



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-0307**

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

NO OF SHEETS: **9**

BILL OF MATERIAL

+9M BODY EXTN. FOR TOWER TYPE - "4DC"

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

WEIGHT OF STRUCTURE	
HT MEMBERS: BOM/LE19D023/PQC9E	4801.786
MS MEMBERS INCLUDING PACK WASHERS AND ACCESSORIES ECT. BOM/LE19D023/PQC9E = 3855.270 BOM/LE19D023/PQC9W = 0.140	3855.410
WEIGHT OF BOLTS & NUTS, SPRING WASHERS AND STEP BOLTS BOM/LE19D023/PQC9B	292.464
TOTAL WEIGHT OF STRUCTURE:	8949.66 Kgs

**SUCCESSFULLY TESTED AT L&T-TLTRS-KANCHIPURAM
ON 07th OF SEPTEMBER 2019**

0	07.09.19	SUBMISSION FOR APPROVAL AFTER SUCCESSFUL TESTING			PU	BSR	CSR
REV.	DATE	DESCRIPTION			CHKD.	REVED.	APPD.
PREPARED BY		CHECKED BY	REVIEWED BY	APPROVED BY	DATE		
MBR		PU	BSR	CSR	07.09.19		

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: 07-Sep-2019

Page: 1 of 6

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9E

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 - "4DC" (400KV D/C QUAD)								
1	77B4DC9000SH	L150X150X12H-E350A	5570.00	27.300	2	152.061	304.122	
2	77B4DC9000AH	L150X150X12H-E350A	5570.00	27.300	2	152.061	304.122	
3	77B4DC9001H	L150X150X12H-E350A	5570.00	27.300	2	152.061	304.122	
4	77B4DC9001AH	L150X150X12H-E350A	5570.00	27.300	2	152.061	304.122	
5	77B4DC9002SH	L150X150X12H-E350A	3989.00	27.300	2	108.900	217.800	
6	77B4DC9002AH	L150X150X12H-E350A	3989.00	27.300	2	108.900	217.800	
7	77B4DC9003H	L150X150X12H-E350A	3989.00	27.300	2	108.900	217.800	
8	77B4DC9003AH	L150X150X12H-E350A	3989.00	27.300	2	108.900	217.800	
9	77B4DC9004H	L120X120X10H-E350A	476.00	18.200	16	8.663	138.608	
10	77B4DC9004AH	L150X150X10H-E350A	476.00	22.900	16	10.900	174.400	
11	77B4DC9005H	14MM PLATE H-E350A	276.00 X 476.00	109.900	8	14.438	115.504	
12	77B4DC9006H	14MM PLATE H-E350A	110.00 X 476.00	109.900	16	5.754	92.064	
13	77B4DC9007H	14MM PLATE H-E350A	110.00 X 316.00	109.900	32	3.820	122.240	
14	77B4DC9008H	14MM PLATE H-E350A	171.00 X 316.00	109.900	4	5.939	23.756	
15	77B4DC9009H	14MM PLATE H-E350A	232.00 X 316.00	109.900	4	8.057	32.228	
16	77B4DC9010H	14MM PLATE H-E350A	232.00 X 316.00	109.900	4	8.057	32.228	
17	77B4DC9011H	14MM PLATE H-E350A	288.00 X 316.00	109.900	4	10.002	40.008	
18	77B4DC9012H	L150X150X10H-E350A	333.00	22.900	8	7.626	61.008	
19	77B4DC9013H	14MM PLATE H-E350A	316.00 X 333.00	109.900	4	11.565	46.260	
20	77B4DC9014H	14MM PLATE H-E350A	130.00 X 333.00	109.900	8	4.758	38.064	
21	77B4DC9015L	L100X100X8-E250A	5100.00	12.100	2	61.710	123.420	
22	77B4DC9015R	L100X100X8-E250A	5100.00	12.100	2	61.710	123.420	
23	77B4DC9016L	L100X100X7-E250A	5100.00	10.700	2	54.570	109.140	
24	77B4DC9016R	L100X100X7-E250A	5100.00	10.700	2	54.570	109.140	
25	77B4DC9017L	L100X100X8-E250A	4750.00	12.100	2	57.475	114.950	
26	77B4DC9017R	L100X100X8-E250A	4750.00	12.100	2	57.475	114.950	
27	77B4DC9018L	L100X100X7-E250A	4750.00	10.700	2	50.825	101.650	
28	77B4DC9018R	L100X100X7-E250A	4750.00	10.700	2	50.825	101.650	
29	77B4DC9019L	L100X100X8-E250A	4302.00	12.100	2	52.054	104.108	
30	77B4DC9019R	L100X100X8-E250A	4302.00	12.100	2	52.054	104.108	
31	77B4DC9020L	L100X100X7-E250A	4302.00	10.700	2	46.031	92.062	
32	77B4DC9020R	L100X100X7-E250A	4302.00	10.700	2	46.031	92.062	
33	77B4DC9021L	L80X80X6-E250A	316.00	7.300	4	2.307	9.228	

