MASTER COPY

Rev. rev.	Sc. sc.	Descrizione Description of revision	Preparato prepared	Controllato checked	Verificato Checked	Approvato approved	Data Date
1	I	REVISED DUE TO SPRING MATERIAL AS PER STANDARD MSS-SP-58 ADDED	PIPE SUPPORTS	PIPE SUPPORTS	PIPE SUPPORTS	ANSALDO	19/12/02
0	I	FIRST ISSUE	PIPE SUPPORTS	PIPE SUPPORTS	PIPE SUPPORTS	ANSALDO	12/11/02

AKRIMOTA THERMAL POWER STATION
STAGE-I, UNITS # 1 & 2 (2 x 125 MW)

OWNER	GUJARAT MINERAL	GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED
CONSULTANT	SELF-RELIANCE IN ENGINEERING DESEIN	DESEIN PRIVATE LIMITED CONSULTING ENGINEERS

Commessa Job no.	Emittente Issued by	Tipo doc. doc. type	Form. Size	Scala scale	Derivato da derived from	Rev. Rev.
0180	PIPESUPPORTS	CCD	A4			1

ANSALDO

Ansaldo Energia s.p.a.

Titolo
Title

SPRING HANGER SUPPORTS DRAWINGS & DATA SHEETS

Identificativo/document no.	Foglio Sheet	Segue fg. Foll. Sheet	Di Of
0180 – VXVVFS162	1	2	6

VARIABLE EFFORT SUPPORT (TYPE-BM1)

Client	Asian Power Projects Ltd.		
Project	Akrimota-TPS		
Client ref.	LOI LP/LOI-AKRI/SAI/1847 dt 28/10/02		
PSI ref	1609	Doc. No.:-	1609-BM1-001

MATERIAL DESCRIPTION

Sr No	DESCRIPTION	MATERIAL
1	SPRING	IS:4454/EN45/EN45A/EN47/50CrV4/60CrV2/50Cr4V2/60SiCr7/55Si7/60Si7/SAE9254/51CrMOV4. (As per MSS-SP-58)
	CAN SECTION	IS:2062 Gr-A/B
	PLATE	IS:2062 Gr-A/B
	ROD	IS:2062 Gr-A/B
	HARDWARE	IS:1367 CL4.6 & CL4
	NAMEPLATE	ALUMINIUM

Painting:-
Primer:- 2 Coats of Epoxy Resin Zinc Rich Primer to 100 microns DFT
Finish:- 3 Coats of Polyamide cured Epoxy MIO Paint to 200 microns DFT
Threads Zinc Plated

Amendments:-
Rev-0 by SRG on 08/11/02
Rev-1 by SRG on 29/11/02
Rev-2 by SRG on 16/12/02
Rev Note: Spring Material List included.

