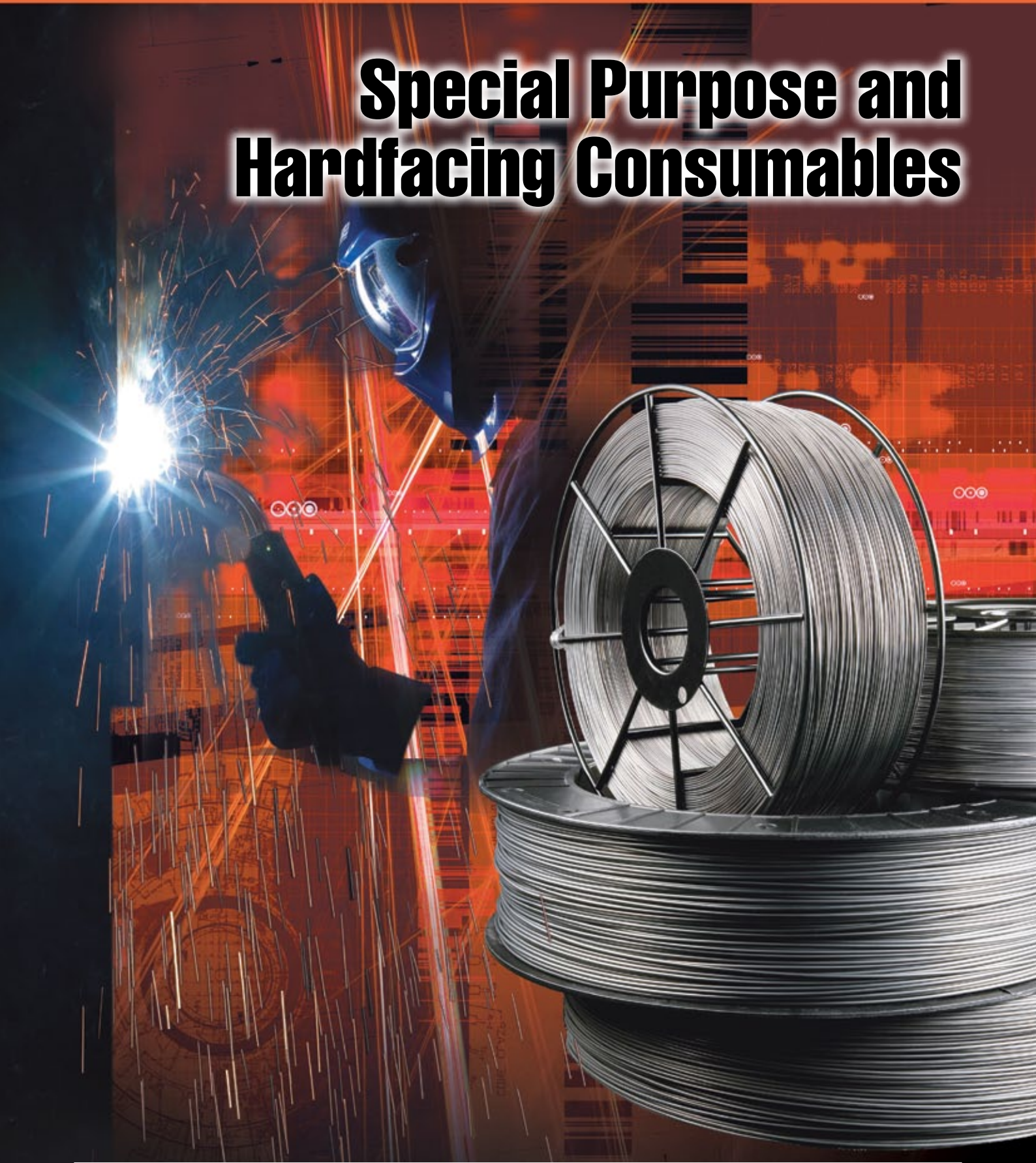


**STOODY**  
*Professional*

# Special Purpose and Hardfacing Consumables





# Introduction

Stoody is the world's leader in the production of welding wires and welding electrodes used to combat various types of wear and corrosion. Our extensive family of MIG welding products includes iron, nickel, cobalt, tungsten and vanadium based alloys. Some of the major industries we serve are power generation, mining, construction, railroad, steel, foundry, oil and gas production and exploration as well as the pulp and paper industry.

