

CORRIGENDUM

Tender Enquiry No. B/4066/2020/0977/V1 Dt: 26.08.2020 for the requirement of Thermal Insulation of TIP for Bhusawal project.

Corrigendum detail:

A. Following point may please be noted and covered by bidders:

- Thickness Schedule / BOM of Thermal Insulation of TIP of subject tender has been revised as per document no. 412114W5001 REV_01 Dt: 29.09.2020 enclosed herewith. Kindly submit your offer accordingly.

B. Due date of submission & opening of subject tender has been extended upto 15/10/2020.



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
1	MAG10BR100	TUBE/PIPE	472	1219	5	M	
2	MAG10BR100	TUBE/PIPE	472	168.3	1	M	
3	MAG10BR100	CAP	472	114.3	1	NO	
4	MAG10BR100	CAP	472	323.8	1	NO	
5	MAG10BR100	FLANGE	472	168.3	1	NO	
6	MAG10BR100	WELDOLET	472	323.9	2	NO	
7	MAG10BR100	ELBOW	472	1219	1	NO	
8	MAG10BR100	TUBE/PIPE	472	1219	2	M	
9	MAG10BR101	ELBOW	472	323.8	2	NO	
10	MAG10BR101	TUBE/PIPE	472	323.8	4	M	
11	MAG10BR102	TUBE/PIPE	362	323.8	2	M	
12	MAG10BR102	ELBOWW	362	323.9	1	NO	
13	MAG10BR102	FLANGE	362	323.9	1	NO	
14	MAG10BR102	FLANGE	362	323.9	1	NO	
15	MAG10BR102	TEE	60	323.9	1	NO	
16	MAG10BR102	TUBE/PIPE	60	323.9	9	M	
17	MAG10BR110	TUBE/PIPE	472	114.3	1	M	
18	MAG10BR110	TUBE/PIPE	472	1219	4	M	
19	MAG10BR110	TUBE/PIPE	472	168.3	1	M	
20	MAG10BR110	CAP	472	114.3	1	NO	
21	MAG10BR110	CAP	472	323.8	1	NO	
22	MAG10BR110	FLANGE	472	168.3	1	NO	
23	MAG10BR110	WELDOLET	472	323.9	2	NO	
24	MAG10BR110	ELBOW	472	1219	1	NO	
25	MAG10BR110	TUBE/PIPE	472	1219	3	M	
26	MAG10BR111	ELBOW	472	323.8	2	NO	
27	MAG10BR111	TUBE/PIPE	472	323.8	4	M	
28	MAG10BR112	ELBOW	60	323.9	1	NO	
29	MAG10BR112	FLANGE	60	323.9	1	NO	
30	MAG10BR112	FLANGE	60	323.9	1	NO	
31	MAG10BR112	TEE	60	323.9	1	NO	
32	MAG10BR112	TUBE/PIPE	60	323.9	13	M	
33	MAL01BR001	ELBOW	593	323.8	2	NO	
34	MAL01BR001	TUBE/PIPE	593	323.8	3	M	



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
35	MAL01BR001	CAP	593	323.9	1	NO	
36	MAL01BR001	WELDWELDOLET	593	323.9	4	NO	
37	MAL01BR001	WELDOLET	593	323.9	1	NO	
38	MAL02BR001	ELBOW	593	323.8	1	NO	
39	MAL02BR001	TUBE/PIPE	593	323.8	3	M	
40	MAL02BR001	CAP	593	323.9	1	NO	
41	MAL02BR001	WELDOLET	593	323.9	3	NO	
42	MAL02BR001	WELDOLET	593	323.9	1	NO	
43	MAL03BR001	ELBOW	593	323.8	1	NO	
44	MAL03BR001	TUBE/PIPE	593	323.8	5	M	
45	MAL03BR001	CAP	593	323.9	1	NO	
46	MAL03BR001	WELDOLET	593	323.9	1	NO	
47	MAL03BR001	WELDOLET	593	323.9	5	NO	
48	MAL03BR001	WELDOLET	593	323.9	1	NO	
49	MAL04BR001	ELBOW	593	323.8	2	NO	
50	MAL04BR001	TUBE/PIPE	593	323.8	4	M	
51	MAL04BR001	CAP	593	323.9	1	NO	
52	MAL04BR001	WELDOLET	593	323.9	1	NO	
53	MAL04BR001	WELDOLET	593	323.9	3	NO	
54	MAL04BR001	WELDOLET	593	323.9	2	NO	
55	MAL11BR001	TEE	573	60.3	1	NO	
56	MAL11BR001	BEND	573	60.3	3	NO	
57	MAL11BR001	BEND	573	60.3	1	NO	
58	MAL11BR001	VALVEE	573	60.3	1	NO	
59	MAL11BR001	CAP	573	60.3	1	NO	
60	MAL11BR001	ELBOW	573	60.3	10	NO	
61	MAL11BR001	TUBE/PIPE	573	60.3	2	M	
62	MAL11BR001	TUBE/PIPE	573	60.3	18	M	
63	MAL11BR001	VALVE	573	60.3	1	NO	
64	MAL12BR001	TEE	573	60.3	1	NO	
65	MAL12BR001	BEND	573	60.3	1	NO	
66	MAL12BR001	BEND	573	60.3	9	NO	
67	MAL12BR001	VALVE	573	60.3	1	NO	
68	MAL12BR001	CAP	573	60.3	1	NO	



