

Excellence in Casting

Centrifugal Casting, Continuous Casting,
and Machining of Critical Metal Components



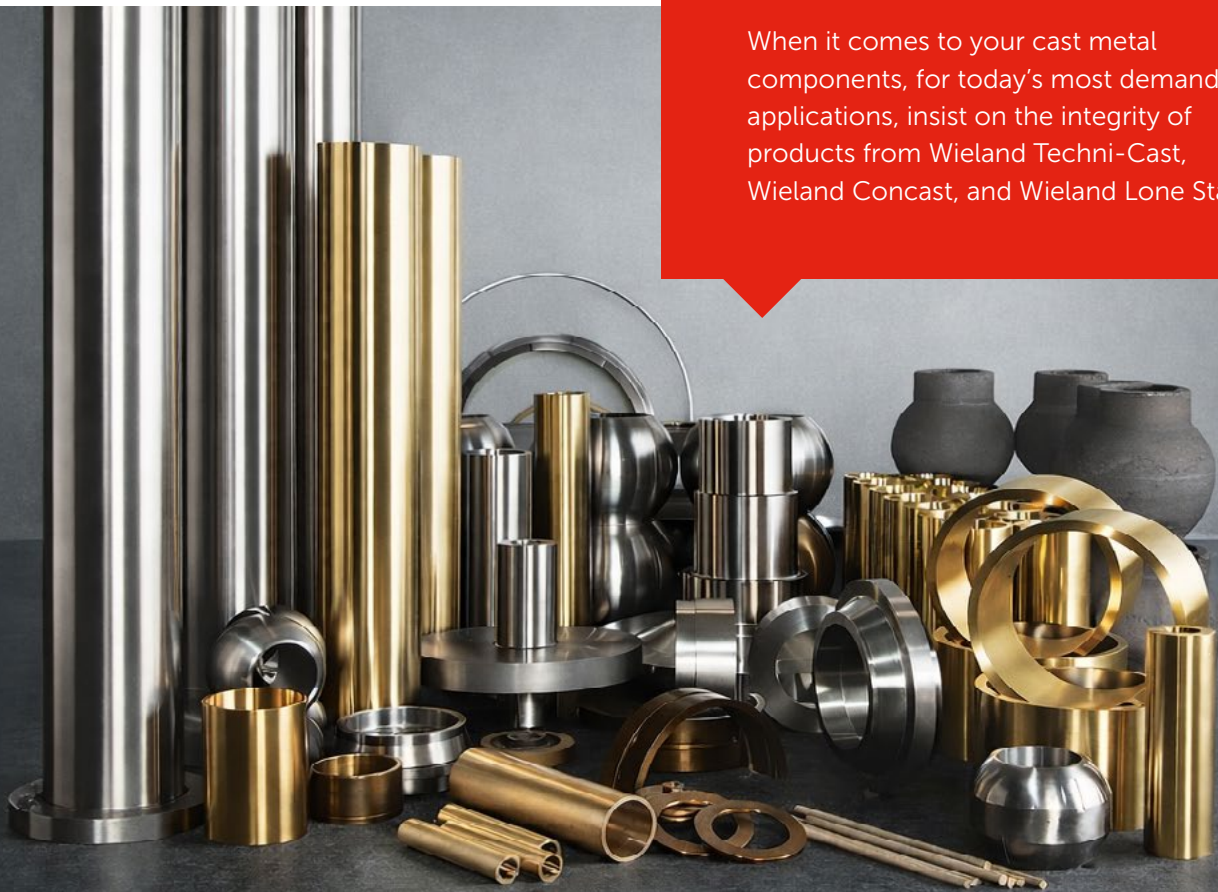
Merging Capabilities for a Broad Range of Cast Metal Solutions

Through the unity and synergy of Wieland Techni-Cast, Wieland Concast, and Wieland Lone Star, we bring together process expertise, superior quality cast metal products, production efficiency, and more options for your project's specific needs.

Across Wieland's metal casting companies, we share a commitment to providing the resources, knowledge, craftsmanship, and high standards you rely on to achieve the best of mission-critical metal components.

