

# Alloy L605

Smiths Advanced Metals

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## Exceptional Strength

Our Alloy L605 bars combines cobalt, nickel, chromium and tungsten.

Alloy L605 is a cobalt-nickel-chromium-tungsten alloy with exceptional strength and good oxidation resistance in environments up to 1093°C (2000°F) for prolonged exposures.

The alloy offers good fabricability, forming welding and machining. L605 is known under various common trade names, including Udimet alloy L-605, Haynes 25 and ATI L605. Our product provides good resistance to wear and galling and is ideal for applications that require good strength with oxidation resistance at elevated temperatures.

Alloy L605 represents one of the strongest fabricable cobalt alloys currently available. The attractive performance characteristics of the alloy make it highly suitable for applications including aircraft engines, gas turbines and ball bearings.

We [stock bars of Alloy L605](#), which are available in various sizes, and we process your bar products in-house to precise lengths.



## Grades / Specifications

- 2.4964
- AMS5759
- UNS R30605

## Benefits

- Excellent resistance to sulfidation
- Good oxidation resistance
- Excellent high-temperature strength

### \*Chemical Composition (weight %)

	Co	Cr	W	Ni	Fe	Mn	Si	C	P	S
min.	Rem	19.00	14.00	9.00		1.00		0.05		
max.		21.00	16.00	11.00	3.00	2.00	0.40	0.15	0.04	0.03

\* As per AMS 5759

## High Temperature Performance

Alloy L605 finds use in applications where mechanical properties need retainment at high temperatures.

The product is ideal for specific aerospace applications such as jet engines, afterburners, and combustion chambers due to its excellent corrosion resistance in hot corrosive environments. The alloy also uses hot furnaces, gas turbine engines, springs and ball bearings.



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