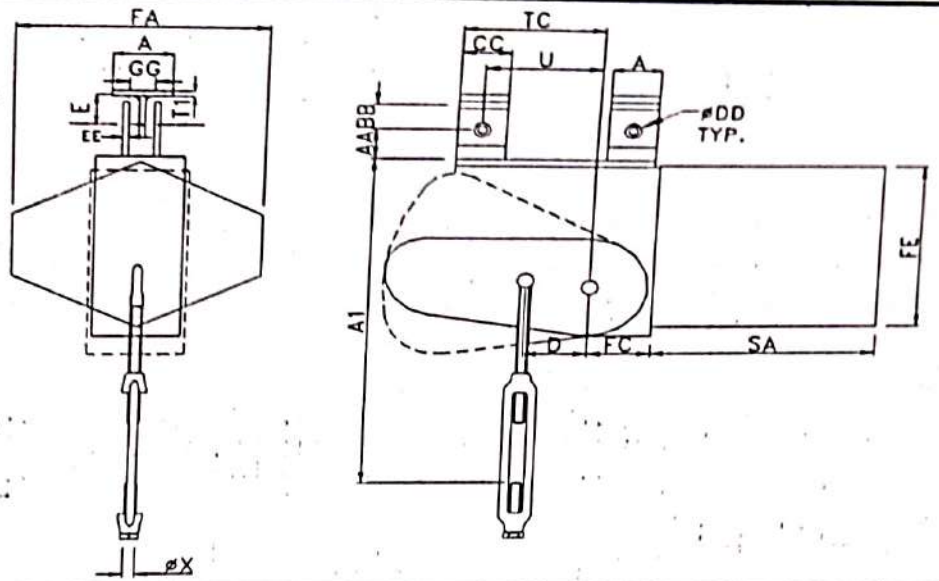
Chkd By:-

Appd By

Sr No	Tag No	Size	Operating Load	Travel (+up) (-down)	Spring Rate	Preset Load	Load Var.	K	M	S	P	U	Base Bolt size	V	Y	J	Qty
			kg	mm	kg/mm	kg	%	mm	mm	mm	mm	mm		mm	mm	mm	Nos
1	1-BQ-0001	V1-20	1298	-6	21.7	1168	10	198	250	270	240	170	M20	12	120	296	1
2	1-BQ-0027	V2-17	646	-12	4.61	591	8.56	198	250	270	240	170	M20	12	100	347	1
3	1-BQ-0036	V2-17	547	14	4.61	612	11.8	198	250	270	240	170	M20	12	100	343	1
4	1-BQ-0037	V2-20	1319	18	10.9	1515	14.8	250	320	270	268	190	M20	12	120	372	1
5	1-BQ-0051	V1-17	530	2	9.22	548	3.48	164	200	270	240	170	M20	10	100	250	1
6	1-BQ-0057	V1-17	471	2	9.22	489	3.91	164	200	270	240	170	M20	10	100	257	1
7	1-BQ-0062	V1-17	489	2	9.22	507	3.77	164	200	270	240	170	M20	10	100	255	1
8	1-BQ-0144	V2-17	467	21	4.61	564	20.7	198	250	270	240	170	M20	12	100	353	1
9	1-BQ-0154	V2-17	563	17	4.61	641	13.9	198	250	270	240	170	M20	12	100	336	1
10	1-BQ-0163	V2-17	565	18	4.61	648	14.7	198	250	270	240	170	M20	12	100	335	1
11	2-BQ-0001	V1-20	1298	-6	21.7	1168	10	198	250	270	240	170	M20	12	120	296	1
12	2-BQ-0027	V2-17	646	-12	4.61	591	8.56	198	250	270	240	170	M20	12	100	347	1
13	2-BQ-0036	V2-17	547	14	4.61	612	11.8	198	250	270	240	170	M20	12	100	343	1
14	2-BQ-0037	V2-20	1319	18	10.9	1515	14.8	250	320	270	268	190	M20	12	120	372	1
15	2-BQ-0051	V1-17	511	2	9.22	529	3.61	164	200	270	240	170	M20	10	100	252	1
16	2-BQ-0057	V1-17	451	3	9.22	479	6.13	164	200	270	240	170	M20	10	100	258	1
17	2-BQ-0062	V1-17	474	3	9.22	502	5.83	164	200	270	240	170	M20	10	100	255	1
18	2-BQ-0144	V2-17	467	21	4.61	564	20.7	198	250	270	240	170	M20	12	100	353	1
19	2-BQ-0154	V2-17	563	17	4.61	641	13.9	198	250	270	240	170	M20	12	100	336	1
20	2-BQ-0163	V2-17	565	18	4.61	648	14.7	198	250	270	240	170	M20	12	100	335	1
21	1-BQ-0221	V1-21	1898	3	28.9	1985	4.56	198	250	270	240	170	M20	12	120	304	1
22	2-BQ-2063	V2-18	684	18	6.13	794	16.1	198	250	270	240	170	M20	12	100	363	1
23	2-BQ-0221	V1-21	1898	3	28.9	1985	4.56	198	250	270	240	170	M20	12	120	304	1

