



L&T Construction

Power Transmission & Distribution

CLIENT :



BIHAR STATE POWER TRANSMISSION CO.LTD., PATNA

PROJECT :

PACKAGE - NIT 77 UNDER STATE PLAN [80:20], CONSTRUCTION OF :
 (I) LILO OF BARH-PATNA 400 KV D/C (QUAD) TL AT BAKHTIYARPUR (LINE LENGTH 10RKM),
 (II) 220 KV D/C BAKHTIYARPUR - SHEIKHPURA TL (ACSR ZEBRA) (LINE LENGTH - 51 RKM),
 (III) 220 KV D/C BAKHTIYARPUR -HATHIDAH TL (ACSR ZEBRA) (LINE LENGTH -52 RKM) AND
 (IV) 220 KV D/C BAKHTIYARPUR – FATHUA TL (ACSR ZEBRA) (LINE LENGTH - 28 RKM)

Spec. No. : **NIT no. 77/PR/BSPTCL/2018**

DRG. No. : **O18089-T-TL-8D-GA-0407**

BOM No. : **BOM/LE19D023/4DD/008**

NO OF SHEETS: **9**

BILL OF MATERIAL

+9M BODY EXTN. FOR TOWER TYPE - "4DD/DE"

400KV D/C QUAD ACSR MOOSE (WZ-4)

WEIGHT OF STRUCTURE	
HT MEMBERS: BOM/LE19D023/PQD9E	6675.932
MS MEMBERS INCLUDING PACK WASHERS AND ACCESSORIES ECT. BOM/LE19D023/PQD9E = 4316.410 BOM/LE19D023/PQD9W = 9.554	4325.964
WEIGHT OF BOLTS & NUTS, SPRING WASHERS AND STEP BOLTS BOM/LE19D023/PQD9B	373.810
TOTAL WEIGHT OF STRUCTURE:	11375.706 Kgs

SUCCESSFULLY TESTED AT L&T-TLTRS-KANCHIPURAM
ON 23rd OF JULY 2019

APPROVED
 I am hereby certifying that you are not absolved of responsibility for correctness of the materials supplied as per specification

Electrical Superintending Engineer
 (Planning and Engineering)
 Bihar State Power Transmission Corporation Limited
 Vidya Vihar, Patna - 800 021

REV.	DATE	SUBMISSION FOR APPROVAL AFTER SUCCESSFUL TESTING			CHKD.	REVED.	APPD.
1	24.07.19	DESCRIPTION			PU	BSR	CSR
PREPARED BY		CHECKED BY	REVIEWED BY	APPROVED BY		DATE	
MBR		PU	BSR	CSR		24.07.19	

THIS IS PROPRIETARY ITEM AND DESIGN RIGHT IS STRICTLY RESERVED WITH BSPTCL UNDER NO CIRCUMSTANCES THIS DRAWING SHALL BE USED BY ANYBODY WITHOUT PRIOR PERMISSION FROM BSPTCL IN WRITING.



LARSEN & TOUBRO LIMITED, CONSTRUCTION.,
979, Mount-Poonamallee Road, Manapakkam,
Tamilnadu-600089, PHONE :044-22526000, FAX :044-22526059

