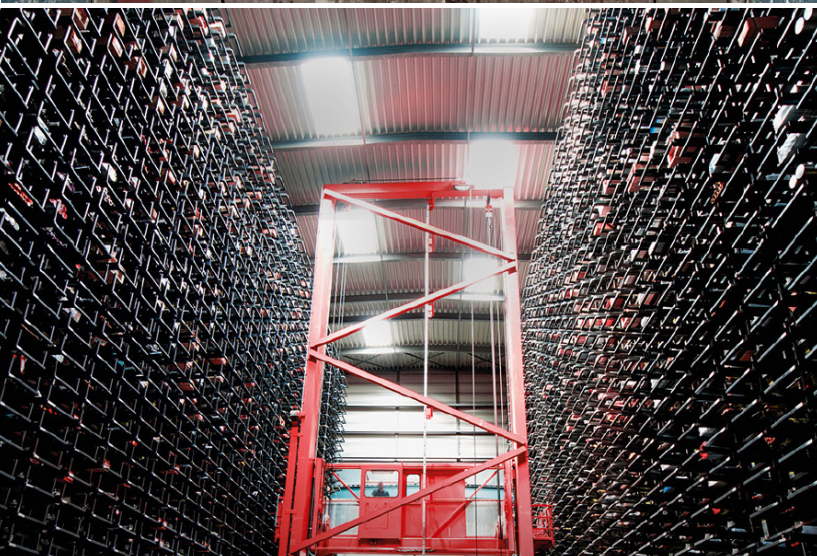


wieland

Aerospace

High-performance alloys



A world leader in aerospace-certified copper alloys.

Wieland supplies alloys specifically engineered for the demands of the aerospace, rocket and aviation industries. With the world's largest and most diverse inventory of specialty high-performance copper-based alloys to select from, custom products are manufactured with quality, traceability, and certification.

Industry Applications

Landing Gear Components

- Actuator Seals
- Bushings
- Bushing Systems
- Down-lock Controls
- Hydraulic Bearings
- Rod End Bearings
- Torque Arm Bearings
- Up-lock Controls

Structural Components

- Door Hardware
- Flap Track Bearings
- Frame Hardware
- Harness Shielding
- Pylon Bushings
- Roller Bearing Cages
- Trunnion Bushings

Reliable service

Receive timely service backed with quality management, accreditations, and over 70 years of experience.





Global locations

6

locations
in America



3

locations
in Europe



Global stocking and value added programs

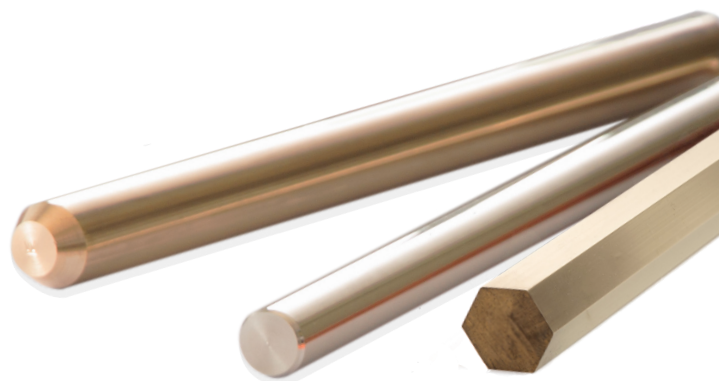
- Accurate material test certificates
- Custom color-coding
- Custom wooden shipping crates
- *Full traceability*
- *On-time delivery*
- *Same-day shipping*