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
69	MAL12BR001	ELBOW	573	60.3	2	NO	
70	MAL12BR001	TUBE/PIPE	573	60.3	1	M	
71	MAL12BR001	TUBE/PIPE	573	60.3	12	M	
72	MAL12BR001	VALVE	573	60.3	1	NO	
73	MAL14BR001	TEE	461	48.3	1	NO	
74	MAL14BR001	BEND	461	48.3	16	NO	
75	MAL14BR001	VALVE	461	48.3	1	NO	
76	MAL14BR001	CAP	461	48.3	1	NO	
77	MAL14BR001	TUBE/PIPE	461	48.3	20	M	
78	MAL14BR001	VALVE	461	48.3	1	NO	
79	MAL19BR001	TEE	573	60.3	1	NO	
80	MAL19BR001	BEND	573	60.3	1	NO	
81	MAL19BR001	BEND	573	60.3	15	NO	
82	MAL19BR001	VALVE	573	60.3	1	NO	
83	MAL19BR001	CAP	573	60.3	1	NO	
84	MAL19BR001	TUBE/PIPE	573	60.3	1	M	
85	MAL19BR001	TUBE/PIPE	573	60.3	18	M	
86	MAL19BR001	VALVE	573	60.3	1	NO	
87	MAL20BR001	TUBE/PIPE	550	60.3	3	M	
88	MAL20BR001	REDU	550	114.3	1	NO	
89	MAL20BR001	VALVE	550	60.3	1	NO	
90	MAL20BR001	CAP	550	60.3	1	NO	
91	MAL20BR001	ELBOW	550	60.3	4	NO	
92	MAL20BR001	VALVE	550	60.3	1	NO	
93	MAL20BR001	TEE	550	60.3	1	NO	
94	MAL20BR001	TUBE/PIPE	550	60.3	20	M	
95	MAL22BR001	ELBOW	461	48.3	2	NO	
96	MAL22BR001	TUBE/PIPE	461	48.3	4	M	
97	MAL22BR002	ELBOW	461	48.3	7	NO	
98	MAL22BR002	TUBE/PIPE	461	48.3	5	M	
99	MAL22BR003	TUBE/PIPE	461	60.3	5	M	
100	MAL22BR003	REDU	461	60.3	1	NO	
101	MAL22BR003	REDU	461	114.3	1	NO	
102	MAL22BR003	TEE	461	60.3	1	NO	



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
103	MAL22BR003	VALVE	461	60.3	1	NO	
104	MAL22BR003	CAP	461	60.3	1	NO	
105	MAL22BR003	ELBOW	461	60.3	4	NO	
106	MAL22BR003	VALVE	461	60.3	1	NO	
107	MAL22BR003	TEE	461	60.3	1	NO	
108	MAL22BR003	TUBE/PIPE	461	60.3	15	M	
109	MAL22BR003	TUBE/PIPE	461	60.3	1	M	
110	MAL23BR001	ELBOW	601	33.4	1	NO	
111	MAL23BR001	TUBE/PIPE	601	33.4	2	M	
112	MAL23BR001	TEE	601	60.3	1	NO	
113	MAL23BR001	TEE	601	60.3	1	NO	
114	MAL23BR001	BEND	601	60.3	1	NO	
115	MAL23BR001	BEND	601	33.4	2	NO	
116	MAL23BR001	VALVE	601	33.4	2	NO	
117	MAL23BR001	VALVE	601	60.3	1	NO	
118	MAL23BR001	CAP	601	60.3	1	NO	
119	MAL23BR001	ELBOW	601	60.3	12	NO	
120	MAL23BR001	TUBE/PIPE	601	60.3	1	M	
121	MAL23BR001	TUBE/PIPE	601	60.3	19	M	
122	MAL23BR001	VALVE	601	60.3	1	NO	
123	MAL23BR001	VALVE	601	33.4	1	NO	
124	MAL24BR001	TUBE/PIPE	601	33.4	1	M	
125	MAL24BR001	TEE	601	60.3	1	NO	
126	MAL24BR001	TEE	601	60.3	1	NO	
127	MAL24BR001	BEND	601	33.4	2	NO	
128	MAL24BR001	BEND	601	60.3	2	NO	
129	MAL24BR001	BEND	601	60.3	11	NO	
130	MAL24BR001	BEND	601	33.4	2	NO	
131	MAL24BR001	VALVE	601	33.4	2	NO	
132	MAL24BR001	VALVE	601	60.3	1	NO	
133	MAL24BR001	CAP	601	60.3	1	NO	
134	MAL24BR001	ELBOW	601	60.3	3	NO	
135	MAL24BR001	TUBE/PIPE	601	60.3	3	M	
136	MAL24BR001	TUBE/PIPE	601	60.3	23	M	



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
137	MAL24BR001	VALVE	601	60.3	1	NO	
138	MAL24BR001	VALVE	601	33.4	1	NO	
139	MAL25BR001	ELBOW	420	48.3	2	NO	
140	MAL25BR001	TUBE/PIPE	420	48.3	12	M	
141	MAL25BR001	BEND	420	48.3	9	NO	
142	MAL25BR001	CAP	420	48.3	1	NO	
143	MAL25BR001	TEE	420	48.3	1	NO	
144	MAL25BR001	VALVE	420	48.3	1	NO	
145	MAL25BR001	VALVE	420	48.3	1	NO	
146	MAL25BR001	TUBE/PIPE	420	48.3	1	M	
147	MAL26BR001	TEE	601	60.3	1	NO	
148	MAL26BR001	VALVE	601	60.3	1	NO	
149	MAL26BR001	CAP	601	60.3	1	NO	
150	MAL26BR001	ELBOW	601	60.3	10	NO	
151	MAL26BR001	TUBE/PIPE	601	60.3	3	M	
152	MAL26BR001	TUBE/PIPE	601	60.3	13	M	
153	MAL26BR001	VALVE	601	60.3	1	NO	
154	MAL27BR001	TEE	601	60.3	1	NO	
155	MAL27BR001	BEND	601	60.3	10	NO	
156	MAL27BR001	VALVE	601	60.3	1	NO	
157	MAL27BR001	CAP	601	60.3	1	NO	
158	MAL27BR001	ELBOW	601	60.3	1	NO	
159	MAL27BR001	TUBE/PIPE	601	60.3	3	M	
160	MAL27BR001	TUBE/PIPE	601	60.3	16	M	
161	MAL27BR001	VALVE	601	60.3	1	NO	
162	MAL31BR001	REDU	601	60.3	1	NO	
163	MAL31BR001	TEE	601	60.3	1	NO	
164	MAL31BR001	TEE	601	60.3	1	NO	
165	MAL31BR001	BEND	601	60.3	4	NO	
166	MAL31BR001	VALVE	601	60.3	1	NO	
167	MAL31BR001	CAP	601	60.3	1	NO	
168	MAL31BR001	TUBE/PIPE	601	60.3	5	M	
169	MAL31BR001	TUBE/PIPE	601	60.3	3	M	
170	MAL31BR001	VALVE	601	60.3	1	NO	



