



ISO 9001:2008, 14001:2004,
50001:2011 & OHSAS 18000
MAHARATNA COMPANY

MATERIAL MANAGEMENT (PURCHASE)
CENTRAL FOUNDRY FORGE PLANT, BHEL HARDWAR
RANIPUR, HARIDWAR (INDIA) – 249403
Phone No. +91-1334-281277/281299, FAX No. 225892
e-mail : vinaysingh@bhel.in; anuragkk@bhel.in

Sub: Tender Enquiry for Welding Cable

Dear Sir,

We are pleased to invite offer in **E-Tender** as per enclosed specifications & terms and conditions for the under mentioned items.

SI No	Tender No	Description of Material	Qty	Date & Time Of Opening
01	201901681, Event ID: 32659	Material Code: FF7754596024 WELDING CABLE (ALUMINIUM) SPECIFICATION-IS:9857:1990 WITH ALUMINIUM CONDUCTOR, 600AMPS & PACKING IN 25+-5 METRES LENGTH PER ROLL. SPEC: FF06035, REV.01 REV: 01 SIZE: 600 AMPS. DIM.: S	2000 MR	23.08.2019 (2.00 PM)

Delivery Schedule: 30 days from PO date, early delivery is acceptable.

Offer to be submitted in compliance with Specification & PQC.

For New Vendor who are not registered with CFFP:

New Vendor who are not registered with CFFP are required to fill the Supplier Registration Form (SRF). The SRF can be filled online through <https://supplier.bhel.in/>. Please ensure to fill the SRF and it is requested to submit the Acknowledgement No./ Application no. of filled SRF along with the offer. Kindly read terms and conditions, offer not in accordance with the instructions is liable to be disqualified or ignored.

Please send the following along with the Offer:

1. **Company Name and Address Proof.**
 2. **GST Number (Scan Copy of Acknowledgement)**
 3. **PAN Copy**
 4. **MSME Certificate (if Any)**
- All the above documents should be signed and stamped.**

Please visit <https://bhel.abcprocure.com/EPROC/>; www.bhel.com or www.bhelhwr.co.in for more details & corrigendum if any for the tender enquiry. **Offers are to be submitted online in E-tender portal at <https://bhel.abcprocure.com/EPROC/>**

Offer to be submitted only on e-procurement portal. Hard copy of offer is not required to be submitted to CFFP. Any offers received in Hard copy shall not be accepted and straightaway rejected by CFFP. Before proceeding for submitting quotation in e-portal, supplier to ensure that they are having a valid Digital Signature Certificate (DSC). Valid DSC refers to an Active Signing and Encryption Certificate (both), with specification Class III SHA2 2048 bit

Thanking You,
Yours Faithfully,
For & On behalf of CFFP, BHEL, Hardwar

(Vinay K Singh)

Sr. Engineer (Purchase)

Note: Corrigendum if any shall not be published, kindly refer <https://bhel.abcprocure.com/EPROC/> for any changes.



ISO 9001:2008, 14001:2004,
50001:2011 & OHSAS 18000
MAHARATNA COMPANY

MATERIAL MANAGEMENT (PURCHASE)
CENTRAL FOUNDRY FORGE PLANT, BHEL HARDWAR
RANIPUR, HARIDWAR (INDIA) – 249403
Phone No.+91-1334-281277/281299, FAX No. 225892

PQC FOR ALUMINUM WELDING CABLE OF 600A

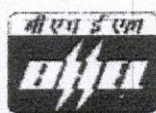
SL NO	PQC	Vendor Compliance
<u>1</u>	Welding cable (aluminum) 600A shall be as per purchase specification FF06035 Rev01. Testing & Certificate at current rating 522 A at 60% duty cycle is acceptable in line with IS	
<u>2</u>	Only those vendors who have supplied at least 500 meter of single core flexible aluminum cable of 600A or higher in last 5 years (on date of opening of tender) shall quote. In support of same vendor shall furnish the copy of purchase order which confirmed item, quantity, cable type rating, date & Customer	

