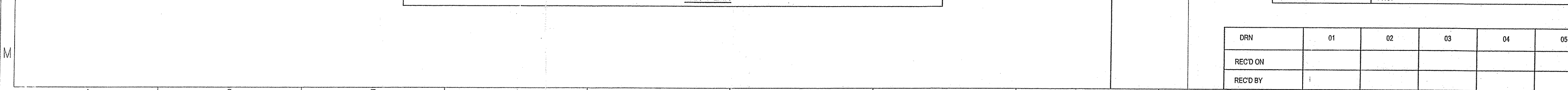
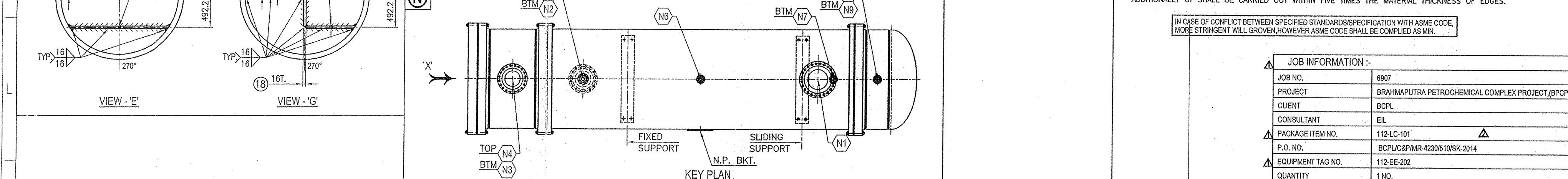
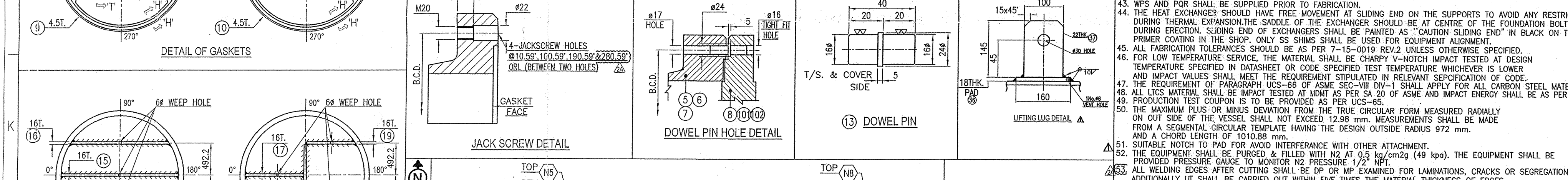
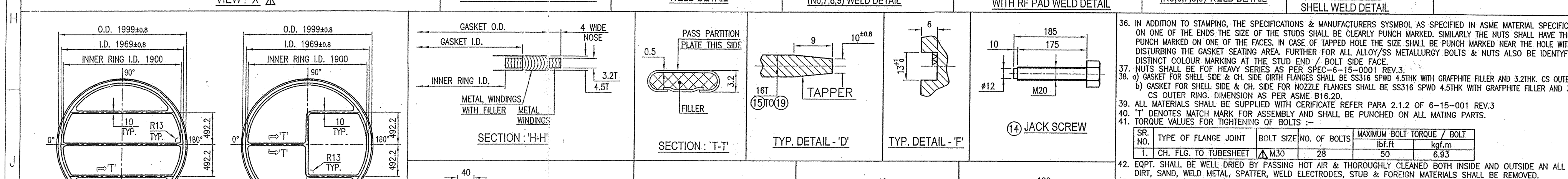
