

MS No.6B UNS No.R30016 [Co-30Cr-4.5W-1C (mass%)]

Superior Wear Resistant alloy which also provides heat resistance

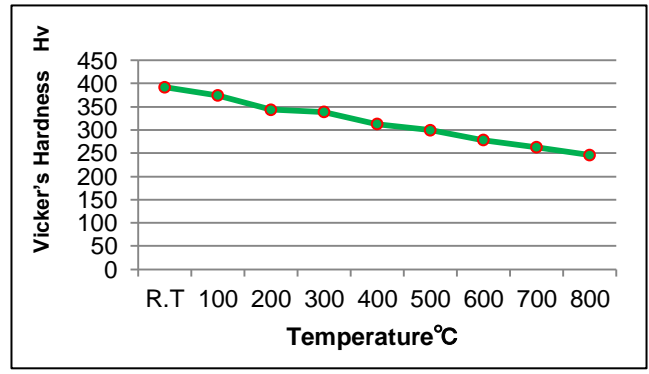
MS No.6B is a cobalt-based alloy that has been developed using Bishilite No.6 which is a casting, hard-facing material into a material that can be forged and rolled. This material is used for applications such as bearings, valves, nozzles, cutting blades, erosion shields in various industries where harsh wear resistance is required such as petroleum, food processing, paper, aircraft, power generation, etc.

1. Typical Mechanical Properties

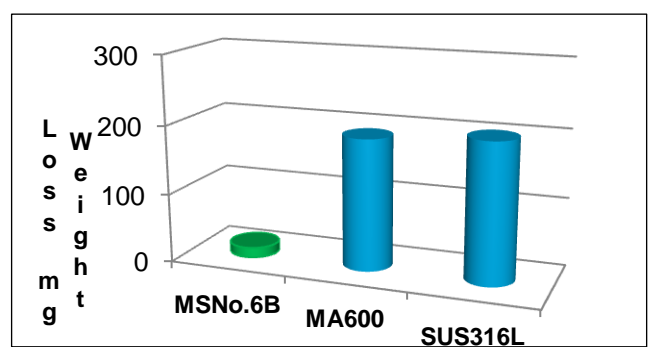
【Tensile Strength・Hardness (Room Temp)】

	Tensile Strength (MPa)	0.2% Proof Stress (MPa)	Elongation (%)	Reduction of Area (%)	Hardness HRC
3.2mm Plate	932	666	6.1	-	39
8mm Plate	963	558	11.8	-	36
φ12.7 Bar	1021	611	5.1	6.5	39
Φ114. Bar	902	543	9.4	9.5	42

【High Temperature Hardness】



【Wear Resistance】



Sand Abrasion Test

2. Physical Properties※

Density	22°C	8.38	g / cm ³
Melting Point	1,265 ~ 1,354 °C		
Electric Resistance	22°C	0.91	μΩ·m
Specific Heat	22°C	0.101	cal / (g · °C)
Thermal Coefficient of Expansion	0~100°C	13.9 × 10 ⁻⁶	/ °C
	0~1000°C	17.4 × 10 ⁻⁶	/ °C
Magnetic Permeability	22°C	<1.2	

• Data in this brochure are typical values and is not a guaranteed value. Physical testing is required for selection of material for individual applications.

※ Reference: ASM International「Alloy DIGEST」

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