APPROVED

subject to the condition that you are not absolve
responsibility for correctness of the material
supplied as per specification

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

Electrical Superintending Engineer
(Planning and Engineering)

State Power Transmission Company Limited
Vidhyut Bhawan, Patna-800021

27.09.19



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

Date: 07-Sep-2019

Page: 2 of 6

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9E

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	77B4DC9021R	L80X80X6-E250A	316.00	7.300	4	2.307	9.228	
35	77B4DC9021AL	L80X80X6-E250A	316.00	7.300	4	2.307	9.228	
36	77B4DC9021AR	L80X80X6-E250A	316.00	7.300	4	2.307	9.228	
37	77B4DC9022	6MM PLATE-E250A	80.00 X 316.00	47.100	32	1.191	38.112	
38	77B4DC9023L	L45X45X4-E250A	838.00	2.700	4	2.263	9.052	
39	77B4DC9023R	L45X45X4-E250A	838.00	2.700	4	2.263	9.052	
40	77B4DC9024L	L45X45X4-E250A	1072.00	2.700	4	2.894	11.576	
41	77B4DC9024R	L45X45X4-E250A	1072.00	2.700	4	2.894	11.576	
42	77B4DC9025L	L55X55X4-E250A	1376.00	3.300	4	4.541	18.164	
43	77B4DC9025R	L55X55X4-E250A	1376.00	3.300	4	4.541	18.164	
44	77B4DC9026L	L65X65X4-E250A	2270.00	4.000	4	9.080	36.320	
45	77B4DC9026R	L65X65X4-E250A	2270.00	4.000	4	9.080	36.320	
46	77B4DC9027L	L80X80X6-E250A	2781.00	7.300	3	20.301	60.903	
47	77B4DC9027R	L80X80X6-E250A	2781.00	7.300	3	20.301	60.903	
48	77B4DC9027AL	L80X80X6-E250A	2781.00	7.300	1	20.301	20.301	
49	77B4DC9027AR	L80X80X6-E250A	2781.00	7.300	1	20.301	20.301	
50	77B4DC9028L	L80X80X6-E250A	3321.00	7.300	3	24.243	72.729	
51	77B4DC9028R	L80X80X6-E250A	3321.00	7.300	3	24.243	72.729	
52	77B4DC9028AL	L80X80X6-E250A	3321.00	7.300	1	24.243	24.243	
53	77B4DC9028AR	L80X80X6-E250A	3321.00	7.300	1	24.243	24.243	
54	77B4DC9029L	L45X45X4-E250A	3821.00	2.700	4	10.317	41.268	
55	77B4DC9029R	L45X45X4-E250A	3821.00	2.700	4	10.317	41.268	
56	77B4DC9030LH	L45X45X4H-E350A	1432.00	2.700	4	3.866	15.464	
57	77B4DC9030RH	L45X45X4H-E350A	1432.00	2.700	4	3.866	15.464	
58	77B4DC9031	L50X50X4-E250A	2360.00	3.000	8	7.080	56.640	
59	77B4DC9032L	L65X65X5-E250A	3389.00	4.900	4	16.606	66.424	
60	77B4DC9032R	L65X65X5-E250A	3389.00	4.900	4	16.606	66.424	
61	77B4DC9033L	L50X50X4-E250A	1623.00	3.000	4	4.869	19.476	
62	77B4DC9033R	L50X50X4-E250A	1623.00	3.000	4	4.869	19.476	
63	77B4DC9034L	L90X90X6-E250A	5589.00	8.200	4	45.830	183.320	
64	77B4DC9034R	L90X90X6-E250A	5589.00	8.200	4	45.830	183.320	
65	77B4DC9035L	L75X75X5-E250A	5052.00	5.700	4	28.796	115.184	
66	77B4DC9035R	L75X75X5-E250A	5052.00	5.700	4	28.796	115.184	
67	77B4DC9036L	L60X60X4-E250A	2087.00	3.700	4	7.722	30.888	