Stoody is given credit for the creation of the term "hardfacing". Founded by two brothers in Southern California in 1921, the company has grown to be a world class supplier providing hardfacing and high alloy products to almost every major industry in the world.

## KEY TO ICONS



Requires shielding gas



No shielding gas required



Direct current - electrode positive



Alternating and Direct Current



Alternating current or Direct Current electrode positive



Suitable for overhead welding



Suitable for vertical up welding



Suitable for side horizontal welding



Suitable for HV (horizontal/vertical) fillet welding



Suitable for flat welding



Copper-coated seamless flux cored wire



Weld metal hardness



Open circuit voltage

## Manual Arc Hardfacing Electrodes

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| Stoody 160-E     | 4 |

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# Manual Arc Hardfacing Electrodes

## Stoody 33

HV<sub>30</sub>  
420

50  
ocv

AC  
DC+



- Highly alloyed manual arc electrode.
- High Chromium Carbide Iron deposit.
- Primary Chromium Iron Carbides in a single layer.
- Ideal for coarse abrasion and low to moderate impact loading.
- Typical applications include the hard surfacing of crusher cones and mantles, swing hammers, bucket teeth and lips, dozer end plates and sugar mill rolls.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 2145-A4 |
| WTIA Tech. Note 4: | 2145-A4 |

### Packaging and Operating Data:

| Electrode Size mm | Length mm | Approx No. Rods/kg | Current Range (amps) | Packet | Carton | Part No  |
|-------------------|-----------|--------------------|----------------------|--------|--------|----------|
| 4.0               | 350       | 17                 | 120 – 160            | 4.5kg  | –      | 11305700 |
| 4.8               | 350       | 12                 | 160 – 250            | 4.5kg  | –      | 11305600 |

AC (minimum 50 OCV) DC+ polarity.

### Typical Weld Deposit Analysis:

All weld metal deposit  
C: 1.9% Mn: 0.8% Si: 0.6% Cr: 25%  
Ni: 3% Mo: 0.8% Fe: Bal

### Typical Weld Deposit Hardness:

All weld metal deposit  
HRC 44 HV<sub>30</sub> 420

### Finishing Recommendations:

Grinding only

### Comparable Thermadyne Product:

Stoody 100 HC-0/101 HC-G/O tubular wire (AS/NZS 2576: 2360-B5/B7)



## ACDC Tube Borium

HV<sub>30</sub>  
800

55  
ocv

AC  
DC+



- Highly alloyed tubular electrode.
- Partially dissolved Tungsten Carbides bonded in an Iron rich matrix.
- Resistant to extreme abrasion and low impact loading.
- Typical applications include drill bits, augers and scraper blades.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 3460-A1 |
| WTIA Tech. Note 4: | 3460-A1 |

### Packaging and Operating Data:

| Electrode Size mm | Length mm | Approx No. Rods/kg | Current Range (amps) | Packet    | Carton | Part No  |
|-------------------|-----------|--------------------|----------------------|-----------|--------|----------|
| 5.5               | 350       | 9                  | 120 – 150            | 4.5kg vac | –      | 10229500 |

AC (minimum 55 OCV) DC+ polarity.

### Typical Weld Deposit Analysis\*:

Single layer on Mild Steel  
C: 3.1% Mn: 0.9% W: 44% Cr: 6%  
Fe: Bal

All weld metal deposit  
C: 3.7% Mn: 1.0% W: 53% Cr: 7%  
Fe: Bal

### Typical Weld Deposit Hardness:

Single layer on Mild Steel  
All weld metal deposit  
HRC 62 HV<sub>30</sub> 750  
HRC 64 HV<sub>30</sub> 800

Deposits contain Tungsten Carbides with hardness up to 2,200 HV.

