

नॉर्दर्न कोलफील्ड्स लिमिटेड  
(मिनिरत्न कंपनी)  
(कोल इण्डिया लिमिटेड की अनुषंगी कंपनी)



**Northern Coalfields Limited**  
(A Miniratna Company)  
(A subsidiary of Coal India Limited)

**Materials Management Department**

**CIN- U10102MP1985GOI003160**

**An ISO: 9001, ISO: 14001 & OHSAS: 18001 Certified Company**

पोस्ट- सिंगरौली कोलियरी, जिला- सिंगरौली, म.प्र., पिन 486889/ Post- Singrauli Colliery, Distt- Singrauli, M.P.  
PIN-486889

Phone: 07805- 266388, (FAX) 266640 email: [gmmm.ncl@coalindia.in](mailto:gmmm.ncl@coalindia.in) website : [www.nclcil.in](http://www.nclcil.in)

**SUPPLY ORDER**

Ref. No. 63826020 / 217A1078

Date: 12.05.2018

<b>Type of Tender:</b> Open Domestic	<b>Category of Firm:</b> Small	<b>Status of Firm:</b> Manufacturer	<b>Item:</b> Consumable
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<b>To,</b> <b>M/s. Pentagon Rubber Pvt. Ltd.,</b> 51 RANI JHANSI ROAD, NEW DELHI - 110 055 e-mail: <a href="mailto:sales@pentagonrubber.com">sales@pentagonrubber.com</a>	Tel: (011) 43504299
	PCC: By Regd.Post
	<b>VENDOR CODE: P-0469</b>

**Sub: - Our Open Domestic cum Reverse Auction Tender No. NCL/SGR/MMD/SKA/NN Belt/ 217A1078/69 dtd 12.10.2017 opened on 15.11.2017 for Procurement of Conveyor Belts (Nylon/Nylon) (Tender ID: 2017\_NCL\_80926\_1)**

**Ref: - Your Offer vide Bid Number 239689 submitted online against Tender ID- 2017\_NCL\_80926\_1 and subsequent correspondences.**

Dear Sirs,

With reference to the above, we hereby place our formal Supply Order on you for supply of following materials. The supply shall be governed by the specifications, prices, terms & conditions mentioned hereunder and also unless otherwise specified as per "General Terms & Conditions for supply of stores" enclosed with NIT:-

**Scope of Supply:**

Sl. No.	NIT Sl.	Item Description	Quantity (Mtrs.)	Unit Basic Price ( ₹ )	Extended Basic Price ( ₹ )
1	1	N/N Rubber Belting 1200mm x 1000 KN/M ** Material Code: 93050300076	2700	2110	5697000.00

<b>GST @ 18%</b>	<b>1025460.00</b>
<b>Total Value</b>	<b>6722460.00</b>
<b>CMPDIL Inspection Charge @1%</b>	<b>67224.60</b>
<b>GST on inspection chgs @ 18%</b>	<b>12100.43</b>
<b>Total Landed Value</b>	<b>6801785.03</b>

**\*\*Detailed Technical specifications will be as per TPS & Annexure- I enclosed which should be followed strictly.**

**TOTAL LANDED VALUE: Rs.68,01,785.03** (Rupees Sixty Eight Lakhs One Thousand Seven Hundred Eighty Five & paise three only) including taxes and duties.

**TERMS & CONDITIONS:**

**1). BASIS OF PRICE:** Prices are on F.O.R Destination Basis inclusive of Packing, Forwarding, Freight and Transit Risk Insurance charges etc.  
The prices will remain firm till completion of supplies and safe arrival of materials up to destination will be your responsibility.

**2). Goods & Services Tax (GST):**

GST shall be Payable extra at legally applicable rate at the time of supply within the scheduled delivery period against documentary evidence which is presently applicable @ 18%. The firm will provide Tax Invoice (as per GST Act & Rules) at the time of supply to avail Input Tax Credit.

Refund, credit, if any, obtained of IGST shall be passed on to NCL which shall be certified by the Auditor of the supplier at the time of supply.