Note: Base Plate Bolts are not in our scope

Load Data Sheet for Constants Model:- HD-TS3

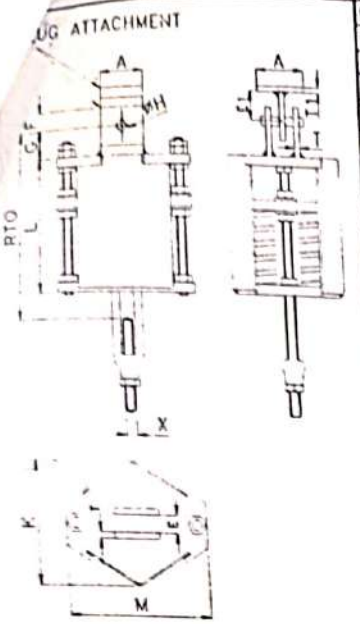


Customer : -	Ansaldo Services Private Limited	PSI Offer Ref:-	1609
Project:-	Akrimota 2x125 MW TPS	Drg No:-	1609-HD-TS3-001
Enq. Ref:-	LOI LP/WI-AKRI/SAI/1847 dt 28/10/02	Rev-0 :-	By SRG on 08/11/02
		Rev-1 :-	By SRG on 29/11/02
		Rev-2	By SRG on 16/12/02
		Rev Note: Spring Material list included	
Painting:-		Material Specification:-	
Primer:-	2 Coats of Epoxy Resin Zinc Rich Primer to 100 mic DFT	Plates/Rods/Can Section:-	IS:2062 Gr-A/B
Finish:-	3 Coats of Epoxy MIO Paint - Total DFT 300 Microns	Spring :-	IS:4454/EN45/EN45A/EN47/50CrV4/60Cr4V2/50Cr4V2/60SiCr7/55Si7/60Si7/SAE9254/51CrMOV4 (As Per MSS-SP-58)
Threads:-	Zinc Plated	Turn Buckle:-	SA105 / IS:2062

Ser. No	Tag No	Size	Hot Load	Travel (+ up)	Movement Provided	A1	D	DIA 'X'	U	A	E	T1	FA	FC	FE	TC	SA	AA	BB	CC	DD	EE	GG	Qty
			Kg	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Nos
1	1-BQ-0043	C4-12	572	73	100	585	188	M20	155	60	50	10	330	95	250	205	286	36	30	50	18	6	25	1
2	1-BQ-0044	C3-9	234	58	110	530	148	M16	120	60	42	10	250	65	198	145	253	36	30	50	18	6	25	2
3	2-BQ-0043	C4-12	572	73	100	585	134	M20	155	60	50	10	330	95	250	205	286	36	30	50	18	6	25	1
4	2-BQ-0044	C3-9	234	58	110	530	148	M16	120	60	42	10	250	65	198	145	253	36	30	50	18	6	25	2

Note:-All the dimensions except 'A1' are for reference only.

VARIABLE EFFORT SUPPORT (TYPE-TS3)



Client	Asian Power Projects Ltd.		
Project	Akrimota-TPS		
Client ref.	LOI LP/LOI-AKRI/SAI/1847 dt 28/10/02		
PSI ref	1609	Drg No.:-	1609-TS3-001

MATERIAL DESCRIPTION

Sr No	DESCRIPTION	MATERIAL
1	SPRING	IS:4454/EN45/EN45A/EN47/50CrV4/50Cr4V2/50Cr4V2/60SiCr7/55Si7/60Si7/SAE9254/ 51CrMOV4. (As per MSS-SP-58)
	CAN SECTION	IS:2062 Gr-A/B
	PLATE	IS:2062 Gr-A/B
	ROD	IS:2062 Gr-A/B
	TURNBUCKLE	SA105
	HARDWARE	IS:1367 CL4.6 & CL4
	NAMEPLATE	ALUMINIUM
	LUG ATTACHMENT	IS:2062 Gr-A/B

Painting:-
Primer:- 2 Coats of Epoxy Resin Zinc Rich Primer to 100 microns DFT
Finish:- 3 Coats of Polyamide Cured Epoxy MIO paint to 200 microns DFT
Threads Zinc Plated

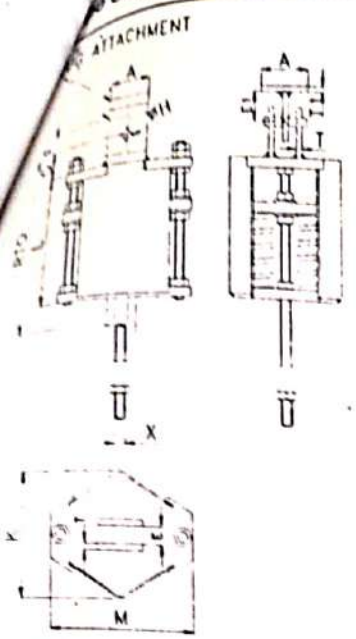
Amendments:-
Rev-0 by SRG on 08/11/02
Rev-1 by SRG on 29/11/02
Rev-2 by SRG on 16/12/02

Rev. Note: Spring Material List included.

