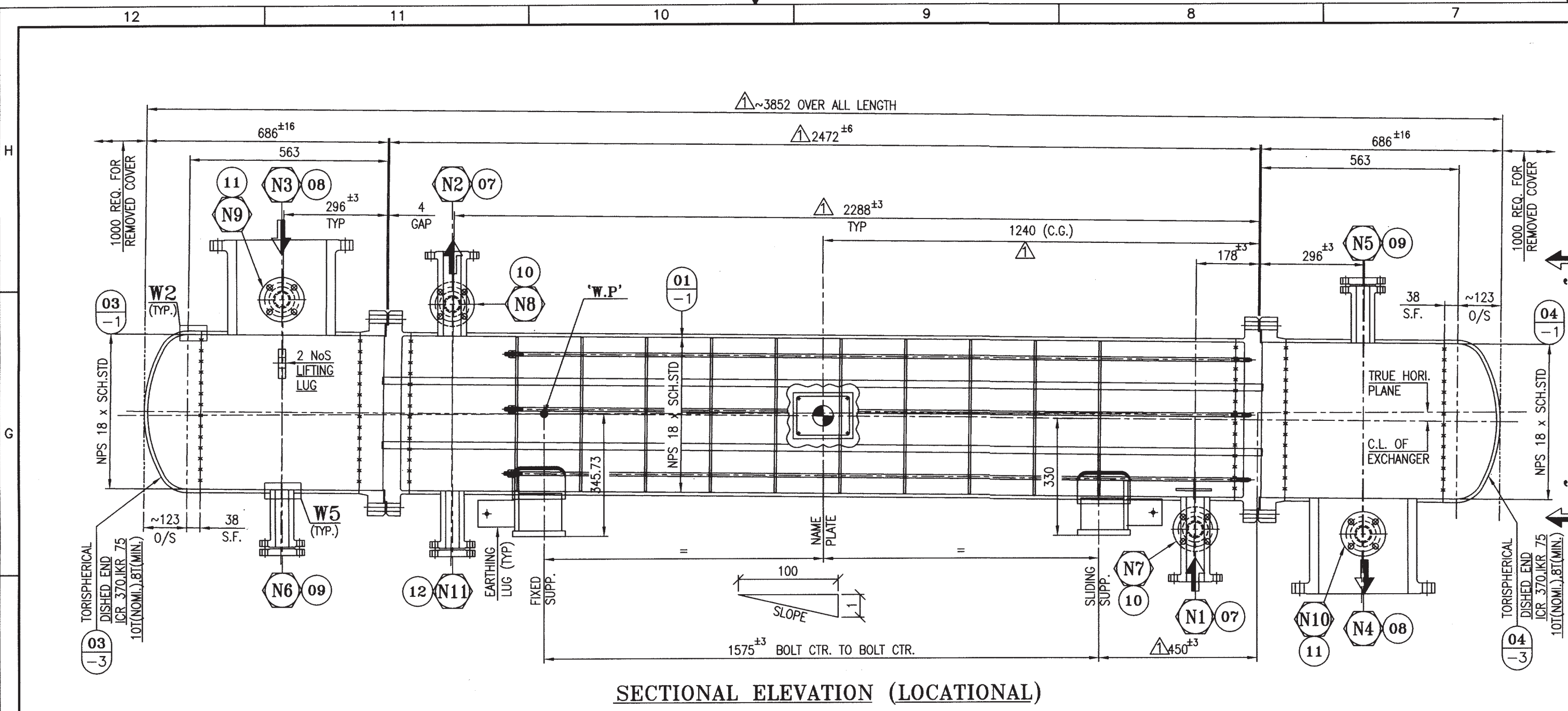
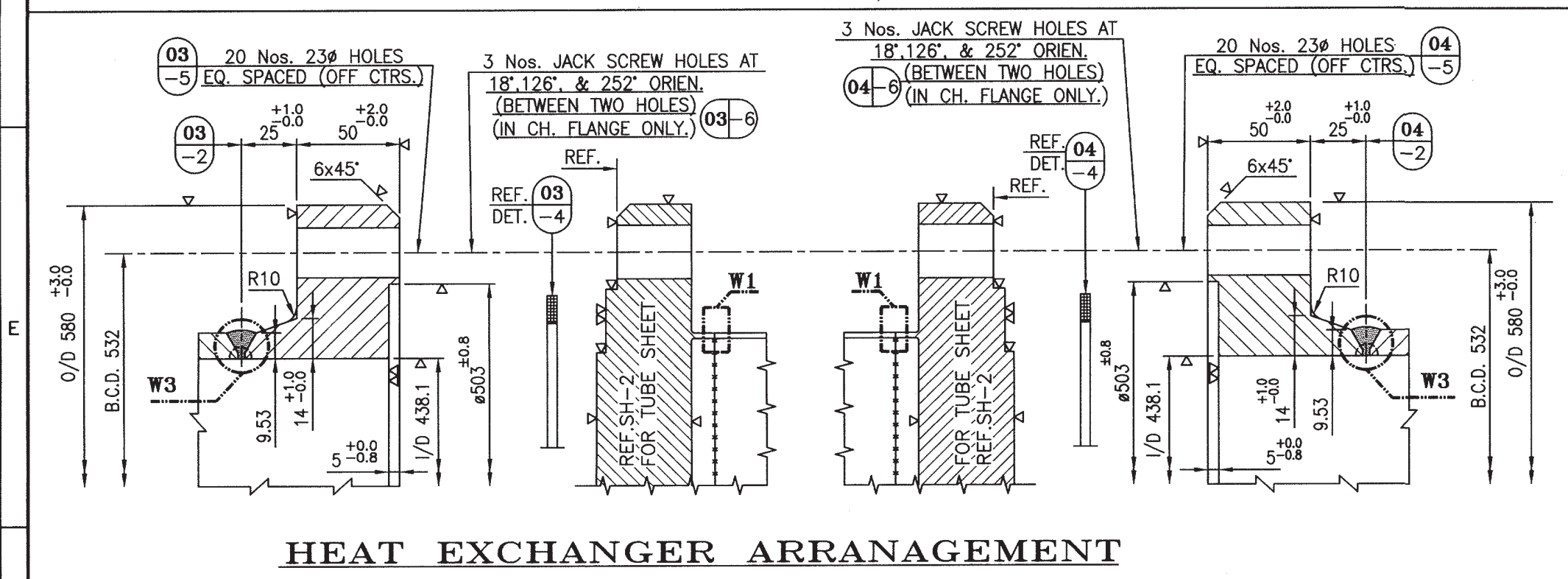