**GSTIN of M/s Pentagon Rubber Pvt. Ltd.: 03AADCP3605J1ZQ**

The details of GST Registration Numbers of NCL are indicated below:

<b>For Consignee located in</b>	<b>GST Registration Number</b>
Madhya Pradesh	23AABCN4884H1ZE

**If there be any statutory increase in the rates of Taxes & Duties during the extended Delivery period (beyond stipulated Delivery period), NCL shall not pay the increase in the Taxes & Duties and shall be borne by you and in case there is any decrease, the same shall be passed on to NCL.**

**03) SECURITY DEPOSIT:-** You are advised to submit Security Money for Rs. 6,80,179.00 (Rupees Six Lakh Eighty Thousand One Hundred Seventy Nine only) in the form of Bank Draft drawn in favour of Northern Coalfields Ltd. payable at SBI, Morwa Branch (Code : 3767), Singrauli (MP) or at any scheduled bank located at MORWA, Singrauli (MP), or in the form of Bank Guarantee of any Scheduled Bank / Nationalized Bank in the prescribed format of Bank Guarantee for Security Deposit i.e. Annexure-J of NIT, within 15 days from date of issue of this Supply Order. The above DD/BG should be submitted at the Office of GM(MM), Materials Management Department, Northern Coalfields Limited, Singrauli.

In case, Security Deposit is submitted in the form of Bank Guarantee, the Bank Guarantees should be issued through Structured Financial Messaging System.

Following details shall be incorporated in the Bank Guarantee:

- i. Beneficiary bank / branch IFSC Code: ICIC0003529 should be mentioned.
- ii. Beneficiary Bank / Branch Name & address should be mentioned as ICICI Bank Ltd., Singrauli Branch, Plot No. 86, Opp. Post Office, Ward No. 3, Morwa, Tehsil Singrauli, Madhya Pradesh – 486889.
- iii. In case of BG issued by ICICI Bank, following text should be incorporated in BG:  
“We shall be liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if you serve upon us a written claim or demand on or before ..... at ICICI Bank Ltd., Plot No.86, Opp. Post-Office, Ward No. 3, Morwa, Tehsil Singrauli, Madhya Pradesh-486889.”

The Bank Guarantee should be valid for a period of three months beyond the stipulated delivery period. In case you fail to deposit the security money, the supply order may be cancelled and the case shall be processed to order elsewhere and your performance will be kept recorded for future dealings with you. Security Money shall be refunded within 30 (thirty days) of satisfactory execution of the order. For unsatisfactory performance and/or contractual failure, the security money shall be forfeited.

**04) DELIVERY SCHEDULE:-**

Minimum 50% of ordered quantity (of individual items) shall be delivered within three (03) months from the date of placement of supply order and balance quantity to be supplied within next three (03) months. However, early delivery will be preferred.

**05) GUARANTEE/WARRANTY:-**

You shall give a warranty for satisfactory performance of the supplied materials for a period of 24 months from the date of fitment or 30 months from from the date of receipt and acceptance of material at consignee's end whichever is earlier.

You shall be responsible for any defect that may develop under the conditions provided for by the contract and under proper use, arising from faulty materials, design or workmanship and shall remedy such defect at your own cost when called upon to do so. If it becomes necessary for you to replace or renew any defective part, such replacement or renewal shall be made by you 100% free of cost without any extra cost to Northern Coalfields Limited. The new goods should be supplied on FOR destination basis free of cost.

Warranty replacement should be completed within a reasonable period maximum within one month from the date of claim free of cost up to ultimate Consignee's end. All cases of warranty replacements will be decided on the basis of joint inspection of the failed goods held between the user's representative and the manufacturer's representative.

**06) PERFORMANCE BANK GUARANTEE: You shall submit Performance Guarantee for Rs. 6,80,179.00 (Rupees Six Lakh Eighty Thousand One Hundred Seventy Nine only) to cover both satisfactory performance and warranty. The Performance Guarantee in SFMS Platform (as per details given in Security Deposit Clause No. 3) should be furnished in the form of Bank Guarantee executed by any scheduled bank on a Non-Judicial Stamp Paper of**

required value in prescribed Format (as per **Annexure-K** of NIT). The stamp paper must be in the name of issuing Bank and the BG must be kept valid for 33 months from the date of receipt & acceptance of materials at consignee's end and the same shall be either released if no claim is pending or en-cashed or extended thereafter, as deemed fit. Security money may be converted into Performance Guarantee. In case Security money is submitted in the form of Bank Guarantee, the same may be converted into Performance Bank Guarantee provided the validity is 33 months from the date of receipt & acceptance of materials at consignee's end. Whenever Security money shall be treated as performance coverage of the contract, operation of security Money BG/ Performance BG shall be guided by Guarantee/ Warranty clause of this supply order. The above BG should be submitted at the Office of GM(MM), Materials Management Department, Northern Coalfields Limited, Singrauli.

