

# STAINLESS STEEL - 316 / 316L

## RELATED SPECIFICATIONS:

Germany	316 - W.Nr 1.4401 X5CrNiMo17 12 2
	316L - W.Nr. 1.4404 X2CrNiMo17 12 2
Great Britain	316 - BS970 – Part 3 – 1991 316S31
	316L - BS970 – Part 3 – 1991 316S11
Japan	JIS G 4303 SUS 316
	JIS G 4303 SUS 316L
USA	ASTM A276-98b 316/316L
	SAE 30316
	AISI 316
	AISI 316L
	316 - UNS S31600
	316L - UNS S31603

## DESCRIPTION:

316/316L is an 18/8 austenitic stainless steel enhanced with an addition of 2.5% Molybdenum, to provide superior corrosion resistance to type 304 stainless steel. 316/316L has improved pitting corrosion resistance and has excellent resistance to sulphates, phosphates and other salts. 316/316L has better resistance than standard 18/8 types to sea water, reducing acids and solution of chlorides, bromides and iodides.

## APPLICATIONS:

Include pumps, valves, marine fittings, fasteners, paper and pulp machinery, and petro chemical equipment.

## CHEMICAL ANALYSIS:

### 316

	C %	Si %	Mn %	P %	S %	Cr %	Ni %	Mo %	N %
Min.	-	-	-	-	-	16.00	10.00	2.00	-
Max.	0.08	1.00	2.00	0.045	0.03	18.00	14.00	3.00	0.10

### 316L

	C %	Si %	Mn %	P %	S %	Cr %	Ni %	Mo %	N %
Min.	-	-	-	-	-	16.00	10.00	2.00	-
Max.	0.03	1.00	2.00	0.045	0.03	18.00	14.00	3.00	0.10

## MECHANICAL PROPERTIES:

### 316 (Annealed to ASTM A276)

Finish	Dia or Thickness mm	Tensile Strength MPa Min.	Yield Strength MPa min.	Elongation in 50mm % min.
Hot finish	All	515	205	40
Cold finish	≤12.7	620	310	30
Cold finish	>12.7	515	205	30

## SIZES AVAILABLE:

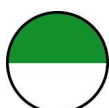
Round bars supplied cold drawn to h9 condition up to 25.4mm, smooth turned and polished up to 127mm and peeled over 12.7mm. Square and Hex bars are cold drawn to h11 tolerance.

**Size Range:** 6.35mm – 310mm

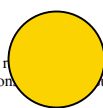
Can also be made available in improved machinability quality.

## COLOUR CODE:

### 316 BOTTLE GREEN AND WHITE END



### 316L MARIGOLD END



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