

# ARCTEC® 604C BRONZE



a quality welding alloy

## GENERAL CHARACTERISTICS:

ARCTEC® 604C BRONZE is a phosphor bronze alloy specially developed for joining and cladding operations using alternating current. For use on phosphor bronze, tin bronze, brass, brass or bronze friction wear strips on booms, cast iron and galvanized steels. This electrode produces a smooth and porosity free deposit in all positions with a minimum of spatter and easily removable slag. Has excellent color match on bronze. **Use AC current for welding with this electrode.**

## APPLICATIONS:

The ARCTEC® 604C electrode is ideal for overlays on shafts and bearing surfaces. For bearing shells, housings, impellers, pumps, turbines, galvanized tanks and pipes, gear teeth, cast iron, bronzes, and other applications where machinability is required.

## WELDING PROCEDURE:

Clean the weld zone free of scale, oxides, grease and other foreign matter. Prepare joints as required. Thin sections can be butt-welded together when a sufficient gap is maintained. Bevel sections 5/32" (4.0mm) or heavier to a 90° included angle using a single vee joint to reduce residual stresses. Preheating is recommended for heavier sections. Maintain a short arc and hold the electrode vertical to the workpiece. Always ensure adequate ventilation is available when welding in confined areas.

## MECHANICAL PROPERTIES:

Hardness	Tensile Strength	Elongation
80-120 HB	40,000 - 50,000psi 275 - 344 MPa	30%

## OPERATING PARAMETERS:

WELDING PROCESS: SMAW

POLARITY: AC

### Recommended Amperage:

Diameter	2.5mm 3/32"	3.25mm 1/8"	4.00mm 5/32"
Amperage	68-80	90-120	100-130

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CALGARY FAX:(403)-250-7682	EDMONTON: (780)-484-4896	VANCOUVER: (604)-596-2940	WINNIPEG: (204)-663-7955
PHONE:(403)-250-9355	(780)-484-3304	(604)-596-6207	(204)-663-9182

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