Date: 24-Jul-2019

Page: 1 of 6

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9E

Order Ref: REF/LE19D023

Sl.No	Part Code	Raw Material	Length Size (In MM)	Unit Wt (In KG)	Req Qty	Per piece wt	Total Wt	Per Piece Ass.Wt
BOM OF +9M BODY EXTN. FOR TOWER TYPE - "4DD/DE" (400KV D/C QUAD)								
1	77B4DD9000SH	L150X150X18H-E350A	4400.00	40.100	2	176.440	352.880	
2	77B4DD9000AH	L150X150X18H-E350A	4400.00	40.100	2	176.440	352.880	
3	77B4DD9001H	L150X150X18H-E350A	4400.00	40.100	2	176.440	352.880	
4	77B4DD9001AH	L150X150X18H-E350A	4400.00	40.100	2	176.440	352.880	
5	77B4DD9002SH	L150X150X18H-E350A	5187.00	40.100	2	207.999	415.998	
6	77B4DD9002AH	L150X150X18H-E350A	5187.00	40.100	2	207.999	415.998	
7	77B4DD9003H	L150X150X18H-E350A	5187.00	40.100	2	207.999	415.998	
8	77B4DD9003AH	L150X150X18H-E350A	5187.00	40.100	2	207.999	415.998	
9	77B4DD9004H	L150X150X12H-E350A	476.00	27.300	16	12.995	207.920	
10	77B4DD9004AH	L150X150X10H-E350A	476.00	22.900	16	10.900	174.400	
11	77B4DD9005H	14MM PLATE H-E350A	316.00 X 476.00	109.900	8	16.531	132.248	
12	77B4DD9006H	14MM PLATE H-E350A	130.00 X 476.00	109.900	16	6.801	108.816	
13	77B4DD9007H	14MM PLATE H-E350A	110.00 X 316.00	109.900	24	3.820	91.680	
14	77B4DD9008H	14MM PLATE H-E350A	64.00 X 316.00	109.900	4	2.223	8.892	
15	77B4DD9009H	14MM PLATE H-E350A	191.00 X 316.00	109.900	4	6.633	26.532	
16	77B4DD9010H	14MM PLATE H-E350A	191.00 X 316.00	109.900	4	6.633	26.532	
17	77B4DD9011H	L150X150X10H-E350A	417.00	22.900	8	9.549	76.392	
18	77B4DD9012H	14MM PLATE H-E350A	316.00 X 417.00	109.900	4	14.482	57.928	
19	77B4DD9013H	14MM PLATE H-E350A	130.00 X 417.00	109.900	8	5.958	47.664	
20	77B4DD9014LH	L100X100X6H-E350A	3950.00	9.200	2	36.340	72.680	
21	77B4DD9014RH	L100X100X6H-E350A	3950.00	9.200	2	36.340	72.680	
22	77B4DD9015LH	L100X100X6H-E350A	3954.00	9.200	2	36.377	72.754	
23	77B4DD9015RH	L100X100X6H-E350A	3954.00	9.200	2	36.377	72.754	
24	77B4DD9016L	L90X90X6-E250A	3950.00	8.200	2	32.390	64.780	
25	77B4DD9016R	L90X90X6-E250A	3950.00	8.200	2	32.390	64.780	
26	77B4DD9017L	L90X90X6-E250A	3954.00	8.200	2	32.423	64.846	
27	77B4DD9017R	L90X90X6-E250A	3954.00	8.200	2	32.423	64.846	
28	77B4DD9018LH	L100X100X6H-E350A	3800.00	9.200	2	34.960	69.920	
29	77B4DD9018RH	L100X100X6H-E350A	3800.00	9.200	2	34.960	69.920	
30	77B4DD9019LH	L100X100X6H-E350A	3800.00	9.200	2	34.960	69.920	
31	77B4DD9019RH	L100X100X6H-E350A	3800.00	9.200	2	34.960	69.920	
32	77B4DD9020L	L90X90X6-E250A	3800.00	8.200	2	31.160	62.320	
33	77B4DD9020R	L90X90X6-E250A	3800.00	8.200	2	31.160	62.320	

APPROVED

Subject to the condition that you are not absolved of
the responsibility for correctness of the materials
supplied as per specification

** -- Item Welded with another item
*** -- Item Assembled with another item

Electrical Superintending Engineer
(Planning and Engineering)

SK
16.06.19
Bihar State Power Transmission Corporation Limited
Vidya Nagar, Patna-800021



LARSEN & TOUBRO LIMITED, CONSTRUCTION.,
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Date: 24-Jul-2019

