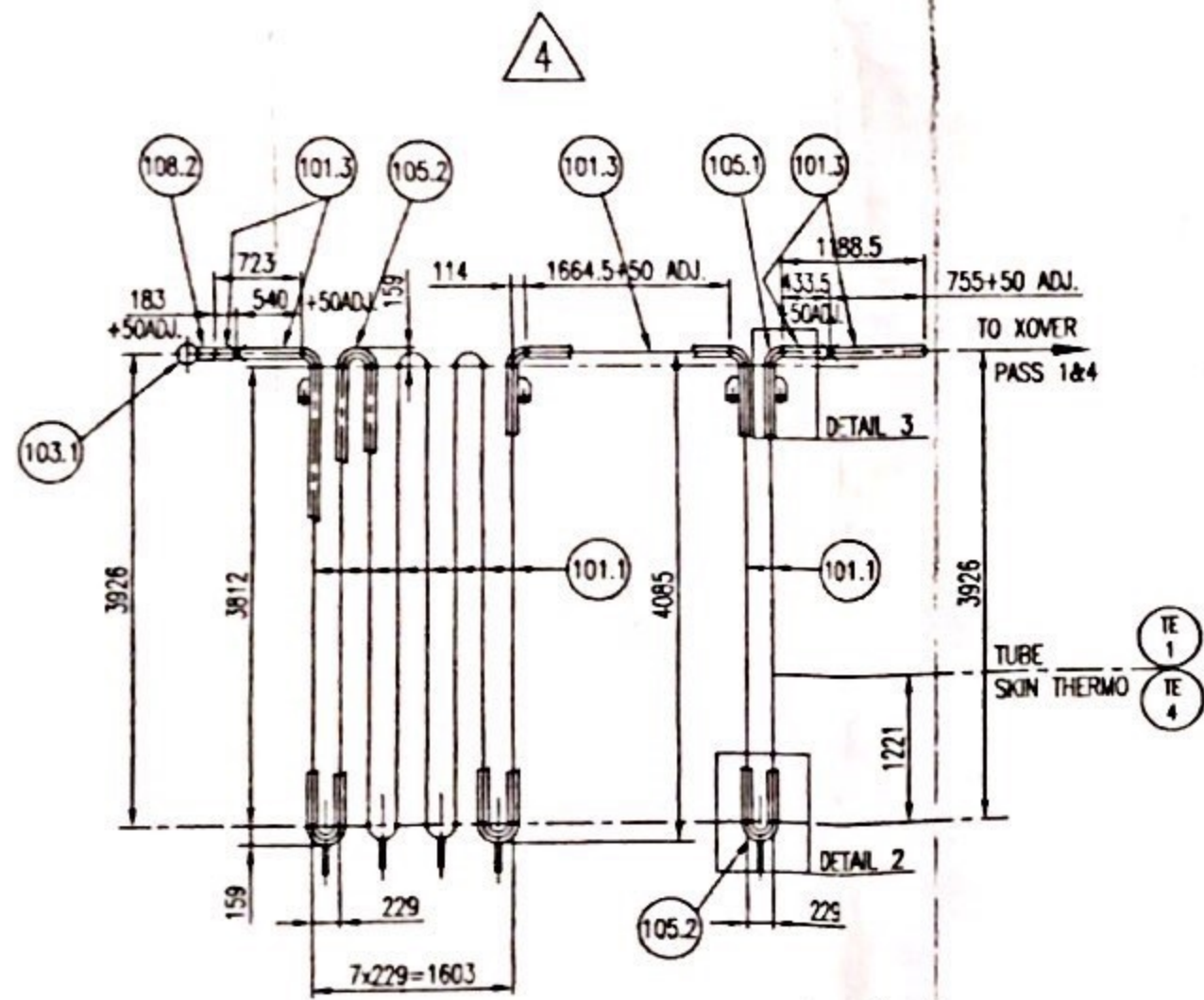
DESIGN DATA		
CODE: ASME VIII (1) - 2001 EDITION		
BEVELS: ANSI B 16-25/1996	DESIGN TEMP: 349 °C (660° F) MCMT: -25.3 °C (-13.54° F)	OFFICIAL TEST PRESSURE: 15.3 MPa (2217.4 PSI)
CORROSION ALLOWANCE: 3.175mm (0.125")	DESIGN PRESSURE: 6.55 MPa (950 PSI)	FABRICATOR TEST PRESSURE: 15.3 MPa (2217.4 PSI)
HEAT TREATMENT: NO		
X RAY: 20%		NATURE OF TEST: HYDRAULIC
CAPACITY: 32 LITERS (7 GAL)		

