Stoody All-Position Hardfacing Wires

Stoody’s family of All-Position (AP) hardfacing wires are tailored to withstand the demands of impact and abrasion from metal to metal and metal to earth applications while offering end users the freedom to choose the application position. For nearly a century Stoody has been on the forefront of hardfacing and high alloy innovation, working closely with customers in countless industries worldwide to produce welding wires and electrodes engineered to combat all types of wear and corrosion. Discerning hardfacing applicators know the importance of weldability and applicability along with superior wear performance. Stoody All-Position wires are designed so that high quality hardfacing can be applied without repositioning of the component.

**Flexible All-Position (AP) Weldability**: Stoody All-Position products Build-Up AP-G, 964 AP-G, and 965 AP-G offer end users the flexibility to choose the appropriate position for applying build-up and hardfacing alloys. Wires are available in 0.045” (1.2 mm) and 1/16” diameters and can be run using constant voltage machines with the appropriate shielding gas.

**Hardfacing Build-Up**: Stoody Build-Up AP-G is a gas shielded, flux cored, all-position, general purpose wire recommended for the rebuilding of worn or broken mild or low alloy steel components and as an under base for subsequent hardfacing overlays. Equipment repair costs are typically a fraction of replacement costs and with Stoody Build-Up AP-G rebuilt parts can be restored and returned to service more wear resistant than when new.

**Hardfacing Overlays**: Stoody 964 AP-G and Stoody 965 AP-G are gas shielded, flux cored, all-position, general purpose wires recommended for impact and abrasion resistance in metal to metal and metal to ground applications. These wires can be applied to used or new components of carbon, low alloy or manganese steel construction.

**Stoody 964 AP-G offers the highest relative wear resistance in an all-position hardfacing wire.**
STOODY BUILD-UP AP-G

STOODY BUILD-UP AP-G is a gas shielded, flux cored, all position, general purpose hardfacing wire with excellent compressive strength and resistance to plastic deformation, making it ideal for use as an under base for subsequent hardfacing. This all position martensitic alloy is used for build up on mild and low alloy steel. It has good machinability in the as welded condition using carbide tools, and it can be forged at red heat. Stoody Build Up AP-G operates in smooth semi-spray transfer which allows high deposition in out-of-position application. Deposits can be applied to carbon steel, low alloy steel, and is recommended for use on manganese steel.

Applications: Mild and low alloy steels, Hammers, Wheel Burns, Repairing Battered Rail, Steel Mill Wobbler and Pods, Carbon Steel Shovel Pads, Shaping, Rolls, Pump Parts

Nominal Composition:
- Alloy Content – 4% (Carbon, Manganese, Chromium, Molybdenum, Silicon) Iron Base

Typical Mechanical Properties:
- Abrasion Resistance: Low
- Impact Resistance: Moderate
- Deposit Layers: Multiple
- Hardness (2 Layers): 24-27 HRC

Welding Procedures/Characteristics: DCEP recommended using 75% Argon, balance CO₂ shielding gas, this wire has excellent out-of-position characteristics.

Part Number | Pkg | Wire Diameter | Shielding Gas | Welding Parameters |
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| 11845500 | 33 lb WB (15 kg) | 0.045" (1.2 mm) | 75-80% Ar, Bal. CO₂ | 1/2" (13 mm) | 140-225 | 25-26 |
| 1201300 | 50 lb PP (22.7 mm) | 1/16" (1.6 mm) | 75-80% Ar, Bal. CO₂ | 1/2" - 3/4" (13-19 mm) | 170-275 | 21-23 |


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. Stoody 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 Stoody Self-Hardening covered electrode.

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

Nominal Composition:
- Alloy Content – 11% (Carbon, Chromium, Manganese, Molybdenum, Silicon) Iron Base

Typical Mechanical Properties:
- Abrasion Resistance: Good
- Impact Resistance: Good
- Deposit Layers: 2 Normal, 3 Max.
- Hardness (2 Layers): 57 - 62

Welding Procedures/Characteristics: DCEP recommended using 75% Argon, balance CO₂ shielding gas. This wire has excellent out-of-position characteristics.

