

## **ALLOY** *C67300*

## **Data Sheet**

Typical Chemistry & Mechanical Properties								
Alloy Number	Name	Che	minal emical position	Tensile Strength (KSI)	Yield Strength (KSI)	Elongation %	Rockwell B Hardness	Remarks
UNS C67300	Dynalloy	Cu: Pb: Si: Mn: Zn:	60.5% 1.12% 1.00% 2.75% Rem%	65	40	8%	72	Free cutting bearing bronze

Straightness Tolerances				
Round	All Sizes	1/4" in any 10' portion		

Drawn Length Tolerances				
0.375'' to 2.000'' (Inclusive)	+/-0.500"			
2.000" to 3.000" (Inclusive)	+/-0.500"			
3.000" to 4.000" (Inclusive)	+/-0.500"			
Notes: Standard Lengths: 12', 14', 15' & 16' All other lengths considered non-standard Minimum Length: 9'–11" (119")				

Shapes and Sizes				
Round	0.375" to 4.000"			

Diameter Tolerances	
	Round
Up to 1.000" (Inclusive)	+/- 0.0020"
>1.000" to 2.000" (Inclusive)	+/- 0.0030"
>2.000" to 2.500" (Inclusive)	+/- 0.0030"
2.000" to 3.000" (Inclusive)	+/- 0.0005"
>3.000" to 3.500" (Inclusive)	+/- 0.0007"
>3.500" to 4.000" (Inclusive)	+/- 0.0012"





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Machinability: Alloy C67300 (Dynalloy) is readily machinable. The alloy has

a machinability rating of 70% as compared to Alloy C36000 (Free Cutting Brass). The following tool dimensions & speeds

are recommended:

	Speed (sfpm)	Feed (ipr)	Back Rake Angle (degrees)
Lathe Turning Tools:	250~400	0.005~0.030	4~8
Drills (118°):	75~250	0.003~0.020	Full Rake Angle
Milling Cutters:	150~250	0.500~20.000	0~10
Form Tools:		0.001~0.003	5~10
Taps:	50~90		5~8

Synthetic soluble oil is recommended as the cutting fluid. A light paraffin oil with an addition of 5-10% lard oil is recommended for threading & tapping operations. For longer running jobs, carbide tooling is recommended.

Workability: This alloy is suitable for light cold working. It has excellent hot

working properties.

Spec. Equal.: UNS Alloy C67300

SAE J463, C6730 (Rods, Bars, Shapes & Forgings)

**Applications:** Dynalloy is widely used for bearing applications, bushings,

gears, valve guides, shaft & cylinder guides. The alloy has found wide acceptance in speed reducer gears & is an excellent

alloy for axial piston pump components.



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