DESIGN DATA		
CODE / API 530		
BEVELS: ANSI B 16-25/1996	DESIGN TEMP: 465° C (868° F)	OFFICIAL TEST PRESSURE: 15.3 MPa (2217.4 PSI)
CORROSION ALLOWANCE: 3.2 mm (0.126")	DESIGN PRESSURE: 6.552 MPa (950 PSI)	FABRICATOR TEST PRESSURE: 15.3 MPa (2217.4 PSI)
HEAT TREATMENT: NO		
X RAY: 20%		NATURE OF TEST: HYDRAULIC
COIL CAPACITY	PER PASS: 197 LITERS (43.4 GAL)	COMPLETE COIL: 788 LITERS (173.4 GAL)

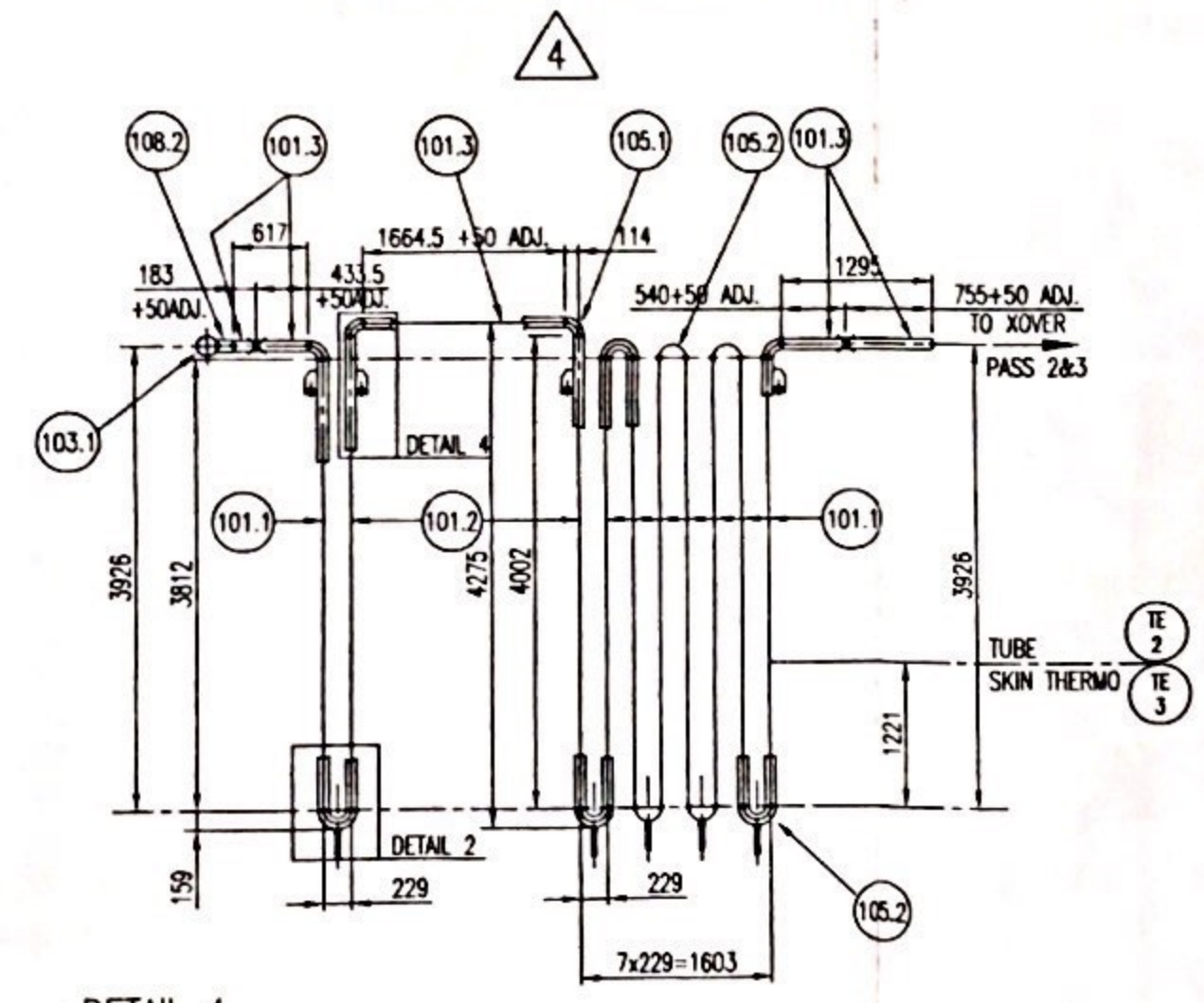
BILL OF MATERIAL FOR 1 HEATER						
ITEM	DESIGNATION	LENGTH	QUANTITY		MATERIAL	OBSERVATIONS
			CONV.	CROSS-OVER RAD.		
101.1	TUBE O.D. 88.9 AV.WALL THK. 7.62	3812	-	36	ASTM A 106 M GR. B	INT. RADIANT
101.2	TUBE O.D. 88.9 AV.WALL THK. 7.62	4002	-	4	ASTM A 106 M GR. B	INT. RADIANT
101.3	TUBE O.D. 88.9 AV.WALL THK. 7.62	12000	-	1	ASTM A 106 M GR. B	INT. COVER OUT. RAD.
103.1	TUBE O.D. 168.3 AV.WALL THK. 10.97	3000	-	1	ASME SA 106 GR. B	INLET RAD. MANIFOLD
