# ARCTEC® W 1041 CP (A)

a quality welding alloy

## GENERAL CHARACTERISTICS:

ARCTEC® W1041 CP (A) is a chromium manganese austenitic type steel wire with outstanding work hardening capabilities. W1041 CP (A) has exceptional joining, buildup and surfacing properties and produces crack free deposits. ARCTEC® W1041 CP (A) requires no external shielding to produce sound deposits and will operate within a wide voltage and amperage range with voltage tolerances that are high enough to permit the use of variable speed wire feeders and drooping type power sources. The smoke level is typical of a high manganese wire and the deposit is non magnetic, cannot be flame cut and is machinable by grinding only. The spatter level is low and no special welding techniques are required.

## APPLICATIONS:

ARCTEC® W1041 CP (A) can be used for carbon steel and manganese base materials. Mild or alloy steels may be joined or built up to the required deposit thickness. Uses: Steel mill wobblers, shovel teeth, buckets and pads, rail frogs and crossovers, crusher rolls, hammermill hammers and impeller bars.

## MECHANICAL PROPERTIES:

| | | | Typical Hardness | |
|---|---|---|---|---|
| Yield Strength | Tensile Strength | Elongation | As Deposited | Work Hardened |
| 83700psi (577Mpa) | 124000psi (854Mpa) | 37%-2" | 245-260 HB | 500 HB |

## CHEMICAL COMPOSITION:

This alloy is comprised of the following elements:

C Mn Si Cr Mo Fe

## OPERATING PARAMETERS:

WELDING PROCESS: FCAW POLARITY: DC Reverse SHIELDING GAS: Not required

| | Operating Range | | |
|---|---|---|---|
| Diameter | Stickout ± .25" | Amps | Volts |
| 1/16"(1.5mm) | 1.25"(31.75mm) | 160-260 | 20-26 |
| 5/64"(2.0mm) | 1.25"(31.75mm) | 240-280 | 22-26 |

## STANDARD SIZE AND PACKAGING:

| Size | | | Packaging |
|---|---|---|---|
| 1/16"1.5mm | 5/64" 2.0mm | | 15Kg Spool |


**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**