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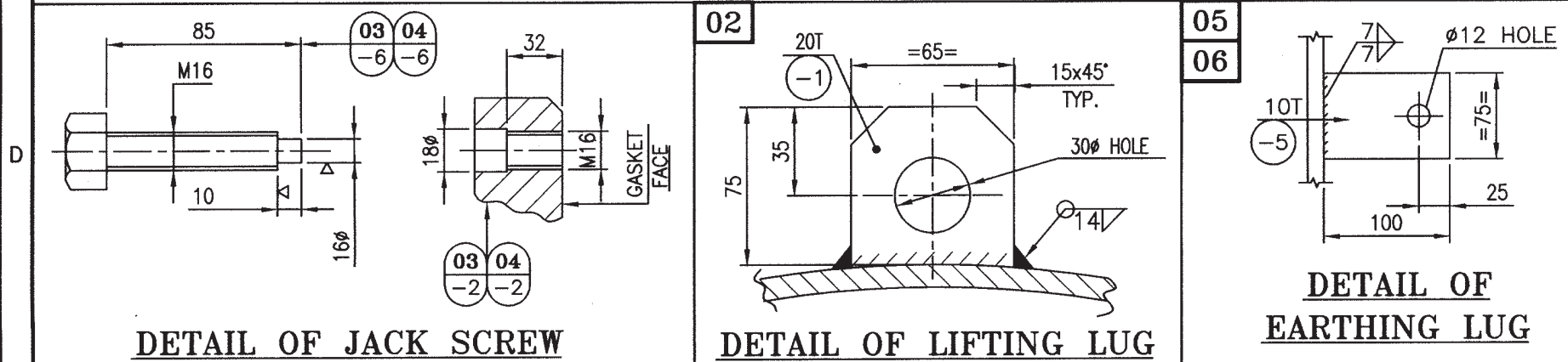


SECTIONAL ELEVATION (LOCATIONAL)

△ (NOTE: ALL NOZZLES FLANGES & SADDLE SUPPORT SHALL BE TRULY HORIZONTAL/VERTICAL.)