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

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

Electrical Superintending Engineer
(Planning and Engineering)
Tamil Nadu State Power Transmission Company Limited
Vidhyut Bhawan, Chennai

27-09-19



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

Date: 07-Sep-2019

Page: 3 of 6

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9E

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	77B4DC9036R	L60X60X4-E250A	2087.00	3.700	4	7.722	30.888	
69	77B4DC9037L	L45X30X4-E250A	998.00	2.200	4	2.196	8.784	
70	77B4DC9037R	L45X30X4-E250A	998.00	2.200	4	2.196	8.784	
71	77B4DC9038L	L45X45X4-E250A	3229.00	2.700	4	8.718	34.872	
72	77B4DC9038R	L45X45X4-E250A	3229.00	2.700	4	8.718	34.872	
73	77B4DC9039LH	L50X50X4H-E350A	2241.00	3.000	4	6.723	26.892	
74	77B4DC9039RH	L50X50X4H-E350A	2241.00	3.000	4	6.723	26.892	
75	77B4DC9040L	L55X55X4-E250A	2963.00	3.300	4	9.778	39.112	
76	77B4DC9040R	L55X55X4-E250A	2963.00	3.300	4	9.778	39.112	
77	77B4DC9041H	6MM PLATE H-E350A	123.00 X 145.00	47.100	8	0.840	6.720	
78	77B4DC9042H	10MM PLATE H-E350A	190.00 X 410.00	78.500	4	6.115	24.460	
79	77B4DC9043H	L100X100X8H-E350A	3747.00	12.100	2	45.339	90.678	
80	77B4DC9044H	L100X100X7H-E350A	3747.00	10.700	2	40.093	80.186	
81	77B4DC9045H	L100X100X8H-E350A	5350.00	12.100	2	64.735	129.470	
82	77B4DC9046H	L100X100X7H-E350A	5350.00	10.700	2	57.245	114.490	
83	77B4DC9047H	L100X100X8H-E350A	4385.00	12.100	2	53.059	106.118	
84	77B4DC9048H	L100X100X7H-E350A	4385.00	10.700	2	46.920	93.840	
85	77B4DC9049H	L100X100X8H-E350A	3747.00	12.100	2	45.339	90.678	
86	77B4DC9050H	L100X100X7H-E350A	3747.00	10.700	2	40.093	80.186	
87	77B4DC9051H	L80X80X6H-E350A	316.00	7.300	6	2.307	13.842	
88	77B4DC9051AH	L80X80X6H-E350A	316.00	7.300	6	2.307	13.842	
89	77B4DC9052H	6MM PLATE H-E350A	80.00 X 316.00	47.100	24	1.191	28.584	
90	77B4DC9053H	L45X45X4H-E350A	1885.00	2.700	4	5.090	20.360	
91	77B4DC9054	L45X45X4-E250A	3612.00	2.700	4	9.752	39.008	
92	77B4DC9054X	L45X45X4-E250A	3612.00	2.700	4	9.752	39.008	
93	77B4DC9055	L60X60X4-E250A	2745.00	3.700	4	10.157	40.628	
94	77B4DC9055X	L60X60X4-E250A	2745.00	3.700	4	10.157	40.628	
95	77B4DC9056	L60X60X4-E250A	4801.00	3.700	8	17.764	142.112	
96	77B4DC9057	L50X50X4-E250A	2857.00	3.000	8	8.571	68.568	
97	77B4DC9058	L45X30X4-E250A	1237.00	2.200	8	2.721	21.768	
98	77B4DC9059	L60X60X4-E250A	5125.00	3.700	4	18.963	75.852	
99	77B4DC9059X	L60X60X4-E250A	5125.00	3.700	4	18.963	75.852	
100	77B4DC9060H	L60X60X4H-E350A	3217.00	3.700	8	11.903	95.224	
101	77B4DC9061	L45X30X4-E250A	1306.00	2.200	8	2.873	22.984	

APPROVED

Subject to the condition that you are not absolved of
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)
Tamil Nadu State Power Transmission Company Limited
Tiruvallur Bhawan Tiruvallur-600021