With Wieland, your casting project begins with metallurgical expertise and precision engineering. With the latest in melting and casting technology, we consistently produce products that exceed expectations. We provide on-site heat-treating services and a range of machining capabilities to transform near-net castings into semi-finished parts for your final production.

When it comes to your cast metal components, for today's most demanding applications, insist on the integrity of products from Wieland Techni-Cast, Wieland Concast, and Wieland Lone Star.



Trust Wieland Casting Solutions to Go Beyond

Every day, our focus is on making your operations more efficient and delivering solutions that set us apart.

Casting Specs Without Limits

We have the capabilities to cast to a broad range of specifications; we can even pour to legacy component specifications.



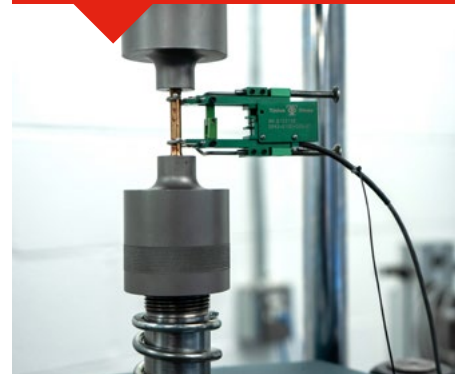
Heat Treating

We conduct in-house thermal processing to achieve the mechanical properties required of alloys for your application.



Mechanical Testing

With mechanical testing capabilities on site, we verify material properties like tensile, yield, elongation, reduction of area, and hardness – ensuring all requirements are met.



Machining and Near-Net Casting

We can cast near-net parts and offer rough, semi-finish, and finish machining to save you time and resources.



Straight and Concentric Parts

You can count on our cast parts to be straight and consistent, so you can simplify machining and create efficiency.



Custom Packaging

We carefully select the packing and materials to best fit your cast part's shape and size, ensuring safe transport to your door.





Core Strength

Centrifugal Casting Specialists

The centrifugal casting process mastered by Wieland Techni-Cast and Wieland Lone Star is the key to producing the highest-quality cast components.

High centrifugal force, coupled with rapid solidification, results in castings with fine-grain structure, structural density, and superior mechanical properties. This optimal centrifugal casting method is an efficient manufacturing process for producing high-integrity parts like tubes, pipes, rings, and gear blanks.

For flanged column pipe, Techni-Cast has the unique ability to integrally cast the flange and tube together, using our proprietary tooling – eliminating the cost and time of additional processes.

Our net-shape centrifugal castings are a cost-effective solution to reduce excess weight and allow you to machine pieces more efficiently.

Molds & Tooling

We maintain an extensive inventory of molds and specialized tooling for the manufacturing of a wide range of part sizes, shapes, and production quantities. We own and maintain over 1000 pieces of tooling, so you don't have to. Our stock molds support cost savings and faster turnaround times.

Centrifugal casting is a highly specialized manufacturing process. Molten metal is poured directly into a rapidly spinning mold through a simple, stationary spout. The rotation eliminates the need for complex gating and risering systems.



Special Casting Capabilities

We can assist in producing, testing, and supplying cast products that must meet:

