



(Under jurisdiction of Nagpur court only)

**WESTERN COALFIELDS LIMITED**(A subsidiary of Coal India Limited & A Government of India Enterprise)  
CIN No. U10100MH1975GOI018626Office of the General Manager(MM)  
Materials Management Department,  
Coal Estate, Civil Lines  
Nagpur 440 001Ph. PBX : 0712 - 2511381,  
2510691 EXT 5609  
Fax : 0712 - 2510284  
Website : [westerncoal.gov.in](http://westerncoal.gov.in)

Ref. no: 11000131519015

DT. 07-05-2019

To  
M/S APAR INDUSTRIES LIMITED  
12/13, JYOTI WIRE HOUS, 23-A,  
SHAH INDUSTRIAL ESTATE,  
OFF: VEERA DESAI ROAD,  
ANDHERI (WEST)  
FAX: 2226740600  
Mob: 9324014141  
Email: [info.cable@apar.com](mailto:info.cable@apar.com), [suresh.pk@apar.com](mailto:suresh.pk@apar.com)Regd Post with A/D  
Vendor Code -  
Category: PrivateSub: Supply order for Flexible Trailing cable for use with SDLs, LHDs & UDMs in underground coal mines  
Ref:

1. Our risk purchase tender no: hq-pur-ra-kdp-e-060-2018-19 opened on 20.10.2018 (Tender ID – 2018\_WCL\_115552\_1)
2. Your offer dated 17.10.2018 (Bid ID – 340336) and subsequent correspondences on the e-procurement portal.
3. Your email dated 30.04.2019 regarding extension of the validity of your offer till 10.05.2019

Dear Sir,

With reference to above, we are pleased to place a firm order on you for supply of Flexible Trailing cable for use with SDLs, LHDs &amp; UDMs in underground coal mines at the rates and specifications and the terms and conditions and general terms and conditions stipulated hereunder;

**1. DESCRIPTION OF STORES AND PRICES:**

SI No	Item Description	Quantity (mtrs)	Basic rate(Rs/mtr)	Extended basic Value (Rs)
1	Elastomer Insulated flexible trailing cable suitable for reeling and unreeling duty for use with SDL/LHD/UDM in underground coal mines, FT-7 type, as per IS:14494-1998, (DGMS approved or complaint to D.G.M.S. Circular (Electrical),(Approval) No.12 Dhanbad dated 25/05/15) Make - "Unicab". Material code - 94994010139 Detailed Specification as per Annexure- I enclosed	9401	1465.00	1,37,72,465.00
			Add GST @ 18%	24,79,043.70
			Add predespatch inspection charges at 1%	1,62,515.09
			Total extended value before input tax credit	1,64,14,023.79
			Input tax credit against GST	24,79,043.70
			Total extended value after input tax credit	1,39,34,980.09

*Kuldeep*  
21/5/19  
*Kay*

*[Signature]*  
21/5/19  
*[Signature]*

(Total order value in words: Rs.One crore sixty four lakhs fourteen thousand and twenty three and paisa seventy nine only)

**1A. Provision for increase in order quantity:**

WCL reserves the right to increase the ordered quantity above as detailed in the table below through a separate amendment if the counter offer is declined by all qualifying MSEs under purchase preference:

NIT Sl No	Item Description	Current ordered quantity (Mtr)	ordered quantity shall be increased upto below indicated quantity through an amendment (Mtr)
1	Elastomer Insulated flexible trailing cable suitable for reeling and unreeling duty for use with SDL/LHD/UDM in underground coal mines, FT-7 type, as per IS:14494-1998, (DGMS approved or complaint to D.G.M.S. Circular (Electrical),(Approval) No.12 Dhanbad dated 25/05/15)	9401	11751

**2. PRICES:** Prices are FIRM & on FOR Destination basis including Packing, forwarding, freight and insurance charges. Safe arrival of the consignment at destination shall be your responsibility.

**3. GST:-** Shall be payable extra as legally applicable within the stipulated delivery period of the contract. Current rate applicable is @ 18%. You shall raise GST compliant invoice enabling WCL to avail input tax credit as per GST rule. The HSN code applicable for the ordered items as indicated by you is 85446030. The GST invoice shall clearly indicate the 8 digit HSN code for the ordered item.

