

25% Cr Super Duplex/F55

Grade: Super Duplex ferritic-austenitic stainless steel (UNS 32760)

ASTM A182, ASTM A479, ASTM A276, NACE MR-0175/ISO 15156

NORSOK M-650 MDS-D54, MDS-D57

Type: High alloy 25 % Cr (dual phase) stainless steel, usually delivered in the solution annealed condition

Other 25 Cr grades are available: UNS32550

Element	UNS S32760, Wt %
	Zeron [®] 100
Carbon	0.03 max
Silicon	1.0 max
Manganese	1.0 max
Phosphorus	0.03 max
Sulphur	0.01 max
Molybdenum	3.0 – 4.0
Chromium	24.0 – 26.0
Nickel	6.0 – 8.0
Tungsten	0.5 – 1.0
Copper	0.5 – 1.0
Nitrogen	0.2 – 0.3
PREN	40 min

Mechanical Properties

Property	Values
Ultimate Tensile Strength	110 min Ksi (760 Mpa)
0.2 % Yield Strength *	80 min Ksi (550 Mpa)
Elongation *	25 % min
Reduction of Area *	45 % min
Charpy Impact Toughness Up to 8" diameter	45 mean/35 min J at -46° C
Hardness	Typically 28 HRC max

Notes:

The excellent corrosion resistance of these grades means that they are used in severe environments, for applications such as piping, valves, fasteners and other pressure containing items.