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
171	MAL31BR002	TUBE/PIPE	601	33.4	12	M	
172	MAL31BR002	BEND	601	33.4	6	NO	
173	MAL31BR003	TUBE/PIPE	601	33.4	7	M	
174	MAL31BR003	BEND	601	33.4	3	NO	
175	MAL31BR003	WELDOLET	601	323.9	1	NO	
176	MAL41BR001	TUBE/PIPE	458	60.3	4	M	
177	MAL41BR001	TEE	458	60.3	1	NO	
178	MAL41BR001	BEND	458	60.3	1	NO	
179	MAL41BR001	BEND	458	60.3	8	NO	
180	MAL41BR001	VALVE	458	60.3	1	NO	
181	MAL41BR001	CAP	458	60.3	1	NO	
182	MAL41BR001	TUBE/PIPE	458	60.3	9	M	
183	MAL41BR001	VALVE	458	60.3	1	NO	
184	MAL41BR002	BEND	458	48.3	3	NO	
185	MAL41BR002	BEND	458	48.3	1	NO	
186	MAL41BR002	TUBE/PIPE	458	48.3	6	M	
187	MAL45BR001	TUBE/PIPE	503	60.3	14	M	
188	MAL45BR001	BEND	503	60.3	1	NO	
189	MAL45BR001	BEND	503	60.3	10	NO	
190	MAL45BR001	VALVE	503	60.3	1	NO	
191	MAL45BR001	CAP	503	60.3	1	NO	
192	MAL45BR001	TEE	503	60.3	1	NO	
193	MAL45BR001	VALVE	503	60.3	1	NO	
194	MAL47BR001	TUBE/PIPE	427	60.3	5	M	
195	MAL47BR001	BEND	427	60.3	1	NO	
196	MAL47BR001	BEND	427	60.3	4	NO	
197	MAL47BR001	CAP	427	60.3	1	NO	
198	MAL47BR001	TEE	427	60.3	1	NO	
199	MAL47BR001	VALVE	427	60.3	1	NO	
200	MAL47BR001	VALVE	427	60.3	1	NO	
201	MAL51BR001	CAP	291	60.3	1	NO	
202	MAL51BR001	TUBE/PIPE	291	60.3	4	M	
203	MAL51BR001	BEND	291	60.3	5	NO	
204	MAL51BR001	VALVE	291	60.3	1	NO	



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
205	MAL51BR001	TEE	291	60.3	1	NO	
206	MAL51BR001	TEE	291	60.3	1	NO	
207	MAL51BR001	VALVE	291	60.3	1	NO	
208	MAL51BR002	TUBE/PIPE	291	33.4	11	M	
209	MAL51BR002	TEE	291	33.4	1	NO	
210	MAL51BR002	BEND	291	33.4	5	NO	
211	MAL51BR003	TUBE/PIPE	291	33.4	8	M	
212	MAL51BR003	BEND	291	33.4	4	NO	
213	MAL54BR001	CAP	187.3	60.3	1	NO	
214	MAL54BR001	TUBE/PIPE	187.3	60.3	19	M	
215	MAL54BR001	TUBE/PIPE	187.3	73	1	M	
216	MAL54BR001	BEND	187.3	60.3	6	NO	
217	MAL54BR001	VALVE	187.3	60.3	1	NO	
218	MAL54BR001	TEE	187.3	60.3	1	NO	
219	MAL54BR001	VALVE	187.3	60.3	1	NO	
220	MAL55BR001	TUBE/PIPE	121.2	60.3	1	M	
221	MAL55BR001	ELBOW	121.2	60.3	1	NO	
222	MAL55BR001	CAP	121.2	60.3	1	NO	
223	MAL55BR001	TUBE/PIPE	121.2	60.3	26	M	
224	MAL55BR001	TUBE/PIPE	121.2	73	1	M	
225	MAL55BR001	BEND	121.2	60.3	8	NO	
226	MAL55BR001	VALVE	121.2	60.3	1	NO	
227	MAL55BR001	TEE	121.2	60.3	1	NO	
228	MAL55BR001	VALVE	121.2	60.3	1	NO	
229	MAL65BR001	TEE	480	60.3	1	NO	
230	MAL65BR001	BEND	480	60.3	5	NO	
231	MAL65BR001	CAP	480	60.3	1	NO	
232	MAL65BR001	ELBOW	480	60.3	2	NO	
233	MAL65BR001	TUBE/PIPE	480	60.3	19	M	
234	MAL65BR001	VALVE	480	60.3	1	NO	
235	MAL65BR001	VALVE	480	60.3	1	NO	
236	MAL81BR001	CAP	540	33.4	1	NO	
237	MAL81BR001	TUBE/PIPE	540	33.4	12	M	
238	MAL81BR001	BEND	540	33.4	6	NO	



**Bill of Materials for Thermal Insulation of TIP
Turbine Drainage System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm)
239	MAL81BR001	VALVE	540	33.4	1	NO	
240	MAL81BR001	TEE	540	33.4	3	NO	
241	MAL81BR001	VALVE	540	33.4	1	NO	
242	MAL81BR001	TUBE/PIPE	540	33.4	1	M	
243	MAL81BR002	TUBE/PIPE	540	33.4	6	M	
244	MAL81BR002	BEND	540	33.4	6	NO	
245	MAL81BR004	TUBE/PIPE	540	33.4	9	M	
246	MAL81BR004	BEND	540	33.4	6	NO	
247	MAL81BR004	INST	540	33.4	1	NO	
248	MAL91BR001	TUBE/PIPE	601	33.4	29	M	
249	MAL91BR001	REDU	601	60.3	1	NO	
250	MAL91BR001	BEND	601	33.4	22	NO	
251	MAL91BR001	INST	601	33.4	1	NO	
252	MAL91BR001	TEE	601	33.4	1	NO	
253	MAL92BR001	TUBE/PIPE	601	33.4	2	M	
254	MAL92BR001	REDU	601	60.3	1	NO	
255	MAL92BR001	BEND	601	33.4	2	NO	
256	MAL92BR001	INST	601	33.4	1	NO	
257	MAL92BR001	TUBE/PIPE	601	60.3	1	M	

