

<div><div>बी एच ई एल</div><div>BHEL</div></div>	CORPORATE STANDARD			AA7710103	
				Rev. No.01	
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CARBON STEEL ELECTRODES FOR SHIELDED METAL ARC WELDING CLASS E6013					
1.0 SCOPE					
This standard covers Carbon Steel arc welding electrodes of Class E6013 to SFA 5.1 of ASME Section-II Part-C.					
2.0 APPLICATION					
These electrodes are used for mild and low Carbon Steels of non-radiographic application.					
3.0 COMPLIANCE TO STANDARD					
This standard is made to the Class E6013 of SFA 5.1 of ASME Section-II C.					
4.0 CHEMICAL COMPOSITION					
As per SFA 5.1 of ASME Section-II C.					
5.0 MECHANICAL PROPERTIES					
As per SFA 5.1 of ASME Section-II C.					
6.0 FILLET WELD TEST					
As per SFA 5.1 of ASME Section-II C.					
7.0 METHODS OF MANUFACTURE					
The welding consumable may be manufactured by any method which will yield the requirements of this standard.					
8.0 STANDARD FORMS, TOLERANCES AND FINISH					
8.1 The standard size shall be 2.0, 2.5, 3.15, 4.0, 5.0, 6.3 mm diameter.					
8.2 The tolerance on the diameter of core wire shall be as per SFA 5.1 of ASME Section-II C.					
8.3 Core Wire & Covering					
The electrodes shall meet the requirements of clause 3.2 of SFA 5.02.					
8.4 Exposed Core					
The electrodes shall meet the requirements of clause 3.3 of SFA 5.02.					
Revisions: Clause 19.4 of MOM of MRC-W			APPROVED: INTERPLANT MATERIAL RATIONALISATION COMMITTEE – MRC(W)		
Rev. No.01	Amd. No.	Reaffirmed	Prepared	Issued	Dt. of 1 st Issue
Dt:08-09-2014	Dt:	Year:	HPBP, Trichy	Corp. R&D	01-02-1989

9.0 IDENTIFICATION

All electrodes shall be identified as per SFA 5.1.

10.0 TEST REQUIREMENTS

Test requirements as per SFA 5.1 of ASME Section-II C. Batch/Lot classification shall be Class C1 and level of testing shall be Schedule 4 or I as per SFA 5.01.

11.0 TEST CERTIFICATES

The supplier shall submit 3 copies of original test certificates in English giving the following information.

1. BHEL Purchase Order No.
2. Supplier's Name, Brand Name and Size
3. BHEL Standard No: AA7710103 and AWS class
4. Batch Number & Quantity
5. Test results as per clause 10.0 of this standard

12.0 ACCEPTANCE

Acceptance shall be based on as per the requirement of this standard. Additional requirements if any shall be as agreed between supplier and purchaser.

13.0 PACKING

The electrodes shall be suitably packed to ensure against damage during shipment or storage under normal condition.

14.0 MARKING

Each carton shall have the following information printed on them.

1. Brand name
2. AWS specification and class
3. Size
4. Batch No. and Date of manufacture
5. Quantity and Net weight
6. Electrode drying requirements

15.0 For rationalized sizes and material codes, refer CMCC of Welding Consumables (for BHEL reference only)**16.0 REFERRED STANDARDS** (Latest Publications including Amendments)

- 1) ASME Section-II C

9.4 Exposed Core

The electrodes shall meet the requirements of clause 3.3 of SFA 5.02.

10.0 IDENTIFICATION

All electrodes shall be identified as per SFA 5.1.

11.0 TEST REQUIREMENTS

Test requirements as per SFA 5.1 of ASME Section-II C. Batch/Lot classification shall be Class C1 and level of testing shall be Schedule 4 or I as per SFA 5.01.

12.0 TEST CERTIFICATES

The supplier shall submit 3 copies of original test certificates in English giving the following information

1. BHEL Purchase Order No.
2. Supplier's Name, Brand Name and Size
3. BHEL Standard No: AA7710112 and AWS class
4. Batch Number & Quantity
5. Test results as per clause 11.0 of this standard

13.0 ACCEPTANCE

Acceptance shall be based on as per the requirement of this standard. Additional requirements if any shall be as agreed between supplier and purchaser.

14.0 PACKING

The electrodes shall be suitably packed to ensure against damage during shipment or storage under normal condition.

15.0 MARKING

Each carton shall have the following information printed on them.

1. Brand name
2. AWS Specification and Class
3. Size
4. Batch No. and Date of manufacture
5. Quantity and Net weight
6. Electrode drying requirements

16.0 For rationalized sizes and material codes, refer CMCC of Welding Consumables (for BHEL reference only)**17.0 REFERRED STANDARDS** (Latest Publications including Amendments)

- 1) ASME Section-II C