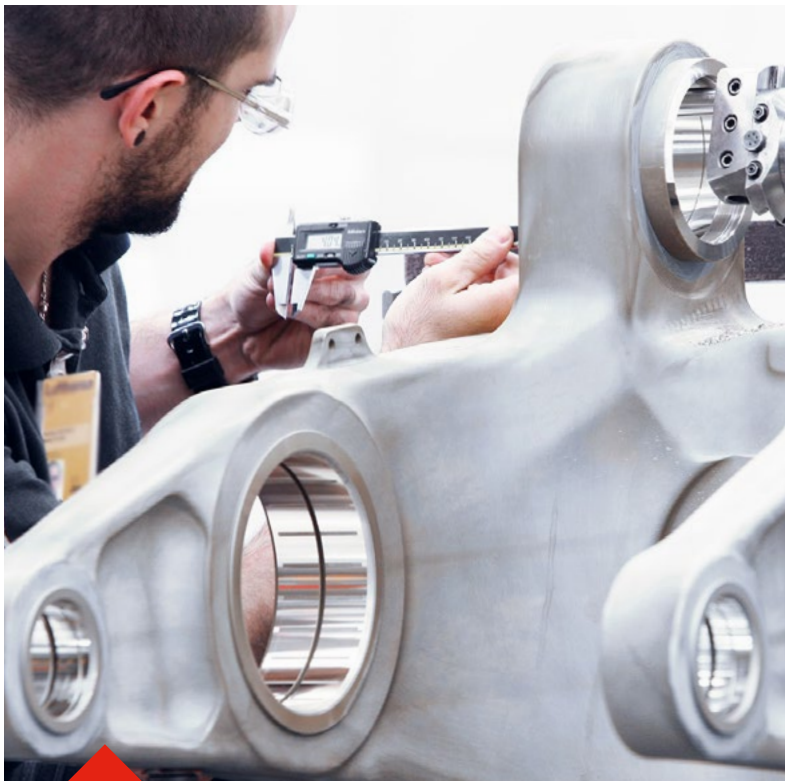
- Corporate specifications
- Custom alloy requirements
- Obsolete and historical standards, will pour to legacy component specifications

Masters of Metal

Alloys Available

All Wieland alloys are created under the strict control of our in-house laboratories that use instruments calibrated to NIST standards. In most cases, we alloy elementally in-house to the latest industry standard requirements, assuring precision and compliance.

Across Wieland, we have the capabilities to centrifugally cast a wide range of ferrous and non-ferrous alloys in near-net and custom shapes, and to continuous cast copper alloys in bars, tubes, plates, and shapes.



Centrifugal casting of stainless steel provides superior material integrity for high-performance applications, including medical equipment, petrochemical piping, automotive components, and industrial equipment.

COPPER ALLOYS

- Red Brass/Semi-Red Brass
- Yellow Brass
- Lead Free Bronze
- Aluminum Bronze
- Tin Bronze/Gear Bronze
- Nickel Tin Bronze Spinodal
- Lead Tin Bronze
- High-Leaded Tin Bronze
- Copper Nickel
- Nickel Silver
- High-Conductivity Copper
- Manganese Bronzes