Rajesh Kumar



**Bill of Materials for Thermal Insulation of TIP
Seal Steam System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
1	LBC41BR001	ELBOW	357	273	2	NO	
2	LBC41BR001	TUBE/PIPE	357	273	2	M	
3	LBC41BR001	ELBOW	357	168.3	6	NO	
4	LBC41BR001	VALVE	357	273	1	NO	
5	LBC41BR001	TUBE/PIPE	357	168.3	11	M	
6	MAM10BR001	TUBE/PIPE	565	48.3	15	M	
7	MAM10BR001	BEND	565	48.3	2	NO	
8	MAM10BR001	BEND	565	48.3	7	NO	
9	MAM10BR002	TUBE/PIPE	565	48.3	17	M	
10	MAM10BR002	BEND	565	48.3	9	NO	
11	MAM10BR003	TUBE/PIPE	565	48.3	31	M	
12	MAM10BR003	BEND	565	48.3	2	NO	
13	MAM10BR003	BEND	565	48.3	8	NO	
14	MAM10BR004	TUBE/PIPE	565	48.3	6	M	
15	MAM10BR004	BEND	565	48.3	5	NO	
16	MAM10BR005	TUBE/PIPE	565	26.7	20	M	
17	MAM10BR005	BEND	565	26.7	1	NO	
18	MAM10BR005	BEND	565	26.7	10	NO	
19	MAM10BR008	TUBE/PIPE	565	60.3	6	M	
20	MAM10BR008	BEND	565	60.3	2	NO	
21	MAM10BR008	BEND	565	60.3	5	NO	
22	MAM10BR008	CAP	565	60.3	1	NO	
23	MAM10BR008	TEE	565	60.3	2	NO	
24	MAM10BR010	TUBE/PIPE	565	60.3	8	M	
25	MAM10BR010	BEND	565	60.3	3	NO	
26	MAM10BR010	BEND	565	60.3	1	NO	
27	MAM10BR010	CAP	565	60.3	1	NO	
28	MAM10BR010	TEE	565	60.3	2	NO	
29	MAM10BR010	TUBE/PIPE	565	60.3	7	M	
30	MAM20BR001	TUBE/PIPE	291	33.4	4	M	
31	MAM20BR001	BEND	291	33.4	5	NO	
32	MAM20BR002	TUBE/PIPE	291	33.4	4	M	
33	MAM20BR002	BEND	291	33.4	5	NO	



**Bill of Materials for Thermal Insulation of TIP
Seal Steam System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
34	MAM20BR003	TUBE/PIPE	405	48.3	10	M	
35	MAM20BR003	BEND	405	48.3	5	NO	
36	MAM20BR003	FTUB	405	48.3	1	NO	
37	MAM20BR005	ELBOW	405	88.9	3	NO	
38	MAM20BR005	CAP	405	88.9	1	NO	
39	MAM20BR005	TUBE/PIPE	405	33.4	1	M	
40	MAM20BR005	TUBE/PIPE	405	48.3	1	M	
41	MAM20BR005	TUBE/PIPE	405	88.9	9	M	
42	MAM20BR005	BEND	405	33.4	2	NO	
43	MAM20BR005	BEND	405	48.3	1	NO	
44	MAM20BR005	WELDOLET	405	88.9	1	NO	
45	MAM20BR006	TUBE/PIPE	565	48.3	7	M	
46	MAM20BR006	BEND	565	48.3	9	NO	
47	MAM20BR006	FTUB	565	48.3	1	NO	
48	MAM20BR007	ELBOW	565	48.3	7	NO	
49	MAM20BR007	TUBE/PIPE	565	48.3	8	M	
50	MAM20BR007	BEND	565	48.3	1	NO	
51	MAM20BR007	FTUB	565	48.3	1	NO	
52	MAM20BR008	ELBOW	565	114.3	3	NO	
53	MAM20BR008	TUBE/PIPE	565	114.3	10	M	
54	MAM20BR008	BEND	565	114.3	1	NO	
55	MAM20BR008	CAP	565	114.3	1	NO	
56	MAM20BR008	WELDOLET	565	114.3	1	NO	
57	MAM20BR008	TEE	565	114.3	4	NO	
58	MAM20BR009	ELBOW	565	48.3	9	NO	
59	MAM20BR009	TUBE/PIPE	565	48.3	8	M	
60	MAM20BR009	BEND	565	48.3	1	NO	
61	MAM20BR009	FTUB	565	48.3	1	NO	
62	MAM20BR010	TUBE/PIPE	565	48.3	9	M	
63	MAM20BR010	BEND	565	48.3	9	NO	
64	MAM20BR010	FTUB	565	48.3	1	NO	
65	MAM30BR001	TUBE/PIPE	593	42.2	14	M	
66	MAM30BR001	BEND	593	42.2	3	NO	

