

# 385 BRASS

Brass alloy 385 has been specifically developed for the mass production of brass components in high speed lathes,providing maximum output and long tool life. Typical applications are nuts, bolts and screw threads.

Colour Code	Stocked Sizes			
Red (Bar End)	Rounds		4.76 mm to 101.6 mm diameter	
	Squares		9.52 mm to 50.8 mm A/F	
	Hexagons		9.52 mm to 44.45 mm A/F	
	Bar Finish			
	Cold Drawn			
Related Specifications				
Australia	AS 1567-385			
Germany	DIN 1.7672 CuZn39Pb3			
Great Britain	BS 2847-CZ121			
USA	ASTM B455 UNS C38510			
Chemical Composition				
	Min. %			Max. %
Copper	56			60
Lead	2.5			4.50
Zinc				Remainder
Typical Mechanical Properties				
Tensile Strength Mpa		400		
Yield Strength Mpa		200		
Elongation %		20		
Hardness HV		135		
Heat Treatment				
Annealing		Heat to $425^{\circ}$ C - $600^{\circ}$ C, hold until temperature is uniform throughout the section and cool in furnace.		
Stress Relieving		Heat to 250°C - 300°C, hold until temperature is uniform throughout the section.		
		Check Test Certificate if critical for end use.		
Hot Working				
Fair hot working properties within an ideal temperature range of 700°C to 800°C.				
Cold Working				
Exhibits poor cold working properties, and cold heading is not recommended.				

### Machining

A free cutting brass specifically developed for maximum output and longest tool life, ideally suited for mass produced brass components.

# **Corrosion Resistance**

Has good corrosion resistance to weathering, with a fair resistance to many waters. It should not be used in contact with ammonia, or ammonia compounds, as it may suffer stress corrosion cracking.

## Plating

Provides good surface finish through either polishing, and/or electroplating.

#### **Joining Properties**

Soldering - Whilst good results can be achieved from Silver soldering, better results can be achieved from Soft soldering. Brazing - Good results can be achieved from brazing.

Welding - Fair results can be achieved from both Oxy acetylene & Carbon arc welding. However Gas shielded and coated metal arc welding, and resistance welding is not recommended.

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