

NES 834

Smiths Advanced Metals

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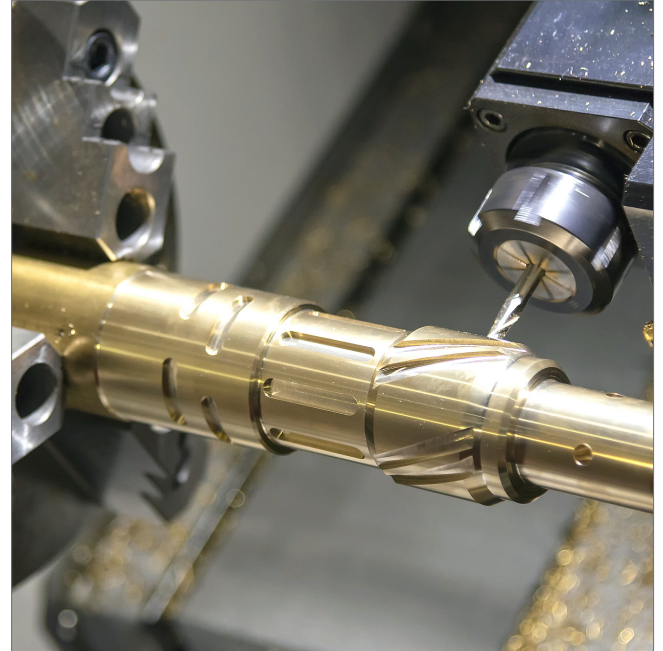
Aluminium Silicon Bronze Bar

Improved machinability

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

- CA107
- CuAl6Si2Fe
- CW301G
- UNS C64200
- DEF STAN 02-834
- DEF STAN 02-879
- DGS1044
- 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%
Izod	-	33J	33J	33J

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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