Technical Data Sheet

AMPCO® 26

AMPCO® 26 is a high performance, hard aluminum bronze alloy known for its exceptional properties and specifications. Its chemical composition and mechanical properties, including hardness and tensile strength, are carefully engineered to provide superior results in demanding industrial environments, making it an ideal solution for applications that require both strength and durability.

Key Features:

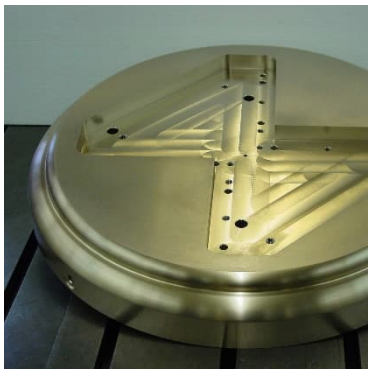
- High hardness
- Wear-resistant
- High compressive strength
- Suitable for high compressive loads
- Good frictional properties & sliding characteristics
- Corrosion resistant
- Easy to polish for a mirror finish

Nominal Composition:

Copper (Cu)	Aluminum (Al)	Iron (Fe)	Others
Proprietary			

Applications:

- Deep drawing rings
- Tube forming, welding & sizing rolls
- Bending tools & dies
- Work rolls & forming rolls
- Tube end forming tools
- Stainless steel & metal forming processes
- Wear applications with high compressive loads



AMPCO® 26 is primarily used in industries and scenarios where exceptional hardness and toughness are critical. It is used extensively in stainless steel drawing dies, where it excels at withstanding the high pressures and abrasive forces involved in the metal forming process. The alloy's exceptional properties make it a valuable asset in industries such as manufacturing, metalworking, and beyond, where it serves as a reliable solution for challenging and demanding environments.

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Mechanical Properties (Nominal values)	Sand Casted	Continuous Casted	Centrifugally Casted	Forged
Compressive Strength R_{mc} (ksi)	220	220	220	233
Compressive Yield Strength $R_{pc0.1}$ (ksi)	100	100	100	104
Elongation 2" (%)	0	0	0	0
Brinell Hardness (10/3000)	418	418	418	420
Rockwell Hardness (HRC)	44	44	44	45

Physical Properties:

Density ρ (lbs/in³)	Coefficient of Expansion α (in/in/°F)	Thermal Conductivity λ (W/m·K)	Electrical Conductivity (% I.A.C.S.)	Specific Heat c_p (BTU/lb·°F)
0.247	$9 \cdot 10^{-6}$	33	8	0.1

Machining Parameters:

Operation	Cutting Speed v_c (m/min)	Feed f (mm/rev)	Depth a (mm)	Tool Specification
Milling – Roughing	90 - 110	0.1 - 0.15	up to 1.5	K10 - K20
Milling – Finishing	70 - 90	0.05 - 0.08	0.1 - 0.5	K10 - K20
Turning – Roughing	90 - 150	0.1 - 0.15	up to 1	K10 - K20
Turning – Finishing	120 - 175	0.05 - 0.08	0.05 - 0.15	K10 - K20

Scan the QR Code to view our machining recommendations:

Lubrication:

Lubricants with graphite, lithium, molybdenum or lead-containing compounds can be used. For deep drawing applications it is particularly recommended to use high pressure and heat-resistance oils containing solid lubricant components such as boron nitride. However, greases and oils containing sulfur (sulfide), copper, aluminum, nickel, or other metal additives are not suitable for lubrication.

Contact us