

SUPER DUPLEX STEEL 2507

ASTM/ASMEUNS S32750, SAF 2507

EURONORMW.Nr1.4410 – X2CrNiMoN25.6.3

NACE MR0175

PRODUCTS OF 2507 AVAILABLE @KAYSUNS

- Buttwelded Fittings to ASME B16.9, MSS SP-43, EN 10253-3, EN 10253-4 etc.
- Pipe & Tube to ASTM SA790, SA789, EN 10216-5 etc.
- Sockweld and Threaded Fittings to ASME B16.11, BS 3799, MSS SP97
- Flange and Special Forgings to ASME B16.9, ASME B16.47, B16.48, EN 1092-1
- Valves to API 6D, ASME B16.34

GENERAL PROPERTIES

Duplex 2507 is a two-phase, ferritic, austenitic 22% chromium, 3% molybdenum, 5 to 6% nickel alloyed stainless steel. It is the most widely used duplex stainless steel grade and is characterized by high yield strength, double that of the standard austenitic stainless steel grades. It also demonstrates good fatigue strength, as well as outstanding resistance to stress corrosion cracking, crevice, pitting, erosion, and general corrosion in severe environments.

CHEMICAL COMPOSITION

C	Si	Mn	P	S	Cr	Ni	Mo	N	Ti	PREN
≦0.030	≦0.80	≦1.20	≦0.035	≦0.020	24.0-26.0	6.0-8.0	3.00-5.00	0.24-0.32	-	≧40

ASTM SPECIFICATION

Pipe Smls&Welded	Tube Smls&Welded	Sheet/Plate	Forgings	Castings	Weld Fittings
A790	A789	A240	A182	A890	A815

MECHANICAL PROPERTIES PARAMETER OF ASTM A790

Tensile Strength, Min. MPA	.2% Yield Strength, Min. MPA	Hardness Max. (HRC)
800	550	32

CHARACTERISTICS OF DUPLEX 2507

- High resistance to chloride stress corrosion cracking
- Resistance to chloride pitting and crevice corrosion
- Good general corrosion resistance
- Good sulfide stress corrosion resistance
- High Strength

APPLICATIONS OF SUPER DUPLEX 2507

- Chemical process vessels, piping and heat exchangers
- Pulp mill digesters, bleach washers, chip pre-steaming vessels
- Sea water treatments
- Oil field piping and heat exchangers
- Flue gas desulfurization equipments