

CONCAST

METAL PRODUCTS CO.

Proven Integrity. Delivering Value.

Oil | Gas and Concast

The oil and gas industry requires alloys to provide corrosion, wear, and impact resistance as well as high-strength characteristics.

At Concast Metal Products Co., our unparalleled experience, service, and quality are at the foundation of our success in meeting the demand for alloys utilized in various oil and gas-related applications. These include bearings, bushings, seals, and pump components along with other industry-specific applications.

14315 State Route 113
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Standard-Stocked Alloys

C63000 | C63020 | C64200 | C72900 | C86300
C93200 | C95400 | C95500 | C95510

Other Available Alloys

C95400HT | C95410 | C95500HT | C95520HT | C95800
C96900HT

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■ Concast Metal Products Co. is certified to ISO 9001 and AS9100

Oil and Gas-Related Alloys Overview

General Information

Copper Alloy UNS No.	Material Description	Applications
C63000*, C63020*	Nickel Aluminum Bronze	bearings, bearings for cranes, bolts, bushings, cams, condenser desalting units, corrosion resistant articles, diesel engine wrist pin bushings, fittings, gears, heavily loaded worm gears, high-strength clamps, high-strength machine parts, hooks, hydraulic bushings for earth moving equipment, hydraulic cylinder parts, insert bearings, large valve stems, machine parts, machine tool bearings, main spindle bearings, marine hardware, nuts, propellers, pump fixtures, pump impellers, pump parts, pump shafts, pumps, roll neck bearings, shafting, slow-speed/heavy-load bearings, spur gears, structural members, thrust washers, trunion bearings, valve components, valve guides, valves, welded piping systems
C64200*	Aluminum Bronze	
C72900*	Copper Nickel-Tin Bronze	
C86300*	Manganese Bronze	
C93200*	Leaded Tin Bronze	
C95400*, C95400HT, C95410	Aluminum Bronze	
C95500*, C95500HT, C95510*, C95520HT, C95800	Nickel-Aluminum Bronze	
C96900HT	Copper-Nickel	

*standard-stocked alloy.

Chemical Composition

Copper Alloy UNS No.	Cu%	Pb%	Sn%	Zn%	Fe%	P%	Ni% ⁴	Al%	Mg%	Mn%	S%	Sb%	Si%	Cb%	Nb%
C63000	remainder ¹		0.20	0.30	2.00-4.00		4.00-5.50	9.00-11.00		1.50			0.25		
C63020 [†]	remainder ¹	0.03	0.25	0.30	4.00-5.50		4.20-6.00	10.00-11.00		1.50			0.15		
C64200	remainder ¹	0.05	0.20	0.50	0.30		0.25	6.30-7.60		0.10			1.50-2.20		
C72900**	remainder	0.02	7.50-8.50	0.50	0.50		14.50-15.50		0.15	0.30				0.10	
C86300	60.00-66.00 ²	0.20	0.20	22.00-28.00	2.00-4.00		1.00	5.00-7.50		2.50-5.00					
C93200	81.00-85.00 ²	6.00-8.00	6.30-7.50	2.00-4.00	0.20	0.15 ⁵	1.00	0.005			0.08	0.35	0.005		
C95400	83.00 min				3.00-5.00		1.50	10.00-11.50		0.50					
C95400HT	83.00 min				3.00-5.00		1.50	10.00-11.50		0.50					
C95410	83.00 min				3.00-5.00		1.50-2.50	10.00-11.50		0.50					
C95500	78.00 min				3.00-5.00		3.00-5.50	10.00-11.50		3.50					
C95500HT	78.00 min				3.00-5.00		3.00-5.50	10.00-11.50		3.50					
C95510	78.00 min		0.20	0.30	2.00-3.50		4.50-5.50	9.70-10.90		1.50					
C95520HT [†]	74.50 min	0.03	0.25	0.30	4.00-5.50		4.20-6.00	10.50-11.50		1.50			0.15		
C95800	79.00 min	0.03			3.50-4.50		4.00-5.00 ³	8.50-9.50		0.80-1.50			0.10		
C96900HT	remainder	0.02	7.50-8.50	0.50			14.50-15.50		0.15	0.05-0.30			0.30		0.10

¹Cu value includes Ag. ²In determining Cu min., Cu may be calculated as Cu + Ni. ³Fe content shall not exceed Ni content.

⁴Ni value includes Co. ⁵For continuous castings, P shall be 1.5% max. [†]Chemical requirements for other elements: Co 0.20%, max and Cr 0.05%, max.

** (AMS 4596, 4597, 4598) Note: Single values, unless otherwise noted, represent maximums.



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