High-performance alloys

Copper

Alloy designation	Temper	Specifications	Available shapes
Spinodal copper nickel tin (ToughMet® 3)			Plate Rod Tube Wire
C72900 CuNi15Sn8	AT90	BMS 7-373	   
C72900 CuNi15Sn8	AT110	AMS 4596 AMS 4595 AMS 4598 ABS 5152 ABS 5849 MTL 4112 BELL 299-947-539 BMS 7-373 AIMS 02-04-002 ASTM-B-929 Boeing M0005044 SKF 40350	   
C72900 CuNi15Sn8	TS160	AMS 4597 MS138	   
Copper beryllium			
C17200 (Alloy 25) CuBe2 CuBe1.9 CW101C	A (TB00)	AMS 4650 AMS 4530 ASTM-B-196 QQ-C-530 DMS 1904 ASNA 3414 NAI 1225 NFL 14-709 SKF 40314	   
C17200 (Alloy 25) CuBe2 CuBe1.9 CW101C	H (TD04)	AMS 4651 ASTM-B-196 QQ-C-530 MSRR 8509 DMS 1904	   
C17200 (Alloy 25) CuBe2 CuBe1.9 CW101C	AT (TF00)	AMS 4533 AMS 4535 ASTM-B-196 ASTM-B-643 QQ-C-530 NFL 14-709 ASNA 3417 ASNA 6110 ASNA 3384 DMS 1904 DMS 2088 SAE-AMS-H-7199 GE B11H51A2 SKF 40313 SKF 40317 SKF 40318	   
C17200 (Alloy 25) CuBe2 CuBe1.9 CW101C	HT (TH04)	AMS 4534 ASTM-B-196 QQ-C-530 ASNA 3400 SAE-AMS-H-7199 MSRR 8509 DMS 1904 DMS 2088 NFL 14-709	   
C17200 (Alloy 25) CuBe2	Overaged	BMS-7-353	   
C17510 (Alloy 3) CuNi2Be CW110C	A H AT HT	B11H141A2 ASTM-B-441	   
Copper beryllium/free machining			
C17300 (M25) CuBe2Pb CW102C	H (TD04)	ASTM-B-196	   
Aluminum bronze (wrought)			
C62300 CuAl10Fe3 CA 103		AMS 4635 ASTM-B-150 APS 364	   
C64200 CuAl75i2 CA 107		AMS 4631 AMS 4633 AMS 4634 ASTM-B-150 QQ-C-465	   



Alloy designation	Temper	Specifications	Available shapes			
Nickel aluminum bronze (wrought)			Plate	Rod	Tube	Wire
C63000 CuAl10Ni5Fe4	HR50 TQ50	AMS 4640 ASTM-B-150 QQ-C-465 NFL 14-705				
C63020 CuAl11Ni5Fe5	HT (TQ50) HT (TQ30)	AMS 4590 LAT 1-9063(2) ASTM-B-150				
UA10N CuAl10Ni5Fe4		ASNA 3315 ASNA 3406 NFL 14-705 NCT 10-641 ABS 5688				
CA 104/ UA11N CuAl11Ni5Fe5		BS 2 B23 BS B 23 BS 2874 DTD 197A LAT 1-9063(1) LAT 3-0189 SKF 40224 SKF 40228 NFL 14-706				
High tensile brass / manganese bronze						
UZ19A6 CuZn19Al6MnFe		NFL 14-707 NCT10-631-11MD NCT 15-631-02 ASNA 3402 CR. 1.2.0.14 D M2				
C86300		AMS 4862 ASTM-B-505				
Sintered bronze (oil impregnated)						
Sintered bronze		AMS 4805 MIL-B-5687 ASTM-B-438 SAE 841				
Phosphor bronze						
C51000 CuSn5	H04	AMS 4625 ASTM-B-139				
C52100 CuSn8 PB104	H04	NFL 14-703 DTD 265A BS B 24 BS 2B 24				
Copper silicon/ copper nickel/ copper nickel silicon						
C65620		AMS 4616				
CuSi3Fe2Zn3		Si45Z				
CuNi2Si		BS B 25 DTD 498A DIN 2.0855 CW111C				
CuNi3Si		NFL 14-701 NCT 15-643 ASNA 3405				
CuNi14Al2		DIN 2.1504 NFL 14-702 ASNA 6127				
Free machining brass/ naval brass						
C36000	H02	AMS 4610 ASTM-B-16				
C46400	H02	AMS 4611				
C46400	H04	AMS 4612				



