



NORTH BIHAR POWER DISTRIBUTION CO. LTD.

[Office of Chief Engineer, Project-II]
(Regd. Office: Vidvut Bhawan, Bailey Road, Patna)
CIN No: U40109BR2012SGC018920

Letter No: 279
[File No: NB/PII/Saharsa/V.A./RDSS/69/2023]
Dated: 14/7/23

Contact No: +91-9264437179

E-mail: cerdssnbpdc12@gmail.com

From,

Pranav Kumar
Chief Engineer (Project-II)

To,

M/s Vindhya Telelinks Ltd.
Club 125, 6th Floor, Tower A, Plot No -3,4&5
Sector 125, Noida, UP-201301

Sub: - Approval of GTP & Drawings of Nut & Bolt of M/s Techman Enterprises against NIT No: 32/PR/NBPDCL/2022 for Saharsa Circle.

- Ref:**
1. This Office LOA No: 17 & 18 dated 06.03.2023.
 2. Your Letter No- 27 dated- 06.07.2023
 3. Vendor Approval vide letter no. 103 Dated 26.06.2023 .

With reference to the subject noted above, please find enclosed herewith the GTP & drawing of **Nut & Bolt** for Development of Distribution Infrastructure against NIT No: 32/PR/NBPDCL/2022 for Saharsa Circle under Revamped Reforms-Based And Results-Linked, Distribution Sector Scheme.

Sl. No.	Name of Item	Vendor Name
1	Nut & Bolt	M/s Techman Enterprises 73, Industrial Area, Phase-2, panchkula-134113 (Haryana)

The Correction wherever required in GTP/ Drawing submitted by the manufacturer has been done. However, these Drawings shall be subject to correctness as per technical specifications of the tender document and the entire responsibility of the correctness of the drawing as per the specifications as well as supply of material according to the technical specifications of the contract agreement shall be responsibility of the contractor.

In case of any conflict or contradiction between GTP / Drawings & Technical Specifications, the decision of C.E. (Project-II) shall be final and binding on both the parties. Contractor shall have to replace the material to the entire satisfaction of the owner in case the material is found unsuitable for use in the project, at any stage

Please carry out the works immediately under conditions stated above.

Encl.:- As above.

Yours faithfully

Pranav Kumar
14.7.2023
(Pranav Kumar)

Chief Engineer (Project-II)

dated...14/07/23...../

Memo no...279...../

Copy forwarded M/s NCC Limited, Hyderabad/ M/s JSP Projects Ltd, UP / M/s Polycab Limited,

Mumbai / M/s Ashoka Buildcon Limited, Nashik/ M/s Cabcon Limited, Kolkata/ M/s Techno Power Enterprises Private Ltd, Kolkata/ M/s Vaishno Associates Vidyut Projects LLP, Jaipur for information.

Pranav Kumar
14.7.2023

(Pranav Kumar)

Chief Engineer (Project-II)

Memo No. 279...../

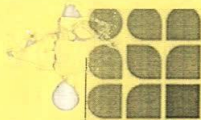
dated 14/7/23...../

Copy forwarded to Director (Projects)/ OSD to MD, NBPDC, Patna for kind information .

Pranav Kumar
14.7.2023

(Pranav Kumar)

Chief Engineer (Project-II)



MP BIRLA GROUP

CONTRACTOR

VINDHYA TELELINKS LIMITED

PROJECT

Revamped Reforms-Based And Results-Linked Distribution Sector Scheme

CLIENT

NORTH BIHAR POWER DISTRIBUTION CO. LTD

NOA NO.1. 246 dated 6th March 2023 for Supply against NIT No.28/PR/NBPDCL/2022
2. 17 dated 6th March 2023 for Supply against NIT No.32/PR/NBPDCL/2022**MATERIAL DESCRIPTION**

