



संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी. - हार्डवेयर)

FF77184 Rev 02

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PLANT PURCHASE SPECIFICATION (CFFP - HARDWARE)

1. Scope :

This purchase specification specifies the requirements and tests for gouging electrode holders (used for removal of material from steel castings with the help of gouging carbon electrodes), in order to optimize the safety of the welder and to ensure satisfactory condition of use during heavy duty manual electric air arc gouging on carbon steel and different alloy steel castings.

2. Compliance with National & International Standard :

The gouging electrode Holder shall be in general as per IS 2641:1993 suitable for current rating at 100% duty cycle use with the characteristics as stated under Technical specifications.

3. Technical Specifications:

3.1. Type of Gouging Holder and their current capacity:

Type of Gouging Holder	Suitable for Gouging Electrodes	Current Rating at 100% duty cycle	Length of heavy duty cable
Gouging Holder-1000 Amps	φ 9mm and φ12mm	1000 amps	2 meter long
Gouging Holder-1800 Amps	φ 18mm	1800 amps	3 meter long

3.2. The gouging Electrode Holder shall be suitable for use on circuits with OCV up-to and including 100 V (RMS).

3.3. The gouging holder shall be made of copper/copper alloy, free from blow holes, cracks and the defects which impair the electrical conductivity.

3.4. The gouging electrode holder shall be of open mouth-Jaw type and it shall be as light as possible.

3.5. The gouging electrode holder shall be fitted with unitized standard cable & hose, air cooled & swivel type terminating in rubber/ jacketed air-power connection and insulation boot. Provision shall be there for connection of pneumatic hose.

RMI	K B Subramanyam	अनुवादक	TRANSLATED BY	
MPIC	Ranjan kumar	निर्माणकर्ता	WORKED BY	V.K. AGARWAL
CHAIRMAN CPSC	B RAHA	जांचकर्ता	CHECKED BY	A.K.GARG
सहमत विभाग AGREED DEPTT	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE	पर्यवेक्षणकर्ता SUPERVISED BY	A.K.GARG
		<p>स्वीकृति APPROVED : प्लांट स्टैंडर्ड PLANT STANDARDS COMMITTEE</p>		
		निर्माण : अंशपसकट	जारी : अंशपसकट टेक्नालॉजी	दिनांक
		टेक्नालॉजी	ISSUED : WELDING TECHNOLOGY	DATE : 25 05 07

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स्वतंत्रताधिकार एवं गोपनीयता
इस प्रलेख में दी गई सूचना भारत
हेवी इलेक्ट्रिकल्स की संपत्ति है। इसका प्रयोग एवं आश्रय रूप से किसी भी
तरीक प्रयोग, जो कि इसी के हित में आवश्यक हो न किया जाए।

सामग्री सूची संख्या
INVENTORY NO.

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स्वत्वाधिकार एवं गोपनीयता
इस दस्तावेज में दी गई सूचना भारत भारती
इलेक्ट्रिकल्स की सम्पत्ति है। इसका प्रयोग एवं प्रकाशन अन्य से किसी भी तरह प्रयोग,
को कि कंपनी के हित में हानिकारक हो न किया जाए।

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3.6. The gouging holder shall have provision for 360° free revolving movement of the holder around air hose/ cable without twisting the air hose/cable for maximum maneuverability.

3.7. The Gouging electrode holder along with coaxial unitized standard cable and air hose assembly shall be able to work continuously at the maximum current (rated for 100% duty cycle) with 7kg/cm² air pressure without any air leakage through jaws and the air switch of the holder.

3.8. The Handle lever and handle covers shall be made in tough heat resistant and electrical insulating material and shall be so constructed that no dirt or foreign particles (likely to cause danger by electric shock) can lodge in joints, holes & other services and that the live ends of screws, pins etc can not be exposed in use.

3.9. Grip of Handle (OD) shall be such that operator can grip it easily & comfortably. The temperature of the grip of handle shall not exceed 30°C above ambient temperature when continuously used at rated current for 100% duty cycle for 30 minutes minimum.

3.10. Spring, if used, shall be insulated electrically so that they do not carry welding current unless designed to do so.

4. Test Certificate:

The party shall supply two sets of the test certificates along with dispatch documents at the time of delivery of gouging holder to confirm the suitability of the gouging electrode holder to meet all the technical requirements as per clause 3.1 to 3.10 given above and to pass all the four tests as given below and described under section 5.3 of IS 2641:1989.

- Insulation resistance test.
- High voltage test.
- Impact test.
- Test for flammability and resistance to heat.

5. Marking :

Each gouging electrode holder shall be marked with the following information:

- Name of manufacturer, Trade mark, if any.
- Current Rating at 100% duty cycle.

6. Guarantee :

The gouging electrode holder shall be guaranteed for 18 months from the date of receipt

7. Packing :

The packing should be suitable to avoid any damage/ loss of material during handling, transit and storage.

निर्माणकर्ता WORKED BY	V.K. Agarwal		14/7/07
जांचकर्ता CHECKED BY	AKGarg		14/7/07



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8. Special Requirements:

- The party shall send with offer the gouging holder catalogue / leaflet giving details of the gouging electrode holder construction and arrangement of holding the gouging cable, in particular.
- The party shall send quote for all the spares of holder for two years trouble free operation.
- The party shall provide test certificates (for the test conducted as per Clause-4 above) with supply.
- Party shall submit two copies of the operation and maintenance manual along with detailed assembly drawing (in English language) at the time of delivery of gouging holder.
- Final acceptance of gouging electrode holder shall be based on satisfactory report/ performance on shop floor.
- If the material received in CFFP is found not suitable as per clause no 4 given above, it shall be replaced free of cost by the supplier.

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स्वत्वाधिकार एवं गोपनीयता
इलेक्ट्रिकल्स की सम्पत्ति है। इसका प्रयोग एवं प्रकाशन अन्य से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो न किया जाए।

हस्ताक्षर एवं तिथि
SIGN & DATE

राज्यी सूची संख्या

निर्माणकर्ता
WORKED BY

V.K.Agarwal

14/7/17

जांचकर्ता
CHECKED BY

AKGarg

14/7/17



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RECORD OF CHANGES

REV CODE	NO. OF CHANGES	DOCU. NO.	SHEET NO.	SIGN	DATE
02	<p>Standard is prepared in standard format. Complete specifications are rewritten.</p> <p>Additional details vide clause no 3.2 and 3.5 are added to the technical specifications to ensure better performance of the gouging holder in usage.</p> <p>Details of the test to which suitability of the gouging holder is to be confirmed are included under clause no 4.0 for ensuring better performance.</p> <p>Clause no 8.0 is added to specify clearly the additional requirements to be met by supplier.</p>		<p>All Sheets Sheet no 1 to 3</p> <p>Sheet no 1</p> <p>Sheet no 2</p> <p>Sheet no 2</p>		25.12.06

DISTRIBUTION OF PRINTS

RMI	✓
STANDARD SECTION	✓
MPIC	✓

निर्माणकर्ता WORKED BY	V.K. Agarwal		14/07/07
जांचकर्ता CHECKED BY	A.K. Garg		14/7/7

स्वाधिकार एवं गोपनीयता प्रमाणित है कि यह दस्तावेज़ केवल प्रयोजन के लिए है और इसका उपयोग केवल उद्देश्य के लिए ही किया जाना चाहिए।

हस्ताक्षर एवं दिनांक

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