Ser No	Tag No	Size	Operating Load	Travel (+up) (-down)	Spring Rate	Preset Load	Load Var.	X	K	M	L	E1	F	G	H	T	T1	A	E	T	RTO	QTY
			kg	mm	kg/mm	kg	%		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Nos
1	1-BQ-0004	V1-21	1535	8	28.9	1766	15	M24	198	250	259	80	55	80	40	16	20	100	45	16	358	1
2	1-BQ-0005	V1-20	1185	9	21.7	1381	16.5	M24	198	250	231	70	55	70	33	12	16	100	40	12	322	1
3	1-BQ-0006	V2-17	524	-20	4.61	432	17.6	M20	198	250	264	50	35	50	22	10	10	60	30	10	320	1
4	1-BQ-0007	V2-20	1318	-17	10.9	1133	14	M24	250	320	311	70	55	70	33	12	16	100	40	12	401	1
5	1-BQ-0011	V2-18	694	15	6.13	786	13.3	M20	198	250	284	50	35	50	22	10	10	60	30	10	377	1
6	1-BQ-0012	V3-19	973	28	4.07	1087	11.7	M20	250	320	473	60	45	60	26	10	12	80	35	10	630	1
7	1-BQ-0014	V3-17	626	-38	2.3	538	14	M20	250	320	409	50	35	50	22	10	10	60	30	10	518	1
8	1-BQ-0017	V3-15	339	34	1.36	385	13.6	M16	164	200	455	42	30	36	18	6	10	60	25	6	606	1
9	1-BQ-0019	V2-16	407	-21	3.72	329	19.2	M16	198	250	244	50	35	50	22	10	10	60	30	10	305	1
10	1-BQ-0022	V2-16	358	19	3.72	429	19.7	M16	198	250	244	50	35	50	22	10	10	60	30	10	332	1
11	1-BQ-0025	V3-15	367	-34	1.36	321	12.6	M16	164	200	455	42	30	36	18	6	10	60	25	6	558	2
12	1-BQ-0029	V3-14	254	-55	1.04	197	22.5	M12	164	200	406	42	30	36	18	6	10	60	25	6	473	1
13	1-BQ-0034	V1-11	108	8	1.73	122	12.8	M12	122	155	139	30	20	30	14	6	8	50	20	6	212	2
14	1-BQ-0042	V2-18	610	19	6.13	727	19.1	M20	198	250	284	50	35	50	22	10	10	60	30	10	367	1
15	1-BQ-0093	V3-10	70	25	0.321	78	11.4	M12	164	200	351	30	20	30	14	6	8	50	20	6	458	1
16	1-BQ-0099	V1-12	130	10	2.34	153	18	M12	122	155	139	30	20	30	14	6	8	50	20	6	209	1
17	1-BQ-0102	V3-7	33	21	0.143	36	9.09	M12	122	155	336	30	20	30	14	6	8	50	20	6	471	1
18	1-BQ-0109	V2-11	107	10	0.865	116	8.09	M12	164	200	209	30	20	30	14	6	8	50	20	6	291	1
19	1-BQ-0123	V1-13	184	-2	3	178	3.26	M12	122	155	160	42	30	36	18	6	10	60	25	6	214	2
20	1-BQ-0133	V1-14	199	3	4.15	211	6.25	M12	122	155	173	42	30	36	18	6	10	60	25	6	220	2
21	1-BQ-0143	V2-14	187	18	2.07	224	20	M12	164	200	235	42	30	36	18	6	10	60	25	6	300	2
22	1-BQ-0145	V1-14	211	2	4.15	219	3.93	M12	122	155	173	42	30	36	18	6	10	60	25	6	222	2
23	1-BQ-0153	V2-14	211	18	2.07	248	17.7	M12	164	200	235	42	30	36	18	6	10	60	25	6	311	2
24	1-BQ-0155	V1-13	204	2	3	210	2.94	M12	122	155	160	42	30	36	18	6	10	60	25	6	224	2
25	1-BQ-0162	V2-14	232	18	2.07	269	16.1	M12	164	200	235	42	30	36	18	6	10	60	25	6	321	2
26	1-BQ-0175	V1-11	92	12	1.73	113	22.6	M12	122	155	139	30	20	30	14	6	8	50	20	6	206	2
27	1-BQ-0176	V3-15	276	-22	1.36	246	10.8	M16	164	200	455	42	30	36	18	6	10	60	25	6	503	1
28	1-BQ-0177	V2-9	65	-11	0.5	59.5	8.46	M12	122	155	208	30	20	30	14	6	8	50	20	6	275	2
29	1-BQ-0179	V2-8	41	-14	0.358	36	12.2	M12	122	155	206	30	20	30	14	6	8	50	20	6	244	2
30	1-BQ-0181	V2-12	131	20	1.17	154	17.9	M12	164	200	213	30	20	30	14	6	8	50	20	6	297	1

