

Jabalpur Transmission Company Limited

(A wholly owned subsidiary of Sterlite Technologies Limited)

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To,

Mr. M.A.Khan

M/s Unitech Power Transmission Ltd.

136, Udyog Vihar, Phase-I,

Gurgaon, Haryana-122016

Ref No: SGL/JTCL/ENGG/UNITECH/DC/15

Dated: 24th Dec'2012

Subject: Approval of GTP, Drum Drawing of 7/3.66 mm earth wire for JTCL project.

Dear Sir,

This is in reference to your ref letter No: UPTL/Mktg/2012-13/281, dated 7th Dec 12, vide which you have submitted GTP, Drum Drawing of 7/3.66 mm earth wire for our approval. We have examined the same & found generally in order. We are hereby conveying our approval on the below mentioned documents/drawings :

Sr. No.	Description	Document No.	Rev. No.
1.	GTP of earthwire		0
2.	Drum Drawing	RW-165/2012	0

Approval conveyed herein neither relieve M/s UPTL of his contractual obligation & his responsibilities for correctness of dimension , materials of construction , weights ,designed details , assembly fits, performance particulars & conformity of the supplies with the Indian statutory laws as may be applicable , nor does it limit the JTCL rights under the contract.

Regards ^



Bigyan Parija

Engineer in Chief - Transmission Line

Copy to:

1. Mr. Jagan Mohan Rao along with Encl.

Encl: As Above

**GUARANTEED TECHNICAL PARTICULARS OF 7/3.66mm
GALVANISED STEEL EARTH WIRE AS PER IS:12776/2002
AND SPECIFICATION OF STERLITE GRID LIMITED**

PURCHASER - JABALPUR TRANSMISSION COMPANY LIMITED

CONTRACTOR - UNITECH POWER TRANSMISSION LTD.

TENDER SPECIFICATION No. - JTCL/02/001

**PROJECT - 765 KV D/C DHARMANJAYGARH - JABALPUR
TRANSMISSION LINE (PKG - C2).**

Sr. No.	Description	Unit	Value Guaranteed by the Bidder
1	Name & Address of Manufacturer		RATLAM WIRES PVT. LIMITED, Plot No. 3, Industrial Estate, RATLAM (M.P.) 457 - 001.

S. No.	Description	Unit	Guaranteed Particulars	
H.	GALVANISED STRANDED STEEL EARTH WIRE		Before Stranding	After Stranding
1.	Material		H. C. Steel Galvanised	
2.	Purity of Material	(%)	As below	
3.	Stranding and Wire diameter	(mm)	7/3.66	
4.	No. of Strands	(Nos.)	7	
5.	Weight	(Kg/km)	683	
6.	Single Wire before stranding			
6.1	Diameter of Wire Strand	(mm)		
6.1.1	Maximum	(mm)	3.74	
6.1.2	Minimum	(mm)	3.58	
6.2	Minimum elongation in 200mm length	(%)	4	3.5
6.3	Minimum tensile strength	(N / sq. mm)	Grade - B	
6.4	D. C. resistance at 20 Deg. C	(Ohms / km)	Not Applicable	

JABALPUR TRANSMISSION COMPANY LTD.
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Approved Vide Ref. Letter No. 84/J.T.C.L./EN 44/UNITECH/D C /15

Date : 24/12/12

Engineering Deptt. Ha-N

The above does not relieve the contractor from their contractual obligations

Cont. ...2..

O.P. CHAUHAN
Dy. General Manager
Ratlam Wires Pvt.Ltd.
3, Industrial Estate
RATLAM - 457001 (M.P.)

:: 2 ::

