



GENERAL CHARACTERISTICS:

ARCTEC® WD 1046 is a high carbon, chromium and iron based alloy that develops hexagonal chrome carbides in an austenitic carbide matrix that produce excellent resistance to both high and low stress abrasion and wear at elevated temperatures. All weld metal deposits retain good hardness at elevated temperatures and have moderate corrosion resistance. External shielding is not required to produce sound weld deposits. Good operation is possible within a wide amperage and voltage range that allows it to be used with variable speed wire feeders and any conventional power source. The deposit retains good hot hardness, stress relieves readily (surface checks), is non machinable, non forgeable and cannot be flame cut. No special welding techniques are required.

APPLICATIONS:

ARCTEC® WD 1046 is excellent for severe low and high stress abrasion applications and for wear at elevated temperatures, where good hot hardness is a necessity. Deposit 2 to 3 layers or 1/4" as required. ARCTEC® WD 1046 is used on: Catalytic pipes and valves, Augers, Pusher shoes, Screw conveyors, Dredge pump impellers and cutters, Crusher roll shells and Bucket teeth and lips.

MECHANICAL PROPERTIES:

Typical Hardness As Deposited	Typical Hardness at elevated temperatures	
	Hardness	Test Temperature
	52 HRC	1000°F / 537°C
	48 HRC	1200°F / 648°C

CHEMICAL COMPOSITION:

This alloy is comprised of the following elements:

C	Mn	Si	Cr	Mo	Fe
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OPERATING PARAMETERS:

WELDING PROCESS: FCAW

POLARITY: DC Reverse

SHIELDING GAS: Not required

Operating Range				
Diameter	Position	Stickout +/- .25'	Amps +/- 75	Volts +/- 1
7/64"	Flat	1.5"(38.10mm)	400	27

STANDARD SIZE AND PACKAGING:

Size	Packaging
7/64" (2.8mm)	45 Kg Auto pak

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The seller makes no warranties, express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, except as expressly stated in seller's contract, delivery slip or invoice form. Technical data and suggested application are provided to assist you in making your own evaluations and decisions and should not be interpreted as expressed or implied warranties. Mechanical properties are typical or average values obtained by testing and comparing many heats of the same alloys. Minimum and maximum values are noted accordingly and are not intended for specific purposes.