



# TSI METAL INDUSTRIES LLC

P.O. BOX: 31165, ICAD-II, ABU DHABI, U.A.E.  
**MANUFACTURER TEST CERTIFICATE**



DATE : 26-MAY-2023  
 MTC NO. : TSI/EXP/23-0304  
 EXP NO. : 23-103  
 INV NO. : TSIA/EX/23/0072

CUSTOMER :

P.O. NO : 23/73 L01-01

WE CERTIFY THAT THE MATERIAL DESCRIBED BELOW FULLY CONFORMS TO ASTM A53. THE CHEMICAL COMPOSITION & MECHANICAL TESTING CONFORMS TO ASTM A751 & ASTM A370 RESPECTIVELY. PLEASE REFER TO ASTM A53 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

### MATERIAL DESCRIPTION - PRIME NEWLY PRODUCED ERW STEEL PIPE CONFORMING TO ASTM A53-20 GRADE-B

S.No.	Item	Outside Diameter	Thickness	Length	Weight	Quantity	Surface Finish	Ends	Batch No	Heat No	Heat Treatment - 540°C Min	Eddy Current Test	Flattening/Bend Test (At 0° and 90°)	Hydro Test Pressure	Avg. Zinc Coating
		Inch	Inch	Feet	Lbs/FT	Pcs							33%/66%/Full/B*0	PSI	Gm/m <sup>2</sup>
1	3" X SCH-80	3.500	0.300	21	10.26	602	Black	Bevel End	3024/230410	127802	OK	OK	OK	2500	N/A
2	4" X SCH-40	4.500	0.237	21	10.80	94	Black	Bevel End	3023/230331	A228922	OK	OK	OK	2210	N/A
3	6" X SCH-40	6.625	0.280	21	18.99	483	Black	Bevel End	3025/230412	B2208016	OK	OK	OK	1780	N/A
4	6" X SCH-40	6.625	0.280	21	18.99	287	Black	Bevel End	3025/230412	B010294	OK	OK	OK	1780	N/A

Chemical Composition / Analysis (MAX)											Mechanical Properties (MIN)			
Heat No	C%	Mn%	P%	S%	Cr%	Cu%	Mo%	Ni%	V%	(Cu+Ni+Cr+Mo+V)%	Specimen	YS-MPa	UTS-MPa	% EL
Spec. Requirement	0.300	1.200	0.0500	0.0450	0.4000	0.4000	0.1500	0.4000	0.0800	1.0000	-	240	415	Table X4.1
127802	0.100	0.170	0.0120	0.0090	0.0200	0.0100	0.0020	0.0100	0.0020	0.0440	L/B	304	441	33
A228922	0.160	0.180	0.0100	0.0110	0.0300	0.0100	0.0020	0.0100	0.0030	0.0550	L/R	349	438	34
B2208016	0.070	1.130	0.0060	0.0060	0.3200	0.0100	0.0010	0.0200	0.0010	0.3520	L/B	394	491	30
B010294	0.153	0.894	0.0190	0.0080	0.0280	0.0050	0.0010	0.0120	0.0010	0.0470	L/B	382	477	31

IT IS FURTHER CERTIFIED THAT THE ABOVE MATERIAL CONFORMS TO THE DIMENSIONAL AND WEIGHT TOLERANCE OF THE SPECIFICATION ASTM A53.

TOLERANCE : FOR ≤48.3 OD ±0.40MM & >48.3MM OD ±1%, THICK. -12.5%, WEIGHT ± 10%. WORKMANSHIP : CONFORMS TO ASTM A53 & P.O., BEVEL ANGLE: 30°- 35° WHEREVER APPLICABLE

ALL THE PIPES WERE CONTINUOUSLY STENCILLED WITH MARKING AS UNDER:

(U) LISTED EX26998 TIGER/MADE IN UAE ASTM A53 NPS -- INCH SCH-40 GR.B TYPE E NDE LENGTH -- FEET HEAT NO. .... RWP 300PSI HTP ---- PSI <FM>

ABBREVIATION: YS: Yield Strength; UTS: Ultimate Tensile Strength; EL: Elongation; GL: Gauge Length; L: Longitudinal; T: Transverse; B: Body Tensile; W: Weld Tensile



**NARENDRA KUMAR**  
 MANAGER (QUALITY)