Signature



**Bill of Materials for Thermal Insulation of TIP
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SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
67	MAM30BR001	BEND	593	42.2	6	NO	
68	MAM30BR002	TUBE/PIPE	593	42.2	28	M	
69	MAM30BR002	BEND	593	42.2	1	NO	
70	MAM30BR002	BEND	593	42.2	14	NO	
71	MAM30BR003	TUBE/PIPE	593	42.2	43	M	
72	MAM30BR003	BEND	593	42.2	17	NO	
73	MAM30BR004	TUBE/PIPE	593	42.2	5	M	
74	MAM30BR004	BEND	593	42.2	1	NO	
75	MAM30BR008	TUBE/PIPE	593	60.3	9	M	
76	MAM30BR008	BEND	593	60.3	7	NO	
77	MAM30BR008	CAP	593	60.3	1	NO	
78	MAM30BR008	TEE	593	60.3	2	NO	
79	MAM30BR010	TUBE/PIPE	593	60.3	6.5	M	
80	MAM30BR010	BEND	593	60.3	4	NO	
81	MAM30BR010	CAP	593	60.3	1	NO	
82	MAM30BR010	TEE	593	60.3	2	NO	
83	MAM30BR010	TUBE/PIPE	593	60.3	8.5	M	
84	MAM40BR001	TUBE/PIPE	593	33.4	5.5	M	
85	MAM40BR001	BEND	593	33.4	7	NO	
86	MAM40BR002	TUBE/PIPE	593	33.4	1	M	
87	MAM40BR002	BEND	593	60.3	8	NO	
88	MAM40BR002	WELDOLET	593	60.3	1	NO	
89	MAM40BR002	REDU	593	60.3	1	NO	
90	MAM40BR002	TEE	593	60.3	1	NO	
91	MAM40BR002	TUBE/PIPE	593	60.3	12.5	M	
92	MAM40BR003	TUBE/PIPE	593	33.4	5.5	M	
93	MAM40BR003	BEND	593	33.4	7	NO	
94	MAM40BR004	TUBE/PIPE	593	33.4	1	M	
95	MAM40BR004	BEND	593	60.3	3	NO	
96	MAM40BR004	WELDOLET	593	60.3	1	NO	
97	MAM40BR004	REDU	593	60.3	1	NO	
98	MAM40BR004	TEE	593	60.3	1	NO	
99	MAM40BR004	TUBE/PIPE	593	60.3	11	M	

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**Bill of Materials for Thermal Insulation of TIP
Seal Steam System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
100	MAM40BR006	ELBOW	593	88.9	1	NO	
101	MAM40BR006	TUBE/PIPE	593	88.9	1	M	
102	MAM40BR006	CAP	593	88.9	1	NO	
103	MAM40BR006	TEE	593	88.9	2	NO	
104	MAW10BR001	ELBOW	470	219.1	3	NO	
105	MAW10BR001	TEE	470	219.1	1	NO	
106	MAW10BR001	TUBE/PIPE	470	219.1	1.5	M	
107	MAW10BR001	VALVE	470	219.1	1	NO	
108	MAW10BR101	ELBOW	290	114.3	2	NO	
109	MAW10BR101	TUBE/PIPE	290	114.3	1	M	
110	MAW10BR101	TEE	290	114.3	1	NO	
111	MAW10BR101	VALVE	290	219.1	1	NO	
112	MAW10BR101	VALVE	290	114.3	1	NO	
113	MAW10BR103	ELBOW	290	114.3	2	NO	
114	MAW10BR103	TUBE/PIPE	290	114.3	1	M	
115	MAW10BR103	REDU	290	219.1	1	NO	
116	MAW10BR103	BEND	290	114.3	1	NO	
117	MAW10BR103	VALVE	290	114.3	1	NO	
118	MAW10BR104	TUBE/PIPE	470	219.1	2	M	
119	MAW10BR104	BEND	470	219.1	2	NO	
120	MAW20BR001	TUBE/PIPE	470	273	1	M	
121	MAW20BR001	ELBOW	470	273	2	NO	
122	MAW20BR001	FLANGE	470	273	1	NO	
123	MAW20BR001	FLANGE	470	273	1	NO	
124	MAW20BR001	REDU	470	323.8	1	NO	
125	MAW20BR001	TEE	470	273	2	NO	
126	MAW20BR001	TUBE/PIPE	470	273	4	M	
127	MAW20BR002	TUBE/PIPE	470	323.9	3.5	M	
128	MAW20BR002	BEND	470	323.9	3	NO	
129	MAW20BR002	WELDOLET	470	323.9	1	NO	
130	MAW20BR002	WELDOLET	470	323.9	1	NO	
131	MAW20BR002	REDU	470	323.8	1	NO	
132	MAW20BR002	TEE	470	323.8	2	NO	

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Seal Steam System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
133	MAW20BR002	TEE	470	323.8	1	NO	
134	MAW20BR003	TEE	501	273.1	1	NO	
135	MAW20BR003	ELBOW	501	273	2	NO	
136	MAW20BR003	FLANGE	501	273	1	NO	
137	MAW20BR003	FLANGE	501	273	1	NO	
138	MAW20BR003	WELDOLET	501	273	1	NO	
139	MAW20BR003	WELDOLET	501	273	2	NO	
140	MAW20BR003	TEE	501	273	1	NO	
141	MAW20BR003	TEE	501	273	1	NO	
142	MAW20BR003	TUBE/PIPE	501	273	11	M	
143	MAW20BR004	TUBE/PIPE	470	88.9	1	M	
144	MAW20BR004	BEND	470	88.9	1	NO	
145	MAW20BR004	FLANGE	470	88.9	1	NO	
146	MAW20BR004	FLANGE	470	88.9	1	NO	
147	MAW20BR004	WELDOLET	470	88.9	1	NO	
148	MAW20BR005	ELBOW	501	33.4	2	NO	
149	MAW20BR005	TUBE/PIPE	501	21.3	1	M	
150	MAW20BR005	TUBE/PIPE	501	33.4	1	M	
151	MAW20BR005	TUBE/PIPE	501	88.9	5	M	
152	MAW20BR005	REDU	501	33.4	2	NO	
153	MAW20BR005	BEND	501	88.9	2	NO	
154	MAW20BR005	BEND	501	88.9	2	NO	
155	MAW20BR005	VALVE	501	16.8	2	NO	
156	MAW20BR005	CAP	501	88.9	1	NO	
157	MAW20BR005	WELDOLET	501	88.9	2	NO	
158	MAW21BR001	ELBOW	470	114.3	3	NO	
159	MAW21BR001	TUBE/PIPE	470	114.3	6	M	
160	MAW21BR001	FLANGE	470	114.3	2	NO	
161	MAW21BR002	ELBOW	470	114.3	3	NO	
162	MAW21BR002	TUBE/PIPE	470	114.3	7	M	
163	MAW21BR002	FLANGE	470	114.3	2	NO	
164	MAW21BR003	TUBE/PIPE	470	168.3	6.5	M	
165	MAW21BR003	REDU	470	168.3	1	NO	

