

BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL
QA-HYDRO
STANDARD QUALITY ASSURANCE PLAN FOR BAR MATERIAL

QAP NO. : QA/HT/1039 Rev. 00 Dated :- 16.05.2018
SPECIFICATION : AA 10108 Rev. 11 (Structural Steel - Bars)
SUPPLY CONDITION : Hot Rolled

1	2	3	4	5	6	7	8	9	10	11	12
SL. NO.	STAGE	CHARACTERSTIC	METHOD	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	P	V	W	REMARKS
1	Raw Material	Chemical	Chemical test	1 Sample / Heat	AA 10108 Rev. 11 & IS :2062-2011, Gr : E250 Quality A	AA 10108 Rev. 11 & IS :2062-2011, Gr : E250 Quality A	Mill Test Certificate	1	2	-	-
2	Heat Treatment	Normalized - Tempered	Normalising & Tempering	1 Sample / Heat & H.T. Batch	-do-	-do-	H.T. Chart	1	2	-	-
3	Final Stage	Stamping on test bar for mechanical Testing	Hard Stamp by TPIA	-do-	-do-	-do-	Stage Inspection Report	1	-	2	Test Piece duly stamped by TPIA
		Mechanical Properties	i) Tensile Test	As Specified in IS :2062-2011, Gr : E250 Quality A	-do-	-do-	Supplier's Test Certificate	1	-	2	In case of traders witness by TPIA to be conducted at NABL approved Lab.
			ii) Yield strength	-do-	-do-	-do-	Supplier's Test Certificate	1	-	2	
			iii) % Elongation	-do-	-do-	-do-	Supplier's Test Certificate	1	-	2	
		Chemical Composition	Chemical test	1 sample / Heat	-do-	-do-	Supplier's Test Certificate	1	-	2	
		Visual Examination	Visual	100%	-do-	Bars shall be free fom surface defects, bends & twists	Supplier's Dimensional Report	1	-	2	
		Dimension & Tolerance	Measurement	100%	IS: 1852 - 1985	IS: 1852 - 1985	-do-	1	-	2	-
4	Dispatch	Identification Marking	Hard Stamping	100%	AA 10108 Rev. 11	AA 10108 Rev. 11	1. Heat No. 2. P.O. No. 3. Spec No. 4. Size 5. Supplier's Name	1	-	2	Identification & marking shall be done on face of each bar & TPIA hard stamp to be done on both face of each bar.
5	Document submission duly certified by TPIA	1) Mill test certificate (Mechanical & Chemical) 2) Supplier Test certificate (Mechanical & Chemical) 3) Dimensional Inspection report. 4) Heat Treatment Chart									

Note : Final Testing of Material will be done at BHEL Bhopal works before clearance of SRV.

1 = Manufacturer / Trader
2 = BHEL / BHEL's TPIA

P = Perform
V = Verification
W = Witness

QA-Hydro
आचार्य राम/SHARMA
ए. अभियंता (कम्यूटर) / Sr. Engineer (QWT)
निष्पन्न-जल परामर्श / Quality Control-WTM
भोपाल / BHEL, BHOPAL

H.T.E

16/05/18
रविन्द्र कुमार/शिवेंद्रा कुमार
वरिष्ठ प्रबंधक/Sr. Manager
टी. & रिटान/H.T.E. DIVISION
भोपाल/BHEL, Bhopal

16/5/18

महेश सोनी / Sr. Manager
प्रबंधक / Sr. Manager
भोपाल / BHEL, BHOPAL