CO-BASE ALLOYS

Application Segments

Engineering

Available Product Variants

Long Products

Product Description

BÖHLER L605 is a wrought cobalt-20chromium-15tungsten-10nickel alloy used for surgical implants. The properties specified apply specifically to wrought bar, rod, wire
BÖHLER L605 is a nonmagnetic cobalt-based chromium-tungsten nickel alloy that has excellent corrosion and oxidation resistance, and high strength at both room and elevated temperatures. Usually BÖHLER L605 is supplied solution heat treated and quenched condition to attain optimum properties. Through work hardening, high strength levels can be obtained and BÖHLER L605 can be used in the cold worked and aged condition. Applications include medical implant devices, e.g. stents, springs, valves, and engine components for the aerospace industry. The alloy composition covered by this specification has been successfully employed in human implants. Long-term clinical experience has shown an acceptable level of biological response.

Process Melting

Airmelted + ESR

Applications

- Medical
- Orthopedics
- Medical Instruments & Implants
- Surgery
- Cardiology

Technical data

Material designation	
L-605	Market grade
2.4964	SEL
CoCr20W15N	EN
R30605	UNS

Standards	
ISO 5832-5	EN ISO
F90	ASTM

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Ni	W	Co	Fe
0.05 to 0.15	max. 0.40	1.00 to 2.00	max. 0.040	max. 0.030	19.00 to 21.00	9.00 to 11.00	14.00 to 16.00	REM	max. 3.00

Related to ASTM F90

Delivery condition

Annealed	
Tensile Strength (MPa)	min. 860
Yield Strength (MPa)	min. 310

Round Bars and Wire Rod (if any)

Diameter* mm		
ROLLED		
5.00	-	13.50

* Diameter 5.00 - 13.50 mm available as Wire Rod.

More information regarding MOQ and tolerances upon request.

Round bars upon request. Availabilty depends on delivery condition.

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.

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voestalpine
ONE STEP AHEAD.