

ALLOY 25 / L605 COBALT ALLOY

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.

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|--------------------------------------|-------------|----|-----|------|------|-------------------------------|----|----|----|-----|
| Specific Gravity | | | | | | | | | | |
| 9.14 g/cm ³ | | | | | | | | | | |
| Typical Applications | | | | | | Related Specifications | | | | |
| Aircraft Engines | | | | | | AMS 5759 | | | | |
| Gas Turbines | | | | | | AMS 5537 | | | | |
| Ball Bearings | | | | | | | | | | |
| Industrial Furnace Lines | | | | | | | | | | |
| Chemical Composition (Wt %) | | | | | | | | | | |
| | C | Mn | Si | P | S | Cr | Ni | W | FE | Co |
| Min | 0.05 | 1 | - | - | - | 19 | 9 | 14 | - | Bal |
| Max | 0.15 | 2 | 0.4 | 0.04 | 0.03 | 21 | 11 | 16 | 3 | |
| Typical Mechanical Properties | | | | | | | | | | |

| | 0.2% Proof Stress | Tensile Strength | Elongation | Hardness |
|----------------|--------------------------|-------------------------|-------------------|-----------------|
| | MPA | MPA | % | HB |
| Content | 310 | 862 | 30 | 277 |
| | | | | |
| | | | | |

* This data has been supplied in good faith and is indicative only. It has been provided for general information purposes only and is not to be relied upon in place of the full specification. Mechanical properties can vary considerably with different supply conditions such as heat treatment or temper and product dimensions.

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