**07) PAYMENT TERMS:-** 100% payment will be made by the Paying Authority of the Consignee within 21 days from the date of receipt and acceptance of materials or bills complete in all respect alongwith acceptable Performance Bank Guarantee, whichever is later. Payment shall be made by "Electronic Fund Transfer" or e-payment. You are therefore requested to indicate EFT No. and other relevant details in your bill(s).

**08) CONSIGNEE:-**

The Depot Officer, Central Stores, Jayant, Northern Coalfields Limited, PO: Jayant, Distt. Singrauli (M.P.) - 486 890.

**09) PAYING AUTHORITY:-**

The Area Finance Manager, Head Quarter, Northern Coalfields Limited, PO: Singrauli, Distt. Singrauli (M.P.)-486 889.

**10) Your Banker's Name, Address and A/c No.:-**

Bank Name – HDFC Bank Limited,.

Branch Name – Baddi Branch, Opp Mehta Home, Sai Road, Baddi (HIMACHAL PRADESH)

IFSC Code: HDFC0000650

Account Type: Current

Account No.: 50200002333878

**11) SUBMISSION OF BILLS:-**

**A. Following documents required to be submitted to the Consignee:**

- i) Consignment Note.
- ii) Delivery Challan in original.
- iii) One copy of the bill.
- i) CGST/SGST/IGST duty paying documentary evidence.
- iv) Warranty/Guarantee Certificate/Inspection Report wherever required.
- v) Manufacturers test certificate
- vi) Lowest Price Certificate.
- vii) Any other documents specified in the Supply order.

**B. Following documents should be submitted to the Paying Authority:**

- ii) 100% bill in triplicate duly stamped and pre-receipted.
- iii) CGST/SGST/IGST Duty paying documentary evidence.
- iv) Copy of the consignment Note
- v) Warranty/Guarantee Certificate/Copy of the Inspection Note.

vi) Lowest Price Certificate.

vii) Any other documents specified in the Supply order.

**Note: Copy of all the above referred documents should also be submitted to the office of GM(MM), NCL HQ.**

## 12) INSPECTION:-

### A. Pre-Despatch Inspection:-

a) However NCL reserves its right to carry out initial inspection at the supplier's works before dispatch by deputing authorized representative.

b) Pre Despatch inspection will be carried out by M/s CMPDIL, Ranchi as per NCL's contract. The Inspection charges @ 1% (One percent) of consignment value inclusive of all taxes plus GST thereon at actuals, which is presently applicable @ 18% shall be paid to CMPDIL by you, and the same may be billed to Northern Coalfields Limited along with supply bill with proof of payment from M/s CMPDIL for reimbursement. In case materials are rejected on first inspection, all charges including lodging, TA, Inspection Fee etc., for subsequent inspection shall be borne by the supplier. You will provide all facilities to carry out necessary "Tests" as required.

You shall pay the Pre-dispatch inspection charge as indicated above through e- mode of payment through State Bank Collect. You have to follow the following steps for depositing Pre Dispatch Inspection Fee online through State Bank Collect:

i. visit CMPDI site ([www.cmpdi.co.in](http://www.cmpdi.co.in))

ii. Click on the link of State Bank Collect to pay Inspection Fee.

iii. Click the acceptance of terms & conditions and then click the proceed button.

iv. Next page will open requesting you to select PSU name, here you select the state as "Jharkhand" and then select the type of institution as *PSU-Public Sector Undertaking*, then press go button.

v. Next page will open requesting you to select PSU name, here you select *CMPDI Ltd.* & then press the submit button.

vi. Next page will open, requesting to select the payment category. Here you select "*INSPECTION FEES*".

