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F51 – DUPLEX - UNS S31803

APPLICABLE SPECIFICATIONS

ASTM A276/276M ASTM A479/479M ASTM A182/182M NACE MR-0175/ISO 15156
 NORSOK M-650 MDS-D44, MDS-D47 SIMILAR TO UNS S32205 / W.NR 1.4462

A chemical resistant ferritic-austenitic stainless steel. Sea water corrosion resistance and mechanical properties are greater than standard austenitic stainless steels.

CHEMICAL ANALYSIS RANGE (WT%)

C	0.03 Max	Cr	21.00 - 23.00	N	0.08 - 0.20
Si	1.00 Max	Mo	2.50 - 3.50		
Mn	2.00 Max	P	0.03 Max		
Ni	4.50 - 6.50	S	0.02 Max		

HEAT TREATMENT

SQA bar stock is in the Solution Annealed & Water Quenched condition

TYPICAL MECHANICAL PROPERTIES IN SOLUTION ANNEALED CONDITION

0.2% Yield Strength	65000 PSI (450 MPa) min
Tensile Strength	90000 PSI (650 MPa) min
Elongation	25% min
Reduction of Area	45% min
Hardness	28 HRC
Charpy V Notch @ -50 DEG C	70 Joules min average (up to 254mm DIA)

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