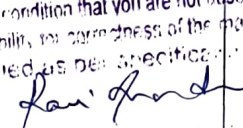


GUARANTEE TECHNICAL PARTICULARS OF ACSR ZEBRA CONDUCTOR

Owner	BIHAR STATE POWER TRANSMISSION COMPANY LIMITED
Contractor	K.Ramachandra Rao Transmission & Projects Pvt. Ltd. Hyderabad.
Project Name	1.Construction of 220 KV DCDS Transmission Line from PGCIL Lakhisarai to BGCL Haveli Kharagpur,2. Construction of 2 Nos of 220KV GIS Bay at 220/132/33KV BGCL Haveli Kharagpur (BGCL). 3. Construction of 2 Nos of 220KV GIS Bay at 220/132/33KV BGCL Goradiah. on turnkey Basis.
NIT No.	NIT-38/PR/BSPTCL/2023
SUPPLIER:	Nirmal Wires Pvt Ltd, Kolkata

Sl. No.	PARTICULARS	UNITS	
1.	Name & address of the Suppliers		Nirmal Wires Pvt. Ltd. Regd. Office : Rudramani, 1720, Laskarhat, E.M. Bypass, Kolkata - 700039
2.	Manufacturer's name and address (for the materials given below)		
a)	E.C.Grade Aluminium Rods/ingots		i) National Alu. Co. Ltd. Bhubneswar, Orissa. ii) Hindalco Industries Ltd, Ramkoot, Uttar Pradesh. iii)Bharat Alu. Co. Ltd. Korba, Chhatisgarh.
b)	High Tensile Galvanzed Steel Wire.		Tata Steel, SAIL, ESL. JINDAL STEEL
c)	Complete Conductor APPROVED Subject to the condition that you are not absolved of the responsibility for correctness of the material supplied as per specification.  Electrical Sub-Engineer, Engineer (Planning and Engineering) Bihar State Power Transmission Company Vidyut Bhawan, Patna-200012		Nirmal Wires Pvt. Ltd. Unit-II - Vill-Ishwaripur, Deulti, PO-Barunda, PS-Bagnan, Howrah- 711303 Unit-III - PLOT NO. 321, 325/1386 MALIPADA CHAMPAJHAR KHORDHA - 752018
3.	Indian Standard		
a)	for conductor		IS:398 (Part-II) -96
b)	for drum		IS: 1778 -1980
4.	E.C.Grade Aluminium Rods		
a)	Indian Standard		IS: 5484:1978
b)	Composition	%	Purity: 99.6 (min) Copper: 0.04(max)
5.	High Tensile Galvanized Steel Wire		
a)	Chemical Composition	%	C = 0.50 to 0.85 P = 0.035 (Max) S = 0.045 (Max) Si = 0.10 to 0.35 Mn = 0.50 to 1.10
6.	Aluminium Strands		
a)	Diameter	mm	3.18
	Standard maximum	mm	3.21



GUARANTEE TECHNICAL PARTICULARS OF ACSR ZEBRA CONDUCTOR

APPROVED

Owner	BIHAR STATE POWER TRANSMISSION COMPANY LIMITED	Subject to the condition that you are not absolved of the responsibility for correctness of the materials supplied as per specification of BGCL.
Contractor	K.Ramachandra Rao Transmission & Projects Pvt. Ltd. Hyderabad	
Project Name	1. Construction of 220 KV DCDS Transmission Line Haveli Kharagpur, 2. Construction of 2 Nos of 220KV GIS Bay at 220/132/33KV BGCL Haveli Kharagpur (BGCL). 3. Construction of 2 Nos of 220KV GIS Bay at 220/132/33KV BGCL Goradih, on turnkey Basis.	Electrical Superintending Engineer (Planning and Engineering)
NIT No.	NIT-38/PR/BSPTCL/2023	Bihar State Power Transmission Company Limited
SUPPLIER:	Nirmal Wires Pvt Ltd, Kolkata	Vidyt Bhawan, Patna-800021