105.1	ELBOW 90° L.R. O.D. 88.9 AV.WALL THK. 7.62	-	-	16	ASTM A 234M GR. WPB	INT. COVER OUT. RAD.
105.2	RETURN BEND 180° L.R. O.D. 88.9 AV.WALL THK. 7.62	-	-	32	ASTM A 234M GR. WPB	INT. RADIANT
106.2	WROUGHT WELDING CAP 6" SCH. 80	-	-	1	ASME SA 234M GR. WPB	INLET RAD. MANIFOLD
107.2	FORGED WELDING NECK - RING JOINT 6" - 600#	-	-	1	ASME SA 105 M	INLET RAD. MANIFOLD
108.2	WROUGHT WELDING STUB FOR SET - ON BRANCH 102 O.D.; 73.7 I.D.; H=150	-	-	4	ASME SA 105 M	INLET RAD. MANIFOLD
109.1	WROUGHT SOCKET WELDING HALF COUPLING 1" - 3000#	-	-	20	ASTM A 105 M	RADIANT TUBE GUIDE
601.2	TUBE SUPPORT GUSSET PATTERN N° 73344 A	-	-	16	25C-12Ni	DG 8039-
604.1	CENTRIFUGALLY CAST TUBE TUBE O.D. 33.4 - 4.55 THK. MINI	-	-	20	25C-12Ni	RADIANT TUBE GUIDE

ELEVATION RADIANT COIL

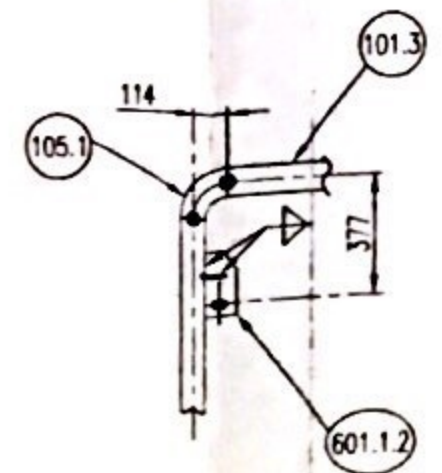
PASSES 1-4
(1 PASS DEVELOPED-
2 PASSES REQUIRED FOR 1 HEATER)