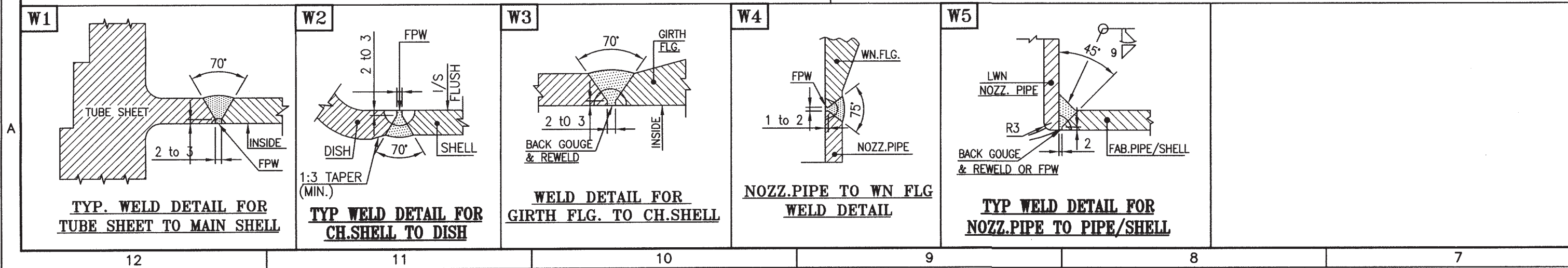
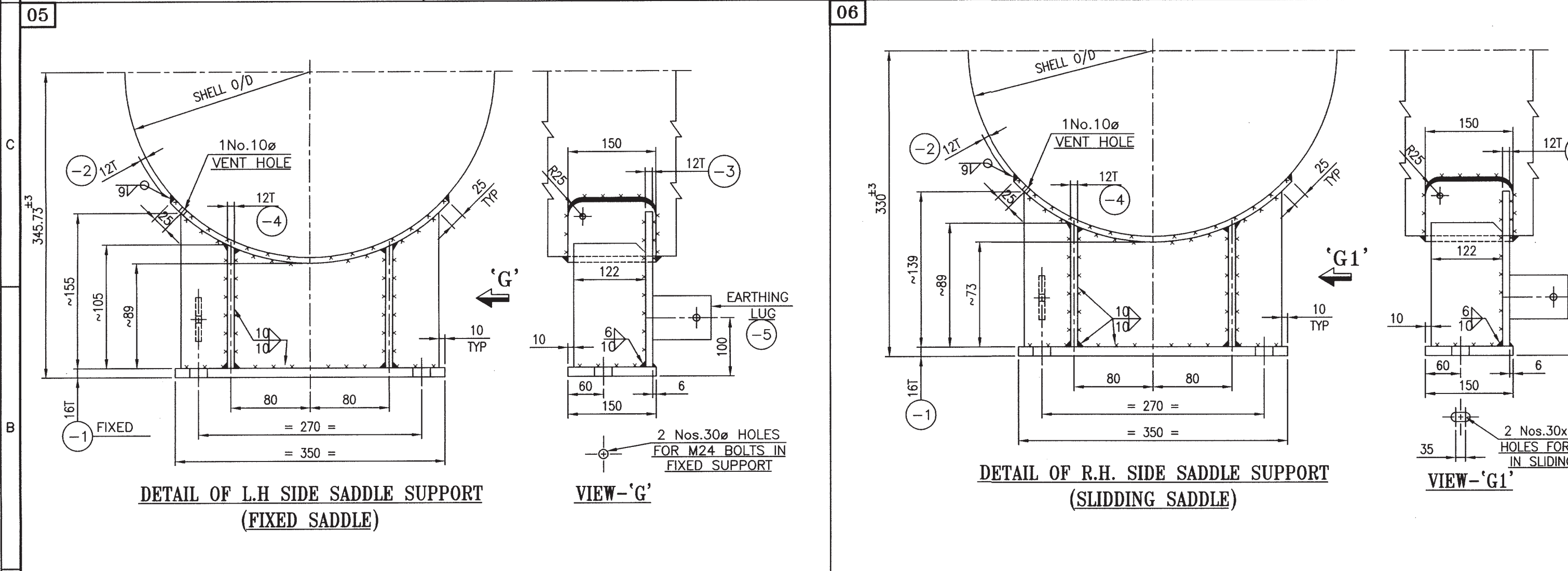


HEAT EXCHANGER ARRANGEMENT



DETAIL OF EARTHING LUG

TORQUE TABLE			
SR. NO.	BOLT SIZE	TORQUE REQ'D	DESCRIPTION
1	M20	673.13 Lb-ft	BETWEEN P. NO. 03/-2 & 13/-2
2	M20	673.13 Lb-ft	BETWEEN P. NO. 04/-2 & 13/-1



