

ASTM A240/A240M Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications

Duplex (Austenitic-Ferritic) steel

Type: 2507

UNS Designation : S32750

Chemical Composition Requirements, %

C: ≤ 0.030

Mn: ≤ 1.20

P: ≤ 0.035

S: ≤ 0.020

Si: ≤ 0.80

Cr: 24.0-26.0

Ni: 6.0-8.0

Mo: 3.0-5.0

N: 0.24-0.32

Cu: ≤ 0.50

Mechanical Test Requirements

Tensile Strength: ≥ 795 Mpa

Yield Strength: ≥ 550 MPa

Elongation in 2 in. or 50 mm: $\geq 15\%$

Hardness:

Brinell: ≤ 310

Rockwell (C scale): ≤ 32

Cold bend: not required