NES 834

BRONZE

Smiths Advanced Metals

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Aluminium Silicon Bronze Bar

Improved machanibility

NES 834 offers improved performance characteristics when compared to standard aluminium bronze products.

The introduction of silicon in the alloying process improves overall machinability. Increased strength and impact strength (even at cryogenic temperatures) and improvement in corrosion resistance are other attractive features. Classed as a non-sparking alloy, NES 834 offers excellent wear, abrasion resistance, and shock loading characteristics. With superior corrosion resistance, the product combines high strength and toughness with low magnetic permeability. The alloy affords designers and engineers broader options when specifying materials for particular applications.

We stock NES 834 bars in various sizes and material greater than 15mm diameter with ultrasonic inspection complying with DEF STAN 02-729 Part 5.

Grades / Specifications

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CA107	DEF STAN 02-834
CuAl6Si2Fe	DEF STAN 02-879
CW301G	DGS1044
UNS C64200	DGS8453



Key Applications

- Non-magnetic marine fasteners
- Valve components
- Safety tooling
- Marine hardware

Chemical Composition (weight %)										
	Cu	Al	Si	Fe	Zn	Pb	Sn	Ni	Mn	Total Impurities
min.	Bal	6.00	2.00	0.50						
max.	Bal	6.40	2.40	0.70	0.40	0.01	0.10	0.10	0.50	0.50

As per DEF STAN 02-879

Mechanical Properties								
Diameter	6-15mm	15-50mm	50-100mm	>100mm				
UTS	525 N/mm ²	525 N/mm ²	525 N/mm ²	525 N/mm ²				
Proof Strength	275 N/mm ²	275 N/mm ²	235 N/mm ²	220 N/mm ²				
Elongation	20%	20%	20%	20%				
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Technical Sales Assistance

To find out more about the NES 834 aluminium silicon bronze bars and for other technical advice, contact Smiths Advanced Metals today. Our team of qualified metallurgists and engineers will be pleased to assist further on any technical topic.



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