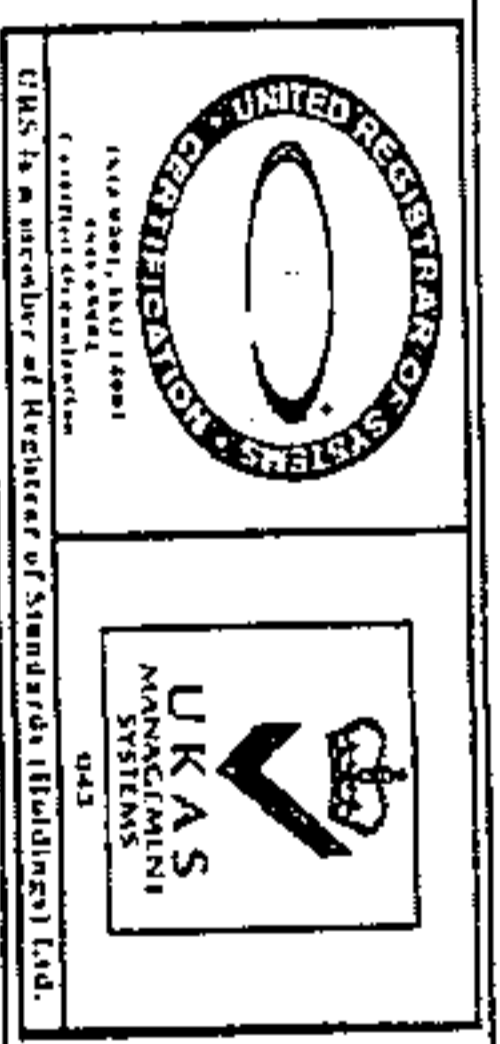




**TSI METAL INDUSTRIES LLC**  
 P.O. BOX: 31165, ICAD-II, ABU DHABI, U.A.E.  
**MANUFACTURER TEST CERTIFICATE**



DATE : 25-AUG-2022  
 MTC NO. : TSI/EXP/22-0504  
 EXP NO. : 22-063  
 INV NO. : TSI/EX/22/0102

P.O. NO. :  
 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°) 33%/66%/T/ll/8"D	Hydro Test Pressure PSI	Avg. Zinc Coating Gm/m <sup>2</sup>
		Inch	Inch	Feet	Ibs/FT	Pcs									
1	8" X SCH 40	8.625	0.322	21	28.58	5	Black	Bevel End	3018/220423	2213341	OK	OK	OK	1570	N/A
Chemical Composition / Analysis (MAX) Heat No      C%      Mn%      P%      S%      Cr%      Cu%      Mo%      Ni%      V%      (Cu+Ni+Cr+Mo+V)% Spec. Requirement    0.300    1.200    0.0500    0.0450    0.4000    0.4000    0.1500    0.4000    0.0800    1.0000															
Mechanical Properties (MIN) Specimen      YS-MPa      UTS-MPa      % EL T/B      357      448      34 T/W      --      461      --															

IT IS FURTHER CERTIFIED THAT THE ABOVE MATERIAL CONFORMS TO THE DIMENSIONAL AND WEIGHT TOLERANCE OF THE SPECIFICATION ASTM A53.  
 TOLERANCE : FOR 548.3 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 HIP .... PSI <+M>  
 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)**