You shall have to comply with the terms and conditions of GST Act/ Rules such as issuance of Tax Invoices, ensure payment of GST and enabling mechanism to facilitate Input Tax credit by WCL. The supplier shall upload the Tax Invoices/Debit Note/Credit Note in GST Portal, make payment of GST and file returns in time, as prescribed under GST Act and Rule to facilitate WCL to avail Input Tax Credit (ITC) as per eligibility under GST. In case WCL is unable to avail ITC or any liability arises to WCL due to failure on the part of supplier to comply the above provisions, the entire amount including Interest (If any) borne by WCL shall be recovered from supplier. You shall make all out efforts to comply with the provisions under GST Act and Rules there under and also shall strive to maintain high compliance rating score under GST during the period of contract with WCL.

GST details of M/S APAR INDUSTRIES LIMITED - 24AAACG1840M1ZR  
GST Details of WCL - 27AAACW1578L1ZW

**4. DELIVERY:** Shall be made as per schedule given below:

- Supply of 50% of the quantity shall be made within first 2(two) months of date placement of supply order which shall be reckoned from the 7<sup>th</sup> day from the placement of order.
- Balance quantity shall be supplied thereafter in 2(two) months.

**5. Inspection Clause:**

**a) Pre-despatch Inspection:** The cable will be inspected by GM(E&M), CMPDIL or his authorised representative at manufacturer's works before dispatch of the same to ascertain the conformity of the cable to supply order specifications, relevant ISS, latest (including amendment), statutory regulations (DGMS) and



type test certificates. Such inspection shall not, in case of any defect noticed later, entitle the supplier to plead that inspection has been done by the purchaser and absolve them of the obligation.

Pre-despatch inspection including stage inspection of the ordered material shall be carried out by WCL / CMPDIL or his authorised representative. The inspection fee as applicable @1% on FOR destination price (basic+freight+insurance+P&F+etc) + applicable GST shall be paid by you along with inspection call to inspecting agency. The inspection fee @1% on FOR destination price will be subsequently reimbursed by the paying authority on production of documentary evidence, however GST on pre-despatch inspection charges shall not be claimed by you vis-à-vis will not be reimbursed by WCL.

- CMPDI Inspection authority - GM(E&M) I/c Central; Mine Planning & Design Institute Ltd, Gondwana Palace ,Kanke Road ,Ranchi-834008,Fax no 0651-2231 185 / 2231 447, PH.NO: 0651-2230 238 / 2230 272.

Minimum 10 days advance notice shall be given to inspecting agency/CMPDIL, with a copy to GM(E&M)HOD,WCL, Coal Estate, Civil Lines, Nagpur-440 001, Fax: 0712-2511572

Note - The payments of fee where the inspection agency is CMPDI shall be made through state bank collect in the hyperlink created on CMPDI website i.e. [www.cmpdi.co.in](http://www.cmpdi.co.in). The payment challan shall be submitted along with the bills in order to claim the re-imbusement of predespatch inspection fees from WCL.

As per NIT provisions if required, alternatively the cable may be inspected by WCL inspection authority i.e. ~~GM(E&M) HOD,WCL~~ or his authorized representative, Coal Estate, Civil Lines, Nagpur-440 001, Fax: 0712-2511572

**b) FINAL INSPECTION:** Final inspection shall be carried out at destination stores.

**6. SECURITY DEPOSIT:** You shall have to furnish the security deposit amount of Rs. 16,41,403.00 (Rs. Sixteen lakh fourty one thousand four hundred and three only) in the form of Demand Draft or Bank Guarantee (as per format given) of any scheduled / Nationalized bank in the format enclosed at Annexure III (i.e. for 10% of the awarded contract landed value ) without having any ceiling within 15 days time from the date of supply order. The BG shall be encashable at Nagpur and valid for a minimum period of 3 months beyond the stipulated delivery period.

The Bank Guarantee issued by the issuing bank on behalf of the supplier in the format enclosed at Annexure III in the favour of Western Coalfields ltd shall be in paper form as well as issued under "Structured financial messaging system". The details of beneficiary for issue of BG under SFMS platform is furnished below:

Name of beneficiary and details	
Name	Western Coalfields ltd
Area	Head Quarter
Bank A/c No: / Cust ID of beneficiary	ICICI Bank Ltd, Vishnu Vaibhav, 222, Palm Road, Civil Lines, Nagpur
IFSC code	ICIC0000059
Bank Manager Name & Ph no:	Hrushikesh Sakalkale Ph n: +91-9923202096

- The original bank guarantee issued by the issuing bank shall be sent by the issuing bank to the following address by Registered post /AD.

