

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.

					Sp	ecific	Gravit	у			
						9.14 g	ı/cm³				
Typical Applications									Related Specifications		
Aircraft Engines									AMS 5759		
Gas Turbines									AMS 5537		
Ball Bearing	S										
Industrial Fu	ırnace Li	nes									
				CI	nemical	Comp	ositio	n (Wt 🤋	%)		
	С	Mn	Si	Р	s	Cr	Ni	W	FE	Со	
Min	0.05	1	-	-	-	19	9	14	-	Bal	
Max	0.15	2	0.4	0.04	0.03	21	11	16	3		

01/07/2025 11:27 1 of 3

Typical Mechanical Properties

	0.2% Proof Stress	Tensile Strength	Elongation	Hardness
	MPA	MPA	%	НВ
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 differer supply conditions such as heat treatment or temper and product dimensions.

General Enquiries

T: +44 (0) 1525 217 556 (tel:+4401525217556)

E: sales@dynamicmetalsltd.com <u>(mailto:sales@dynamicmetalsltd.com)</u>



UK Address:

Head Office

40 Eden Way Chartwell Business Park Leighton Buzzard Bedfordshire LU7 4FY

T: +44 (0)1525 217 556 (tel:+441525217556)

Conversion Centre

Suite 2 Meadowhall Riverside Meadowhall Road Sheffield South Yorkshire S9 1BW

01/07/2025 11:27 2 of 3

No liability will be accepted by Dynamic Metals Ltd in respect of any action taken by any third party in reliance of any of the

The information provided in this datasheet has been taken from multiple recognised sources. No guarantee is given that the

Material supplied by Dynamic Metals Ltd may vary significantly from this data but will conform to the relevant and

As the products detailed may be used for a wide variety of purposes and as Dynamic Metals Ltd has no control over their use; Dynamic Metals Ltd specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to

Advice given by Dynamic Metals Ltd to any third party is given for that party's assistance only and without liability on the

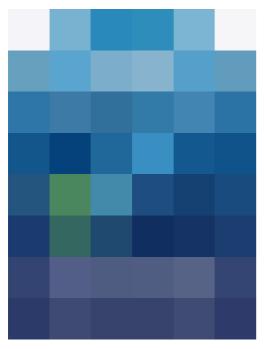
All transactions are subject to Dynamic Metals Ltd latest Terms and Conditions of Sale. The extent of the Company's liabilitie to any customer is clearly set out in those Conditions; a copy of which is available by request or by downloading from our websitie.

T: +44 (0)1143 030 320 (tel:+4401143030320)

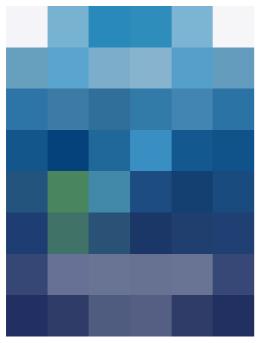
Registered Office (only)

The Granary Crowhill Farm Ravensden Road Wilden Bedfordshire MK44 2QS

T: +44 (0)1525 217 556 (tel:+441525217556)



(/media/zn2dbklo/cyber-essentialscertified-plus.png)



<u>(/media/dyelbliq/cyber-essentials-certified.png)</u>

01/07/2025 11:27 3 of 3