### Finishing Recommendations:

Grinding only

### Comparable Thermadyne Product:

Stoody 130-O tubular hardfacing wire (AS/NZS 2576: 3460-B7)

\*Actual weld deposit consists of undisclosed Tungsten Carbide particles in a eutectic matrix of C-W-Cr-Fe. The analysis of the matrix will vary with the proportion of Tungsten Carbides dissolved during welding.

## Stoody 160-E

HV<sub>30</sub>  
800

55  
ocv

AC  
DC+



- Highly alloyed tubular electrode.
- Partially dissolved Tungsten Carbides bonded in a nickel silicon boron matrix.
- Resistant to extreme abrasion and low impact loading.
- For the hardfacing of drill bits, cutter heads and dredgers.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 3665-A1 |
| WTIA Tech. Note 4: | 3665-A1 |

### Packaging and Operating Data:

| Electrode Size mm | Length mm | Approx No. Rods/kg | Current Range (amps) | Packet    | Carton | Part No  |
|-------------------|-----------|--------------------|----------------------|-----------|--------|----------|
| 4.8               | 350       | 9                  | 120 – 150            | 4.5kg vac | –      | 11897400 |

AC (minimum 55 OCV) DC+ polarity.

### Typical Weld Deposit Analysis\*:

Single layer on Mild Steel  
C: 2.2% Mn: 0.2% Si: 0.4% B: 1.2%  
W: 45% Ni: Bal

All weld metal deposit  
C: 3.2% Mn: 0.3% Si: 0.6% B: 1.5%  
W: 54% Ni: Bal

### Typical Weld Deposit Hardness:

Single layer on Mild Steel  
All weld metal deposit  
HRC 62 HV<sub>30</sub> 750  
HRC 64 HV<sub>30</sub> 800

Deposits contain Tungsten Carbides with hardness up to 2,200 HV.

### Finishing Recommendations:

Grinding only

### Comparable Thermadyne Product:

Stoody 160/160 DM tubular hardfacing wire (AS/NZS 2576: 3665-B7)

\*Actual weld deposit consists of undisclosed Tungsten Carbide particles in a matrix of Ni-Si-B. The analysis of the matrix will vary with the proportion of Tungsten Carbides dissolved during welding.

# Build-up & Hardfacing Wires - Open Arc & Gas Shielded

## Dynamang-0



- Self shielded (-0) tubular hardfacing wire.
- Tough, work hardening Austenitic Manganese Steel deposit.
- Typical applications include the repair of Manganese steel crusher rolls, jaw and hammer crushers, gyratory mantles, blow bars and dredge pump cutters, etc

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1215-B7 |
| WTIA Tech. Note 4: | 1215-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.6           | 200-250              | 23-27                 | 12-25                 | Spool     | 15kg        | 11446700 |
| 2.8           | 275-375              | 25-28                 | 20-45                 | Coil      | 27kg        | 11249900 |

DC electrode positive.

### Typical All Weld Metal Deposit Analysis:

C: 0.90% Mn: 13.40% Si: 0.37%  
Ni: 2.7% Cr: 2.50% Fe: Bal

### Typical Weld Deposit Properties:

Yield Stress 615 MPa  
Tensile Strength 810 MPa  
Elongation 21%

### Typical Weld Deposit Hardness:

|                        |     |      |
|------------------------|-----|------|
|                        | HRC | HV30 |
| All weld metal deposit | 17  | 220  |
| Work hardened          | 42  | 410  |

### Finishing Recommendations:

Machinable as deposited

### Recommended Shielding Gas:

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Product:

Cobalarc Mangcraft extruded electrode (AS/NZS 2576: 1215-A4)

