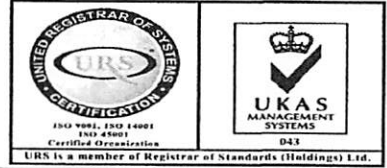


# TSI METAL INDUSTRIES LLC

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



CUSTOMER : SUNBELT GROUP L.P.  
 1990 POST OAK BLVD.SUITE 2100  
 HOUSTON,TEXAS 77056  
 P.O. NO : 25.982

DATE : 26-JAN-2024  
 MTC NO. : TSI/EXP/24-0012  
 EXP NO. : 23-342  
 INV NO. : TSIA/EX/24/0008

WE CERTIFY THAT THE MATERIAL DESCRIBED BELOW FULLY CONFORMS TO ASTM A53/ASME SA53. 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/ASME SA53 GRADE-A

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/8*D	PSI	Gm/m <sup>2</sup>
1	1" X SCH-40	1.315	0.133	21	1.68	720	Black	Plain End	1046/231223	23A08309	NA	OK	OK	1200	N/A
2	2" X SCH-40	2.375	0.154	21	3.68	1092	Galvanized	Bevel End	2086/231228	23A08149	NA	OK	OK	2300	584

#### Chemical Composition / Analysis (MAX)

Heat No	C%	Mn%	P%	S%	Cr%	Cu%	Mo%	Ni%	V%	(Cu+Ni+Cr+Mo+V)%	Mechanical Properties (MIN)			
Spec. Requirement	0.250	0.950	0.0500	0.0450	0.4000	0.4000	0.1500	0.4000	0.0800	1.0000	Specimen	YS-MPa	UTS-MPa	% EL
23A08309	0.170	0.380	0.0120	0.0010	0.0100	0.0100	0.0000	0.0100	0.0000	0.0300	L/B	347	456	31
23A08149	0.150	0.360	0.0090	0.0030	0.0200	0.0100	0.0000	0.0100	0.0000	0.0400	L/B	327	446	32

IT IS FURTHER CERTIFIED THAT THE ABOVE MATERIAL CONFORMS TO THE DIMENSIONAL AND WEIGHT TOLERANCE OF THE SPECIFICATION ASTM A53/ASME SA53.  
 TOLERANCE : FOR ≤48.3 OD ±0.40MM & >48.3MM OD ±1%, THICK. -12.5%, WEIGHT ± 10%. WORKMANSHIP : CONFORMS TO ASTM A53/ASME SA53 & P.O., BEVEL ANGLE: 30° - 35° WHEREVER APPLICABLE  
 ALL THE PIPES WERE CONTINUOUSLY STENCILLED WITH MARKING AS UNDER:  
 (UL) LISTED EX26998 TIGER/MADE IN UAE ASTM A53/ASME SA53 NPS -- INCH SCH-40 GR.A/B TYPE E NDE LENGTH -- FEET HEAT NO. .... RWP 300PSI HTP ---- PSI <FM>  
 COUNTRY OF MELT & POUR : INDIA/CHINA.

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)