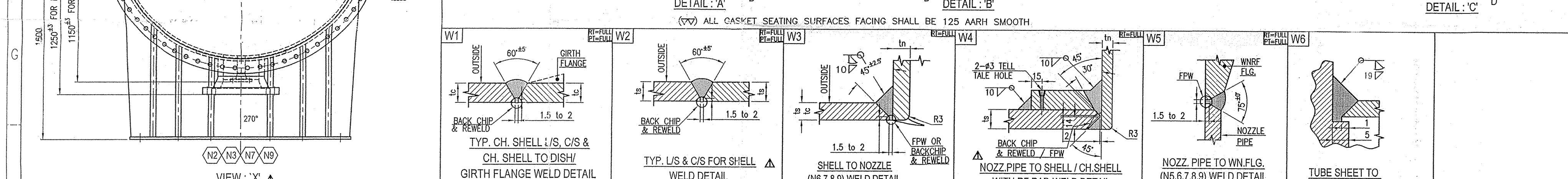
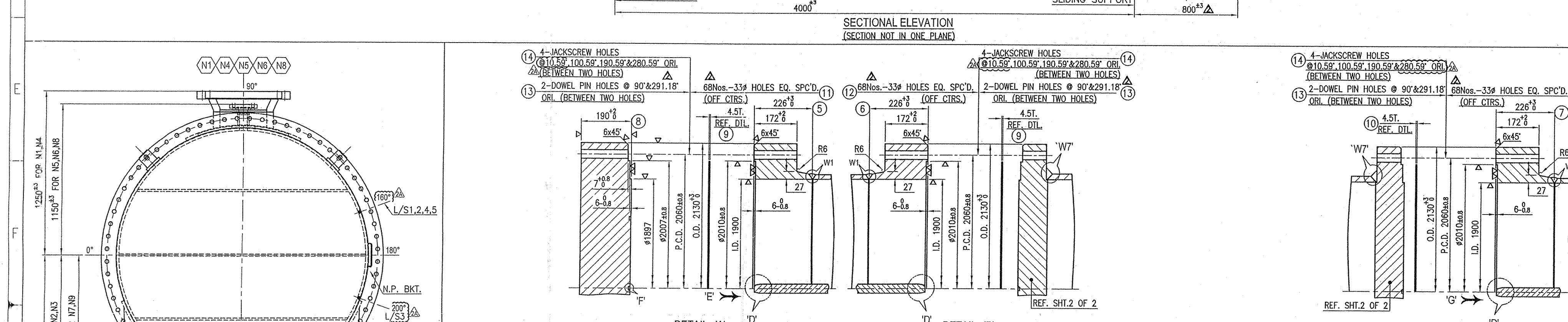
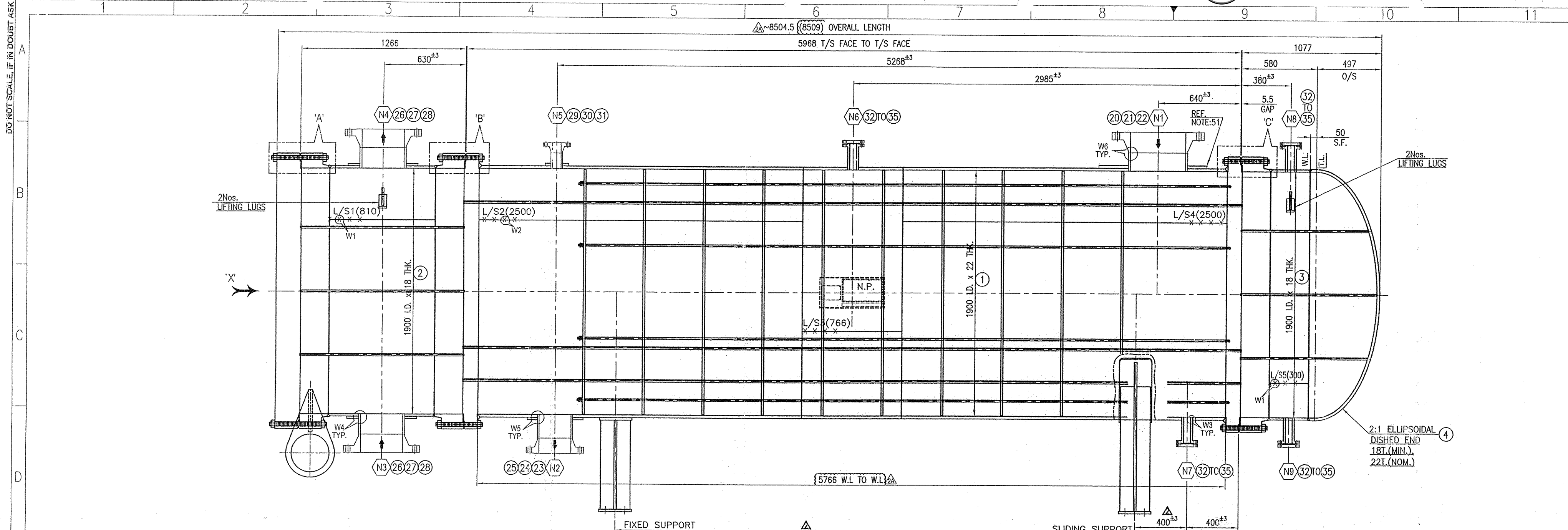