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SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
166	MAW21BR003	BEND	470	168.3	3	NO	
167	MAW21BR003	TEE	470	168.3	1	NO	
168	MAW22BR001	ELBOW	470	168.3	3	NO	
169	MAW22BR001	TUBE/PIPE	470	168.3	9	M	
170	MAW22BR001	REDU	470	168.3	1	NO	
171	MAW22BR001	TEE	470	168.3	1	NO	
172	MAW22BR002	ELBOW	470	114.3	3	NO	
173	MAW22BR002	TUBE/PIPE	470	114.3	6	M	
174	MAW22BR002	BEND	470	114.3	1	NO	
175	MAW22BR002	FLANGE	470	114.3	2	NO	
176	MAW22BR003	ELBOW	470	114.3	3	NO	
177	MAW22BR003	TUBE/PIPE	470	114.3	5	M	
178	MAW22BR003	BEND	470	114.3	1	NO	
179	MAW22BR003	FLANGE	470	114.3	2	NO	
180	MAW23BR001	ELBOW	470	114.3	4	NO	
181	MAW23BR001	TUBE/PIPE	470	114.3	5.5	M	
182	MAW23BR001	FLANGE	470	114.3	2	NO	
183	MAW23BR002	ELBOW	470	114.3	3	NO	
184	MAW23BR002	TUBE/PIPE	470	114.3	6	M	
185	MAW23BR002	FLANGE	470	114.3	2	NO	
186	MAW23BR003	ELBOW	470	168.3	3	NO	
187	MAW23BR003	TUBE/PIPE	470	168.3	9.5	M	
188	MAW23BR003	REDU	470	168.3	1	NO	
189	MAW23BR003	TEE	470	168.3	1	NO	
190	MAW24BR001	ELBOW	470	141.3	2	NO	
191	MAW24BR001	TUBE/PIPE	470	141.3	5	M	
192	MAW24BR001	REDU	470	141.3	1	NO	
193	MAW24BR002	ELBOW	470	141.3	2	NO	
194	MAW24BR002	TUBE/PIPE	470	141.3	4	M	
195	MAW24BR002	REDU	470	141.3	1	NO	
196	MAW24BR003	ELBOW	470	168.3	7	NO	
197	MAW24BR003	TUBE/PIPE	470	168.3	8.5	M	
198	MAW24BR003	REDU	470	168.3	1	NO	

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SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
199	MAW24BR003	TEE	470	168.3	1	NO	
200	MAW24BR004	ELBOW	470	114.3	2	NO	
201	MAW24BR004	TUBE/PIPE	470	114.3	3	M	
202	MAW24BR004	FLANGE	470	114.3	2	NO	
203	MAW24BR005	ELBOW	470	114.3	2	NO	
204	MAW24BR005	TUBE/PIPE	470	114.3	2.5	M	
205	MAW24BR005	FLANGE	470	114.3	2	NO	
206	MAW25BR001	ELBOW	501	114.3	5	NO	
207	MAW25BR001	TUBE/PIPE	501	114.3	9	M	
208	MAW25BR001	BEND	501	114.3	2	NO	
209	MAW25BR001	FLANGE	501	114.3	2	NO	
210	MAW26BR001	ELBOW	501	114.3	7	NO	
211	MAW26BR001	TUBE/PIPE	501	114.3	9.5	M	
212	MAW26BR001	FLANGE	501	114.3	2	NO	
213	MAW50BR001	ELBOW	280	406.4	1	NO	
214	MAW50BR001	TUBE/PIPE	280	406.4	2	M	
215	MAW50BR001	REDU	280	406.4	1	NO	
216	MAW50BR001	BEND	280	406.4	1	NO	
217	MAW50BR001	ELBOW	280	406.4	1	NO	
218	MAW50BR001	WELDOLET	280	406.4	1	NO	
219	MAW50BR001	WELDOLET	280	406.4	2	NO	
220	MAW50BR001	TEE	280	406.4	1	NO	
221	MAW50BR001	VALVE	280	406.4	1	NO	
222	MAW50BR001	VALVE	280	457.2	1	NO	
223	MAW50BR002	ELBOW	540	457.2	9	NO	
224	MAW50BR002	TUBE/PIPE	540	457.2	12.5	M	
225	MAW50BR002	BEND	540	457.2	2	NO	
226	MAW50BR002	ELBOW	540	457.2	1	NO	
227	MAW50BR002	TEE	540	457	1	NO	
228	MAW50BR002	VALVE	540	457.2	1	NO	
229	MAW50BR003	FLANGE	280	168.3	1	NO	
230	MAW50BR003	TUBE/PIPE	280	168.3	1	M	
231	MAW50BR003	BEND	280	168.3	1	NO	

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SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
232	MAW50BR003	FLANGE	280	168.3	1	NO	
233	MAW50BR003	WELDOLET	280	168.3	1	NO	
234	MAW50BR103	ELBOW	280	406.4	2	NO	
235	MAW50BR103	TUBE/PIPE	280	406.4	1	M	
236	MAW50BR103	VALVE	280	406.4	1	NO	
237	MAW50BR104	ELBOW	540	457.2	2	NO	
238	MAW50BR104	TUBE/PIPE	540	457.2	1.5	M	
239	MAW50BR104	REDU	540	457.2	1	NO	
240	MAW60BR001	ELBOW	430	114.3	2	NO	
241	MAW60BR001	TUBE/PIPE	430	114.3	4	M	
242	MAW60BR001	BEND	430	114.3	1	NO	
243	MAW60BR002	ELBOW	430	114.3	2	NO	
244	MAW60BR002	TUBE/PIPE	430	114.3	4	M	
245	MAW60BR002	BEND	430	114.3	1	NO	
246	MAW60BR003	ELBOW	430	168.3	2	NO	
247	MAW60BR003	TUBE/PIPE	430	168.3	5	M	
248	MAW60BR003	BEND	430	168.3	1	NO	
249	MAW60BR003	CAP	430	168.3	1	NO	
250	MAW60BR003	TEE	430	168.3	2	NO	
251	MAW60BR004	ELBOW	430	114.3	5	NO	
252	MAW60BR004	TUBE/PIPE	430	114.3	5	M	
253	MAW60BR004	BEND	430	114.3	1	NO	
254	MAW60BR005	ELBOW	430	114.3	5	NO	
255	MAW60BR005	TUBE/PIPE	430	114.3	5.5	M	
256	MAW60BR005	BEND	430	114.3	1	NO	
257	MAW60BR006	ELBOW	430	168.3	2	NO	
258	MAW60BR006	TUBE/PIPE	430	168.3	3	M	
259	MAW60BR006	BEND	430	168.3	1	NO	
260	MAW60BR006	CAP	430	168.3	1	NO	
261	MAW60BR006	TEE	430	168.3	2	NO	
262	MAW60BR007	BEND	430	219.1	3	NO	
263	MAW60BR007	CAP	430	219.1	1	NO	
264	MAW60BR007	ELBOW	430	219.1	6	NO	