	minimum	mm	3.21 3.15
b)	Minimum Weight	Kg/Km	21.47
c)	Breaking load		
	Before stranding	KN	1.29
	After stranding	KN	1.23
d)	Electrical Resistance at 20°C	ohms/Km	3.626 3.582 (S+d.)
e)	Cross Sectional area of nominal diameter wire	Sq.mm	7.942
7. Steel strands			
a)	Diameter	mm	3.18
	Standard	mm	3.24
	maximum	mm	3.12
	minimum	mm	
b)	Minimum Weight	Kg/km	61.95
c)	Breaking load (Minimum):		
	Before stranding	KN	10.43
	After stranding	KN	9.91
d)	Cross Sectional area of nominal diameter wire	Sq.mm	7.942
e)	Elongation of 200 mm gauge length on breaking.		
	i) Before stranding	%	4
	ii) After stranding	%	3.5
f)	No. of twists on a length equal to 100 times the diameter of wire (Torsion Test) (Either elongation or Torsion)		
	i) Before stranding	Nos.	18 (min)
	ii) After stranding	Nos.	16 (min)
g)	Galvanizing		
	i) Indian standard		IS: 209 : (1992)
	ii) Purity of Zinc	%	99.95 (Min)
	iii) Process of galvanizing		Hot Dip
	iv) Minimum weight of Zinc		
	a) Before stranding	gm/sqmeter	250 260
	b) After stranding		As per IS:4826
v)	Uniformity of Zn coating		
	a) Before stranding		
	Minimum no. of dips of 1 minute duration which the strand can withstand (under preece test)	Nos.	3
	b) After stranding	Nos.	As per IS:4826

GUARANTEE TECHNICAL PARTICULARS OF ACSR ZEBRA CONDUCTOR

Owner	BIHAR STATE POWER TRANSMISSION COMPANY LIMITED
Contractor	K.Ramachandra Rao Transmission & Projects Pvt. Ltd. Hyderabad.
Project Name	1.Construction of 220 KV DCDS Transmission Line from PGCIL Lakhisarai to BGCL Haveli Kharagpur,2. Construction of 2 Nos of 220KV GIS Bay at 220/132/33KV BGCL Haveli Kharagpur (BGCL). 3. Construction of 2 Nos of 220KV GIS Bay at 220/132/33KV BGCL Goradih. on turnkey Basis.
NIT No.	NIT-38/PR/BSPTCL/2023
SUPPLIER:	Nirmal Wires Pvt Ltd, Kolkata

		Steel		No joints
		Aluminium		
		18 Wire layer		No joints
		12 Wire layer		No two joints within 15m
		Method of welding joints		By Cold Pressure
				Butt welding
9.		Dimension of reel (mm)		F-1880 X B-711 X T- 864
a)		Drums/Reels		AS per ISS 1778 -1980

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)
Bihar State Power Transmission Company Limited
Vidyut Bhawan, Patna-800031

SK

[Signature]



Standard Length Per Drum	
Standard Length	2100 $\pm$ 5%
Gross Weight (Max.)	3804 Kgs $\pm$ 5%
Net Weight (Max.)	3404 Kgs $\pm$ 5%
Tare Weight (Approx.)	400 Kgs $\pm$ 10%
Reference No.	

COMPANY LIMITED

Projects Pvt. Ltd. Hyderabad

Project Name- 1 Construction of 220 KV DCDS

Transmission Line from PGCIL Lakhisarai to BGCL

Haveli Kharagpur 2. Construction of 2 Nos of 220KV GIS

Bay at 220/132/33kV BGCL, Haveli Kharagpur (BGCL).

3. Construction of 2 Nos of 220KV GIS Bay at

220/132/33kV BGCL Goradin, on turnkey Basis

NIT No.-NIT-38/PR/BSPTCL/2023

ALL DIMENSIONS AS PER IS : 1778- 1980

APPROVED

Sl. NO.	DESCRIPTION	QTY	SIZE
1	Large Diaper		M/L
2	Diaper Diaper		1280
3	Diapers		700
4	Diaper Tissues		364
5	Soft Diaper		2 X 32
6	Soft Diaper		125 X 125
7	Soft Diaper Tissues		50
8	Soft Diaper Tissues		50
9	Diaper Tissues		7500
10	Diaper		22
11	Diaper Tissues		1000
12	Diaper Tissues		3600000
13	Diaper Tissues		22
14	Diaper		2 X 1000
15	Diaper Tissues		1000

Subject to the condition that you are not to be held responsible for any loss or damage to the equipment supplied as a result of your negligence.

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Electrical Supervisor - City Engineer

Planning and Engineering

Elster State Power Transmission 2007-2008

Wolke Emmaus Pass 2007

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TITLE: *DELIVERING OF
ACSR ZEPHRA CONDUCTOR*

ON 245

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