Page: 2 of 6

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9E

Order Ref: REF/LE19D023

Sl.No	Part Code	Raw Material	Length Size (In MM)	Unit Wt (In KG)	Req Qty	Per piece wt	Total Wt	Per Piece Ass.Wt
34	77B4DD9021L	L90X90X6-E250A	3800.00	8.200	2	31.160	62.320	
35	77B4DD9021R	L90X90X6-E250A	3800.00	8.200	2	31.160	62.320	
36	77B4DD9022LH	L100X100X6H-E350A	6985.00	9.200	2	64.262	128.524	
37	77B4DD9022RH	L100X100X6H-E350A	6985.00	9.200	2	64.262	128.524	
38	77B4DD9023LH	L100X100X6H-E350A	6985.00	9.200	2	64.262	128.524	
39	77B4DD9023RH	L100X100X6H-E350A	6985.00	9.200	2	64.262	128.524	
40	77B4DD9024L	L90X90X6-E250A	6985.00	8.200	2	57.277	114.554	
41	77B4DD9024R	L90X90X6-E250A	6985.00	8.200	2	57.277	114.554	
42	77B4DD9025L	L90X90X6-E250A	6985.00	8.200	2	57.277	114.554	
43	77B4DD9025R	L90X90X6-E250A	6985.00	8.200	2	57.277	114.554	
44	77B4DD9026LH	L75X75X5H-E350A	316.00	5.700	8	1.801	14.408	
45	77B4DD9026RH	L75X75X5H-E350A	316.00	5.700	8	1.801	14.408	
46	77B4DD9026AL	L75X75X5-E250A	316.00	5.700	8	1.801	14.408	
47	77B4DD9026AR	L75X75X5-E250A	316.00	5.700	8	1.801	14.408	
48	77B4DD9027H	12MM PLATE H-E350A	80.00 X 316.00	94.200	8	2.381	19.048	
49	77B4DD9027A	12MM PLATE-E250A	80.00 X 316.00	94.200	8	2.381	19.048	
50	77B4DD9028H	6MM PLATE H-E350A	164.00 X 316.00	47.100	8	2.441	19.528	
51	77B4DD9028A	6MM PLATE-E250A	164.00 X 316.00	47.100	8	2.441	19.528	
52	77B4DD9029L	L75X75X5-E250A	2314.00	5.700	4	13.190	52.760	
53	77B4DD9029R	L75X75X5-E250A	2314.00	5.700	4	13.190	52.760	
54	77B4DD9030	8MM PLATE-E250A	102.00 X 130.00	62.800	8	0.833	6.664	
55	77B4DD9030A	4MM PLATE-E250A	73.00 X 100.00	31.400	8	0.229	1.832	
56	77B4DD9031L	L70X70X5-E250A	2862.00	5.300	3	15.169	45.507	
57	77B4DD9031R	L70X70X5-E250A	2862.00	5.300	3	15.169	45.507	
58	77B4DD9031AL	L70X70X5-E250A	2862.00	5.300	1	15.169	15.169	
59	77B4DD9031AR	L70X70X5-E250A	2862.00	5.300	1	15.169	15.169	
60	77B4DD9032L	L90X90X6-E250A	4657.00	8.200	3	38.187	114.561	
61	77B4DD9032R	L90X90X6-E250A	4657.00	8.200	3	38.187	114.561	
62	77B4DD9032AL	L90X90X6-E250A	4657.00	8.200	1	38.187	38.187	
63	77B4DD9032AR	L90X90X6-E250A	4657.00	8.200	1	38.187	38.187	
64	77B4DD9033L	L70X70X5-E250A	2862.00	5.300	4	15.169	60.676	
65	77B4DD9033R	L70X70X5-E250A	2862.00	5.300	4	15.169	60.676	
66	77B4DD9033A	6MM PLATE-E250A	130.00 X 150.00	47.100	8	0.918	7.344	
67	77B4DD9034L	L50X50X4-E250A	2783.00	3.000	4	8.349	33.396	

APPROVED

** -- Item Welded with another item
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Electrical Superintending Engineer
(Design and Engineering)

Transmission Company Limited

8k
16.08.19

900021



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979, Mount-Poonamallee Road, Manapakkam,
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Date: 24-Jul-2019

