

AMS 4590

A nickel aluminium bronze used typically for parts requiring a combination of high strength and hardness with some ductility and toughness but not limited to such applications.

National Specifications

ASTM	UNS	SAE AMS	British Standard	Werkstoff
-	C63020	4590	-	1.4534 1.4548

Material may also be released to Customer Specifications, subject to enquiry.

Technical Data

Nominal Composition by Percent

	Al	Mn	Si	S	Ni+Co	Cu	Fe	-
Min	10.0	-	-	-	4.2	-	4.0	%
Max	11.0	1.5	-	-	6.0	-	5.5	%

Typical Mechanical Properties

Annealed Condition	MPa		%
Tensile Strength, min	896	-	-
Yield Strength (0.2% offset), min	655	-	-
Elongation on 4D, min	-	-	6
Reduction of Area	-	-	-
Hardness	-	26 HRC	-