

**This page is mainly introduced the A 479 S31803 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of A 479 S31803, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.**

## **Datasheet for Steel Grades Specialsteel A 479 S31803**

### A 479 S31803 Standard Number:

ITEM	Standard Number	Descriptions
1	A 479/A 479M (2013)	Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels

### A 479 S31803 Chemical composition (mass fraction) (wt.%)

Chemical		Min.(%)		Max.(%)					
C				0.03					
Mn				2.00					
Si				1.00					
P				0.03					
S				0.02					
Cr		21.00		23.00					
Ni		4.50		6.50					
Mo		2.50		3.50					
N		0.08		0.20					
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels

### A 479 S31803 Physical Properties

Tensile strength		115-234	σb/MPa
Yield Strength	23		σ 0.2 ≥/MPa
Elongation	65		δ5 ≥ (%)
ψ	-		ψ ≥ (%)
Akv	-		Akv ≥/J
HBS	123-321		-
HRC	30		-

### A 479 S31803 Mechanical Properties

Tensile strength		231-231	σb/MPa
Yield Strength	154		σ 0.2 ≥/MPa
Elongation	56		δ5 ≥ (%)
ψ	-		ψ ≥ (%)
Akv	-		Akv ≥/J
HBS	235-268		-
HRC	30		-

### A 479 S31803 Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

### A 479 S31803 Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar,	Φ8-1200mm*L	Forging, hot rolling and	Black, Rough Turning,

	Square Bar		cold rolling, Cast	Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

**We can produce Specialsteel the specifications follows:**