vii. Automatically you will be transferred to next page requesting to you to provide details of payment. Here you are required to fill the data as requested in each row including the remarks.

viii. After filling all the required data, press the *submit* button, you will be transferred to next page, which will request to verify the details and confirm the details. Press "*Confirm*" button if entry made are correct otherwise press cancel. If you press Confirm then you will be transferred to next page where payment option will appear.

ix. On this page you will find the various modes of e-payment of different banks i.e. net-banking, debit card, credit card etc.

x. At this page you are requested to make the payment by selecting the appropriate mode of payments offered by different banks as per your choice.

xi. After making the payment please take out the prints of e-receipt which should subsequently be submitted to us as a proof of payment made to CMPDI along with inspection call letter.

xii. The inspection call is required to be submitted online on the email id: [gmenm.cmpdi@coalindia.in](mailto:gmenm.cmpdi@coalindia.in), with a copy to [paresh.saxena@coalindia.in](mailto:paresh.saxena@coalindia.in) in the following manner:

- a. A Covering letter on your letter head giving the details of inspection.
  - b. Inspection call duly stamped and signed, addressed to GM (E&M) CMPDI in the required format on your letter head.
  - c. Copy of e-money receipt for the PDI Fee deposited online.
  - d. Copy of the respective complete supplied order against which inspection call is raised.
- All the above four documents are to be submitted in separate PDF files.

xiii. Simultaneously a copy of e-money receipt for the PDI Fee deposited online must be mailed on the email id: [hqfinance@yahoo.com](mailto:hqfinance@yahoo.com), with a copy to [sandeep.aru@coalindia.in](mailto:sandeep.aru@coalindia.in)

**Note: The facility for submission of PDI Fee on State Bank Collect will be available from 1<sup>st</sup> to 28<sup>th</sup> of every month.**

**C. Final Inspection**:- (i)Final inspection will be carried out at consignee's end.

(ii)NCL reserves right to get checked, the belting supplied and issued, at any Government accredited laboratory, to ensure that the material conforms to specifications mentioned in the NIT/supply order. In case of non-conformity with laid down specifications, penal action will be taken as per provisions of Coal India Purchase manual.

**13) PACKING**: - Packing of all the materials shall conform to the requirements of the Carriers. All the others details of Packing shall be as per Clause No. 4 of Annexure I Technical specifications.

**14) MODE OF DESPATCH**:-By Road Transport: Full truck load consignments are to be despatched on Door Delivery basis. All consignment should be booked to consignee and not to selves.

**15) PRICE FALL CLAUSE**: - The supplier shall undertakes that they have not supplied / is not supplying similar product/systems or subsystems at a price lower than that offered in the present Bid in respect of any other Ministry / Department of the Government of India or PSU and if it is found at any stage that similar product / Systems or Subsystems was supplied by supplier to any other Ministry / Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the supplier to NCL.

**16) LIQUIDATED DAMAGE:** In the event of failure to deliver the stores within the stipulated date/period in accordance with the specifications mentioned in the supply order and in the event of breach of any of the terms and conditions mentioned in the supply order, NCL shall have the right:-

a) To recover from you, as agreed liquidated damages a sum not less than 0.5% (half percent) of the price of any store which you have not been able to supply as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10% (ten percent). Where felt necessary, the limit of 10% can be increased to 15% at the discretion of Head of Material Management Division of NCL

b) To purchase elsewhere after due notice to you on your account and risk, the stores not supplied or others of a similar description without cancelling the supply order in respect of consignment not yet due for supply.

OR

c) To cancel the supply order or a portion thereof and if so desired to purchase the stores at your and risk and cost and also -

d) To extend the period of delivery with or without penalty as may be considered fit and proper. The penalty, if imposed shall not be more than the agreed liquidated damages referred to in clause (a) above.

e) To forfeit the security deposit fully or partly

f) Whenever, under this contract, a sum of money is recoverable from and payable by you, NCL shall be entitled to recover such sum by appropriating in part or in whole by deducting any sum or which at any time thereafter may become due to you in this or any contract should this sum be not sufficient to cover the full amount recoverable, you shall pay NCL on demand the remaining balance. You shall not be entitled to any gain on any such purchase.

g) CGST, SGST or IGST will be levied as applicable as per the provision of GST ACT and Rule thereon.

h) Supplier shall have to issue credit note as per the provision of Rule 53 of CGST Rule, 2017 on quality deduction or liquidity deduction or liquidated damage, if any arises.