*Kalyan*  
*Kalyan*

*[Signature]*

*[Signature]*

General Manager (MM) I/c  
Materials Management Wing  
Western coalfields ltd HQ  
Coal Estate, Civil lines  
Nagpur – 440001  
Maharashtra

- Any extension / amendments to the BG shall be done following the same procedure as above.

**7. PAYMENT TERMS:** 100% Payment will be made by the Paying Authority within 21 days of receipt and acceptance of the materials at Destination stores or submission of bills whichever is later.

Details of bank account for payment through Electronic Fund Transfer are as given below:

Name of the Bank and Branch	SYNDICATE BANK
Address of the Branch of the Bank	227,NARIMAN BHAVAN,NARIMAN POINT-MUMBAI-400021
Account Number	50371250000368
Nature of Account	ODH ACCOUNT
IFS Code of the Branch	SYNB0005037

**8. PAYING AUTHORITY;** GENERAL MANAGER (FIN), WCL, HQR, Civil Lines, Nagpur.

**9. CONSIGNEE:**

Depot Officer, Central Stores, Tadali, WCL  
Urjagram, PO : Tadali, Dist : Chandrapur - 442401  
Phone / Fax no: 07172- 237295, 237076,  
Range V ,Division -I ,Commissionerate -Nagpur

**10. SUBMISSION OF BILLS;** Your 100% bill(s) in quadruplicate duly pre - receipted, stamped and signed by the authorized signatory shall be submitted to the consignee along with the following documents.

- Delivery Challan in original.
- GST compliant Invoice
- Eway bill (if applicable) – In the event the delivery of goods by the supplier is on FOR destination basis, the movement of the goods is to be initiated by the supplier and the supplier is liable to issue e-way bill.
- Guarantee / Warranty Certificate.
- Consignment note
- Packing list in original giving details of materials, if any
- pre-despatch Inspection report of the inspecting authority
- Self attested copy of valid BIS License for use of standard BIS mark on the cable/ DGMS approval if applicable.
- Certificate on the body of each bill to the following effect:-  
“Certified that the items supplied included in this bill/invoice are of own make have been actually manufactured in our works at. . . . (address of the factory).”
- Any other document required as per technical specification.(identification on drum,Cable and sealing etc) or indicated elsewhere in the order.

Note :A copy of the above bills should be submitted to this office also for information and records



**11. GUARANTEE / WARRANTY:** Guarantee/Warranty shall be valid for a period of 18 months from the date of receipt and acceptance of the materials at ultimate destination or 12 months from the date of fitment /commissioning, whichever is earlier.

You shall be fully responsible for the manufacturer's warranty in respect of sub-standard materials , proper workmanship , faulty design ( normal wear and tear excluded) of the materials. In case of any failure under warranty, it will be the responsibility of the supplier to collect the items failed under warranty and deliver the replacement / Repaired item(as per warranty /guarantee terms) Free of Cost up to the user/ consignee end. Warranty replacement should be completed within one month from the date of claim of cost. All cases of warranty replacement will be decided on the basis of joint inspection of the failed cable held between user's representative and manufacturer's representative.

**12. LIQUIDATED DAMAGES:** In the event of failure to deliver the stores within the stipulated date / period in accordance with the samples and / or specifications mentioned in the supply order and in the event of breach of any of the terms and conditions mentioned in the supply order, Coal India Limited and / or its subsidiary Companies should have the right :-