Supports India Pvt Ltd

VARIABLE EFFORT SUPPORT (TYPE-TS3)



Client	Asian Power Projects Ltd.
Project	Akrimota-TPS
Client ref.	LOI LP/LOI-AKRI/SAI/1847 dt 28/10/02
PSI ref	1609 Drg No.:- 1609-TS3-001

Sr No	DESCRIPTION	MATERIAL DESCRIPTION MATERIAL
1	SPRING	IS:4454/EN45/EN45A/EN47/50CrV4/60Cr4V2/50Cr4V2/60SiCr7/55Si7/60Si7/SAE9254/51CrMOV4. (As per MSS-SP-58)
	CAN SECTION	IS:2062 Gr-A/B
	PLATE	IS:2062 Gr-A/B
	ROD	IS:2062 Gr-A/B
	TURNBUCKLE	SA105
	HARDWARE	IS:1367 CL4.6 & CL4
	NAMEPLATE	ALUMINIUM
	LUG ATTACHMENT	IS:2062 Gr-A/B

Painting:-
Primer:- 2 Coats of Epoxy Resin Zinc Rich Primer to 100 microns DFT
Finish:- 3 Coats of Polyamide Cured Epoxy MIO paint to 200 microns DFT
Threads Zinc Plated

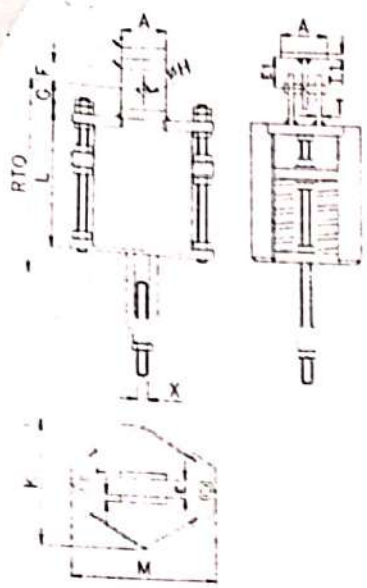
Amendments:-
Rev-0 by SRG on 08/11/02
Rev-1 by SRG on 29/11/02
Rev-2 by SRG on 16/12/02

Rev. Note: Spring Material List included.

