



BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM, HYDERABAD-32

PROJECT ENGINEERING & SYSTEMS DIVISION

**BILL OF MATERIALS
RUBBER LINED PIPING PACKAGE**

**ANNEXURE-A TO PEMC-07395
JOB SPECIFICATION FOR RUBBER LINED PIPING PACKAGE
TCL MITHAPUR**

ANNEXURE-A
BILL OF MATERIALS

PROJECT: TCL MITHAPUR
RUBBER LINED PIPING PACKAGE-BOQ

A.FLANGED RUBBER LINED PIPING SPOOL BOQ

S.NO	VAR NO	SPOOL	SIZE	MATERIAL	L	L1	FLG UNIT WT KG	PIPE UNIT WT (KG)	PIPE SPOOL WT (KG)	ASSY WT KG	TOTAL LENGTH(M)	No. OF SPOOLS(No)	TOTAL WEIGHT(KG)	REMARK
1	1	CWS-01	273.1 x 6.4	IS 3589	6000	5978	19.5	42.11	251.734	290.734	168	28	8140.54024	
2	2	CWS-02	273.1 x 6.4	IS 3589	3000	2978	19.5	42.11	125.404	164.404	15	5	822.0179	
3	3	CWS-03	273.1 x 6.4	IS 3589	1000	978	19.5	42.11	41.184	80.184	10	10	801.8358	
4	4	CWS-04	273.1 x 6.4	IS 3589	500	478	19.5	42.11	20.129	59.129	6	12	709.54296	
5	5	CWS-05	273.1 x 6.4	IS 3589	300	278	19.5	42.11	11.707	50.707	1.2	4	202.82632	1 SPOOL WITH 1.5" & 2" STUB ALONG WITH FLANGES
6	6	CWR-01	273.1 x 6.4	IS 3589	6000	5978	19.5	42.11	251.734	290.734	168	28	8140.54024	
7	7	CWR-02	273.1 x 6.4	IS 3589	3000	2978	19.5	42.11	125.404	164.404	15	5	822.0179	
8	8	CWR-03	273.1 x 6.4	IS 3589	1000	978	19.5	42.11	41.184	80.184	10	10	801.8358	
9	9	CWR-04	273.1 x 6.4	IS 3589	500	478	19.5	42.11	20.129	59.129	6	12	709.54296	
10	10	CWR-05	273.1 x 6.4	IS 3589	300	278	19.5	42.11	11.707	50.707	1.2	4	202.82632	1 SPOOL WITH 1.5" & 2" STUB ALONG WITH FLANGES
11	11	CWS0-01	219.1 x 6.4	IS 3589	3000	2978	13.7	33.58	100.001	127.401	6	2	254.80248	
12	12	CWS0-02	219.1 x 6.4	IS 3589	2000	1978	13.7	33.58	66.421	93.821	6	3	281.46372	
13	13	CWS0-03	219.1 x 6.4	IS 3589	1000	978	13.7	33.58	32.841	60.241	3	3	180.72372	
14	14	CWS0-04	219.1 x 6.4	IS 3589	500	478	13.7	33.58	16.051	43.451	3	6	260.70744	2 SPOOLS WITH 1.5" & 2" STUB ALONG WITH FLANGES
15	15	CWS0-05	219.1 x 6.4	IS 3589	300	278	13.7	33.58	9.335	36.735	1.2	4	146.94096	1 SPOOL WITH 1.5" STUB ALONG WITH FLANGE
16	16	CWR0-01	219.1 x 6.4	IS 3589	3000	2978	13.7	33.58	100.001	127.401	6	2	254.80248	
17	17	CWR0-02	219.1 x 6.4	IS 3589	2000	1978	13.7	33.58	66.421	93.821	6	3	281.46372	
18	18	CWR0-03	219.1 x 6.4	IS 3589	1000	978	13.7	33.58	32.841	60.241	3	3	180.72372	
19	19	CWR0-04	219.1 x 6.4	IS 3589	500	478	13.7	33.58	16.051	43.451	3	6	260.70744	2 SPOOLS WITH 1.5" & 2" STUB ALONG WITH FLANGES
20	20	CWR0-05	219.1 x 6.4	IS 3589	300	278	13.7	33.58	9.335	36.735	1.2	4	146.94096	1 SPOOL WITH 1.5" STUB ALONG WITH FLANGE
21	21	ELBOW	219.1 x 6.4	IS 3589								10	0	
22	22	CWSG-01	168.3 x 5.4	IS 1239 BL	2000	1978	8.6	21.7	42.923	60.123	18	9	541.1034	
23	23	CWSG-02	168.3 x 5.4	IS 1239 BL	1000	978	8.6	21.7	21.223	38.423	3	3	115.2678	
24	24	CWSG-03	168.3 x 5.4	IS 1239 BL	500	478	8.6	21.7	10.373	27.573	2	4	110.2904	1 SPOOL WITH 1.5" & 2" STUB ALONG WITH FLANGES
25	25	CWSG-04	168.3 x 5.4	IS 1239 BL	300	278	8.6	21.7	6.033	23.233	1.2	4	92.9304	1 SPOOL WITH 1.5" STUB ALONG WITH FLANGE
26	26	CWRG-01	168.3 x 5.4	IS 1239 BL	2000	1978	8.6	21.7	42.923	60.123	18	9	541.1034	
27	27	CWRG-02	168.3 x 5.4	IS 1239 BL	1000	978	8.6	21.7	21.223	38.423	3	3	115.2678	
28	28	CWRG-03	168.3 x 5.4	IS 1239 BL	500	478	8.6	21.7	10.373	27.573	2	4	110.2904	1 SPOOL WITH 1.5" & 2" STUB ALONG WITH FLANGES
29	29	CWRG-04	168.3 x 5.4	IS 1239 BL	300	278	8.6	21.7	6.033	23.233	1.2	4	92.9304	1 SPOOLS WITH 1.5" STUB ALONG WITH FLANGE