- a. To recover from successful tenderer, as agreed liquidated damages, a sum not less than 0.5% of the price of the store which successful tenderer has not been able to supply (for this purpose part of a unit supplied will not be considered) as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10 %. Where felt necessary the limit of 10% can be increased to 15% at the discretion of Head of the Materials Management Division
- b. To purchase from elsewhere, after due notice to the successful tenderer, on the account and at the risk of the defaulting supplier 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 store at the risk and cost of the defaulting supplier and also
- d. To extend the delivery period with or without imposition of Liquidated Damages as may be considered fit and proper. The penalty if imposed shall not be more than the agreed liquidated damages referred to clause (a) above.
- e. To any available Bank Guarantee/ Security Deposit for recovery of the penalty.
- f. Whenever under the contract a sum of money is recoverable from and payable by the supplier, Western Coalfields Limited, 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 the successful tenderer in this or any other contract, with CIL or its subsidiary. Should this sum be not sufficient to cover the full amount recoverable, the successful tenderer shall pay to Western Coalfields Limited, on demand the remaining balance.
- g. The supplier shall not be entitled to any gain on any such purchase.

**13. FORCE MAJEURE CONDITION:** 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 any embargo or blockage, or fire, flood, acts of nature or any other contingency beyond the suppliers' control due to act of God then Western Coalfields Limited may allow such additional time by extending the delivery period, as it considers to be justified by the circumstances of the case and its decision shall be final. If and when additional time is granted by the CIL and its subsidiary companies, the contract / supply order shall be read and understood as if it had contained from its inception the delivery date as extended.

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 fifteen days of the occurrence and cession of such force majeure conditions. In the event of delay lasting out of force majeure, WCL will reserve the right to cancel the contract, and provisions governing termination of contract as stated in the bid documents will apply.

*Kuldeep*  
*KH*

*[Signature]*  
*[Signature]*



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

**14. PRICE FALL CLAUSE:** You have undertaken that you have not supplied / are not supplying similar products/ systems or sub-systems at a price lower than that offered in the present order in respect of any other ministry/ department of the Govt. of India or a PSU and if it is found that at any stage that similar product/ systems or sub-systems was supplied by you to any other Ministry/ Department of the Government of India or a PSU at a lower price, than at that very price, with due allowance for the elapsed time, will be applicable to the present case and the difference in the cost would be refunded by you to WCL, if the contract has already been concluded.

**15. PRICE CERTIFICATE:** You have undertaken in your offer as under:  
“We have not offered the same products at a price lower than that offered in the present order in respect of any other ministry/ department of the Govt. of India or a PSU. In case we offer the lower prices for same items under similar terms within the validity of this offer to ministry/department of the Govt. of India or a PSU, we undertake to notify such reduction to the buyer and the same will also be applicable against this offer.”

**16. RISK PURCHASE CLAUSE:** In the event of failure of the supplier to deliver or dispatch 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, Coal India Ltd. or its Subsidiary Companies have the right to purchase the stores from elsewhere after due notice to the defaulting supplier at the risk and cost of the defaulting supplier. In the event of failure of the supplier as detailed above, the cost as per risk purchase exercise may be recovered from the bills against any other supplies pending in the same Subsidiary Co. and also in any other Subsidiary Companies/CIL.

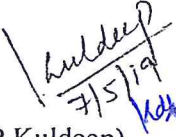
**17. PACKING:** Shall be applicable as per clause no: 18 of General Terms and conditions of supply of stores enclosed.

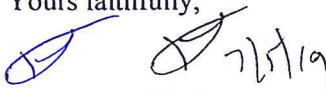
**18. LOCATION OF DISPATCH:** The materials are to be dispatched from your factory located at KHATA NO.1932, SURVEY NO. 82/2P, 88,861/1, 862/1, 863/1, MANEKPUR ROAD,KHATALWADA, UMBERGAON, DIST. VALSAD, GUJARAT396120 TEL: 0260-2562954, FAX: 0260-2563950 E-mail id: uniflex.works@apar.com.

**19: Jurisdiction:-** All disputes shall be subject to the jurisdiction of Nagpur court only.

**20. GENERAL TERMS AND CONDITIONS:** This Order shall also be governed by the General Terms and Conditions of supply of stores, unless and otherwise specified in the above paragraphs.

This order is being placed on the basis of the terms and conditions already accepted by you. You may acknowledge the receipt of this order within 15 days from date of receipt of this order by sending a copy of this order duly signed & stamped with seal of your company.