Page: 3 of 6

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9E

Order Ref: REF/LE19D023

Sl.No	Part Code	Raw Material	Length Size (In MM)	Unit Wt (In KG)	Req Qty	Per piece wt	Total Wt	Per Piece Ass.Wt
68	77B4DD9034R	L50X50X4-E250A	2783.00	3.000	4	8.349	33.396	
69	77B4DD9035L	L45X45X4-E250A	2548.00	2.700	4	6.880	27.520	
70	77B4DD9035R	L45X45X4-E250A	2548.00	2.700	4	6.880	27.520	
71	77B4DD9036L	L100X100X7-E250A	7000.00	10.700	4	74.900	299.600	
72	77B4DD9036R	L100X100X7-E250A	7000.00	10.700	4	74.900	299.600	
73	77B4DD9037	8MM PLATE-E250A	150.00 X 279.00	62.800	8	2.628	21.024	
74	77B4DD9037A	4MM PLATE-E250A	73.00 X 279.00	31.400	8	0.640	5.120	
75	77B4DD9038	6MM PLATE-E250A	130.00 X 175.00	47.100	8	1.072	8.576	
76	77B4DD9039	6MM PLATE-E250A	120.00 X 170.00	47.100	8	0.961	7.688	
77	77B4DD9040L	L75X75X6-E250A	2862.00	6.800	4	19.462	77.848	
78	77B4DD9040R	L75X75X6-E250A	2862.00	6.800	4	19.462	77.848	
79	77B4DD9040A	6MM PLATE-E250A	130.00 X 153.00	47.100	8	0.937	7.496	
80	77B4DD9041L	L45X45X4-E250A	2452.00	2.700	4	6.620	26.480	
81	77B4DD9041R	L45X45X4-E250A	2452.00	2.700	4	6.620	26.480	
82	77B4DD9042L	L55X55X4-E250A	2961.00	3.300	4	9.771	39.084	
83	77B4DD9042R	L55X55X4-E250A	2961.00	3.300	4	9.771	39.084	
84	77B4DD9043L	L45X45X4-E250A	2452.00	2.700	4	6.620	26.480	
85	77B4DD9043R	L45X45X4-E250A	2452.00	2.700	4	6.620	26.480	
86	77B4DD9044L	L55X55X4-E250A	2961.00	3.300	4	9.771	39.084	
87	77B4DD9044R	L55X55X4-E250A	2961.00	3.300	4	9.771	39.084	
88	77B4DD9045L	L45X45X4-E250A	2392.00	2.700	4	6.458	25.832	
89	77B4DD9045R	L45X45X4-E250A	2392.00	2.700	4	6.458	25.832	
90	77B4DD9046H	12MM PLATE H-E350A	195.00 X 416.00	94.200	4	7.642	30.568	
91	77B4DD9047H	L110X110X8H-E350A	6600.00	13.400	2	88.440	176.880	
92	77B4DD9048	L100X100X7-E250A	6600.00	10.700	2	70.620	141.240	
93	77B4DD9049H	L110X110X8H-E350A	5440.00	13.400	2	72.896	145.792	
94	77B4DD9050	L100X100X7-E250A	5440.00	10.700	2	58.208	116.416	
95	77B4DD9051H	L110X110X8H-E350A	6600.00	13.400	2	88.440	176.880	
96	77B4DD9052	L100X100X7-E250A	6600.00	10.700	2	70.620	141.240	
97	77B4DD9053H	L90X90X6H-E350A	346.00	8.200	4	2.837	11.348	
98	77B4DD9053A	L75X75X6-E250A	346.00	6.800	4	2.353	9.412	
99	77B4DD9054H	6MM PLATE H-E350A	90.00 X 346.00	47.100	8	1.467	11.736	
100	77B4DD9054A	6MM PLATE-E250A	75.00 X 346.00	47.100	8	1.222	9.776	
101	77B4DD9056	6MM PLATE-E250A	105.00 X 132.00	47.100	8	0.653	5.224	

APPROVED

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Electrical Superintending Engineer
(Planning and Engineering)