Part Number | Pkg | Wire Diameter | Shielding Gas | Welding Parameters |
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| 11807800 | 33 lb WB (15 kg) | 0.045" (1.2 mm) | 75-80% Ar, Bal. CO₂ | 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. CO₂ | 1/2" - 3/4" (13-19 mm) | 170-275 | 24-30 |

DIN EN 14700: TFe3 | DIN 8555: MF 6_60_PT | ISO/TR 13393: T-H-Fe-M2


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 steels, 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 when compared to chrome carbide and many other tool steel welding wires.

Applications: Slitter Blades, Auger Flights, Rendering Screws, Tamper Tools, Extruder Screws, Tamper Feet, Tillage Tools, Dredge Parts, Drag Line Bucket Lips

Nominal Composition:
- Alloy Content - 18% (Carbon, Chromium, Manganese, Molybdenum, Silicon) Iron Base with Small Primary Carbides

Deposit Characteristics:
- Abrasion Resistance: Excellent
- Hardness: 58-64 HRC
- Impact Resistance: Good
- Deposit Layers: 2 Max
- Surface Cross Checks: None
- Magnetic: on Stainless Steel
- Slightly on Carbon Steel
- Yes on Manganese Steel

Welding Procedures/Characteristics: DCEP recommended using 75% Argon, balance CO₂ shielding gas. This wire has excellent out-of-position characteristics. It has a smooth semi-spray transfer and can be applied to carbon and low alloy steels.

Part Number | Pkg | Wire Diameter | Shielding Gas | Welding Parameters |
--- | --- | --- | --- | --- |
| 11970600 | 33 lb WB (15 kg) | 0.045" (1.2 mm) | 75-80% Ar, Bal. CO₂ | 1/2" - 3/4" (13-19 mm) | 140-225 | 25-29 |
| 11983700 | 33 lb WB (15 kg) | 1/16" (1.6 mm) | 75-80% Ar, Bal. CO₂ | 1/2" - 3/4" (13-19 mm) | 180-250 | 25-29 |

DIN EN 14700: T2Fe8 | DIN 8555: MF 6_60_GT | ISO/TR 13393: T-H-Fe-M2
ISO 9001
REGISTERED FIRM

The Quality System of Stoody at our Bowling Green, Kentucky location is registered to meet the requirements of ISO 9001

WARNING: Protect yourself and others. Before you use this product, read and understand this label. The appropriate Material Safety Data Sheet (MSDS) is available upon request from your distributor, your employer.

HEAT RAYS (INFRARED RADIATION) from flame or hot metal, from oxyfuel process can injure eyes.

ELECTRIC SHOCK can kill. ARC RAYS can injure eyes and burn skin.

FUMES AND GASES can be hazardous to your health.

- Keep your head out of fumes, the primary entry route for welding fumes and gases is by inhalation. Short-term over-exposure to welding fumes may result in fever, dizziness, nausea, or dryness or irritation of nose, throat or eyes and may aggravate pre-existing respiratory conditions. Long-term over-exposure to welding fumes may harm your respiratory function and pulmonary function and may lead to siderosis (iron deposits in the lungs). Manganese over-exposure may affect the central nervous system, resulting in impaired speech and movement. OSHA considers chromium and nickel compounds carcinogens.
- Use enough ventilation and exhaust at the arc (flame) to keep fumes and gases from your breathing zone and general area. If you are concerned about the ventilation of your work area, request that your employer conduct appropriate testing.
- This product contains or produces a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). (California Health and Safety Code 25249.5 et seq.)
- Wear correct eye, ear, and body protection.
- Do not permit electrically live parts to touch skin, clothing or gloves. Insulate your self from work and ground.

IN CASE OF EMERGENCY: Immediately call for medical aid. Employ first aid techniques recommended by the Red Cross.


THIS INFORMATION IS INTENDED FOR THE END USER OF THIS PRODUCT. DO NOT REMOVE OR OBSTRUCT THIS INFORMATION.