

FABRICATION DIVISION
Welding Development & Technology
BHEL, BHOPAL

P.I No. _____ **Date: 09-10-2020**

Technical Specification No: FBM/WD&T/TS03 Rev 05

Technical Specification for EA3K Wire for Electro Slag Welding

S. No	Description	Requirement	Vendor to Provide	Offered	Deviation	Remark
1	Scope	This specification prescribes requirements for solid electrodes for electrosag welding of carbon and low-alloy steels.	Vendor to confirm			
1.1	Classification of electrode	EA3K-EW as per SFA 5.25 of ASME Sec IIC Ed 2019				
1.2	Chemical Composition	As per SFA 5.25 of ASME Sec IIC Ed 2019				
1.3	Type	Soft and Annealed				
1.4	Diameter of Wire	3.15-3.2 mm				
1.5	Weight of Spool	75 kgs (Approx.)				
1.6	Spool type	Coils with support				
1.7	Dimensions of Spool	ID : 600, +20, - 0 (approximately)				
1.8	Finish and Uniformity	As per clause 14.2 of SFA 5.25 of ASME Sec IIC Ed 2019				
1.9	Standard package forms	As per clause 14.3 of SFA 5.25 of ASME Sec IIC Ed 2019				
1.10	Winding Requirement	As per clause 14.4 of SFA 5.25 of ASME Sec IIC Ed 2019				
1.11	Electrode Identification	As per clause 14.5 of SFA 5.25 of ASME Sec IIC Ed 2019				
1.12	Packaging	As per clause 14.6 of SFA 5.25 of ASME Sec IIC Ed 2019. It must be ensured that no damage during transportation occurs.				
1.13	Marking of Pacakges	As per clause 14.7 of SFA 5.25 of ASME Sec IIC Ed 2019				
2	Tests Required for wire quoted					
2.1	Chemical Analysis	As per SFA 5.25 of ASME Sec IIC Ed 2019 (Test certificate to be provided with offer)	Vendor to confirm and provide Test Certificate from OCM			
2.2	Tensile Strength of Wire	590 - 700 N/mm ² (Test certificate to be provided with offer)				
2.3	Micro Hardness of Wire	The Micro Hardness of Wire shall be less than or equal to 220 HV (Test certificate to be provided with offer)				

S. No	Description	Requirement	Vendor to Provide	Offered	Deviation	Remark
3	Authorization and Correspondence: In case, authorized vendor quotes for the tender, then the following must be met: 1. Vendor to provide authorized dealer certificate valid for atleast 1 year, and the OCM to take guarantee of the product quoted, failing this the offer will be rejected. 2. All Technical correspondence and confirmation shall be done with their principal supplier (OCM). Contact details of OCM to be provided with the offer. 3. All liability shall be of principal in the event of default by the authorized agent/dealer. 4. All correspondence and documents including test certificate shall be in english language. 5. If any document provided by vendor is in language other than english, it must be supported with valid english translation.		Vendor to confirm			
4	BHEL reserves the right to call free sample spool (on a non-returnable basis) of minimum 25 kgs (with dimensions as mentioned in S. No. 1.7 of this specification) for further technical evaluation. The test results (for S. No. 2.1 to 2.3 of this specification) of BHEL will be final. Vendor to submit samples within 7 days after intimation by BHEL.		Vendor to confirm and provide Test Certificate from OCM			

Legends :

1. OCM- Original Consumable Manufacturer