

Laboratory **QC Lab, CS Plant, Kutch Works, Ratnamani Metals & Tubes Ltd.,
Survey No. 474, Bhachau – Anjar Road, Village Bhimasar, Tal. Anjar,
Dist. Kutch, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7028 (in lieu of T-3839)**

Page 1 of 2

Validity **10.03.2018 to 09.03.2020**

Last Amended on **12.03.2018**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
-----	----------------------------	-------------------------	---	--

MECHANICAL TESTING

I.	MECHANICAL PROPERTIES OF METALS			
1.	Ferrous Metals:(Carbon Steel Welded Pipes / HR Coils /Plates)	Tensile Test		
		Yield Strength (By Graph method)	ASTM A370 ISO 6892-1	100 MPa to 1000 MPa (40 to 1000 kN /0.01 kN)
		Yield Strength (0.2% Proof stress)	IS 1608 ASTM E8/E8M	100 to 1000 MPa (40 to 1000 kN /0.01 kN)
		Yield Stress (0.5% Extension Under Load)		100 MPa to 1000 MPa (40 to 1000 kN /0.01 kN)
		Ultimate Tensile Strength		150 MPa to 1500 MPa (40 to 1000 kN /0.01 kN)
		% Elongation		2 % to 80 %
		Hardness Test		
		Vickers Hardness Test	ASTM A370 ISO 6507 ASTM E92	100 to 400 HV 10
		Impact Test		
		Charpy Impact test (V Notch) at room temperature and temperature Up to -60°C	ASTM A370 ASTM E23 ISO 148-1	2 J to 240 J
	BEND TEST			
	Guided Root Bend Guided Face Bend Guided Side Bend	ASTM A370 ASTM E190 ISO 7438 IS 3589 Cl. No. 9.3 IS 5504 Cl. No. 6.3.1.1	Qualitative (3 to 50 mm Thickness) (Mandrel Diameter: 12, 14, 16, 18, 20, 24, 25, 28, 30, 32, 35, 40, 44, 50, 55, 60, 65, 70, 75, 80, 85, 90,	

Sachin Tomar
Convenor

N. Venkateswaran
Program Director

Laboratory **QC Lab, CS Plant, Kutch Works, Ratnamani Metals & Tubes Ltd.,
Survey No. 474, Bhachau – Anjar Road, Village Bhimasar, Tal. Anjar,
Dist. Kutch, Gujarat**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7028 (in lieu of T-3839)**

Page 2 of 2

Validity **10.03.2018 to 09.03.2020**

Last Amended on 12.03.2018

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Material Bend	IS 1599 ASTM E290	95, 100, 105, 110, 120, 130, 140, 150 mm)
		Flattening Test	API 5L Cl. No. 9.6, 10.2.3.7, 10.2.4.7 ISO 3183, Cl. No.9.6, 10.2.12.3, 10.2.4.7 API 5CT Cl. No.7.13, 10.5, ASTM A53, Cl. No.7.3 IS 3589, Cl. No.7.3 IS 2328 , Cl. No.7.3 ASTM A370 ISO 8492	Qualitative (6" to 18" Outside Diameter & 3.0 to 14.27 mm Thickness)

Sachin Tomar
Convenor

N. Venkateswaran
Program Director