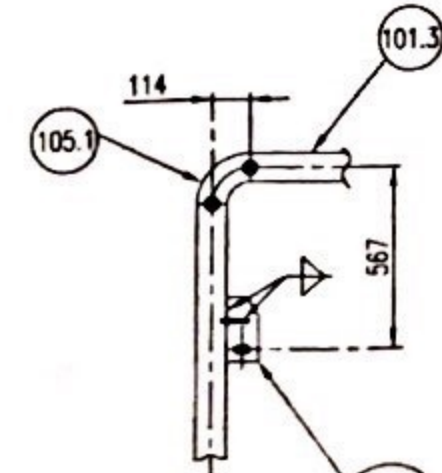
PASSES 2-3
(1 PASS DEVELOPED-
2 PASSES REQUIRED FOR 1 HEATER)



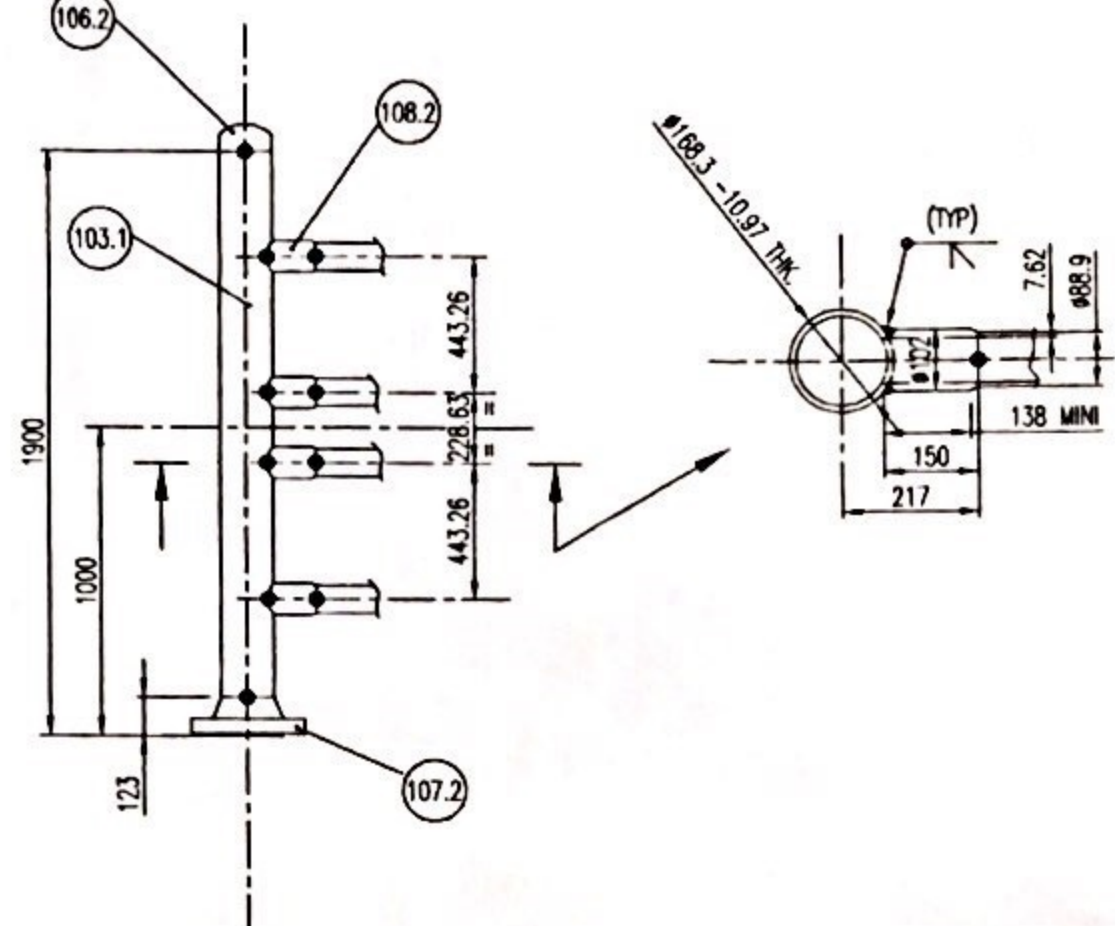
DETAIL 3
(SCALE 1/20)