  
(P.Kuldeep)  
Deputy Manager (MM)

Yours faithfully,  
  
(K.S.R.Divakar)  
Chief Manager (MM)

Encl:

1. Detailed Technical Specifications - Annexure I
2. General Terms and conditions for supply of materials - Annexure-II
3. Format for BG - Annexure III
4. BC details – Annexure IV

Copy to:

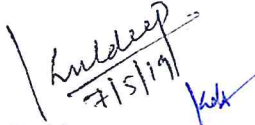
1. AGM /SO (E&M.)/SO(MM)/AFM/Depot Officer , WCL ALL AREAS
2. GM (E&M) HOD WCL, HQRS
3. GM (Fin), This order is issued with concurrence of D (F) dt. 25.04.2019 and approval of CMD ,WCL dated 26.04.2019 (file ref: P-69758)
4. Sr Manager(Fin) CP, WCL HQ
5. Depot Officer / CM (Fin.) , WCL, Central Stores, Tadali
6. GM(E&M)HOD, CMPDIL, Gondawana Palace, Kanke Road, Ranchi- 834008, FAX NO: 0651-2231 185 / 2231 447, PH.NO: 0651-2230 238 / 2230 272
7. RD, CMPDIL, Jaripatka, Nagpur. Ph no: 0712 – 2642 118 / 494. Fax no: 2643 231.
8. GM(MM), SECL, MCL, CCL, ECL, BCCL
9. Master File


**For Internal Use Only:**

**Indent Ref/BC Details:**

a) Supply order no: No.40623003-A dt.07/04/16 read with amendment was placed on M/s Skytone Electrical India ltd for supply of FT-7 trailing cable for use on SDL/LHD for a quantity of 22546mtrs against MB-16-17. The subject order is against risk purchase for the unsupplied quantity of 11751mtrs which has been approved by competent authority as per provisions and laid down procedures in purchase manual.

b) Total BC for Rs. 3,26,94,948.55 lakhs has been provided by Areas against MB 2019-20 (Details enclosed). BC of Rs. 1,64,14,023.79 has been utilised for this order from the above BC for MB-19-20 as per confirmation of GM(E&M)-HOD vide noting dates 02.05.2019 (File ref: P-69758) Accordingly balance BC available is Rs.1,62,80,924.76 as on 07.05.2019.

  
(P.Kuldeep)  
Deputy Manager (MM)

  
(K.S.R.Divakar)  
Chief Manager (MM)



## ANNEXURE-I

Sl.No.	Description	
<b>1.0</b>	<b>ITEM :</b>	
1.1	Elastomer insulated flexible trailing cables suitable for reeling and un-reeling duty for use with SDLs, LHDs & UDMs in underground Coal Mines.	
<b>3.0</b>	<b>STANDARD :</b>	
3.1	Specification and tests to which the trailing cable conforms	IS:14494-1998
3.2	Conductor material - Composed of annealed tinned copper wires conforming to class 5 of	IS:8130-1984
3.3	Insulating material - Elastomer compound conforming to type IE2 of	IS:6380-1984
3.4	Sheath material - Elastomeric compound conforming to type SE4 of	
3.5	Cables to be wound on drum of suitable size and packed conforms to	IS:10418-1982
3.6	The cable shall have DGMS approval, If having valid approval lasting till the date of the supply. OR as per DGMS circular no. D.G.M.S. Circular (Electrical),(Approval) No.12 Dhanbad, 25/05/15	
3.7	The cable shall carry BIS certification mark.	
3.8	The construction of cables for use in mines shall also comply with the relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric supply) Regulations, 2010 as amended from time to time.	
<b>4.0</b>	<b>TESTING OF CABLES :</b>	
4.1	The tests on cables are broadly grouped as routine tests, type tests, acceptance tests and optional tests.	
4.2	Routine Tests - Tests made by the manufacturer on all finished cable lengths to demonstrate the integrity of the cable.	
4.3	Type Tests - Tests required to be made before supply on general commercial basis on a type of cable in order to demonstrate satisfactory performance characteristics to meet the intended application.	
4.4	Acceptance Tests - Tests carried out on samples taken from a lot for the purpose of acceptance of the lot.	
4.5	The type test report of the cable made at a laboratory as mentioned in the DGMS approval policy 2015 or its revised version for the parameters specified under the relevant standard shall be accepted.	