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SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
265	MAW60BR007	WELDOLET	430	219.1	1	NO	
266	MAW60BR007	WELDOLET	430	219.1	1	NO	
267	MAW60BR007	TEE	430	219.1	2	NO	
268	MAW60BR007	TUBE/PIPE	430	219.1	15.5	M	
269	MAW60BR008	TUBE/PIPE	347	114.3	1	M	
270	MAW60BR008	TUBE/PIPE	347	48.3	1	M	
271	MAW60BR008	CAP	347	114.3	1	NO	
272	MAW80BR001	TUBE/PIPE	225	141.3	1	M	
273	MAW80BR001	TUBE/PIPE	225	323.8	4	M	
274	MAW80BR001	ELBOW	225	323.9	6	NO	
275	MAW80BR001	FLANGE	225	141.3	1	NO	
276	MAW80BR001	TEE	225	323.9	1	NO	
277	MAW80BR001	TEE	225	323.9	1	NO	
278	MAW80BR001	TEE	225	323.8	1	NO	
279	MAW80BR001	TUBE/PIPE	225	323.9	25	M	
280	MAW80BR001	VALVE	225	323.9	2	NO	
281	MAW80BR002	TUBE/PIPE	310	88.9	1	M	
282	MAW80BR002	BEND	310	88.9	2	NO	
283	MAW80BR002	REDU	310	323.9	1	NO	
284	MAW80BR002	ELBOW	310	323.9	5	NO	
285	MAW80BR002	REDU	310	273.1	1	NO	
286	MAW80BR002	TEE	310	273	1	NO	
287	MAW80BR002	TEE	310	273	1	NO	
288	MAW80BR002	TUBE/PIPE	310	273.1	6.5	M	
289	MAW80BR002	TUBE/PIPE	310	323.9	7	M	
290	MAW80BR003	CAP	310	219.1	1	NO	
291	MAW80BR003	TEE	310	219.1	2	NO	
292	MAW80BR003	TUBE/PIPE	310	219.1	2.5	M	
293	MAW80BR004	TUBE/PIPE	225	33.4	1	M	
294	MAW80BR004	TUBE/PIPE	225	60.3	1	M	
295	MAW80BR004	ELBOW	225	273	5	NO	
296	MAW80BR004	FLANGE	225	60.3	1	NO	
297	MAW80BR004	FLANGE	225	60.3	1	NO	

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SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
298	MAW80BR004	TUBE/PIPE	225	273.1	5.5	M	
299	MAW80BR005	ELBOW	310	33.4	1	NO	
300	MAW80BR005	TUBE/PIPE	310	33.4	2	M	
301	MAW80BR005	REDU	310	33.4	2	NO	
302	MAW80BR005	BEND	310	33.4	6	NO	
303	MAW80BR005	TEE	310	33.4	1	NO	
304	MAW80BR006	ELBOW	310	33.4	5	NO	
305	MAW80BR006	TUBE/PIPE	310	33.4	3	M	
306	MAW80BR006	REDU	310	33.4	2	NO	
307	MAW80BR006	TEE	310	33.4	1	NO	
308	MAW80BR008	ELBOW	100	168.3	5	NO	
309	MAW80BR008	TUBE/PIPE	100	168.3	9	M	
310	MAW80BR008	REDU	100	219.1	1	NO	
311	MAW80BR008	COUP	100	168.3	1	NO	
312	MAW80BR008	FLANGE	100	168.3	2	NO	
313	MAW80BR008	TEE	100	168.3	1	NO	
314	MAW80BR008	VALVE	100	168.3	1	NO	
315	MAW80BR009	ELBOW	100	168.3	2	NO	
316	MAW80BR009	TUBE/PIPE	100	168.3	1	M	
317	MAW80BR009	REDU	100	219.1	1	NO	
318	MAW80BR009	COUP	100	168.3	1	NO	
319	MAW80BR009	FLANGE	100	168.3	2	NO	
320	MAW80BR009	VALVE	100	168.3	1	NO	
321	MAW80BR012	TUBE/PIPE	100	219.1	1	M	
322	MAW80BR012	TUBE/PIPE	100	33.4	1	M	
323	MAW80BR012	ELBOW	100	219.1	2	NO	
324	MAW80BR012	FLANGE	100	219.1	2	NO	
325	MAW80BR012	TUBE/PIPE	100	219.1	2	M	
326	MAW80BR012	VALVE	100	219.1	1	NO	
327	MAW80BR013	TUBE/PIPE	100	219.1	1	M	
328	MAW80BR013	TUBE/PIPE	100	33.4	1	M	
329	MAW80BR013	TEE	100	219.1	1	NO	
330	MAW80BR013	ELBOW	100	219.1	4	NO	