**GENERAL ASSEMBLY & DETAILS
FOR
CONDENSER**



MATERIAL OF CONSTRUCTION		DESIGN DATA		CONSTRUCTION CODE	
ALL MATERIAL SHALL CONFORM TO ASME SECTION-II PART-A, ED-2007, ADD-2009 IN ADDITION TO THIS, MATERIAL SHALL CONFORM TO FOLLOWING REQUIREMENTS		DESCRIPTION		DATA	
1	MIN. SHELL, CH. SHELL, DISH END, PAD FOR SADDLE, N.P. BKT. R-PAD	2	INSPECTION BY	AI (L.R. INSURANCE INC)	
2	CH. SHELL, GIRTH FLANGE, TUBE SHEET, CH. SHELL COVER	3	TYPE	AEM (HORIZONTAL)	
3	NOZZLE PIPE (SHELL & CH. SIDE)	4	CONTAINED FLUID	PROPYLENE	
4	NOZZLE FLANGES (SHELL & CH. SIDE)	5	DESIGN PRESSURE	2207(22.5/F.V)	1698 (17.31/F.V)
5	GASKETS (GIRTH FLG.)	6	MAX. ALLOWABLE WORKING PRESSURE	2207(22.5/F.V)	1698 (17.31/F.V)
6	STUD/NUTS (HEAVY)	7	M.A.W.P.	100 (1.055)	100 (1.055)
7	TUBES	8	OPERATING PRESSURE	1670 (17.03)	441.3 (4.5)
8	SPACERS	9	OPERATING TEMPERATURE (IN/OUT)	70/43	33/40
9	TIE RODS/NUTS	10	DESIGN TEMPERATURE (MAX.)	110	65
10	JACK SCREW	11	MINIMUM DESIGN METAL TEMPERATURE	-45	-45
11	NAME PLATE	12	HYDRO TEST PRESSURE (HRS)	45.09	2256 (23)
12	SADDLE SUPPORT	13	HYDRO TEST TEMPERATURE (MIN./MAX.)	-	-
APPLICABLE CODES, STANDARDS :-		14	PNEUMATIC TEST PRESSURE	2452 (25)	-
ASME Sec. II PART-A-2007, ADD-2009		15	CORROSION ALLOWANCE	mm	3 (EXCEPT TUBE)
ASME Sec. II PART-D-2007, ADD-2009		16	POST WELD HEAT TREATMENT	NO	NO
ASME Sec. IX-2003		17	POST FORMING HEAT TREATMENT	NO	YES (NOTE:22)
ASME Sec. V-2009		18	RADIOGRAPHY	100%	100% (EXCEPT TUBE)
TMA CL. R. ADDITION - 2007		19	JOINT EFFICIENCY	1.0	1.0
APPLICABLE DRAWINGS		20	NO. OF PASSES	1	1
0300232-16-01 : TUBE BUNDLE/S, SADDLE & SADDLE SUPPORT DETAIL FOR CONDENSER		21	FOULING RESISTANCE	m ² h ² C/kcal	0.000200
0300232-16-01 : SPARE LIST		22	PRESSURE DROP (ALLOW/CAL)	kg/cm ²	0.1/0.004
FR-DSN-002-0300232(TDC)		23	CAPACITY (NOMINAL)	m ³	7.851
APPLICABLE EIL SPECIFICATION		24	THERMAL INSULATION (MINERAL WOOL)	mm	-
UG 22 LOADINGS		25	SURFACE AREA/UNIT CAL/INSTALL	m ²	1679.09/1604.09
INTERNAL DESIGN PRESSURE		26	IMPACT TESTING REQUIRED	YES (NOTE-46)	YES (NOTE-46)
EXTERNAL DESIGN PRESSURE		27	HEAT LOAD/UNIT	kcal/hr	5072462
WEIGHT OF THE VESSEL AND CONTENTS UNDER OPERATING OR TEST CONDITIONS		28	EMPTY WEIGHT	kg	49084
WEIGHT OF THE VESSEL AND CONTENTS UNDER OPERATING OR TEST CONDITIONS		29	OPERATING WEIGHT	kg	69000
WEIGHT OF THE VESSEL AND CONTENTS UNDER OPERATING OR TEST CONDITIONS		30	HYDRO TEST WEIGHT	kg	69000
WEIGHT OF THE VESSEL AND CONTENTS UNDER OPERATING OR TEST CONDITIONS		31	WIND SPEED	IS 875, PART III, BASIC WIND SPEED 50M/S	IS 875, PART III, BASIC WIND SPEED 50M/S
WEIGHT OF THE VESSEL AND CONTENTS UNDER OPERATING OR TEST CONDITIONS		32	SEISMIC	IS 1893, ZONE-V	IS 1893, ZONE-V
WEIGHT OF THE VESSEL AND CONTENTS UNDER OPERATING OR TEST CONDITIONS		33	PAINTING & CLEANING	NOTE-16	NOTE-16
WEIGHT OF THE VESSEL AND CONTENTS UNDER OPERATING OR TEST CONDITIONS		34	SHI/PTC	YES	YES (NOTE:49)