27-09-19



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

Date: 07-Sep-2019

Page: 4 of 6

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9E

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	77B4DC9062	L55X55X4-E250A	4799.00	3.300	8	15.837	126.696	
103	77B4DC9063H	6MM PLATE H-E350A	110.00 X 155.00	47.100	8	0.803	6.424	
104	77B4DC9064L	6MM PLATE-E250A	179.00 X 196.00	47.100	4	1.652	6.608	
105	77B4DC9064R	6MM PLATE-E250A	179.00 X 196.00	47.100	4	1.652	6.608	
106	77B4DC9065	6MM PLATE-E250A	110.00 X 155.00	47.100	8	0.803	6.424	
107	77B4DC9066L	6MM PLATE-E250A	115.00 X 174.00	47.100	4	0.942	3.768	
108	77B4DC9066R	6MM PLATE-E250A	115.00 X 174.00	47.100	4	0.942	3.768	
109	77B4DC9067L	6MM PLATE-E250A	110.00 X 195.00	47.100	4	1.010	4.040	
110	77B4DC9067R	6MM PLATE-E250A	110.00 X 195.00	47.100	4	1.010	4.040	
111	77B4DC9068LH	6MM PLATE H-E350A	123.00 X 212.00	47.100	4	1.228	4.912	
112	77B4DC9068RH	6MM PLATE H-E350A	123.00 X 212.00	47.100	4	1.228	4.912	
113	77B4DC9069L	6MM PLATE-E250A	114.00 X 176.00	47.100	4	0.945	3.780	
114	77B4DC9069R	6MM PLATE-E250A	114.00 X 176.00	47.100	4	0.945	3.780	
115	77B4DC9070	6MM PLATE-E250A	140.00 X 174.00	47.100	4	1.147	4.588	
116	77B4DC9071H	L90X90X6H-E350A	443.00	8.200	4	3.633	14.532	
117	77B4DC9072	L70X70X5-E250A	3889.00	5.300	4	20.612	82.448	
118	77B4DC9073H	L75X75X5H-E350A	454.00	5.700	4	2.588	10.352	
119	77B4DC9074H	L75X75X5H-E350A	3758.00	5.700	4	21.421	85.684	
120	77B4DC9074XH	L75X75X5H-E350A	3758.00	5.700	4	21.421	85.684	
121	77B4DC9075H	L75X75X5H-E350A	6100.00	5.700	4	34.770	139.080	
122	77B4DC9075XH	L75X75X5H-E350A	6100.00	5.700	4	34.770	139.080	
123	77B4DC9076H	L50X50X4H-E350A	2086.00	3.000	4	6.258	25.032	
124	77B4DC9077H	L50X50X4H-E350A	2086.00	3.000	4	6.258	25.032	
125	77B4DC9078H	L45X45X4H-E350A	1626.00	2.700	4	4.390	17.560	
126	77B4DC9079H	L45X45X4H-E350A	1626.00	2.700	4	4.390	17.560	
127	77B4DC9080	L45X45X4-E250A	1080.00	2.700	4	2.916	11.664	
128	77B4DC9081	L45X45X4-E250A	1080.00	2.700	4	2.916	11.664	
129	77B4DC9082H	L45X45X4H-E350A	1465.00	2.700	4	3.956	15.824	
130	77B4DC9083H	L75X75X5H-E350A	5819.00	5.700	4	33.168	132.672	
131	77B4DC9084	6MM PLATE-E250A	92.00 X 165.00	47.100	2	0.715	1.430	
Total Weight :							8657.056	

Associated Parts

Part Code	Type of Association	Associated with	Total Weight
-----------	---------------------	-----------------	--------------

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

APPROVED

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

Electrical Superintending Engineer
(Planning and Engineering)
Tamil Nadu State Power Transmission Company Limited
Madhav Bhawan, Chennai-600021

8k
27.09.19



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

Date: 07-Sep-2019

Page: 5 of 6

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9E

Order Ref: REF/LE19D023

No Association Part

Raw Material Involved	Standard Material	Total Weight (In Kg)
BOM OF +9M BODY EXTN. FOR TOWER TYPE - "4DC" (400kV D/C QUAD)		
10MM PLATE H-E350A	HT	24.460
14MM PLATE H-E350A	HT	542.352
6MM PLATE H-E350A	HT	51.552
6MM PLATE-E250A	MS	86.946
L100X100X7-E250A	MS	605.704
L100X100X7H-E350A	HT	368.702
L100X100X8-E250A	MS	684.956
L100X100X8H-E350A	HT	416.944
L120X120X10H-E350A	HT	138.608
L150X150X10H-E350A	HT	235.408
L150X150X12H-E350A	HT	2087.688
L45X30X4-E250A	MS	62.320
L45X45X4-E250A	MS	294.880
L45X45X4H-E350A	HT	102.232
L50X50X4-E250A	MS	164.160
L50X50X4H-E350A	HT	103.848
L55X55X4-E250A	MS	241.248
L60X60X4-E250A	MS	436.848
L60X60X4H-E350A	HT	95.224
L65X65X4-E250A	MS	72.640
L65X65X5-E250A	MS	132.848
L70X70X5-E250A	MS	82.448
L75X75X5-E250A	MS	230.368
L75X75X5H-E350A	HT	592.552
L80X80X6-E250A	MS	393.264
L80X80X6H-E350A	HT	27.684
L90X90X6-E250A	MS	366.640
L90X90X6H-E350A	HT	14.532
Total		8657.056
HT		4801.786
MS		3855.270