**17) RISK PURCHASE:-** In the event of your failure to deliver the stores within the stipulated date/period of the supply order, or in the event of breach of any of the terms and conditions mentioned in the supply order, NCL has the right to purchase stores from elsewhere after due notice to you at your risk and cost. In the event of your failure as detailed above, the cost as per risk purchase exercise may be recovered from your bills against any supplies pending in NCL and also in any other Subsidiary companies/Coal India Ltd.

**18) FORCE MAJEURE:**

If the execution of the contract/supply order is delayed beyond the period stipulated in the contract/supply order as a result of outbreak of hostilities, declaration of an embargo or blockage or fire, flood, acts of nature or any other contingency beyond the supplier's control due to act of God, then NCL may allow such additional time by extending the delivery period

as he considers to be justified by the circumstances of the case and its decision in this regard shall be final. If and when additional time is granted by the purchaser, the contract/supply order shall be read and understood as if it had contained from its inception the delivery date as extended. Power failure will not be considered as a force majeure conditions.

(a) The successful bidder will advise, in the event of his having to resort to this clause, by a registered letter, duly certified by the local chamber of commerce, or statutory authorities, the beginning and end of the causes of the delay, within 15 days of the occurrence and cession of such force majeure conditions. In the event of delay last out of force majeure, NCL will reserve the right to cancel the contract, and provisions governing termination of contract as stated in the bid documents will apply.

(b) For delay arising out of Force majeure, the bidder will not claim any extension in completion date for a period exceeding the period of delay attributable to the causes of force majeure and neither NCL nor the bidder shall be liable to pay extra cost provided it is mutually established that the force majeure conditions did actually exist.

**19) LOWEST PRICE CERTIFICATE**:- You shall furnish the following certificate to the consignee/paying authority along with the bill:-

“We certify that the prices charged by us against this supply order are the lowest and are same as applicable to other Government Departments/Undertakings/Other Organizations and are not higher than rates quoted/prices charged by us for the same/similar items to other Customers”.

**20) IDENTIFICATION MARKS/SYMBOL**:- The beltings shall be marked as per Marking Clause of Annexure I i.e. Technical Specifications.

**21) JURISDICTION OF COURT**:- Any dispute arising out of or in respect of the contract will be subject to the jurisdiction of Singrauli Court only.

Apart from the above terms and conditions, the supplies will also be governed by NIT and the "General Terms & Conditions of Supplies of Stores" issued along with our "Invitation to Tender" as annexure GTC and provisions of CIL Purchase Manual unless otherwise stipulated in this supply order.

You are requested to kindly acknowledge receipt and acceptance of order within 10 (Ten) days from the date of issue of order. In case no reply is received, it will be presumed that the order has been accepted by you without any precondition.

**Yours faithfully,  
For & On Behalf of Northern Coalfields Limited**

**(V. K. Verma)**  
**Asst. Manager (MM)**

**(A Kumar)**  
**Chief Manager (MM)**

Encl:- Annexure I: Technical Specification  
Annexure II: Integrity Pact

**Copy to:-**

The Chief Vigilance Officer, NCL, Singrauli  
The Director (Tech/Oper.), NCL, Singrauli.

The General Manager (E&M)/ General Manager (Fin.), NCL, Singrauli.



The General Manager (Stores), NCL, HQ, Singrauli  
The Depot Officer, Central Stores- Jayant.  
The Area Finance Manager, HQ, NCL.  
The General Manager (MM), CCL/BCCL/ECL/SECL/WCL/MCL/CMPDIL/NEC.

Sri Sewa Ram, IAS (Retd.), 660, Sector – 26, Panchkula, Haryana – 134116.  
Sri J.K. Khanna, IPS (Retd.), A-102, Sector - 55, Noida -201307.

The General Manager (E&M), CMPDI Limited, Gondwana Place, Kanke Road, Ranchi-834008, FAX No.: 0651–231447/231851 **(By Registered Post)** :- Kindly arrange to make Pre-despatch inspection on priority after receipt of inspection call from the supplier.