WEIGHT-A 25322

B. RUBBER LINED PIPE FITTINGS BOQ

S.NO	VAR	DESCRIPTION	SIZE 1	SIZE 2	MATERIAL	FLG-1 UNIT WT KG	FLG-2 UNIT WT KG	FLG-3 UNIT WT KG	FITTING UNIT WT	PIPE SPOOL WT	ASSY WEIGHT	QTY	TOTAL WEIGHT(KG)	REMARKS
1	1	EQ.TEE	10"	-	A234 GR.WPB	19.5	19.5	19.5	41.89	7.58	107.9698	2	215.9396	FITTINGS ALONG WITH FLANGES WELDED AT BOTH ENDS
2	2	EQ.TEE	8"	-	A234 GR.WPB	13.7	13.7	13.7	24.69	6.04	71.8344	2	143.6688	FITTINGS ALONG WITH FLANGES WELDED AT BOTH ENDS
1	1	RED.TEE	10"	8	A234 GR.WPB	19.5	13.7	39.27	39.27	7.58	119.3198	2	238.6396	FITTINGS ALONG WITH FLANGES WELDED AT BOTH ENDS
2	2	RED.TEE	10	6	A234 GR.WPB	19.5	8.6	37.61	37.61	7.58	110.8998	2	221.7996	FITTINGS ALONG WITH FLANGES WELDED AT BOTH ENDS
3	3	ELBOW 90D	10"	-	A234 GR.WPB	19.5	19.5		35.01	8.42	82.432	40	3297.28	FITTINGS ALONG WITH FLANGES WELDED AT BOTH ENDS
4	4	ELBOW 90D	8"	-	A234 GR.WPB	13.7	13.7		19.91	6.72	54.026	10	540.26	FITTINGS ALONG WITH FLANGES WELDED AT BOTH ENDS
5	5	ELBOW 90D	6"	-	A234 GR.WPB	8.6	8.6		9.98	4.34	31.52	20	630.4	FITTINGS ALONG WITH FLANGES WELDED AT BOTH ENDS

WEIGHT-B

5288

C.LOOSE ITEMS

S.NO	VAR	DESCRIPTION	SIZE	MATERIAL	QTY	REMARKS	UNIT WEIGHT	TOTAL WEIGHT(KG)
1	1	BLIND FLANGE	10"	A105	2	ALONG WITH RUBBER LINING	32	64
2	2	BLIND FLANGE	8"	A105	2	ALONG WITH RUBBER LINING	20.5	41

WEIGHT-C

105

Notes:

1. Typical drawing for Flanged Rubber lined Piping spool/Tee/Elbow/Flange details-PY-DH-1-0000-0000-02-S00-R00 is enclosed with the enquiry.