Bihar State Power Transmission Corporation Limited

Vidya Nagar, Patna

8k
16.06.19



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Page: 4 of 6

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9E

Order Ref: REF/LE19D023

Sl.No	Part Code	Raw Material	Length Size (In MM)	Unit Wt (In KG)	Req Qty	Per piece wt	Total Wt	Per Piece Ass.Wt
102	77B4DD9057H	L60X60X4H-E350A	3118.00	3.700	4	11.537	46.148	
103	77B4DD9058	L45X45X4-E250A	2016.00	2.700	4	5.443	21.772	
104	77B4DD9058X	L45X45X4-E250A	2016.00	2.700	4	5.443	21.772	
105	77B4DD9059	L50X50X4-E250A	5839.00	3.000	8	17.517	140.136	
106	77B4DD9060	L65X65X4-E250A	3865.00	4.000	8	15.460	123.680	
107	77B4DD9061	L60X60X4-E250A	5092.00	3.700	8	18.840	150.720	
108	77B4DD9062	L45X45X4-E250A	2479.00	2.700	8	6.693	53.544	
109	77B4DD9063	L60X60X4-E250A	5411.00	3.700	4	20.021	80.084	
110	77B4DD9063X	L60X60X4-E250A	5411.00	3.700	4	20.021	80.084	
111	77B4DD9064	L55X55X4-E250A	4616.00	3.300	8	15.233	121.864	
112	77B4DD9064A	L45X45X4-E250A	2065.00	2.700	8	5.576	44.608	
113	77B4DD9065	6MM PLATE-E250A	110.00 X 164.00	47.100	8	0.850	6.800	
114	77B4DD9066LH	6MM PLATE H-E350A	188.00 X 330.00	47.100	4	2.922	11.688	
115	77B4DD9066RH	6MM PLATE H-E350A	188.00 X 330.00	47.100	4	2.922	11.688	
116	77B4DD9067L	6MM PLATE-E250A	206.00 X 326.00	47.100	4	3.163	12.652	
117	77B4DD9067R	6MM PLATE-E250A	206.00 X 326.00	47.100	4	3.163	12.652	
118	77B4DD9068L	6MM PLATE-E250A	110.00 X 291.00	47.100	4	1.508	6.032	
119	77B4DD9068R	6MM PLATE-E250A	110.00 X 291.00	47.100	4	1.508	6.032	
120	77B4DD9069L	6MM PLATE-E250A	134.00 X 320.00	47.100	4	2.020	8.080	
121	77B4DD9069R	6MM PLATE-E250A	134.00 X 320.00	47.100	4	2.020	8.080	
122	77B4DD9070L	6MM PLATE-E250A	113.00 X 287.00	47.100	4	1.528	6.112	
123	77B4DD9070R	6MM PLATE-E250A	113.00 X 287.00	47.100	4	1.528	6.112	
124	77B4DD9071	6MM PLATE-E250A	150.00 X 159.00	47.100	4	1.123	4.492	
125	77B4DD9072	6MM PLATE-E250A	92.00 X 110.00	47.100	2	0.477	0.954	
126	77B4DD9073H	L60X60X4H-E350A	3238.00	3.700	4	11.981	47.924	
127	77B4DD9073A	L75X75X5-E250A	337.00	5.700	4	1.921	7.684	
128	77B4DD9074H	L60X60X4H-E350A	3140.00	3.700	4	11.618	46.472	
129	77B4DD9074AH	L60X60X4H-E350A	3140.00	3.700	4	11.618	46.472	
130	77B4DD9074BH	6MM PLATE H-E350A	115.00 X 135.00	47.100	8	0.731	5.848	
131	77B4DD9075H	L75X75X5H-E350A	459.00	5.700	4	2.616	10.464	
132	77B4DD9076H	L65X65X4H-E350A	3200.00	4.000	4	12.800	51.200	
133	77B4DD9076XH	L65X65X4H-E350A	3200.00	4.000	4	12.800	51.200	
134	77B4DD9077H	L75X75X5H-E350A	3762.00	5.700	4	21.443	85.772	
135	77B4DD9077XH	L75X75X5H-E350A	3762.00	5.700	4	21.443	85.772	

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*** -- Item Assembled with another item

Electrical Superintending Engineer
(Planning and Engineering)

Bihar State Power Transmission Corporation Limited

gk
16.08.19

A



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Date: 24-Jul-2019

Page: 5 of 6

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9E

Order Ref: REF/LE19D023

Sl.No	Part Code	Raw Material	Length Size (In MM)	Unit Wt (In KG)	Req Qty	Per piece wt	Total Wt	Per Piece Ass.Wt
136	77B4DD9078H	L75X75X5H-E350A	3910.00	5.700	4	22.287	89.148	
137	77B4DD9078XH	L75X75X5H-E350A	3910.00	5.700	4	22.287	89.148	
138	77B4DD9079H	L50X50X4H-E350A	2234.00	3.000	4	6.702	26.808	
139	77B4DD9080H	L50X50X4H-E350A	2234.00	3.000	4	6.702	26.808	
140	77B4DD9081H	6MM PLATE H-E350A	110.00 X 135.00	47.100	8	0.699	5.592	
141	77B4DD9082H	L45X45X4H-E350A	1766.00	2.700	4	4.768	19.072	
142	77B4DD9083H	L45X45X4H-E350A	1766.00	2.700	4	4.768	19.072	
143	77B4DD9084	L45X45X4-E250A	1153.00	2.700	4	3.113	12.452	
144	77B4DD9085	L45X45X4-E250A	1153.00	2.700	4	3.113	12.452	
145	77B4DD9086H	L45X45X4H-E350A	1588.00	2.700	4	4.288	17.152	
146	77B4DD9087H	L75X75X5H-E350A	6260.00	5.700	4	35.682	142.728	
Total Weight :							10992.342	

