Alloy 25 / L605 Cobalt Alloy

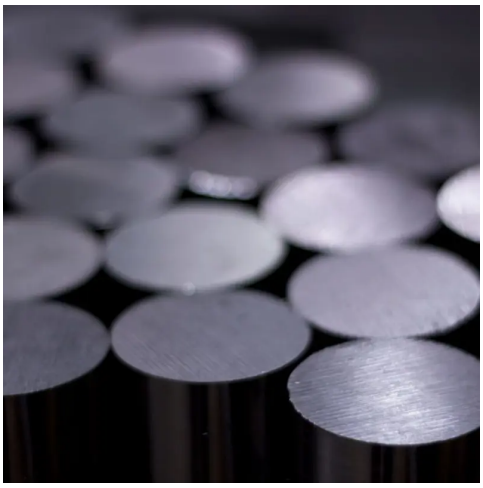
Typical Applications

Aircraft Engines

Gas Turbines

Ball Bearings

Industrial Furnace Lines



Cobalt Alloy 25/L605 has a carefully balanced composition of cobalt, chromium, tungsten, and other trace elements. The main strengths of this alloy are its ability to resist corrosion and wear, as well as its capacity to endure high temperatures. Cobalt Alloy L605 maintains its structural integrity well, even when subjected to caustic environments, abrasive forces or scorching heat.

The main strength of Cobalt Alloy L605 is its hardness, which is achieved through a heat treatment process. This hardness is no mere boast - it translates into exceptional wear resistance that allows the alloy to shrug off the harshest conditions. Whether it's being subjected to relentless friction or operating in abrasive environments, L605 exhibits a tenacity that few materials can match. In industries where downtime is unacceptable and failure is not an option, L605 stands as a tireless workhorse, ready to take on the most punishing challenges.

But the capabilities of Cobalt Alloy L605 don't end there. Its remarkable strength at extreme heat levels means it is a good choice for high heat applications, e.g. Industrial Furnace Lines. From the blistering environments of aerospace applications to the furnace-like conditions of power generation and chemical processing plants, components crafted from this alloy stand unwavering, their structural integrity never compromised.

Related Products

Alloy 188

Alloy 25 L605

Technical specification

Related Specifications

AMS 5759

AMS 5537

Specific Gravity

9.14 g/cm³

Chemical Composition (WT %)

	Min	Max
C	0.05	0.15
Mn	1	2
Si	-	0.04
P	-	0.04
S	-	0.03
Cr	19	21
Ni	9	11
W	14	16
Fe	-	3
Co	Bal	-

Typical Mechanical Properties

Type		Bar (Normalised and tempered, 0.5" and above)
0.2% Proof Stress	MPA	1276
Tensile Strength	MPA	1517
Elongation	%	10
Reduction of area	%	35

Hardness	HBW	269

Need more information? ***Get in touch***

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