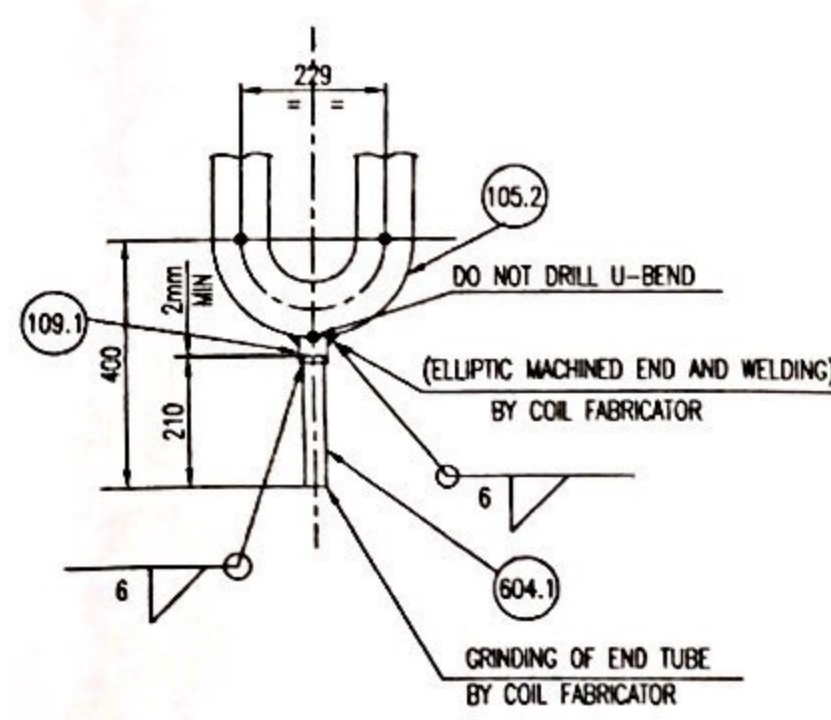
DETAIL 4
(SCALE 1/20)



DETAIL 1
(SCALE 1/20)



DETAIL 2
(SCALE 1/10)



- SHOP WELD
- ✕ SHOP WELD AFTER ASSEMBLY
- ✕ FIELD WELD

NOTE

- FOUNDATION LOADING AND CONNECTIONS SEE DWG. 9901-FD-001
- GENERAL ASSEMBLY SEE DWG. 9901-FD-002
- CONVECTION COILS AND CROSS OVER SEE DWG. 9901-FD-402
- VERTICAL FLANGE BOLT HOLES TO STRADDLE // VERTICAL AXIS
- THE MANIFOLD IS ONLY STAMPED "U" ASME

OGDCL		QADIRPUR - PAKISTAN	
REGENERATION GAS HEATER E9901 RADIANT COILS			
ECHELLE/SCALE: 1/50	NOM/NAME: ZD	A1	00-FD-401

DESIGN DATA (E-9901)

INLET RADIANT MANIFOLD:

1. Code:	ASME VIII (I) – 2001 Edition.
2. Design Temperature:	349°C (660°F)
3. Design Pressure (MAWP):	950 Psi (6.55MPa)
4. Capacity:	32 Liters (7 Gallons)
5. Bevels:	ANSI B 16-25/1996
6. Corrosion allowance:	3.175 mm (0.125")
7. Official Test pressure:	2217.4 Psi (15.3 Mpa)
8. Fabricator Test Pressure:	2217.4 Psi (15.3 Mpa)
9. MDMT:	-25.3°C (-13.54°F)
10. Heat Treatment	No
11. X-Ray	20%

RADIANT COILS:

1. Code:	API 530
2. Design Temperature:	465°C (868°F)
3. Design Pressure (MAWP):	950 Psi (6.552 Mpa)
4. Coil Capacity (Per Pass):	43.4 Gal
5. Capacity complete coil:	788 liters (173.4 Gal)
6. Bevels:	ANSI B 16-25/1996
7. Corrosion allowance:	3.2 mm (0.126")
8. Official Test pressure:	2217.4 Psi (15.3 Mpa)
9. Fabricator Test Pressure:	2217.4 Psi (15.3 Mpa)
10. Heat Treatment	No
11. X-Ray	20%