Associated Parts

Part Code	Type of Association	Associated with	Total Weight
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No Association Part

Raw Material Involved	Standard Material	Total Weight (In Kg)
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BOM OF +9M BODY EXTN. FOR TOWER TYPE - "4DD/DE" (400kV D/C QUAD)

12MM PLATE H-E350A	HT	49.616
12MM PLATE-E250A	MS	19.048
14MM PLATE H-E350A	HT	500.292
4MM PLATE-E250A	MS	6.952
6MM PLATE H-E350A	HT	66.080
6MM PLATE-E250A	MS	143.630
8MM PLATE-E250A	MS	27.688
L100X100X6H-E350A	HT	1084.644
L100X100X7-E250A	MS	998.096
L110X110X8H-E350A	HT	499.552
L150X150X10H-E350A	HT	250.792
L150X150X12H-E350A	HT	207.920
L150X150X18H-E350A	HT	3075.512
L45X45X4-E250A	MS	379.224
L45X45X4H-E350A	HT	55.296

APPROVED

Subject to the condition that you are not absolved of
the responsibility for correctness of the materials
supplied as per specification

** -- Item Welded with another item

*** -- Item Assembled with another item

Electrical Superintending Engineer
(Planning and Engineering)

State Power Transmission

ed

16.08.19



LARSEN & TOUBRO LIMITED, CONSTRUCTION.,
979, Mount-Poonamallee Road, Manapakkam,
Tamilnadu-600089, PHONE :044-22526000, FAX :044-22526059

Date: 24-Jul-2019

Page: 6 of 6

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9E

Order Ref: REF/LE19D023

L50X50X4-E250A	MS	206.928
L50X50X4H-E350A	HT	53.616
L55X55X4-E250A	MS	278.200
L60X60X4-E250A	MS	310.888
L60X60X4H-E350A	HT	187.016
L65X65X4-E250A	MS	123.680
L65X65X4H-E350A	HT	102.400
L70X70X5-E250A	MS	242.704
L75X75X5-E250A	MS	142.020
L75X75X5H-E350A	HT	531.848
L75X75X6-E250A	MS	165.108
L90X90X6-E250A	MS	1272.244
L90X90X6H-E350A	HT	11.348
Total		10992.342
HT		6675.932
MS		4316.410

APPROVED

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supplied as per specification

Electrical Superintending Engineer
(Planning and Engineering)

Orissa State Power Transmission Corporation Limited
Bhubaneswar

SK
16.08.19

** -- Item Welded with another item
*** -- Item Assembled with another item



LARSEN & TOUBRO LIMITED, CONSTRUCTION.,
979, Mount-Poonamallee Road, Manapakkam,
Tamilnadu-600089, PHONE :044-22526000, FAX :044-22526059

Date: 24-Jul-2019

Page: 1 of 2

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9B

Order Ref: REF/LE19D023

Sl.No	Part Code	Raw Material	Length Size (In MM)	Unit Wt (In KG)	Req Qty	Per piece wt	Total Wt	Per Piece Ass. Wt
BOLTS & NUTS OF +9M BODY EXTN. FOR TOWER TYPE - "4DD/DE" (400kV D/C QUAD)								
1	PQD9B11	M16x3.5MM SPRING WASHER IS3063		0.009	2320	0.009	20.880	
2	PQD9B1	M16X35MM LONG (IS:12427)		0.119	598	0.119	71.162	
3	PQD9B2	M16X40MM LONG (IS:12427)		0.126	168	0.126	21.168	
4	PQD9B3	M16X45MM LONG (IS:12427)		0.134	310	0.134	41.540	
5	PQD9B4	M16X50MM LONG (IS:12427)		0.142	252	0.142	35.784	
6	PQD9B5	M16X55MM LONG (IS:12427)		0.150	264	0.150	39.600	
7	PQD9B6	M16X60MM LONG (IS:12427)		0.158	112	0.158	17.696	
8	PQD9B7	M16X65MM LONG (IS:12427)		0.164	92	0.164	15.088	
9	PQD9B9	M16X75MM LONG (IS:12427)		0.180	52	0.180	9.360	
10	PQD9B10	M16X80MM LONG (IS:12427)		0.185	472	0.185	87.320	
11	PQD9B12	M16x175LG STEP BOLT (350D) 2N+1SP		0.374	38	0.374	14.212	
Total Weight :							373.810	