This is issued against MB 2017-18 circulated by General Manager (Stores)/HOD vide No. NCL/SGR/Stores/MB/17-18/669 dtd 09.06.17 and Indent Registration No. 217A1078 dtd 11.10.2017.

The proposal is concurred vide BC No. NCL/HQ/C&B/Centralised/BC/Other Stores/2018-19/05 dated 12.05.2018 and FC No. NCL/HQ/FC/2018-19/Other Stores/Centralised/05 dated 12.05.2018 for Rs.2,35,13,736.22. The purchase proposal has been concurred by Dir (Fin), NCL and approved by CMD, NCL.

**Asst. Manager (MM)**

**Chief Manager (MM)**

**TECHNICAL SPECIFICATIONS FOR N/N BELTING WITH FR COVER**

S. No	Description of Item	Specification Parameter
1	N/N BELTING WITH FR GRADE COVER; 1200 mm x 1000 KN	<p>1.0 Basic Parameters:-</p> <p>1.1 Carrying Material:-</p> <ul style="list-style-type: none"><li>a) Coal/shale of maximum size: 250 mm.</li><li>b) Percentage of shale/sand stone: upto 30%</li><li>c) Percentage of moisture: upto 20%</li><li>d) Bulk density : 0.9 -1.15 Te/Cu.m.</li><li>e) Condition of material : Wet &amp; sticky.</li></ul> <p>2.0 Duty Conditions:</p> <p>Beltings shall be designed for heavy duty condition and shall be suitable for 24 effective working hour operation per working day and 365 working days per year in a Coal Handling Plant handling coal to the tune of 5 MTPA to 15 MTPA. This shall be suitable for installation over conveyor system having 35 degree troughing angle. It shall be suitable for operation at an ambient temperature from 4 degree C to 50 degree C. It shall have sufficient resistance against exposure to open sun light so that its qualities do not deteriorate while working in open sun. It also may have to work in rain or in conditions where relative humidity goes upto 100%.</p> <p>3.0 Constructional features:</p> <p>3.1 The belting shall consist of a carcass having rubber covers. The carcass shall consist of number of plies as specified below. The construction shall be of same type of woven fabric in all the plies and shall be impregnated with rubber mix. The whole shall be vulcanised together in a uniform manner. The specified construction of ply type belting shall be with full width ply only.</p> <p>3.2 Fabric:- The fabric shall be of Nylon having grade Nylon-66, with minimum melting point 250 degree C. The belting shall be pre-stretched, straight ply, skim coated with open ends. It shall have sufficient strength as specified elsewhere. No longitudinal joint in fabric.</p> <p>3.3 The belt shall have sufficient lateral flexibility so that it suits the troughing angle requirements even when is empty. It shall have sufficient lateral stiffness. The belt shall have sufficient longitudinal flexibility so that it can easily flex around different pulley of the conveyor system.</p> <p>3.4 The belt shall have sufficient impact resistance to withstand impact at the loading points.</p> <p>3.5 Belt cover: The rubber cover used in the top and bottom cover of the belting shall be of Fire resistant grade. The fire resistant properties of the cover should conform to ISO-340</p>

with latest amendments. Rubber cover when removed from the belt and tested as described in relevant IS, the tensile strength and elongation at break shall not be less than the value specified in the IS. After ageing as per provision of IS the variation in the original values of tensile strength and elongation should not exceed the value as specified in the IS. The top cover thickness shall be 6 mm minimum and bottom cover thickness 3 mm minimum. The tolerance on cover thickness shall be as per IS. The abrasion loss of the cover, when tested as per DIN-53516 should be 175 cu. mm (max.)

3.6 Edges:- The edges shall be of cut edge construction.

3.7 Marking: - The beltings shall be marked on the carrying surface at both ends of each reel within first two Metres of its length and at intervals of maximum 12 mtrs. thereafter with the following details:-

- a) Manufacturers name and trade mark if any.
- b) Fabric designation as N/N
- c) Belt designation i.e. KNM
- d) Grade of rubber covers i.e. FR
- e) Last two digits of the year of manufacturing, say –15 for 2015 and 16 for 2016.
- f) BIS code reference i.e. 1891 (Pt-1) - 1994.