3

संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी. - हार्डवार)		FF 06035 Rev 0																																													
PLANT PURCHASE SPECIFICATION (CFPP - HARDWAR)		पृष्ठ का Page 1 of 3																																													
WELDING CABLES – 400, 600 and 900 AMPS.																																															
1. Scope : This purchase specification specifies the requirements and tests for single core flexible cables used for manual electric arc welding on carbon steel and alloy steel castings.																																															
2. Compliance with National & International Standard : The welding Cables shall be in general as per IS 9857:1990 suitable for manual electric arc welding (current rating specified for 60% duty cycle) with the characteristics as stated under Technical specifications.																																															
3. Technical Specifications: 3.1. The welding cable shall be single core flexible cable suitable for manual electric arc welding. 3.2. The single core flexible welding cable shall be consisting of coaxial placed flexible circular conductor, separator and insulating covering. 3.3. The flexible circular conductor shall be of annealed high conductivity copper or aluminum multi strands wires confirming to IS 8130:1984. The nominal cross-section area of the conductor shall be not less than the nominal value specified in Table 1.																																															
TABLE - 1																																															
<table border="1"><thead><tr><th>Description of Welding Cable</th><th>Nominal Cross Sectional Area of Conductor, mm²</th><th>Nominal Thickness of Covering, mm</th></tr></thead><tbody><tr><td>Welding Cable (Copper) - 400Amp.</td><td>50</td><td>2.20</td></tr><tr><td>Welding Cable (Copper) - 600Amp</td><td>95</td><td>2.60</td></tr><tr><td>Welding Cable (Aluminum)-600Amp</td><td>120</td><td>2.80</td></tr><tr><td>Welding Cable (Copper) - 900Amp</td><td>120</td><td>2.80</td></tr></tbody></table>			Description of Welding Cable	Nominal Cross Sectional Area of Conductor, mm ²	Nominal Thickness of Covering, mm	Welding Cable (Copper) - 400Amp.	50	2.20	Welding Cable (Copper) - 600Amp	95	2.60	Welding Cable (Aluminum)-600Amp	120	2.80	Welding Cable (Copper) - 900Amp	120	2.80																														
Description of Welding Cable	Nominal Cross Sectional Area of Conductor, mm ²	Nominal Thickness of Covering, mm																																													
Welding Cable (Copper) - 400Amp.	50	2.20																																													
Welding Cable (Copper) - 600Amp	95	2.60																																													
Welding Cable (Aluminum)-600Amp	120	2.80																																													
Welding Cable (Copper) - 900Amp	120	2.80																																													
3.4. The single core flexible cable shall be covered coaxial with a separator tap (material dry paper, polyester taps or other suitable material) to give complete covering of the conductor.																																															
3.5. The insulating covering of the welding cable shall be able to with-stand 90°C temperature continuously during usage and shall be made of heat resisting, oil resisting and flame retardant (HOFR) normal duty elastomeric compound Type SE-3 confirming to the requirements of IS 6380:1984.																																															
<table border="1"><tr><td>RMI</td><td>NK SAHU</td><td>अनुवादक</td><td>TRANSLATED BY</td><td></td></tr><tr><td>MPIC</td><td>KB SOOD</td><td>विवरणकर्ता</td><td>WORKED BY</td><td>V.K. AGARWAL</td></tr><tr><td>CHAIRMAN CPSC</td><td>B RAHA</td><td>जांचकर्ता</td><td>CHECKED BY</td><td>A.K. GARG</td></tr><tr><td>अनुमोदित विभाग</td><td>नाम</td><td>विवरण एवं हस्ताक्षर</td><td>पर्यवेक्षणकर्ता</td><td>SUPERVISED BY</td></tr><tr><td>AGREED DEPT</td><td>NAME</td><td>DATE & SIGNATURE</td><td></td><td></td></tr><tr><td colspan="5">स्वीकृत प्लांट स्टैंडर्ड्स</td></tr><tr><td colspan="5">APPROVED : PLANT STANDARDS COMMITTEE</td></tr><tr><td colspan="2">विवरण : वेल्डिंग टेक्नोलॉजी</td><td>अवधि : वेल्डिंग टेक्नोलॉजी</td><td colspan="2">विवरण : वेल्डिंग टेक्नोलॉजी</td></tr><tr><td colspan="2">PREPARED : WELDING TECH</td><td colspan="2">ISSUED : WELDING TECHNOLOGY</td><td>DATE 10.10.06</td></tr></table>			RMI	NK SAHU	अनुवादक	TRANSLATED BY		MPIC	KB SOOD	विवरणकर्ता	WORKED BY	V.K. AGARWAL	CHAIRMAN CPSC	B RAHA	जांचकर्ता	CHECKED BY	A.K. GARG	अनुमोदित विभाग	नाम	विवरण एवं हस्ताक्षर	पर्यवेक्षणकर्ता	SUPERVISED BY	AGREED DEPT	NAME	DATE & SIGNATURE			स्वीकृत प्लांट स्टैंडर्ड्स					APPROVED : PLANT STANDARDS COMMITTEE					विवरण : वेल्डिंग टेक्नोलॉजी		अवधि : वेल्डिंग टेक्नोलॉजी	विवरण : वेल्डिंग टेक्नोलॉजी		PREPARED : WELDING TECH		ISSUED : WELDING TECHNOLOGY		DATE 10.10.06
RMI	NK SAHU	अनुवादक	TRANSLATED BY																																												
MPIC	KB SOOD	विवरणकर्ता	WORKED BY	V.K. AGARWAL																																											
CHAIRMAN CPSC	B RAHA	जांचकर्ता	CHECKED BY	A.K. GARG																																											
अनुमोदित विभाग	नाम	विवरण एवं हस्ताक्षर	पर्यवेक्षणकर्ता	SUPERVISED BY																																											
AGREED DEPT	NAME	DATE & SIGNATURE																																													
स्वीकृत प्लांट स्टैंडर्ड्स																																															
APPROVED : PLANT STANDARDS COMMITTEE																																															
विवरण : वेल्डिंग टेक्नोलॉजी		अवधि : वेल्डिंग टेक्नोलॉजी	विवरण : वेल्डिंग टेक्नोलॉजी																																												
PREPARED : WELDING TECH		ISSUED : WELDING TECHNOLOGY		DATE 10.10.06																																											