FOUNDATION LOADING		APPROX WEIGHT = 18310	
WIND	2950	4720	
OPERATING	5310	8486	
SEISMIC			

GENERAL NOTES:	
1.	ALL DIM. ARE IN MM, UNLESS OTHERWISE SPECIFIED.
2.	ALL GASKET SEATING SURFACES FOR THE FLANGE FACING SHALL BE SMOOTH FINISH TO 125 AARH.
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BILL OF MATERIAL FOR ONE UNIT ONLY	
2A	30.06.2011
2B	28.01.2011
2C	07.12.2010
REV.	DATE
DESCRIPTION	BY
CHD	APPD
REVISION STATUS	
CONSULTANT:	O.A. NO. : 0300232-16
CLIENT :	BCPL LAKHNA
PROJECT :	BRAMHAPUTRA PETROCHEMICAL COMPLEX PROJECT, LAKHNA
SCALE :	1:1
DATE :	28.07.2009
DRN :	12.08.2009
CHD :	12.08.2009
APPD :	14.08.2009
U-STAMP	
TITLE :	G.A. DRAWING FOR CONDENSER
DRG. NO. :	0300232-16-00
ITEM CODE :	907MA0300232-16
REV. 2A	

JOB INFORMATION	
JOB NO.	6907
PROJECT	BRAMHAPUTRA PETROCHEMICAL COMPLEX PROJECT (BPCCP)
CLIENT	BCPL
CONSULTANT	EL
PACKAGE ITEM NO.	1124-101
P.O. NO.	BCPLCAP/PM-42308/10/2014
EQUIPMENT TAG NO.	1124E-202
QUANTITY	1 NO.
DRN	01
REC'D ON	02
REC'D BY	03
	04
	05

NOZZLE LOAD TABLE	
NOZZLE MARK	SIZE
N1	450
N2	450
N3	350
N4	350
N5	80
N6	50
N7	150
N8	150
N9	150
N10	150
N11	150
N12	150
N13	150
N14	150
N15	150
N16	150
N17	150
N18	150
N19	150
N20	150
N21	150
N22	150
N23	150
N24	150
N25	150
N26	150
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N86	150
N87	150
N88	150
N89	150
N90	150
N91	150
N92	150
N93	150
N94	150
N95	150
N96	150
N97	150
N98	150
N99	150
N100	150

NOZZLE LOAD TABLE									
FORCES					MOMENTS				
NOZZLE MARK	SIZE (DN)	FA (kgf)	FL (kgf)	FC (kgf)	MT (kgf.m)	ML (kgf.m)	MC (kgf.m)		
N1	450	270	400	400	200	160	120		
N2	250	405	600	800	450	360	270		
N3,N4	350	135	200	200	50	40	30		
N5	80	135	200	200	112	90	67		
N6,7,8,9	50	135	200	200	50	40	30		

FL
FA
FC
MT
ML
MC

GLOBAL CO-ORDINATION

OWNER

ENGINEERS INDIA LIMITED
(एन ई आई लिमिटेड)
(A Govt. of India Undertaking)

PROJECT BRAHMAPUTRA PETROCHEMICAL CO-ORDINATE PROJECT

MATERIAL	SCALE	DRG NO	FIRST USE MODEL
SA S18 G-60 <td>N.T.S</td> <td></td> <td>ACR. PROJ</td>	N.T.S		ACR. PROJ
Quantify- ONE		PRJ/9753/101/39	REV. SHEET SH 52

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