<b>5.0</b>	<b>IDENTIFICATION:</b>
5.1	Manufacturer's Identification: The manufacturer shall be Identified throughout the length of the cable by means of a tape bearing the manufacturer's name or trade-mark or by manufacturer's name or trade-make being indented, printed or embossed on the cable. In case none of these methods can be employed or if the purchaser so desires, colour identification threads in accordance with a scheme approved by the Bureau of India Standards (BIS)/ relevant international standard shall be employed. The indentation, printing or embossing shall be done only on the outer sheath.
5.2	Cable Identification - In order to distinguish these electric cables from telephone cables and other cables, the word 'electric' shall be indented, printed, or embossed throughout the length of the cable. In case of cables intended for use in mines, the word 'mining' also shall be indented, printed or embossed throughout the length of the cable. The indentation, printing or embossing shall be done only on the outer sheath. The following special cables shall be identified by indenting, embossing or printing the appropriate legend on the outer sheath throughout the cable length, in addition to the existing marking requirements:
5.3	Voltage Identification : The voltage grade of the cable shall be identified throughout the length of the cable by means of a tape bearing the voltage grade of the cable (for example 1.1kV, 3.3kV, 3.81/66kV and 6.35/11kV) or by the voltage grade being printed, embossed or indented on outer sheath.
5.4	Type of Cable: The cable type shall also be marked using the appropriate designation as given in the relevant standard (BIS) / relevant international standard throughout the length of cable by any of the means indicated above.
<b>6.0</b>	<b>MARKING AND PACKING</b>
6.1	The cables shall be wound on a drum (as per IS 10418).
6.2	The cut ends of the cable shall be sealed by means of non-hygroscopic sealing material.
6.3	The Cable shall carry the following information either stencilled on the drum or contained in a label attached to it:
	a. Reference to the relevant Standard;
	b. Manufacturer's name, brand name or trademark;
	c. Type of cable and voltage grade;
	d. Number of cores;
	e. Nominal cross-sectional area of the conductor;
	f. Cable type;
	g. Length of cable on the drum;
	h. Number of lengths on drum (if more than one);
	I. Direction of rotation of drum (by means of an arrow);
	j. Approximate gross mass;
	k. Country of manufacture; and
	l. Year of manufacturer.
<b>7.0</b>	<b>THE MANUFACTURER SHALL:</b>

*Handwritten signature/initials*

*Handwritten signature/initials*

7.1	Have Reliable and adequate facility for manufacturing & testing of cables and fully responsible for its quality. The Indigenous cable manufacturers shall have valid BIS licence.	
7.2	Take a note of the relevant standards amended from time to time, provisions of the Central Electricity Authority (measures relating to safety and electric supply), Regulations, 2010 and any other Instructions / circulars issued from this Directorate in respect of manufacturing of cables.	
7.3	Furnish to the user all the type and routine test reports, cross sectional drawings of the cables, giving dimensional details for each size of cable. An illustrated literature on the cable, giving technical information on current ratings, cable constants, short circuit ratings, de-rating factors for different types of cables. The manufacturer shall also furnish other details like packing date, weights and other relevant information pertinent to their product (s) to the user(s), along with each consignment, and the users shall also have the responsibility to get such test reports/literature/documents from the manufacturer while purchasing and using the cable in the mines.	
7.4	<p>Shall seal the cable ends properly so that ingress of moisture is completely prevented.</p> <p>a. the individual core endings shall be sealed effectively with water resistant compound applied over the core and provided with a heat shrinkable cap of sufficient length with adequate cushion space so that the conductor does not puncture the cap in case of movement of the core during unwinding or laying. Before sealing, the semi-conducting layer on the cores may be removed for about 2mm at each end, to facilitate checking the insulation resistance from one end, without removing the reeling cap at the other end.</p> <p>b. The multi cores should have an overall heat shrinkable cap with adequate end clearance and sufficient cushioning to prevent puncturing of the overall sealing cap due to stretching of the cores. The sealing cap shall have sufficient mechanical strength and shall prevent ingress of moisture into the cable. The ends of single core cables shall also be sealed on the same lines to prevent entry of moisture.</p>	
<b>8.0</b>	<b>TECHNICAL PARAMETER :</b>	
8.1	Cable type	FT-7
8.2	Voltage grade	1100 V
8.3	Number of cores	Power – 3
		Pilot – 1
		Earth – 1
8.4	Core identification	Power – Red, Yellow & Blue
		Pilot - Black
		Earth - Bare conductor
8.5	Size of conductor	Power – 25 mm <sup>2</sup>
		Pilot - 25 mm <sup>2</sup>
		Earth - 16 mm <sup>2</sup>
8.6	Overall diameter of the cable	Min. -45 mm
		Max. - As per IS:14494-1998

