Contact: **01937 584440**
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FV520B Stainless Steel

FV520B stainless steel stockholders and suppliers, delivering to the whole of the U.K. West Yorkshire Steel are supplier of FV520B round bar, diameters. A precipitation hardening stainless steel with excellent anti galling characteristics. FV520B offers good corrosion resistance, weldability and is capable of being hardened by low temperature treatment. It has better resistance to intergranular and pitting corrosion that other precipitation hardening grades such as 17/4PH stainless. With corrosion resistance comparable to 304 stainless it is often used in industry and marine environments where rusting rate is low.

Related Specifications

1.4594 X5CrNiMoCuNb14 5 PH Firth Vickers Silver Fox 520B

Alternative stainless grades we supply

17/4PH | S31254 | 904L | 310 | 316 | 321 | 440B | 440C | 420 | 410 | 416 | 431 | S31803 | S32760

Form of Supply

West Yorkshire Steel are suppliers and stockholders of round bar in diameters. FV520B ground steel bar can be supplied, providing a high quality stainless precision ground bar to your required tolerances.

Supply Condition
FV520B Double Overaged 750-550º C
FV520B Primary Hardened Condition

- Diameter

Applications

Typical applications include pump shafts, impellers, fasteners, fans, valves, hydraulic equipment used in oil and gas industries, petrochemical, marine and nuclear engineering, and aircraft components such as steam turbine blades.

Analysis

Carbon	0.07% max	Chromium	13.20-14.70%
Manganese	1.00% max	Nickel	5.00-6.00%
Silicon	0.70% max	Molybdenum	1.20-2.00%
Phosphorous	0.035% max	Niobium	0.20-0.70%
Sulphur	0.025% max	Copper	1.20-2.00%

Corrosion Resistance

FV520B has useful corrosion resistance in modest corrosion environments having similar characteristics to that of austenitic stainless steel grades. It has useful resistance to some acid conditions and has low rusting rate in marine and industrial atmospheres.

Welding

FV520B has good weldability characteristics when using standard techniques. Oxy-acetylene welding is not recommended due to the possible pick up of carbon. We recommend you contact your welding consumables supplier who should provide you full assistance and information on welding FV520B stainless steel.

Typical Mechanical Properties*

Supply Condition	0.2% Proof Stress N/mm²	Tensile Strength N/mm²	Elongation % min	Hardness Brinell HB	Izod Joules min
Supply Condition	0.2% Proof Stress N/mm²	Tensile Strength N/mm²	Elongation % min	Hardness Brinell HB	Izod Joules min
Primary Hardened 1050º C +2 hours 750-850ºC	-	-	-	293-341	-
Double Overaged 1050º C +2 hours 750-850ºC +2 hours 550ºC	800	925-1090	15	277-341	54

*rolled bar - longitudinal

Typical Physical Properties

Density	7.80 Kg/dm
Magnetisable	Yes

Heat Treatment

Heat treatment temperatures, including rate of heating, cooling and soaking times will vary due to factors such as the shape and size of each steel component. Other considerations during the heat treatment process include the type of furnace, quenching medium and work piece transfer facilities. Please consult your heat treatment provider for full guidance on heat treatment of FV520B stainless steel.

Certification

Stainless steel grade FV520B is available with BS EN 10204 3.1 mill certificate, please request when placing any orders.

Quality Assured Supply

FV520B stainless is supplied in accordance with our ISO 9001:2015 registration.