4.0 Packing:- Belt shall be packed in a wooden drum in the length specified at clause no. 8.18. This packing shall enable the easy unreeling of the belting. On the body of the wooden drum the direction of belt and the location of end of the belting should be indicated so that belting can be properly placed while unreeling.

5.0 Compliance with standards:

The design, construction, testing and performance of the belting shall comply with all applicable codes and as per IS 1891/1994 & 1993 (latest) or any other international standard as indicated in this specification. The belting shall also conform to DGMS circular no. 6 dated 06/09/01; the relevant portion of which is reproduced below:-

- (i) Fire resistant properties of the cover - to conform to IS:340.
- (ii) Drum friction test - to conform to IS:1891 (Part-V) of 1993.
- (iii) Max. surface electrical resistance - to conform to IS:1891 (Part-V) of 1993.
- (iv) Cover abrasion loss (when tested as per DIN-53516 :- 175 cu.mm.(max.)

6.0 Pre-despatch Testing and Quality Control:

Before despatch, the finished material shall be subject to inspection by the authorities/representatives of the purchaser. The inspection shall be carried out in the presence of the manufacturer, in terms of up-to date engineering practice and relevant Indian

standards/International standards in this respect, for which all facilities shall be provided by the manufacturer at his cost. The test shall be carried out on samples taken from any part of the belt roll including middle from each lot offered for inspection. The tests shall interalia, include the following:-

a) Full thickness belt test:

- i) Breaking load, Kg/Sq. Cm. for warp and weft.
- ii) Elongation under reference load (%).
- iii) Elongation at break (%).

b) Rubber cover test (top/bottom):

- i) Tensile strength of cover (Kg/Sq.Cm.)
- ii) Elongation at break (%).
- iii) Adhesion between ply to ply and between covers and Ply.
- iv) Abrasion loss of rubber cover.
- v) Fire resistance properties testing (Flame test)

c) Physical dimension check:

d) Flexibility test:

e) Drum friction test

f) Surface electrical resistance test.

6.2 All relevant type test certificates shall have to be produced during inspection and along-with supplies for necessary verification and approval.

**7 TEST-CUM-INSPECTION CERTIFICATE:**

Each supply should accompany the Test-cum-Inspection Certificate duly signed by the authorized signatory of the manufacturer of items. The certificate should not be of before the date of the purchase order.

Note: Test specification/stipulations shall be of latest edition or with latest amendment.

**8. Specifications:-**

8.1 Type of carcass: Nylon-66, N/N

8.2 Duty Condition: Heavy Duty

8.3 Belt width :1200 mm.

8.4 Tensile strength: 1000 KNM

8.5 No. of ply : 4

8.6 Troughability at 35 Degree angle : As per IS 1891 (Part-I) , 1994

8.7 Top Rubber Cover: 6 MM

8.8 Bottom Rubber cover : 3 mm

8.9 Grade of Rubber cover: FR grade

8.10 Abrasion loss of Rubber cover: 175 Cu.mm. max as per DIN 53516

8.11 Adhesive strength between adjacent piles (KN/M): - 5.25 (Minimum)

8.12 Adhesive strength between rubber cover and carcass (KN/M): - 4.5 (Minimum)

8.13 Elongation at break (%) : As per IS 1891 (Part-I) ,

	1994
	8.14 Elongation of rubber covers at break (%) : As per IS 1891 (Part-I) , 1994
	8.15 Fire resistant properties of cover: As per ISO 340 with latest amendment if any.
	8.16 Surface electrical resistance (Max.): As per IS 1891 (Part-V), 1993
	8.17 Drum friction: As per IS 1891 (Part-V), 1993
	8.18 Reel length (Mtr.) : 200 m.
	9. Warranty/Guarantee Period: Two (02) years (24 months) from the date of fitment & use or 30 months from the date of receipt and acceptance of materials at consignee's end, whichever is earlier.

**Note:**

1. Length variation: The tolerance in length of only (+)2% / (-)0.5% maximum of ordered quantity will be allowed as per IS specification IS:1891 (Part-I) 1994 with latest amendment.

**Asst. Manager (MM)**

**Chief Manager (MM)**