Ser No	Tag No	Size	Operating Load	Travel (+up) (-down)	Spring Rate	Preset Load	Load Var.	X	K	M	L	E1	F	G	H	T	T1	A	E	T	RTO	QTY
			kg	mm	kg/mm	kg	%		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Nos
31	2-BQ-0004	V1-21	1535	8	28.9	1766	15	M24	198	250	259	80	55	80	40	16	20	100	45	16	358	1
32	2-BQ-0005	V1-20	1185	9	21.7	1381	16.5	M24	198	250	231	70	55	70	33	12	16	100	40	12	322	1
33	2-BQ-0006	V2-17	524	-20	4.61	432	17.6	M20	198	250	264	50	35	50	22	10	10	60	30	10	320	1
34	2-BQ-0007	V2-20	1318	-17	10.9	1133	14	M24	250	320	311	70	55	70	33	12	16	100	40	12	401	1
35	2-BQ-0011	V2-18	694	15	6.13	786	13.3	M20	198	250	284	50	35	50	22	10	10	60	30	10	377	1
36	2-BQ-0012	V3-19	973	28	4.07	1087	11.7	M20	250	320	473	60	45	60	26	10	12	80	35	10	630	1
37	2-BQ-0014	V3-17	626	-38	2.3	538	14	M20	250	320	409	50	35	50	22	10	10	60	30	10	518	1
38	2-BQ-0017	V3-15	339	34	1.36	385	13.6	M16	164	200	455	42	30	36	18	6	10	60	25	6	606	1
39	2-BQ-0019	V2-16	407	-21	3.72	329	19.2	M16	198	250	244	50	35	50	22	10	10	60	30	10	305	1
40	2-BQ-0022	V2-16	358	19	3.72	429	19.7	M16	198	250	244	50	35	50	22	10	10	60	30	10	332	1
41	2-BQ-0025	V3-15	367	-34	1.36	321	12.6	M16	164	200	455	42	30	36	18	6	10	60	25	6	558	2
42	2-BQ-0029	V3-14	254	-55	1.04	197	22.5	M12	164	200	406	42	30	36	18	6	10	60	25	6	473	1
43	2-BQ-0034	V1-11	108	8	1.73	122	12.8	M12	122	155	139	30	20	30	14	6	8	50	20	6	212	2
44	2-BQ-0042	V2-18	610	19	6.13	727	19.1	M20	198	250	284	50	35	50	22	10	10	60	30	10	367	1
45	2-BQ-0093	V3-10	70	25	0.321	78	11.4	M12	164	200	351	30	20	30	14	6	8	50	20	6	458	1
46	2-BQ-0099	V1-12	130	10	2.34	153	18	M12	122	155	139	30	20	30	14	6	8	50	20	6	209	1
47	2-BQ-0102	V3-7	33	21	0.143	36	9.09	M12	122	155	336	30	20	30	14	6	8	50	20	6	471	1
48	2-BQ-0109	V2-11	107	10	0.865	116	8.09	M12	164	200	209	30	20	30	14	6	8	50	20	6	291	1
49	2-BQ-0123	V1-13	184	-2	3	178	3.26	M12	122	155	160	42	30	36	18	6	10	60	25	6	214	2
50	2-BQ-0133	V1-14	199	3	4.15	211	6.25	M12	122	155	173	42	30	36	18	6	10	60	25	6	220	2
51	2-BQ-0143	V2-14	187	18	2.07	224	20	M12	164	200	235	42	30	36	18	6	10	60	25	6	300	2
52	2-BQ-0145	V1-13	158	2	3	164	3.8	M12	122	155	160	42	30	36	18	6	10	60	25	6	209	2
53	2-BQ-0153	V2-14	211	18	2.07	248	17.7	M12	164	200	235	42	30	36	18	6	10	60	25	6	311	2
54	2-BQ-0155	V1-13	204	2	3	210	2.94	M12	122	155	160	42	30	36	18	6	10	60	25	6	224	2
55	2-BQ-0162	V2-14	232	18	2.07	269	16.1	M12	164	200	235	42	30	36	18	6	10	60	25	6	321	2
56	2-BQ-0175	V1-11	92	12	1.73	113	22.6	M12	122	155	139	30	20	30	14	6	8	50	20	6	206	2
57	2-BQ-0176	V3-15	276	-22	1.36	246	10.8	M16	164	200	455	42	30	36	18	6	10	60	25	6	503	1
58	2-BQ-0177	V2-9	65	-11	0.5	59.5	8.46	M12	122	155	208	30	20	30	14	6	8	50	20	6	275	2
59	2-BQ-0179	V2-8	41	-14	0.358	36	12.2	M12	122	155	206	30	20	30	14	6	8	50	20	6	244	2
60	2-BQ-0181	V2-12	131	20	1.17	154	17.9	M12	164	200	213	30	20	30	14	6	8	50	20	6	297	1

VARIABLE EFFORT SUPPORT (TYPE-TS3)

LUG ATTACHMENT



Client	Asian Power Projects Ltd.		
Project	Akrimota-TPS		
Client ref.	LOI LP/LOI-AKRI/SAI/1847 dt 28/10/02		
PSI ref	1609	Drg No.:-	1609-TS3-001