STAINLESS STEEL ALLOYS

- Austenitic
- Duplex/Super Duplex
- Martensitic/PH

NICKEL-BASED ALLOYS

COBALT-BASED ALLOYS

NI-RESIST/DUCTILE IRON

ALUMINUM CASTING ALLOYS



Available Alloys

Alloy Designation	Alloy Family	CC ASTM	CF ASTM	ACI	AMS	Wieland Concast	Wieland Techni-Cast	Wieland Lone Star
RED BRASS / SEMI-RED BRASS								
C83600	Red Brass	B505	B271		AMS 4855	X	X	
C83800	Semi-Red Brass	B505	B271			X	X	
C84200	Semi-Red Brass	B505				X	X	
C84400	Semi-Red Brass	B505	B271			X	X	
C84800	Semi-Red Brass	B505	B271			X	X	
YELLOW BRASS								
C85200	Yellow Brass	B505	B271			X	X	
C85400	Yellow Brass	B505	B271				X	
C85500	Yellow Brass	B505			AMS 4855	X	X	
C85700	Yellow Brass	B505	B271			X	X	
MANGANESE BRONZE								
C86200	Mn Bronze	B505	B271		AMS 4862	X	X	
C86300	Mn Bronze	B505	B271, B22		AMS 4862	X	X	
C86400	Mn Bronze	B505	B271			X	X	
C86500	Mn Bronze	B505	B271		AMS 4860	X	X	
C86700	Mn Bronze	B505	B271			X	X	
LEAD-FREE BRONZE								
C87500	Lead-Free	B505	B271				X	
C87850	Lead-Free	B505				X		
C89320	Lead-Free	B505				X		
C89325	Lead-Free	B505				X		
C89520	Lead-Free	B505				X		
C89831	Lead-Free	B505				X	X	
C89833	Lead-Free	B505				X	X	
C89835	Lead-Free	B505				X	X	
C89844	Lead-Free	B505				X	X	
TIN BRONZE / GEAR BRONZE								
C90200	Tin Bronze	B505				X	X	
C90300	Tin Bronze	B505	B271			X	X	
C90500	Tin Bronze	B505	B271, B22		AMS 4845, 4846	X	X	
C90700	Gear Bronze	B505	B427			X	X	
C90800	Gear Bronze	B505	B427			X	X	
C90810	Tin Bronze	B505				X		
C91000	Tin Bronze	B505, B427				X	X	
C91100	Tin Bronze	B505, B427	B22			X	X	
C91300	Tin Bronze	B505, B427	B22		AMS 7322	X	X	
C91600	Gear Bronze	B505, B427	B427			X	X	
C91700	Gear Bronze	B505, B427	B427			X	X	
C92900	Gear Bronze	B505	B427			X		
LEADED TIN BRONZE								
C92200	Leaded Tin Bronze	B505	B271			X	X	
C92300	Leaded Tin Bronze	B505	B271			X	X	
C92500	Leaded Tin Bronze	B505				X	X	
C92600	Leaded Tin Bronze	B505				X	X	
C92700	Leaded Tin Bronze	B505				X	X	
C92800	Leaded Tin Bronze	B505				X	X	
HIGH-LEADED TIN BRONZE								
C93200	Hi-Lead Tin Brz	B505	B271			X	X	
C93400	Hi-Lead Tin Brz	B505				X	X	
C93500	Hi-Lead Tin Brz	B505	B271			X		
C93600	Hi-Lead Tin Brz	B505	B271			X		
C93700	Hi-Lead Tin Brz	B505	B271, B22		AMS 4842, 4827	X	X	
C93800	Hi-Lead Tin Brz	B505	B271			X	X	
C93900	Hi-Lead Tin Brz	B505				X		
C94000	Hi-Lead Tin Brz	B505				X		
C94100	Hi-Lead Tin Brz	B505				X	X	
C94300	Hi-Lead Tin Brz	B505	B271		AMS 4840	X	X	