Associated Parts

Part Code	Type of Association	Associated with	Total Weight
No Association Part			

Raw Material Involved	Standard Material	Total Weight (In Kg)
BOLTS & NUTS OF +9M BODY EXTN. FOR TOWER TYPE - "4DD/DE" (400kV D/C QUAD)		
M16x175LG STEP BOLT(350D) 2N+1SP		14.212
M16x3.5MM SPRING WASHER IS3063		20.880
M16X35MM LONG (IS:12427)		71.162
M16X40MM LONG (IS:12427)		21.168
M16X45MM LONG (IS:12427)		41.540
M16X50MM LONG (IS:12427)		35.784
M16X55MM LONG (IS:12427)		39.600
M16X60MM LONG (IS:12427)		17.696
M16X65MM LONG (IS:12427)		15.088
M16X75MM LONG (IS:12427)		9.360

APPROVED

Subject to the condition that you are not absolved of
the responsibility for correctness of the materials
supplied as per specification

** -- Item Welded with another item
*** -- Item Assembled with another item

Electrical Superintending Engineer
(Planning and Engineering)
Bihar State Power Transmission Limited
Vidya Nagar, Patna

Sk
16.08.19



LARSEN & TOUBRO LIMITED, CONSTRUCTION.,
979, Mount-Poonamallee Road, Manapakkam,
Tamilnadu-600089, PHONE :044-22526000, FAX :044-22526059

Date: 24-Jul-2019

Page: 2 of 2

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9B

Order Ref: REF/LE19D023

M16X80MM LONG (IS:12427)

Total

87.320

373.810

APPROVED

Subject to the condition that you are not absolved of
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supplied as per specification

A
Electrical Superintending Engineer
(Planning and Engineering)

Tamil Nadu State Power Transmission Corporation Limited
Chennai

SK
16.08.19

** -- Item Welded with another item
*** -- Item Assembled with another item



LARSEN & TOUBRO LIMITED, CONSTRUCTION.,
979, Mount-Poonamallee Road, Manapakkam,
Tamilnadu-600089, PHONE : 044-22526000, FAX : 044-22526059

Date: 24-Jul-2019

Page: 1 of 1

BILL OF MATERIAL

Order No : LE19D023 - Intra Kanchi R- TL -BSPTCL NIT-77

Bom No : BOM/LE19D023/PQD9W

Order Ref: REF/LE19D023

Sl.No	Part Code	Raw Material	Length Size (In MM)	Unit Wt (In KG)	Req Qty	Per piece wt	Total Wt	Per Piece Ass.Wt
PACK WASHERS OF +9M BODY EXTN. FOR TOWER TYPE - "4DD/DE" (400kV D/C QUAD)								
1	PQD9W1	M16x4MM ROUND PACK WASHER IS2016		0.014	32	0.014	0.448	
2	PQD9W2	M16x5MM ROUND PACK WASHER IS2016		0.018	8	0.018	0.144	
3	PQD9W3	M16x6MM ROUND PACK WASHER IS2016		0.021	42	0.021	0.882	
4	PQD9W4	M16x8MM ROUND PACK WASHER IS2016		0.028	6	0.028	0.168	
5	PQD9W5	M16x12MM ROUND PACK WASHER IS2016		0.043	184	0.043	7.912	
Total Weight :							9.554	

Associated Parts

Part Code	Type of Association	Associated with	Total Weight
No Association Part			

Raw Material Involved	Standard Material	Total Weight (In Kg)
PACK WASHERS OF +9M BODY EXTN. FOR TOWER TYPE - "4DD/DE" (400kV D/C QUAD)		
M16x12MM ROUND PACK WASHER IS2016		7.912
M16x4MM ROUND PACK WASHER IS2016		0.448
M16x5MM ROUND PACK WASHER IS2016		0.144
M16x6MM ROUND PACK WASHER IS2016		0.882
M16x8MM ROUND PACK WASHER IS2016		0.168
Total		9.554

APPROVED

Subject to the condition that you are not absolved of
the responsibility for correctness of the materials
supplied as per specification

(Signature)

Electrical Superintending Engineer
(Planning and Engineering)

State Power Transmission Corporation Limited

SK
16.08.19

(Signature)

** -- Item Welded with another item
*** -- Item Assembled with another item