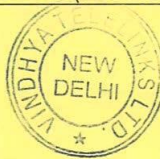
MS HOT DIP GALVANISED BOLTS NUTS, PLAIN WASHERS, SPRING WASHERS

SUPPLIER

M/S TECHMAN ENTERPRISES, PANCHKULA

GUARANTEED TECHNICAL PARTICULARS FOR HDG BOLTS, NUTS & WASHERS

S.N	Particulars	Value guaranteed			
1	Manufacturer's Name	Techman Enterprises ✓			
	Manufacturer's Address	73, Industrial Area Phase II ✓			
	Place of Manufacture	Panchkula-134109 (Haryana)			
2.	Specification and standards:				
	i) Bolts – M6 to M30	IS : 1363 Part 1 and Part II : 2002 / IS-12428			
	ii) Nuts – M6 to M30	IS : 1363 Part 3, IS:14394-1996 ✓			
	iii) Spring Washers Zinc Plated – M6 to M30	IS : 3063 : 1994 ✓			
	iv) Plain Washers – M6 to M30	IS : 2016 : 1967 ✓			
3	Tolerances	IS : 1367 (Part 2) : 2002 ✓			
4	Raw Material				
	i) For Bolts & Nuts	IS : 1367 Part III & VI ✓			
	ii) For Plain Washers	IS : 2062 – 2011 GR. E-250/A, Carbon Steel			
	iii) For Spring Washers	IS : 4072 : 1975 ✓			
5	Sources of receipt of Raw Material				
	Steel	RINL, SAIL, JSW, JSPL, Secondary Producers. ✓			
	Zinc	Hindustan Zinc Ltd. ✓			
6	Chemical Composition	As per IS : 1367 Part III & VI, IS : 2062-2011 Gr. E-250/A & IS : 4072 : 1975 ✓			
	Grade	4.6 5.6	5 ✓	2,3&4 ✓	E250A
		Bolts	Nuts	S/W	P/W
	Carbon (Min.)	-	-	0.60%	-
	Carbon (Max.)	0.55% ✓	0.50%	0.85%	0.23%
	Phosphorus (Max.)	0.05% ✓	0.06%	0.05%	0.045%
	Sulphur (Max.)	0.06% ✓	0.15%	0.05%	0.045%
	Magnese (Max.)	-	-	0.80%	1.50%
	Silicon (Max.)	-	-	0.35%	0.40%
7	Mechanical Properties				
a)	For Bolts	IS : 1367 Part III – 2002 ✓			
	i) Tensile Strength (N/Sq. mm-min)	400 500 N/mm ²			
	ii) Yield Strength (N/Sq. mm-min)	240			
	iii) Stress under proof load (N/Sq.mm/min)	225 280 N/mm ²			
	iv) Hardness HRB (Min./Max.)	67 - 95 HRB ✓			
	v) Strength under wedge load (N/Sq. mm-min)	400 500 N/mm ²			
	vi) Head soundness test	No fracture ✓			
b)	For Hex Nuts	IS : 1367-1994 Part VI, IS:14394 ✓			
	i) Proof stress (N/Sq. mm-min)	400 500 N/mm ²			
	ii) Hardness HRB (Min./Max.)	71-107 ✓			

**CHECKED**

AEE(P-II) EEE(P-II) ESE(P-II)

APPROVED

Subject to the condition that you are not absolved of the responsibility of Correctness of materials

Chief Engineer (Project-II)

182

c)	For Spring washers Zinc Plated (Type-B)	IS : 3063 – 1994 ✓			
i)	Hardness test	43 – 51 HRC (Before HDG) ✓			
ii)	Permanent oct. Coat	IS : 3063 – 1994 ✓			
iii)	Permanent Load test	IS : 3063 – 1994 ✓			
iv)	Twist test	No Crack at 90° Bend ✓			
8	Hot Dip Galvanising of Bolts & Nuts	IS : 1367 (Part XIII) – 1983, 2629 & 2633 ✓			
a)					
i)	Mass of coating (g/m ² min)	375 300 gm/m ² ✓			
ii)	Coating thickness (min)	543 microns ✓			
iii)	Uniformity of Zinc Coating	CuSo4 dip one minute ,4 times each.			
iv)	Adhesion Test	With Blunt Knife			
b)	Hot Dip Galvanising of Plain washers	IS : 4759 1996 , IS 2016/1967			
i)	Mass of coating (g/m ² min)	460 (g/m ² min) ✓			
ii)	Coating Thickness (Min.)	66 microns ✓			
9	Sampling Procedure				
	For Bolts & Nuts	IS : 1367 Part – 17 ✓			
	Spring Washers and Plain Washers	IS : 6821 – 1973 ✓			
10	Dimensional Particulars for Bolts, Nuts, spring washers and Plain washers	Bolt	Nut	S/W	P/W
			IS-1367	IS-3063/1994	IS-2016
i)	Width across flat(s) 'mm'	IS:1363 (Pt.1)	IS:1363 (Pt.3)	--	--
ii)	Width across corner (e) 'mm'	-do-	-do-	--	--
iii)	Thickness of Bolt head (k) 'mm'	-do-	--	--	--
iv)	Shank Dia (ds) 'mm'	-do-	--	--	--
v)	Thread Length (b) 'mm'	-do-	--	--	--
vi)	Thickness of Nut (m) in mm,	-do-	--	--	--
vii)	Spring washers d1,d2,b, s, h.	--	--	IS:3063	--
viii)	Plain washers (Type – A) d1, D, s.	--	--	--	IS:2016

Note:

- 1) Proof Stress of Nut shall be as per IS:14394-1996 Industrial Fasteners – Hexagon Nuts of Product Grade C – Hot-Dip Galvanized Specification Page-3, Clause 5.2.
- 2) Property Class of Bolts shall be 4.8 as per Table 3, Page 7 of IS:1363(part-1) copy attached.
- 3) As per IS:1363(Part-1) Table-1, Thread Lengths of M16 Bolts upto 125mm length = 38mm, Above 125 upto 200mm = 44mm, Above 200mm – 57mm.
- 4) Tensile Strength, Yield Strength, Stress under proof load, Hardness, Strength under wedge load, Head Soundness tests shall be carried out on full size bolts as per Test Programme B, Clause 6, Table 4 & 5, IS:1367 (Pt.3) 2002.
- 5) Chemical properties of Spring Washers shall be as per Grade 2, 3 & 4 as per Table 1, Amdt. No.2, IS:4072 Specification for Steel for Spring Washers.
- 6) In case of any difference between RDSS-TSS and ISS, then Product Standard and Technical Values as per Indian Standard Specification shall prevail.