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SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
331	MAW80BR013	FLANGE	100	219.1	2	NO	
332	MAW80BR013	TUBE/PIPE	100	219.1	7.5	M	
333	MAW80BR013	VALVE	100	219.1	1	NO	
334	MAW80BR020	TUBE/PIPE	100	33.4	10.5	M	
335	MAW80BR020	BEND	100	33.4	6	NO	
336	MAW80BR021	TUBE/PIPE	100	33.4	11.5	M	
337	MAW80BR021	BEND	100	33.4	6	NO	
338	MAW81BR001	ELBOW	310	114.3	2	NO	
339	MAW81BR001	TUBE/PIPE	310	114.3	4	M	
340	MAW81BR001	BEND	310	114.3	1	NO	
341	MAW81BR002	ELBOW	310	114.3	3	NO	
342	MAW81BR002	TUBE/PIPE	310	114.3	4	M	
343	MAW81BR003	ELBOW	310	168.3	2	NO	
344	MAW81BR003	TUBE/PIPE	310	168.3	8	M	
345	MAW81BR003	REDU	310	168.3	1	NO	
346	MAW81BR003	BEND	310	168.3	1	NO	
347	MAW81BR003	FLANGE	310	168.3	2	NO	
348	MAW81BR003	TEE	310	168.3	1	NO	
349	MAW81BR003	VALVE	310	168.3	1	NO	
350	MAW82BR001	ELBOW	310	114.3	3	NO	
351	MAW82BR001	TUBE/PIPE	310	114.3	4	M	
352	MAW82BR001	BEND	310	114.3	1	NO	
353	MAW82BR002	ELBOW	310	114.3	4	NO	
354	MAW82BR002	TUBE/PIPE	310	114.3	4	M	
355	MAW82BR003	ELBOW	310	168.3	4	NO	
356	MAW82BR003	TUBE/PIPE	310	168.3	7.5	M	
357	MAW82BR003	REDU	310	168.3	1	NO	
358	MAW82BR003	BEND	310	168.3	1	NO	
359	MAW82BR003	FLANGE	310	168.3	2	NO	
360	MAW82BR003	TEE	310	168.3	1	NO	
361	MAW82BR003	VALVE	310	168.3	1	NO	
362	MAW83BR001	ELBOW	310	114.3	6	NO	
363	MAW83BR001	TUBE/PIPE	310	114.3	14	M	

Rajesh Kumar



**Bill of Materials for Thermal Insulation of TIP
Seal Steam System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement Length / Qty	Unit of measurement	Insulation Thickness (mm) To be filled by vendor
364	MAW83BR001	BEND	310	114.3	1	NO	
365	MAW83BR001	VALVE	310	114.3	1	NO	
366	MAW83BR001	FLANGE	310	114.3	2	NO	
367	MAW84BR001	ELBOW	310	141.3	2	NO	
368	MAW84BR001	TUBE/PIPE	310	141.3	9.5	M	
369	MAW84BR001	REDU	310	141.3	1	NO	
370	MAW84BR001	BEND	310	141.3	1	NO	
371	MAW84BR001	FLANGE	310	141.3	2	NO	
372	MAW84BR001	VALVEE	310	141.3	1	NO	
373	MAW84BR002	TUBE/PIPE	310	114.3	2	M	
374	MAW85BR001	ELBOW	225	88.9	2	NO	
375	MAW85BR001	TUBE/PIPE	225	88.9	3	M	
376	MAW85BR001	BEND	225	88.9	2	NO	
377	MAW85BR001	VALVE	225	88.9	1	NO	
378	MAW85BR001	FLANGE	225	88.9	2	NO	
379	MAW86BR001	TUBE/PIPE	225	88.9	2.5	M	
380	MAW86BR001	BEND	225	88.9	2	NO	
381	MAW86BR001	VALVE	225	88.9	1	NO	
382	MAW86BR001	FLANGE	225	88.9	2	NO	

Rajesh Kumar



**Bill of Materials for Thermal Insulation of TIP
Overload Piping System**

SI No	TAG No of the Line	TYPE	Operating Temperature (deg C)	Pipe OD (mm)	Measurement	Unit of measurement	Insulation Thickness (mm) To be filled by
1	MAA14BR001	BEND	565	219.1	6	NO	
2	MAA14BR001	FTUB	565	229	2	NO	
3	MAA14BR001	WELDOLET	565	60.3	1	NO	
4	MAA14BR001	TUBE/PIPE	565	219.1	11	M	
5	MAA14BR002	BEND	565	219.1	4	NO	
6	MAA14BR002	FTUB	565	229	2	NO	
7	MAA14BR002	WELDOLET	565	60.3	1	NO	
8	MAA14BR002	TUBE/PIPE	565	219.1	12	M	
9	MAA14BR003	ELBOW	520	168.3	7	NO	
10	MAA14BR003	TUBE/PIPE	520	168.3	15	M	
11	MAA14BR003	REDU	520	219.1	1	NO	
12	MAA14BR004	ELBOW	520	168.3	13	NO	
13	MAA14BR004	TUBE/PIPE	520	168.3	21	M	
14	MAA14BR004	REDU	520	219.1	1	NO	

Rajesh Kumar

General Notes for Seal Steam, Turbine Drainage & Overload Piping System:

1. This BOM may vary by +/- 3%.
2. Components are not included in pipe length and are to be considered separately for Thermal Insulation as per the above table. This supercedes Clause 2.5 of ST29005 in this regard.
3. This BOM consists of total 25 (Twenty five) pages. Turbine Drainage System = 9 Pages, Seal Steam System = 14 Pages & Overload Piping System = 2 Page.



SPECIAL INSTRUCTIONS:

Checklist for Vendors	SI No	BHEL REQUIREMENTS	VENDOR's CHECKPOINT (To be filled by Vendor) [YES/NO]
	1	<i>Vendor has indicated insulation thicknesses for all items covered in this document.</i>	
	2	<i>Vendor has considered design criteria as per doc no 412114W5000 , ST29005 REV_04 & Annexure-1 (Customer Spec.).</i>	
	3	<i>Vendor has furnished Sample Calculations for min 10 different cases.</i>	
	4	<i>Vendor has furnished k-values of insulation mattresses at different mean temperatures ranging from 100-300 °C.</i>	
	5	<i>Vendor has furnished BOM containing breakup of quantity of mattresses (in Kg and m²) & Aluminium (in kg, for 18,20 & 22 SWG separately) in their standard format along with weight in Kg.</i>	

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