EIL APPLICABLE SPECIFICATIONS			
NO. SR.	STD. NO.	DESCRIPTION	NO. REV.
1	1641-1923	VENDOR DWG./DOC. SUBMISSION	1
2	117-16	SECTION PLAN/SECTIONAL DRAWING	0
3	45-4481	FOR H.E. (ITEM NO.-117-EE-481)	0
4	117-05	TUBE LAYOUT FOR HEAT EXCHANGER	1
5	117-05	GENERAL SPEC. FOR HEAT EXCHANGER	3
6	117-05	TUBE TO TUBESHEET JOINT	3
7	117-05	STD. SPEC. FOR WELDED TUBE	3
8	117-05	STD. SPEC. FOR P.W. AT VENDOR'S WORKS	1
9	117-05	INS. & TEST PLAN FOR HEAT EXCHANGER	1
10	117-05	JOB SPEC. FOR SHELL & TUBE HEAT EXCHANGERS	0
11	117-05	SCOPE OF WORK & SUPPLY FOR SHELL & TUBE HEAT EXCHANGERS	0
12	117-05	GUIDE LINE TO VENDOR REGARDING TUBE LAYOUT PREPARATION	0
13	117-05	SYSTEM REQ. FOR BIDDERS. SPEC. FOR QUALITY MANAGEMENT	0
14	117-05	VENDOR DATA REQUIREMENT	0
15	117-05	SPEC. FOR DOCUMENTATION REQUIREMENT FROM SUPPLIERS.	0

EIL APPLICABLE STANDARD			
NO. SR.	STD. NO.	DESCRIPTION	NO. REV.
1	7-15-0001	PART DETAILS	3
2	7-15-0002	TYPES OF NON STD. GASKETS	3
3	7-15-0004	SUPP. FOR HORI. EXCHANGERS	3
4	7-15-0006	STD. FOR TUBE HOLE EXPANSION	3
5	7-15-0009	METHODS OF FASTENING NUTS TO THE TUBES	3
6	7-15-0010	JACK SCREW TAPPING & ARR. G.	3
7	7-15-0013	LIFTING LUG DETAIL	3
8	7-15-0016	EARTHING LUG	3
9	7-15-0017	NAME PLATE (S&T TYPE EXCH.)	3
10	7-15-0019	TUBE HEAT EXCHANGERS TOLERANCES FOR SHELL &	3

RTHING LUG (-5)	▶	03	R.H. SIDE CHANNEL ASSEMBLY				
		-6	JACK SCREW	03	SS 304	M16 x 85 Lg	0.3
		-5	STUD WITH 2HMY HEX NUTS	20	SA 320 L7/SA 194 GR 4	M20 x 155 Lg	7.6
		-4	GASKET	01	IJA	3 THK. x AS PER DRG.	-
		-3	DISHED END	01	SA 516 GR. 60	10T x 615 B.DIA.	23.
		-2	CH. GIRTH FLG.	01	SA 350 LF 2 CL.1	AS PER DRG.	46.
	▶	-1	CHANNEL SHELL	01	SA 333 GR. 6	NPS 18 x SCH.STD x 451 Dev.Lg.	47.
		04	R.H. SIDE CHANNEL ASSEMBLY				
	▶	-6	JACK SCREW	03	SS 304	M16 x 85 Lg	0.3
		-5	STUD WITH 2HMY HEX NUTS	20	SA 320 L7/SA 194 GR 4	M20 x 155 Lg	7.6
LOTTED BOLTS (-5)		-4	GASKET	01	IJA	3 THK. x AS PER DRG.	-
		-3	DISHED END	01	SA 516 GR. 60	10T x 615 B.DIA.	23.
		-2	CH. GIRTH FLG.	01	SA 350 LF 2 CL.1	AS PER DRG.	46.
		-1	CHANNEL SHELL	01	SA 333 GR. 6	NPS 18 x SCH.STD x 451 Dev.Lg.	47.
		03	L.H. SIDE CHANNEL ASSEMBLY				
		-1	LIFTING LUG	04	SA 516 GR 60	16T x 65W x ~80 L	2.6
		02	LIFTING LUG ASSEMBLY				
		-1	MAIN SHELL	01	SA 333 GR. 6	NPS 18 x SCH.STD x 2348 Dev.Lg.	247.
		01	MAIN SHELL ASSEMBLY				