MATERIAL DESCRIPTION

Sr No	DESCRIPTION	MATERIAL
1	SPRING	IS 4454/EN45/EN45A/EN47/50CrV4/50Cr4V2/50Cr4V2/50SiCr7/55Si7/50Si7/SAE9254/ 51CrMOV4 (As per MSS-SP-58)
	CAN SECTION	IS 2062 Gr-A/B
	PLATE	IS 2062 Gr-A/B
	ROD	IS 2062 Gr-A/B
	TURNBUCKLE	SA105
	HARDWARE	IS 1367 CL4.6 & CL4
	NAMEPLATE	ALUMINIUM
	LUG ATTACHMENT	IS 2062 Gr-A/B

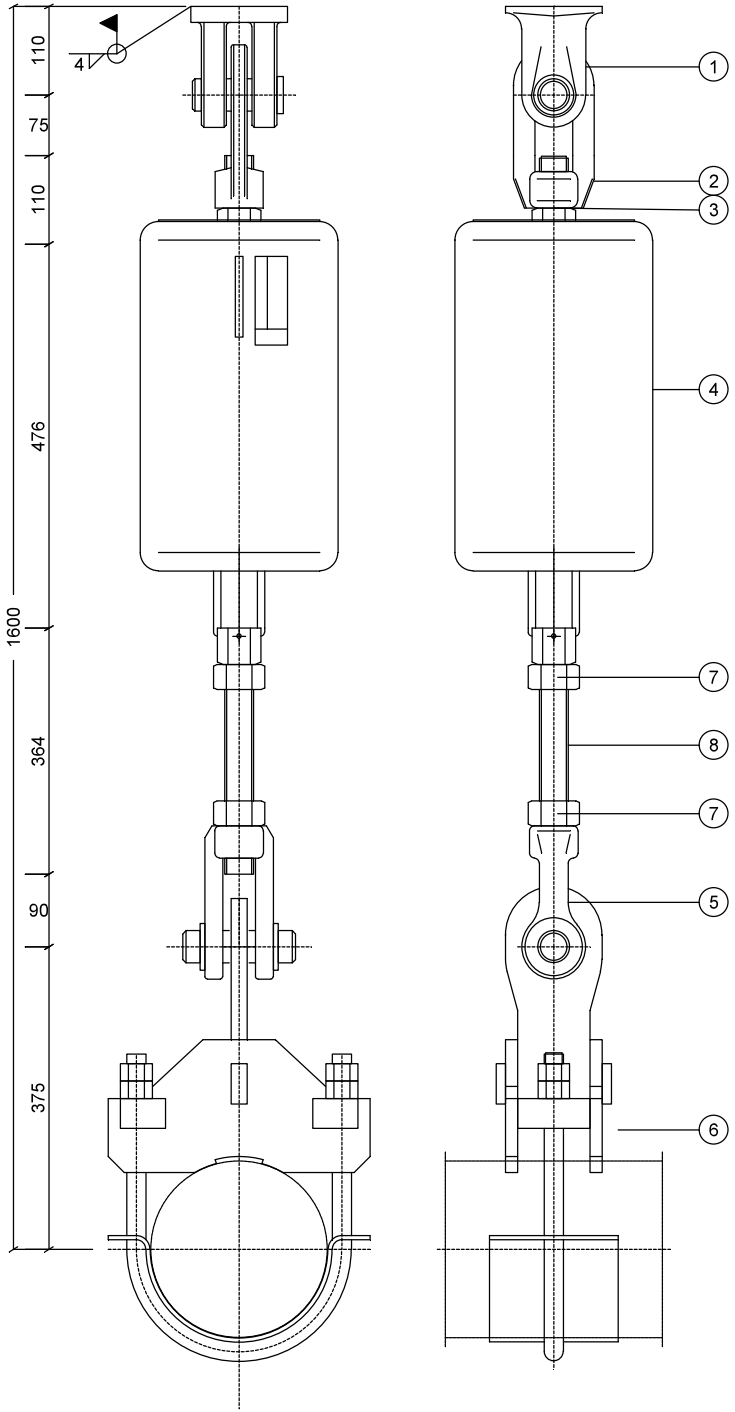
Painting:-
Primer:- 2 Coats of Epoxy Resin Zinc Rich Primer to 100 microns DFT
Finish:- 3 Coats of Polyamide Cured Epoxy MIO paint to 200 microns DFT
Threads Zinc Plated

Amendments:-
Rev-0 by SRG on 08/11/02
Rev-1 by SRG on 29/11/02
Rev-2 by SRG on 16/12/02

Rev. Note:	Spring Material List included.