Alloy Designation	Alloy Family	CC ASTM	CF ASTM	ACI	AMS	Wieland Concast	Wieland Techni-Cast	Wieland Lone Star
NICKEL TIN BRONZE SPINODAL								
C94700	Ni-Sn Bronze	B505				X		
C94800	Ni-Sn Bronze	B505				X		
C96900	Cu-Ni-Sn	B505	B369, B271			X		
ALUMINUM BRONZE								
C95200	Al Bronze	B505	B271			X	X	X
C95220	Al Bronze	B505						
C95300	Al Bronze	B505	B271		AMS 4630, 4632	X	X	
C95400	Al Bronze	B505	B271		AMS 4870, 4871, 4872, 4873	X	X	X
C95400HT	Al Bronze	B505	B271		AMS 4870, 4871, 4872, 4873	X	X	
C95410	Al Bronze	B505	B271			X	X	X
C95420	Al Bronze	B505					X	X
C95500	Ni-Al Bronze	B505			AMS 4880	X	X	X
C95500HT	Ni-Al Bronze	B505			AMS 4880	X	X	
C95510	Ni-Al Bronze	B505			AMS 4880	X	X	X
C95520	Ni-Al Bronze	B505	B271		AMS 4881	X	X	X
C95600	Al Bronze	B505			AMS 4631	X	X	
C95800	Ni-Al Bronze	B505	B271			X	X	
C95900	Al Bronze	B505				X	X	
COPPER NICKEL								
C96200	Copper Nickel		B369				X	
C96400	Copper Nickel	B505	B369			X	X	
C70600	Cu-Ni Wrought						X	
C71500	Cu-Ni Wrought						X	
NICKEL SILVER								
C97300	Nickel Silver	B505	B271			X	X	
C97600	Nickel Silver	B505	B271			X	X	
C97800	Nickel Silver	B505	B271			X	X	
HIGH-CONDUCTIVITY COPPER								
C81500	Hi-Cond Cu						X	
STAINLESS STEEL - AUSTENITIC								
CF-16Fa	Austenitic SS		A743	CF-16Fa	AMS 5341		X	
CF-8	Austenitic SS		A351, A743, A744	CF-8	AMS 5370, 5501		X	
CF-3	Austenitic SS		A351, A743, A744	CF-3	AMS 5511		X	
CH-20	Austenitic SS		A351, A743	CH-20			X	
CF-8M	Austenitic SS		A351, A743, A744	CF-8M			X	
CF-3M	Austenitic SS		A351, A743, A744	CF-3M			X	
CG-8M	Austenitic SS		A351, A743, A744	CG-8M			X	
CG-3M	Austenitic SS		A743, A351	CG-3M			X	
CF-8C	Austenitic SS		A351, A743, A744	CF-8C			X	
CN-7M	Austenitic SS		A351, A743, A744	CN-7M			X	
CN-7MS	Austenitic SS		A744	CN-7MS			X	
CN-3MN	Super Austenitic		A351, A743, A744	CN-3MN			X	
CK-3MCuN	Super Austenitic		A351, A743, A744	CK-3MCuN			X	
CE-20N	Austenitic SS		A351, A451	CE-20N			X	
CF-10	Austenitic SS		A743	CF-10			X	
CF-10MC	Austenitic SS		A743	CF-10MC			X	
CG-6MMN	Austenitic SS		A351, A743	CG-6MMN			X	
CF-10SMnN	Austenitic SS		A351, A743	CF-10SMnN			X	
STAINLESS STEEL - DUPLEX/SUPER DUPLEX								
CD-4MCu 1A	Duplex SS		A890, A351, A995	CD-4MCu 1A			X	
CD-4MCuN 1B	Duplex SS		A890, A995	CD-4MCuN 1B			X	
CE-8MN 2A	Duplex SS		A890, A995	CE-8MN 2A			X	
CD-6MN 3A	Duplex SS		A890, A995	CD-6MN 3A			X	
CD-3MN 4A	Duplex SS		A890, A995	CD-3MN 4A			X	
CE-3MN 5A	Super Duplex		A890, A995	CE-3MN 5A			X	
CD-3MWCuN 6A	Super Duplex		A890, A995	CD-3MWCuN 6A			X	