For TECHMAN ENTERPRISES

PARIVR



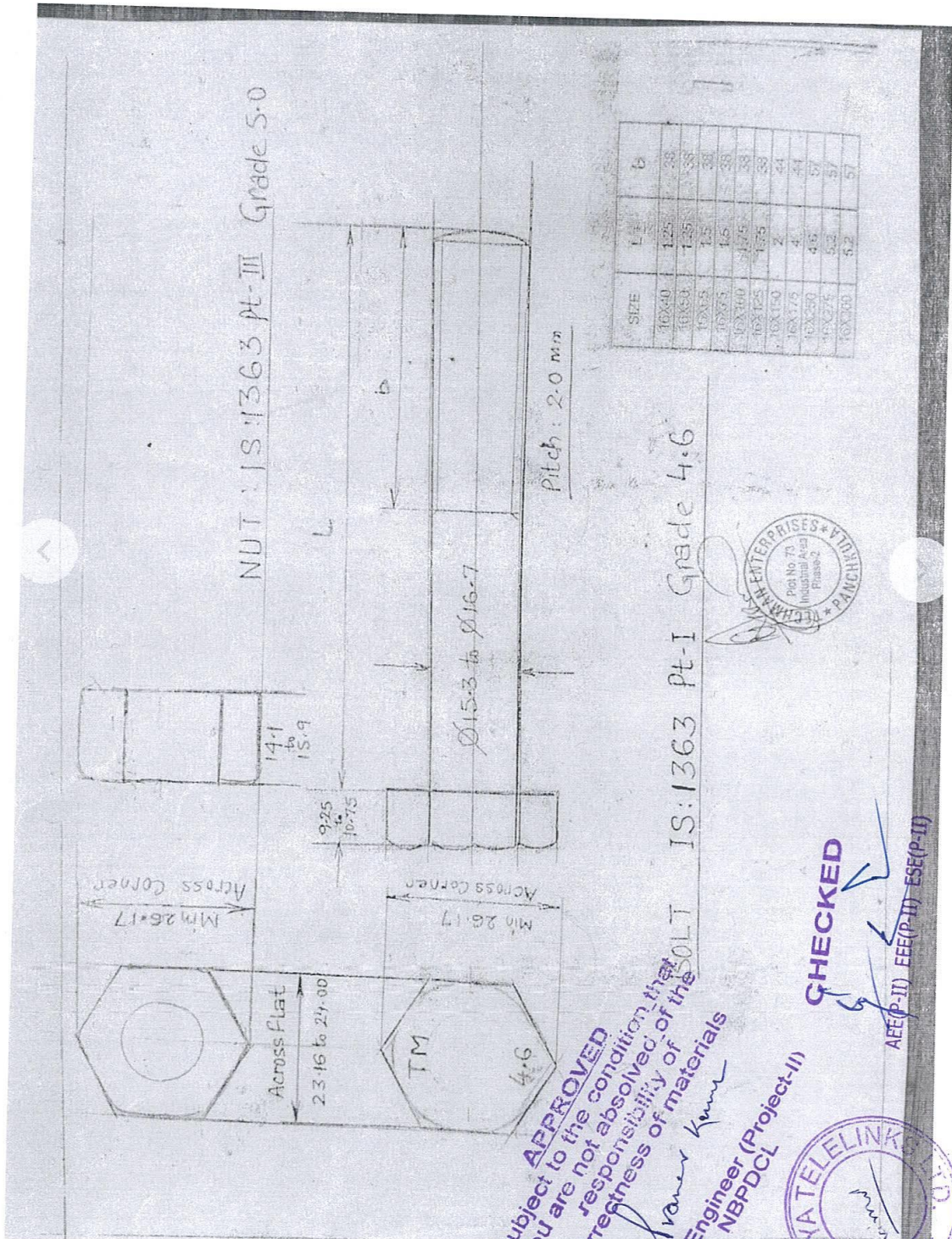
CHECKED

AEE(P-II) EEE(P-II) ESE(P-II)

APPROVED
Subject to the condition that you are not absolved of the responsibility of the Correctness of materials

Chief Engineer (Project-II)
NBPDCI

198



SIZE	L	B
10x10	1.25	38
10x12.5	1.35	38
10x15	1.5	38
10x17.5	1.6	38
10x20	1.75	38
10x25	2	44
10x30	2.15	57
10x35	2.3	57
10x40	2.5	57

IS:1363 Pt-I Grade 4.6



APPROVED
 Subject to the condition that
 you are not absolved of the
 responsibility of the
 correctness of materials

Ramesh Kumar
 Chief Engineer (Project-II)
 NBPDC



CHECKED

AE(P-II) EEE(P-III) ESE(P-II)