APPROVED

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

** -- Item Welded with another item

*** -- Item Assembled with another item

Electrical Superintending Engineer
(Planning and Engineering)

Tamil Nadu State Power Transmission Company Limited

Arivud Bhawan, Chennai - 600 021

8K
27.09.19



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

Date: 07-Sep-2019

Page: 6 of 6

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9E

Order Ref: REF/LE19D023

APPROVED

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

Electrical Superintending Engineer
(Planning and Engineering)
Tamil Nadu State Power Transmission Company Limited
Vidyut Bhawan, Patna-800021

SK
27.09.19

** -- 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: 07-Sep-2019

Page: 1 of 2

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9B

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 - "4DC" (400kV D/C QUAD)								
1	PQC9B1	M16X35MM LONG (IS:12427)		0.119	312	0.119	37.128	
2	PQC9B2	M16X40MM LONG (IS:12427)		0.126	370	0.126	46.620	
3	PQC9B3	M16X45MM LONG (IS:12427)		0.134	302	0.134	40.468	
4	PQC9B10	M16x3.5MM SPRING WASHER IS3063		0.009	1832	0.009	16.488	
5	PQC9B4	M16X50MM LONG (IS:12427)		0.142	328	0.142	46.576	
6	PQC9B5	M16X55MM LONG (IS:12427)		0.150	72	0.150	10.800	
7	PQC9B6	M16X60MM LONG (IS:12427)		0.158	58	0.158	9.164	
8	PQC9B7	M16X65MM LONG (IS:12427)		0.164	22	0.164	3.608	
9	PQC9B8	M16X70MM LONG (IS:12427)		0.173	48	0.173	8.304	
10	PQC9B9	M16X75MM LONG (IS:12427)		0.180	320	0.180	57.600	
11	PQC9B11	M16x175LG STEP BOLT (350D) 2N+1SP		0.374	42	0.374	15.708	

Total Weight : 292.464

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 - "4DC" (400kV D/C QUAD)

M16x175LG STEP BOLT(350D) 2N+1SP		15.708
M16x3.5MM SPRING WASHER IS3063		16.488
M16X35MM LONG (IS:12427)		37.128
M16X40MM LONG (IS:12427)		46.620
M16X45MM LONG (IS:12427)		40.468
M16X50MM LONG (IS:12427)		46.576
M16X55MM LONG (IS:12427)		10.800
M16X60MM LONG (IS:12427)		9.164
M16X65MM LONG (IS:12427)		3.608
M16X70MM LONG (IS:12427)		8.304

APPROVED

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

Electrical Superintending Engineer
(Planning and Engineering)
Bihar State Power Transmission Company Limited
Vidyut Bhawan Patna-800021

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

27.09.19



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

Date: 07-Sep-2019

Page: 2 of 2

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9B

Order Ref: REF/LE19D023

M16X75MM LONG (IS:12427)

Total

57.600

292.464

APPROVED

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


Electrical Superintending Engineer
(Planning and Engineering)
Bihar State Power Transmission Company Limited
Vidyut Bhawan Patna-800021

SK
27.09.19



** -- 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: 07-Sep-2019

Page: 1 of 1

BILL OF MATERIAL

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

Bom No : BOM/LE19D023/PQC9W

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 - "4DC" (400kV D/C QUAD)								
1	PQC9W1	M16x4MM ROUND PACK WASHER IS2016		0.014	4	0.014	0.056	
2	PQC9W2	M16x6MM ROUND PACK WASHER IS2016		0.021	4	0.021	0.084	
Total Weight :							0.140	

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 - "4DC" (400kV D/C QUAD)		
M16x4MM ROUND PACK WASHER IS2016		0.056
M16x6MM ROUND PACK WASHER IS2016		0.084
Total		0.140

APPROVED

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

Electrical Engineering Engineer
(Planning and Engineering)
Bharat State Power Transmission Company Limited
Vidyut Bhawan, Patna-800021

SK
27.09.19

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