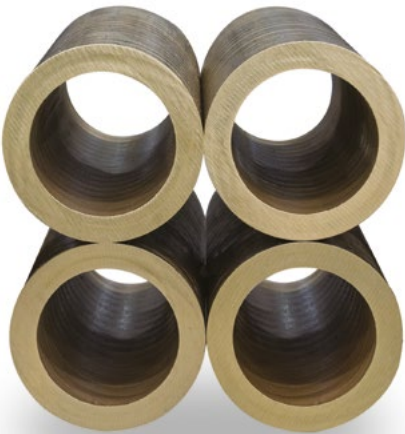
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STAINLESS STEEL - MARTENSITIC/PH								
CA-15	Martensitic SS		A743, A487, A217	CA-15	AMS 5350		X	
CA-40	Martensitic SS		A743	CA-40			X	
CA-40F	Martensitic SS		A743	CA-40F			X	
416	Martensitic SS				AMS 5349		X	
430	Ferritic SS		A743	CB-30			X	
431	Martensitic SS				AMS 5353		X	
440A	Martensitic SS		A743				X	
440B	Martensitic SS		A743				X	
440C	Martensitic SS		A743		AMS 5352		X	
CA-6NM	Martensitic SS		A743, A487, A757	CA-6NM	AMS 5363		X	
CB-7Cu-1	PH Steel		A747	CB-7Cu-1	AMS 5340, 5342, 5343, 5344, 5398		X	
CB-7Cu-2	PH Steel		A747	CB-7Cu-2	AMS 5340, 5342, 5344, 5348		X	
NICKEL-BASED ALLOYS								
M-35-1	Ni-Cu		A494	M-35-1			X	
M-30-H	Ni-Cu		A494	M-30-H			X	
M-25-S	Ni-Cu		A494	M-25-S	AMS 4893		X	
M-30-C	Ni-Cu		A494	M-30-C			X	
CY-40	Nickel		A494	CY-40			X	
CW-6MC	Nickel		A494	CW-6MC	AMS 5402		X	
AMS 5390	Nickel				AMS 5390		X	
CW-12MW	Nickel		A494	CW-12MW			X	
CW-2M	Nickel		A494	CW-2M	AMS 5408		X	
CX-2MW	Nickel		A494	CX-2MW			X	
N-12MV	Nickel		A494	N-12MV	AMS 5396		X	
N-7M	Nickel		A494	N-7M			X	
COBALT-BASED ALLOYS								
R30003	Cobalt				AMS 5833		X	
R30006	Cobalt				AMS 5373 / 5387		X	
R30012	Cobalt				AMS 5396		X	
R30021	Cobalt		A732		AMS 5385		X	
R30031	Cobalt		A732		AMS 5382		X	
NI-RESIST/DUCTILE IRON								
NR1	Ni-Resist		A436				X	
NR2	Ni-Resist		A436				X	
NR3	Ni-Resist		A436				X	
NRD2	Ni-Resist Ductile		A439		AMS 5394		X	
NRD3	Ni-Resist Ductile		A439				X	
NRD5	Ni-Resist Ductile		A439				X	
DI-D60	Ductile Iron		A536				X	
DI-D65	Ductile Iron		A536				X	
DI-D80	Ductile Iron		A536				X	
DI-D100	Ductile Iron		A536				X	
DI-D120	Ductile Iron		A536				X	
CAST IRON								
AMS 7310	Cast Iron				AMS 7310		X	
ALUMINUM CASTING ALLOYS								
AL-A535	Aluminum		B26, B108				X	
AL-A356	Aluminum		B108, B618		AMS 4285		X	

Additional alloy availability is noted on our website

Your Partner in Productivity & Efficiency

Continuous Casting

We're your source for continuous cast, extruded or cast-and-drawn, copper alloys, and lead-free parts. Vertical continuous casting is a cornerstone of Wieland's production specialties. Our methods include horizontal continuous casting, which is ideal for aluminum bronzes, given the material's unique metallurgy. Wieland Concast offers a complete line of stocked and custom-made products. We are certified to both ISO 9001: 2015 and AS9100 D standards and recognized as the leading producer of continuous-cast copper alloys.



Testing Labs & QC

Our state-of-the-art labs support our commitment to providing centrifugal and continuous cast components and technical services that meet or exceed your requirements. We conduct thorough on-site mechanical testing of materials and products in strict adherence to protocols.

Through non-destructive testing (NDT), we use advanced techniques to examine cast components to ensure quality without compromising structural integrity.

Our products meet the highest standards in aerospace, military, petrochemical, nuclear, and commercial industries. Our processes are documented and regularly reviewed.

Certifications

- ISO 9001: 2015 – Quality Management System Certification
- AS9100 D – Quality System Certification
- ISO 14001: 2015 – Environmental Certification
- Safran Approval Requirements

Machining On Site

With machining capabilities on site, Wieland Techni-Cast and Wieland Lone Star are able to fulfill almost every requirement, transforming raw, rough metal castings into any level of finished components to support your operation's production needs.

- Rough machining
- Semi-finish machining
- CNC finishing
- Machining into hollow parts
- Complete sawing, turning, and milling

Applications

- Aerospace & defense
- Chemical processing
- Commercial aircraft
- Construction & infrastructure
- Food production
- Heavy equipment
- Industrial pumps
- Industrial valves
- Large-scale printing
- Military aircraft
- Military weapon systems
- Mining
- Naval surface ships & submarines
- Paper production
- Petrochemical production
- Shipboard propulsion
- Waste processing



wieland techni-cast

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