

This page is mainly introduced the SA-193 Grade B8M2 Class 2B chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SA-193 Grade B8M2 Class 2B, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Data Table for Grades Stainless Steels SA-193 Grade B8M2 Class 2B

SA-193 Grade B8M2 Class 2B Standard Number:		
ITEM	Standard Number	Descriptions
1	SA-193/SA-193M	Specification for Alloy Steel and Stainless Steel Bolting Materials for High-Temperature Service

SA-193 Grade B8M2 Class 2B Chemical composition(mass fraction)(wt.%)		
Chemical	Min.(%)	Max.(%)
C		0.13
Si		
Mn		
Ni		
Cr		5.70
Al		6.30
Cu		
Ti		
Fe		
Mo		2.00
Co		
Ta		3.00
Zr		0.60
W		11.00

SA-193 Grade B8M2 Class 2B Physical Properties		
Tensile strength	115-234	$\sigma_b$ /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)

$\psi$	-	$\psi \geq (\%)$
Akv	-	Akv $\geq J$
HBS	123-321	-
HRC	30	-

### SA-193 Grade B8M2 Class 2B Mechanical Properties

Tensile strength	231-231	$\sigma_b / \text{MPa}$
Yield Strength	154	$\sigma_{0.2} \geq / \text{MPa}$
Elongation	56	$\delta 5 \geq (\%)$
$\psi$	-	$\psi \geq (\%)$
Akv	-	Akv $\geq J$
HBS	235-268	-
HRC	30	-

### SA-193 Grade B8M2 Class 2B Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
✓	✓	✓	✓	✓

### SA-193 Grade B8M2 Class 2B 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, Square Bar	$\Phi 8$ -1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, 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 Stainless Steels the specifications follows:**