Centrifugally and continuously cast alloys

Aluminum bronze

Alloy designation	Temper	Specifications	Available shapes			
			Plate	Rod	Tube	Wire
C95200		ASTM-B-271 QQ-B-671 QQ-C-390				
C95300	HT	ASTM-B-271 QQ-B-671 QQ-C-390				
C95400	HT	ASTM-B-271 QQ-B-671 QQ-C-390 ASTM-B-505				
C95410	HT	ASTM-B-271				
C95420	HT	AMS 4870 AMS 4871 QQ-C-390				

Nickel aluminum bronze

Alloy designation	Temper	Specifications	Available shapes			
			Plate	Rod	Tube	Wire
C95500	TQ50	QQ-C-390 QQ-B-671 ASTM-B-271 DMS 1677				
C95510 CuAl10Ni5Fe3	TQ50	AMS 4880 SKF 40226 FTI 8701				
C95520 CuAl11Ni5Fe5	TQ50	AMS 4881				
C95800		ASTM-B-271				



Ferrous alloys

Steel

Alloy designation	Temper	Specifications	Available shapes Plate Rod Tube Wire
300M	N&T	AMS 6419, AMS 6257, AMS 6417, BS S155, BMS 7-26, MIL S 8844 CL 3, GM1012 (Grumman) C-05-1190 (Lockheed), DMS1935 (McDonnell-Douglas)	   
4340 VM	N&T	AMS6414, AMS 2300, AMS 6415, AMS 6484, AMS-S-5000, BMS-7-28, BPS-299-947-055, MIL-S-5000, DMS-1555 GRD A (CAP of), MIL-S-8844 CL 1	   

Stainless-steel

Alloy designation	Temper	Specifications	Available shapes Plate Bar Tube Wire
17-4 PH	Solution treat annealed	AMS 5643, ASTM-A484, ASTM A564 TY 630, AMS 2303	   
15-5 PH	Solution treat annealed	AMS 5669, ASTM-A564	   
13-8 MO	Solution treat annealed	AMS 5629, ASTM-A564	   

Non-ferrous alloys

Nickel

Alloy designation	Temper	Specifications	Available shapes Plate Rod Tube Wire
Nickel 625		AMS 5666, AMS 5599, ASTM-B-446 Gr 1, ASTM B 564	   
Nickel 718	Solution annealed precipitation hardened	AMS 5662, AMS 5663, AMS 5664	   
Nickel X750		ASTM B 637, ASME SB 637, AMS 5667, AMS 5668, AMS 5669, AMS 5670, AMS 5671, AMS 5747, EN10269	   

wieland

Wieland Busby

850 Freeport Parkway, Suite 400
Coppell, TX 75019
United States
+1 800 552 8729
info@busbymetals.com
busbymetals.com

Wieland Busby

55 Davids Drive
Hauppauge, NY 11788
United States
+1 800 552 8729
info@busbymetals.com
busbymetals.com

Wieland Busby

6500 E. Washington Boulevard
Commerce, CA 90040
United States
+1 800 552 8729
info@busbymetals.com
busbymetals.com

Wieland Busby

7817 South 210th Street, Suite B106
Kent, WA 98032
United States
+1 800 552 8729
info@busbymetals.com
busbymetals.com

Wieland Busby Ltd

Unit 3A Transigo, Gables Way
Thatcham, Berks RG194JZ
United Kingdom
+44 118 930 3733
arron.richards@wieland.com
busbymetals.com

Wieland Concast

14315 State Route 113
Wakeman, OH 44889
United States
+1 800 626 7071
sales.concast@wieland.com
concast.com

Wieland France S.A.S.

30 Av. de la Colombière
74950 Scionzier
France
+33 4 50 98 11 46
yannick.quinton@wieland.com
wieland-france.com

Wieland Lone Star Casting

3102 Maverick Drive
Kilgore, TX 75662
United States
+1 903 986 8300
ryan.rector@lonestarcasting.com
lonestarcasting.com

Wieland Metal Services Germany

GmbH
Am Schüttenhof 5
40472 Düsseldorf
Germany
+49 211 9654 288
christian.butz@wieland.com
www.wieland.com/en/prometa