7.	Stranded Wire			
7.1	Length of Lay			
7.1.1	Maximum	(mm)	198	
7.1.2	Minimum	(mm)	165	
7.2	Minimum breaking load	(kN)	68.4	
7.3	Overall diameter	(mm)	10.98	
7.4	Modulus of elasticity	(kg./sq. mm)	19×10^3	
7.5	Coefficient of linear expansion	(per Dec. C)	11.50×10^{-6}	
7.6	D. C. Resistance at 20 Dec. C. (Maximum)	(Ohms / km)	2.50	
7.7	Total sectional area	(sq. mm)	73.646	
8.	Direction of lay of outer layer		Right Hand	
9.	Zinc Coating			
9.1	Number of One Minute		3	3
9.2	Number of half minute dips		1	
9.3	Quality of Zinc	(%)	99.95%	
9.4	Weight of coating on Wire	(gm / sq. m)	300	275
9.5	Torsion Test 100 x dia.		20	18
9.6	Process of Galvanising		Hot Dip	
10	Joints		No Joints	
11.	Oiling		Linseed Oil	
12.	Chemical composition			
12.1	Carbon (Max.)	(%)	0.55	
12.2	Manganese	(%)	0.4 to 0.90	
12.3	Phosphorus (Max)	(%)	0.04	
12.4	Sulphur (Max.)	(%)	0.04	
12.5	Silicon	(%)	0.15 to 0.35	

For RATLAM WIRES PVT. LTD.

Date: 30.11.2012

Place: RATLAM

(Signature)
(Printed Name)
(Designation)
(Seal)

O.P. CHAUHAN
Dy. GENERAL MANAGER
O.P. CHAUHAN
Dy. General Manager
Ratlam Wires Pvt.Ltd.
3, Industrial Estate
RATLAM - 457001 (M.P.)

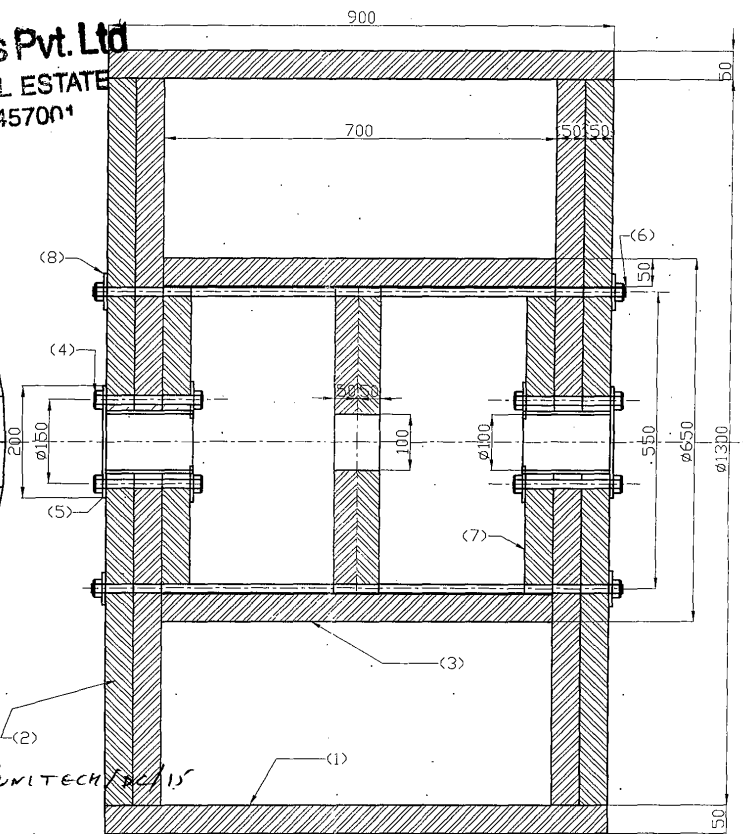
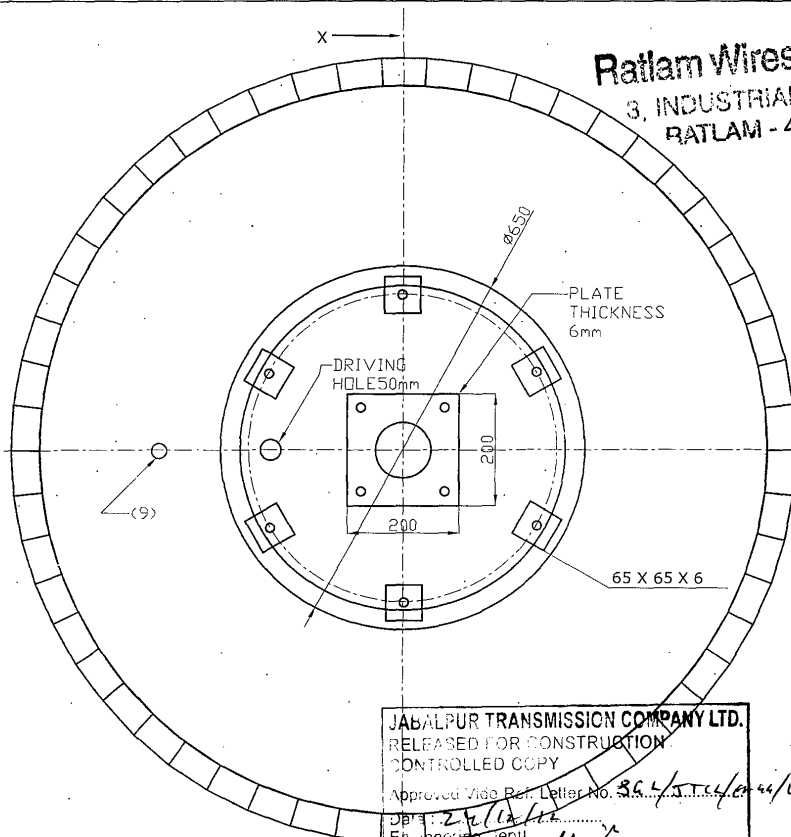
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Approved Vide Ref. Letter No. SAL/ITCL/ENR/UNITECH/DC/15

