

# Open-Arc and Gas-Shielded Wires

## GROUP 3: METAL TO EARTH FOR MODERATE TO SEVERE IMPACT AND MODERATE TO SEVERE ABRASION

### STOODY® 965-G & 965-O

STOODY 965-G can be categorized as a general purpose hardfacing alloy that offers a good balance of impact and abrasion resistance. Analysis and properties are very similar to Stoodly Self-Hardening. Applications would include both metal-to-metal and metal-to-earth. Deposits are martensitic, forgeable, and are not readily machinable. Can be applied to carbon, low alloy and manganese steel.

**Welding Procedures/Characteristics:** DCEP (reverse polarity) recommended using either stringer or weave beads. Weldability is very good in flat and horizontal applications. The addition of CO<sub>2</sub> shielding gas with the 1/16" (1.6 mm) diameter wire reduces the amount of spatter and improves the weldability

**Applications:** Tillage Tools, Drag Line Bucket Lips, Tamper Feet, Chisel Plows, Dredge Parts, Extruded Screws, Muller Tires, Sugar Mill Classification Table Combs, Press Rolls - Underlay

#### Nominal Composition:

Alloy Content – 10% (Chromium, Manganese, Silicon, Carbon)  
Iron Base

#### Mechanical Properties Typical Rockwell Hardness:

Base Metal 0.20% C Steel  
Layers: 2  
Hardness 56-60 HRC



Stoody 965 with addition of dropped tungsten carbides.

Part Number	Pkg	Wire Dia.	Shielding Gas	Welding Parameters CTWD	Amp	Volts
<b>965-G</b>						
■ 11929300	5 lb PS-LLW (2.27 kg)	0.035" (0.9 mm)	75-80% Ar, Bal. CO <sub>2</sub>	1/2"-5/8" (13-16 mm)	80-130	15-20
11933300	25 lb PS (11.3 kg)	0.035" (0.9 mm)	75-80% Ar, Bal. CO <sub>2</sub>	1/2"-5/8" (13-16 mm)	80-130	15-20
■ 11423000	10 lb PS (4.5 kg)	0.045" (1.2 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	1/2"-3/4" (13-19 mm)	150-200	25-29
■ 11423100	33 lb WB (15 kg)	0.045" (1.2 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	1/2"-3/4" (13-19 mm)	150-200	25-29
■ 11875400	300 lb NTP (136 kg)	0.045" (1.2 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	1/2"-3/4" (13-19 mm)	150-200	25-29
■ 11501500	33 lb WB (15 kg)	1/16" (1.6 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	3/4"-1" (19-25 mm)	200-250	27-31
■ 11823900	50 lb PP (22.7 kg)	1/16" (1.6 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	3/4"-1" (19-25 mm)	200-250	27-31
■ 11864500	200 lb HP (90.7 kg)	1/16" (1.6 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	3/4"-1" (19-25 mm)	200-250	27-31
11933500	200 lb NTP (90.7 kg)	1/16" (1.6 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	3/4"-1" (19-25 mm)	200-250	27-31
11875500	400 lb NTP (181.4 kg)	1/16" (1.6 mm)	98% Ar / 2% O <sub>2</sub> or 75-80% Ar, Bal. CO <sub>2</sub>	3/4"-1" (19-25 mm)	200-250	27-31
<b>965-O</b>						
■ 11427100	33 lb WB (15 kg)	1/16" (1.6 mm)	Open-arc or CO <sub>2</sub>	3/4"-1 1/4" (19-32 mm)	200-250	27-31
■ 11427000	50 lb PP (22.7 kg)	1/16" (1.6 mm)	Open-arc or CO <sub>2</sub>	3/4"-1 1/4" (19-32 mm)	200-250	27-31
11956000	200 lb HP (90.7 kg)	1/16" (1.6 mm)	Open-arc or CO <sub>2</sub>	3/4"-1 1/4" (19-32 mm)	200-250	27-31
11956100	500 lb POP (226.8 kg)	1/16" (1.6 mm)	Open-arc or CO <sub>2</sub>	3/4"-1 1/4" (19-32 mm)	200-250	27-31
11946100	60 lb Coil (27.2 kg)	3/32" (2.4 mm)	Open-arc or CO <sub>2</sub>	1 1/4"-1 1/2" (32-38 mm)	300-350	25-28
11987200	60 lb Coil (27.2 kg)	7/64" (2.8 mm)	Open-arc or CO <sub>2</sub>	1 1/4"-1 1/2" (32-38 mm)	425-475	28-30

### STOODY® 965 AP-G

STOODY 965 AP-G is a gas-shielded, flux cored, all position, general purpose hardfacing alloy which offers a good balance of impact and abrasion resistance. It can be used in both metal-to-metal and metal-to-earth applications. Deposits are forgeable but not readily machinable. Stoodly 965 AP-G has a smooth semi-spray transfer and can be applied to carbon, low alloy, and manganese steels. It is magnetic on carbon and low alloy steels but not on manganese steels. Analysis and properties are similar to Stoodly Self-Hardening covered electrode.

**Welding Procedures/Characteristics:** DCEP (reverse polarity) recommended using 75 Argon/25 CO<sub>2</sub> shielding gas. This wire has excellent out-of-position characteristics in the vertical, overhead and horizontal positions. It has a smooth semi-spray transfer and can be applied to carbon and low alloy steels.

**Applications:** Tillage Tools, Dredge Parts, Sliding Metal Parts, Tire Shredder Knives, Drag Line Bucket Lips, Extruder Screws, Tamper Feet, Churn Drills, Muller Tires, Sugar Cane Harvesters

#### Nominal Composition:

Alloy Content – 11% (Carbon, Chromium, Manganese, Molybdenum, Silicon)  
Iron Base

#### Deposit Characteristics:

Abrasion Resistance ..... Good  
Impact Resistance..... Good  
2 Layer Hardness ..... 57-62 HRC  
Deposit Layers ..... 2 Normal, 3 Max.

Part Number	Pkg	Wire Dia.	Shielding Gas	Welding Parameters CTWD	Amp	Volts
12023500	10 lb PS (4.5 kg)	0.045" (1.2 mm)	75-80% Ar, Bal. CO <sub>2</sub>	1/2"- 3/4" (13-19 mm)	140-225	26-29
■ 11807800	33 lb WB (15 kg)	0.045" (1.2 mm)	75-80% Ar, Bal. CO <sub>2</sub>	1/2"- 3/4" (13-19 mm)	140-225	26-29
■ 11808600	33 lb WB (15 kg)	1/16" (1.6 mm)	75-80% Ar, Bal. CO <sub>2</sub>	1/2"- 3/4" (13-19 mm)	170-275	24-30
11962400	200 lb HP (90.7 kg)	1/16" (1.6 mm)	75-80% Ar, Bal. CO <sub>2</sub>	1/2"- 3/4" (13-19 mm)	170-275	24-30