

Technical Data Sheet **AMPCO-CORE® 300**

Description and Application

AMPCO-CORE® 300 is an aluminum bronze flux core wire for use with the Gas Metal Arc Welding process.

AMPCO-CORE® 300 is primarily an overlay filler metal. In addition to high hardness, the deposit also has excellent bearing and wear-resistant qualities.

These characteristics – hardness, bearing properties and wear resistance - all combine to make AMPCO-CORE® 300 ideal for surfacing iron and copper-base materials. Dies overlaid with AMPCO-CORE® 300 have surprising freedom from scratching and galling; die marks are almost completely eliminated.

Typical Applications

Fabrication of new, or rebuilding of worn, ferrous dies, used for forming or drawing titanium, stainless steel and low to medium carbon steel.

Limiting Chemical Composition

% (filler metal)

Copper.....	balance
Aluminum.....	13.5
Iron.....	4.0

Mechanical Properties*

(Nominal all-weld metal value)

BHN (3000kg.)	
Three layer deposit on mild steel.....	364

Product availability and packaging

AMPCO-CORE® 300 is available in two diameters:
0.045" (1.2mm)
0.062" (1.6mm).

Both sizes are available in 12" (300mm) spools weighing 33lbs. (15kgs.) each.

*Hardness will vary depending on quality of the weld and experience and know-how of the welder.

Welding position and deposits

The flat welding position is recommended. Backhand (trailing) welding is preferred rather than forehand (pushing) to make either stringer or weaved beads.

Shielding gas

100% Argon

Operating conditions

Current type

DC+ (DCEP)

Gas flow rate

25 - 46 cfh (12-22 L/min)

Intensity [A]

0.045" (1.2 mm)	200-300
0.062" (1.6 mm)	360-400

Voltage [V]

All diameters	28-30
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Stick-out [inch (mm)]

All diameters	5/8-1" (15-25)
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