Date: 24/12/12
Engineering Deptt.

The above does not relieve the contractor from their contractual obligations

Ratlam Wires Pvt. Ltd
3, INDUSTRIAL ESTATE
RATLAM - 457001



JABALPUR TRANSMISSION COMPANY LTD.
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Approved Vice Pres. Letter No. 864/JTCL/02/001/UNITECH/2015
Date: 24/12/15
Engineering Deptt. *[Signature]*

X The above does not relieve the contractor from their contractual obligations

SECTION XX

- 1 ALL DIMENSIONS ARE IN MM.
- 2 CLEARANCE FROM OUTER SURFACE OF OUTER LAYER OF WIRE TO INNER SURFACE OF PROTECTIVE LAGGING IS ATLEAST 50 MM.
- 3 TWO LENGTHS OF EARTH WIRE ARE WOUND ON EVERY DRUM. THE LENGTHS ARE WELDED AND THE ENDS OF THE WELDS ARE MARKED BY RED TAPE.
- 4 THICKNESS OF PROTECTIVE LAGGING SHOULD BE 50 MM.
- 5 THE STANDARD LENGTH OF EARTH WIRE IS 2000+/-5% M.
- 6 TOLERANCE ON DIMENSIONS OF WOOD ONLY IS + 3 MM.
- 7 GROSS WEIGHT WITH LAGGING :- 2620 KG.
- 8 TARE WEIGHT :- 220 KG.
- 9 NET WEIGHT :- 2330 KG.

DESCRIPTION	QUANTITY	DIMENSION	TITLE:- DRUM DRAWING FOR SUPPLY OF 7/3.66 EARTH WIRE AS PER IS:12776/2002 & SPECIFICATION OF STERLITE GRID LIMITED.
1 PROTECTIVE EXTERNAL LAGGING	40	50X75X900	NAME OF MANUFACTURER : M/S RATLAM WIRES PVT.LTD., RTI
2 FLANGE	2	1300 X 100	NAME OF PURCHASER: JABALPUR TRANSMISSION COMPANY LIMIT
3 BARREL	1	50X75X700	NAME OF CONTRACTOR: UNITECH POWER TRANSMISSION LIMITED.
4 BARREL STUD FOR MS BUSH	8	M16 X 175	TENDER SPECIFICATION NO.: JTCL/02/001
5 MILD STEEL BUSH WITH PLATE	2	100 ID X 160	PROJECT:- 765 KV D/C DHARAMJAYAGARH-JABALPUR TRANSMISSION LINE (PACKAGE-C2)
6 Tie Rods	6	950 X M16	DATE PREPARED BY CHECKED BY APPROVED BY DRAW
7 BARREL SUPPORT	3	570 DIA	30.11.15 <i>[Signature]</i> <i>[Signature]</i> <i>[Signature]</i> RW-165/
8 WASHER	24	65 X 65 X 6	
9 SLOT FOR INNER OF EARTH WIRE	1	50 mm	