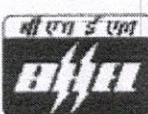
17/10/06

2

दिनांक एवं हस्ताक्षर SIGN & DATE		संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी - हरिद्वार) PLANT PURCHASE SPECIFICATION (CFFP - HARDWAR)	FF 06035 Rev 01 पृष्ठ का Page 2 of 3						
समीची सूची प्रदान की जा रही है INVENTORY NO	SUPERSEDES	3.6. The covering shall be so applied that it fits closely on the taped conductor. The covering unless applied by extrusion method shall be applied in two or more layers. The colour of covering shall be black. The nominal thickness of the covering for cable shall be not less than the nominal value specified in Table 1.							
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.		4. Test Certificate: The vendor shall supply two sets of the test certificates along with dispatch documents at the time of delivery of welding cables to confirm the suitability of the welding cable to pass all the six tests as given below and described under section 10 and section 11 of IS 9857:1990. a) Annealing test b) Conductor resistance test c) Test for thickness of covering (as per section 3.6 above) d) High voltage test (water immersion test) e) Static flexibility test f) Flammability test 5. Welding Cable Identification : Each welding cable shall be marked with the following information throughout the length of the cable at every meter distance as per requirement of section 12 of IS 9857:1990 (a) Manufacturer's identification /trade mark , if any. (b) Cable identification, i.e., "HR 90".							
स्वामित्विकार एवं गोपनीयता इस प्रलेख में दी गई युग्म अथवा इसी प्रलेखिका में तबतक है इसका प्रयोग एवं अप्रयोग पर से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हितकारक हो न किया जाए ।		6. Guarantee: The welding cable shall be guaranteed for 24 months from the date of receipt. 7. Packing and Marking: The welding cable shall be either wound on reels or drums or supplied in coils packed and labeled giving the information as per section 13.2 of IS 9857:1990. The packing should be suitable to avoid any damage during handling, transit and storage. 8. Special Requirements: a) The vendor shall send with offer the list of the industries with address to whom welding cables are supplied earlier. b) Final acceptance of welding cable shall be based on satisfactory report/ performance on shop floor.							
दिनांक एवं हस्ताक्षर SIGN & DATE			<table border="1"> <tr> <td>निर्माणकर्ता WORKED BY</td> <td>V.K. Agarwal</td> <td></td> </tr> <tr> <td>जांचकर्ता CHECKED BY</td> <td>AKGarg</td> <td></td> </tr> </table>	निर्माणकर्ता WORKED BY	V.K. Agarwal		जांचकर्ता CHECKED BY	AKGarg	
निर्माणकर्ता WORKED BY	V.K. Agarwal								
जांचकर्ता CHECKED BY	AKGarg								

1

01

विनिर्देशक एवं हस्ताक्षर SIGN & DATE				संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी - हार्डवेयर) PLANT PURCHASE SPECIFICATION (CFFP - HARDWAR)		FF 06035 Rev.00	
सुपरसेडिंग INVENTORY NO.		पृष्ठ Page		का 3 of 3			
RECORD OF CHANGES							
REV CODE	NO. OF CHANGES	DOCU. NO.	SHEET NO.	SIGN	DATE		
01	Title of standard is changed from "Welding cables-400 and 600Amps" to "Welding cables-400, 600 and 900Amp" to include the specification for welding cables for 900 amps also.		1		10.10.06		
	Section 3.3 of Technical specifications is modified to include specifications for 900 amps cable also.		1		10.10.06		
DISTRIBUTION OF PRINTS							
RMI		✓					
STANDARD SECTION		✓					
MPIC		✓					
हस्ताक्षर एवं दिनांक		निर्माणकर्ता WORKED BY		V.K.Agarwal			
समाप्ति सूची अंश		जांचकर्ता CHECKED BY		A.K.Garg			