Ser No	Tag No	Size	Operating Load	Travel (+up) (-down)	Spring Rate	Preset Load	Load Var.	X	K	M	L	E1	F	G	H	T	T1	A	E	T	RTO	QTY
			kg	mm	kg/mm	kg	%		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Nos
61	1-BQ-0206	V3-14	237	23	1.04	261	10.1	M12	164	200	406	42	30	36	18	6	10	60	25	6	535	1
62	1-BQ-0210	V3-14	227	35	1.04	263	16	M12	164	200	406	42	30	36	18	6	10	60	25	6	537	1
63	1-BQ-0216	V2-13	149	14	1.5	170	14.1	M12	164	200	222	42	30	36	18	6	10	60	25	6	288	1
64	1-BQ-0220	V2-13	146	14	1.5	167	14.4	M12	164	200	222	42	30	36	18	6	10	60	25	6	286	1
65	1-BQ-0309	V1-8	37	-5	0.717	33.4	9.69	M12	122	155	133	30	20	30	14	6	8	50	20	6	183	1
66	2-BQ--0206	V3-14	237	23	1.04	261	10.1	M12	164	200	406	42	30	36	18	6	10	20	25	6	535	1
67	2-BQ-0210	V3-14	228	35	1.04	264	15.9	M12	164	200	406	42	30	36	18	6	10	20	25	6	538	1
68	2-BQ-0216	V2-13	149	14	1.5	170	14.1	M12	164	200	222	42	30	36	18	6	10	20	25	6	288	1
69	2-BQ-0220	V2-13	146	14	1.5	167	14.4	M12	164	200	222	42	30	36	18	6	10	20	25	6	286	1
70	2-BQ-0309	V1-8	37	-5	0.717	33.4	9.69	M12	122	155	133	30	20	30	14	6	8	50	20	6	183	1
71	1-BQ-0016	V3-16	401	30	1.86	457	13.9	M16	250	320	374	50	35	50	22	10	10	60	30	10	514	1
72	2-BQ-0016	V3-16	401	30	1.86	457	13.9	M16	250	320	374	50	35	50	22	10	10	60	30	10	514	1

CW condeser outlet hanger support



Used surface protection system: C3M-M

Pipe clamp is selected for a load inclined at an angle of 1°

8	**Threaded rod**	677213	(364)	1	3.40	IS 2062
7	**Hexagonal nut**	637928	M36	2	0.78	Cl. 8
6	**Pipe clamp**	442233	D219.1	1	22.00	**A387 Gr.22**
5	**Clevis with pin**	617912		1	4.40	**A 105**
4	**Variable spring hanger**	217218		1	63.00	
3	**Threaded stud**	677113	110	1	0.75	**IS 2062**
2	**Eye nut**	607912		1	2.00	**A 105**
1	**Weld-on clevis /w bolt**	737912		1	6.80	A 105
					103.13	

Pos.	Description	Type	mm	Qty	kg	Material

Quantity of Supports : 2 **206.26**

1249843

Input F(H) =	42.27 kN
F(H) =	42.56 kN
F(C) =	48.56 kN
F(P) =	48.56 kN
later.=	0 mm
horiz.=	0 mm
vert.=	15 mm
Ø OD =	200.0 mm
Insul=	0 mm
Temp.=	0 °C
ΔF =	14 %
Spring rate =	400.0 N/mm
tot Tvl =	100 mm
Preset=	71 mm
tri Tvl =	15.00 mm

LISEGA

Customer :
GMDC
Plant / System :

P.O. N° : 2022400216.0 DT. 05.09.2022

LISEGA Offer N°:
0-8-0 0

LICAD Dwg.- N° Rev.
5286-3-82292

LISEGA India
SHMISHRA
Drawing N° :

Project manager 7/29/2022

Checked:

LICAD
Vers. 11.1.0.125