

STELLITE® 156 AL-

TECHNICAL DATA

PTA & LASER WELD DEPOSITION

Nominal Composition (mass %) and Physical Properties

Co	Cr	W	C	Others	Hardness
Base	28	4	1.6	Ni, Si, Mn, Mo	43 HRC 425 HV

Stellite® cobalt base alloys consist of complex carbides in an alloy matrix. They are resistant to wear, galling and corrosion and retain these properties at high temperatures. Their exceptional wear resistance is due mainly to the unique inherent characteristics of the hard carbide phase dispersed in a CoCr alloy matrix.

	Wear Data*		Media, Concentrations and Temperatures**			
	Volume Loss (mm ³)	Wear Coefficient	30% Formic Acid, 66°C	30% Acetic Acid, Boiling	5% Sulfuric Acid, 66°C	65% Nitric Acid, 66°C
Stellite 156	37	8 x 10 ⁻⁴	.13 to .15 mm/y	.51 to 1.27 mm/y	>1.27 mm/y	13 to .15 mm/y

*Tested for 2000 revolutions at a load of 30 lbs. (13.6 kg) using a 9 in. (229 mm) diameter rubber wheel and dry sand.

** Five 24 hour test periods. Determined in laboratory tests. Samples should be tested under actual conditions.

Nominal Hot Hardness (DPH)

427°C (800°F)	538°C (1000°F)	649°C (1200°F)	760°C (1400°F)
410	390	356	345

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