*Handwritten signature*  
Kip

*Handwritten mark*

*Handwritten mark*

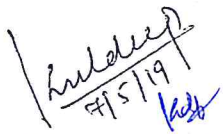


8.7	Max.conductor resistance per 1000 mtr length at 20° C.	For 25 sq mm – 0.795 ohms For 16 sq mm – 1.24 ohms
8.8	Protective screens	Three power cores and pilot core shall be provided with protective metallic screens.
8.9	Form of screen	The screen strands shall be applied in the form of a braid in which all the strands in one direction are of tinned annealed copper wires and the strands in the other direction are of non metallic reinforcing material like polyamide, polyethylene terephthalate, nylon.
8.10	Laying up of cores	The three power cores and one pilot core shall be laid up around the bare earth conductor with right hand lay maintaining the electrical contact between core screens and earth conductor.
8.11	Application	Cable should be suitable for reeling and un-reeling duty condition for use with SDL/LHD/UDM in underground mine.
8.12	Standard/Packing length	100 mtrs ±5%
<b>9.0</b>	<b>DENTIFICATION, MARKING AND SEALING :</b>	
9.1	Identification in cable	Manufacturer's name/trade mark, month and year of manufacture and cable type & size, shall be identified through out the length of the cable by means of a tape in side the cable i.e. under the sheath.
9.2	Identification on drum	Manufacturer's name/trade mark, month and year of manufacturing, cable type and voltage grade, nos. of cores and size, length of cable, approx. gross mass and direction of rotation.
9.3	BIS certification	The cable shall carry BIS standard mark (on the drum)
9.4	Cable and sealing	The cable ends shall be sealed with a tough heat-shrink end-cap coated internally with a mastic adhesive that is activated by heat to shrink down the cap on to the end of the cable.
<b>10.0</b>	<b>PRE-DESPATCH INSPECTION : Refer clause 5</b>	
10.1	The trailing cables will be inspected by WCL's representative/third party inspection agency at manufacturer's works before dispatch of the consignments to ascertain the conformity of the cables to supply order specifications; relevant ISS, statutory regulation (DGMS approval) and type test certificates	
10.2	The manufacturer shall make available to the inspector, the required test facilities with necessary support for conducting all the acceptance tests applicable for the cable as per IS:14494-1998 and supply order specifications.	

*Handwritten signature/initials*  
ksh

*Handwritten signature/initials*

10.3	The manufacturer shall make available to the inspector the following documents during inspection :-	Copies of relevant ISS.
		Copies of DGMS approvals, If having valid approval lasting till the date of the supply. OR DGMS circular no. D.G.M.S. Circular (Electrical),(Approval) No.12 Dhanbad, 25/05/15
		Copy of BIS license for IS:14494-1998
		Copies of type test certificates from Govt./Govt. approved test house as per IS:14494.
		Manufacturer's test certificates for the raw materials.
		Copy of Quality Assurance Plan.
		All records of quality checks at various stages of manufacturing as per QAP.
<b>11.0</b>	<b>PARAMETERS:</b>	
11.1	Make of cable – UNICAB	
11.2	Derating factors to be considered for use of cable at ambient temperature 35 deg - 0.96 40 deg - 0.91 45 deg - 0.87 50 deg - 0.82 55 deg - 0.76	
<b>13.0</b>	<b>DOCUMENTS TO BE SUBMITTED WITH THE CONSIGNMENT :</b>	
13.1	Notary attested Copy of valid DGMS approval till the date of the supply. OR all the test reports as per DGMS circular no.D.G.M.S. Circular (Electrical),(Approval) No.12 Dhanbad, 25/05/15	
13.2	Self attested copies of valid BIS license for use of standard BIS mark on the offered cables.	
13.3	Pre-despatch inspection report of inspecting authority.	
13.4	Technical leaflets/technical literatures, any other documents (if any).	

  
Dy Manager (MM)

  
Chief Manager (MM)