

## STOODY® 964 AP-G

### Gas Shielded Flux Cored Wire

Stoody 964 AP-G is a gas shielded, flux cored, all position, general purpose, hardfacing wire. The deposit is a specially formulated wear resistant alloy which produces a uniform distribution of small primary carbides in a martensitic matrix. The small carbides provide greatly improved wear resistance over martensitic steel, many tool steels, and some conventional chromium carbide alloys. 964 AP-G possesses excellent resistance to impact and plastic deformation. Deposits are crack free on carbon 300 stainless and manganese steels. Other base metals should be preheated and post heated appropriately. The material is characterized by a high hardness and excellent wear resistance. 964 AP-G is recommended for parts where cross checking is undesirable. 964 AP-G offers improved weldability over chromium carbide and many other tool steel welding wires.

### TYPICAL DEPOSIT CHARACTERISTICS

Abrasion Resistance	Excellent
Hardness, HRC	58 – 64
Impact Resistance	Good
Deposit Layers	2 Maximum
Position	Flat, Horizontal, Vertical, Overhead
Surface Cross Checks	None <sup>1</sup>
Machinability <sup>2</sup>	Poor
Magnetic	
On Stainless Steel	Slightly
On Carbon Steel	Yes
On Manganese Steel	Yes
Hot Wear Applications	1000°F (538°C)

<sup>1</sup> With proper use of preheat and interpass temperature.

<sup>2</sup> Grind deposit with soft tool steel grinding wheels to prevent burning and heat checking of the surface.

### ALLOY TYPE

Small Primary Carbides in a Martensitic Matrix

### TYPICAL APPLICATIONS

- Slitter blades
- Rendering screws
- Extruder screws
- Tillage tools
- Hard banding
- Auger flights
- Sugar cane harvesters
- Tamper feet
- Dredge parts
- Drag line bucket lips

### OPERATIONAL CHARACTERISTICS/WELDING PARAMETERS (DCEP)

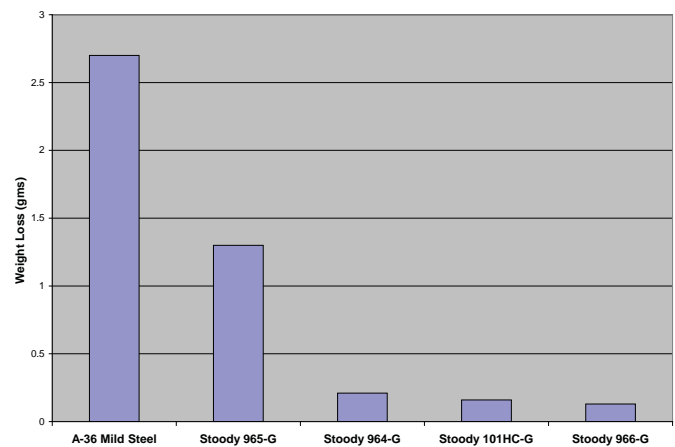
#### 0.045" (1.2 mm)

Current DCEP, amp	140 – 225
Voltage (volts)	25 – 29
Shielding Gas	75 Ar / 25 CO <sub>2</sub>
Wire Extension, in (mm)	1/2 – 3/4 (13 – 19)
Wire Feed Speed, ipm (m/min)	240 – 470 (6.1 – 12)
Position	All

#### 1/16" (1.6 mm)

Current DCEP, amp	150 – 280
Voltage (volts)	24 – 30
Shielding Gas	75 Ar / 25 CO <sub>2</sub>
Wire Extension, in (mm)	1/2 – 3/4 (13 – 19)
Wire Feed Speed, ipm (m/min)	150 – 275 (3.8 – 7)
Position	All

### ASTM G65 Wear Test (6000 Revs)



### STANDARD SIZES & PACKAGING

Diameter	Packaging	Part #
0.045" (1.2 mm)	33 lb (15 kg) Wire Basket	11970600
0.045" (1.2 mm)	300 lb (136 kg) No Twist Drum	11990400
1/16" (1.6 mm)	33 lb (15 kg) Wire Basket	11983700

PDS-CRC-W-030  
Revision 4  
February 12, 2016

NOTICE - Failure to follow manufacturer's directions for use may result in equipment or material failure and void any applicable warranty. The data provided or referenced herein is provided for informational purposes only, without guarantee or warranty and represents "typical" results when Stoody products are used in accordance with internal Stoody procedures. Other tests and procedures may produce differing results. Stoody expressly disclaims any liability resulting from reliance on this data.

PROTECT YOURSELF AND OTHERS - Users should read and follow all recommended guidance on health and safety from their employer, the supplier, the manufacturer, and government authorities. These, at a minimum including the Warning Labels on the products and the Safety Data Sheets ("SDS"). The SDS and additional safety information may be found on materials or links at: [Stoody.com](http://Stoody.com).