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## AM 316/316L Data sheet

AM 316/316L is the most commonly used austenitic stainless steel in the chemical process industry. The addition of molybdenum increases general corrosion resistance, improves chloride pitting resistance and strengthens the alloy in high temperature service.

### Alloy Highlights

Good corrosion resistance

### Typical Applications

Food processing  
 Marine  
 Pulp & Paper  
 Chemical Processing  
 Pharmaceutical Equipment  
 Medical implant devices

Mechanical Properties (as Sintered)		
Test	Horizontal	Vertical
Tensile Strength	145 +/-6 ksi	130 +/-8 ksi
Yield Strength	106 +/-5 ksi	90 +/-6
Elongation at break	35 +/-5 %	42 +/-5 %
Hardness (HRC)		30
Density (lb/in <sup>3</sup> )		0.285
E Modulus (Msi)		20 +/-3

Chemistry		
Element	Range (%)	
	Min	Max
Fe	Balance	0.4
Cr	16.0	18.0
Ni	10.0	14.0
Mo	2.0	3.0
Mn		2.0
Si		0.75
C		0.03
S		0.03
P		0.045

### Applicable Chemistry Specifications

AMS 5507	AMS 5648	AMS 5653
ASME SA 240	ASME SA 312	ASME SA 479
ASTM A 240	ASTM A 276	ASTM A479
EN 1.4404	UNS S31600	UNS S31603