## Build Up-0



- Self shielded (-0) tubular build-up wire.
- Tough, machinable low carbon pearlitic steel deposit.
- Resistant to high compressive loading.
- Ideal as an underbase prior to hardfacing.
- For rebuilding worn steel components.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1125-B7 |
| WTIA Tech. Note 4: | 1125-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 2.4           | 200-350              | 24-28                 | 20-30                 | Coil      | 27kg        | 11183600 |
| 2.8#          | 300-450              | 26-30                 | 20-35                 | Coil      | 27kg        | 11000100 |
| 2.8#          | 300-450              | 26-30                 | 20-35                 | Half Pack | 90kg        | 11813100 |
| 2.8#          | 300-450              | 26-30                 | 20-35                 | Drum      | 226kg       | 11869900 |

DC electrode positive #Indent items

### Typical All Weld Metal Deposit Analysis:

C: 0.10% Mn: 2.00% Si: 0.50%  
Cr: 1.00% Mo: 0.25% Fe: Bal

### Typical Weld Deposit Hardness:

|                            |     |      |
|----------------------------|-----|------|
|                            | HRC | HV30 |
| Single layer on Mild Steel | 28  | 290  |

### Finishing Recommendations:

Machinable

### Recommended Shielding Gas:

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Products:

Cobalarc 350 extruded electrode (AS/NZS 2576: 1435-A4)

Stoody Super Build Up-G (AS/NZS 2576: 1435-B5)

## Super Build Up-G



- Gas (-G) tubular hardfacing wire.
- Tough, machinable low carbon martensitic steel deposit.
- Recommended for the build-up and surfacing of steel track rolls, idler wheels, track pads, drive sprockets, pins, links and other components subject to abrasion and/or metal-to-metal wear.
- 1.2mm & 1.6mm sizes can be used for vertical surfacing by depositing overlapping horizontal stringer passes.
- 1.2mm & 1.6mm wires are B5 type wires which require a shielding gas.

### Classifications:

|                    |                          |
|--------------------|--------------------------|
|                    | <b>1.2mm &amp; 1.6mm</b> |
| AS/NZS 2756:       | 1435-B5                  |
| WTIA Tech. Note 4: | 1435-B5                  |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.2           | 120-220              | 18-24                 | 15-20                 | Spool     | 15kg        | 11423600 |
| 1.6           | 140-250              | 23-26                 | 15-25                 | Spool     | 15kg        | 11946200 |

DC electrode positive

### Typical All Weld Metal Deposit Analysis:

C: 0.20% Mn: 1.5% Si: 0.4%  
Cr: 2.0% Mo: 0.5% Fe: Bal

### Typical Weld Deposit Hardness:

|                            |     |      |
|----------------------------|-----|------|
|                            | HRC | HV30 |
| Single layer on Mild Steel | 30  | 300  |
| All weld metal deposit     | 40  | 390  |

### Finishing Recommendations:

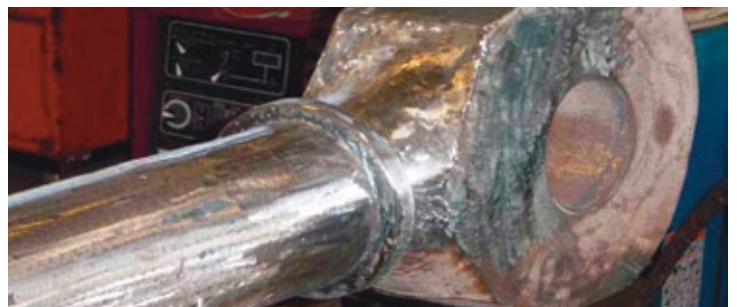
Machinable. Carbide tools recommended.

### Recommended Shielding Gas:

Ar + 1-3% O<sub>2</sub> ISO14175: M13  
Ar + 10-25% CO<sub>2</sub> or equiv. ISO14175: M21

### Comparable Thermadyne Product:

Cobalarc 350 extruded electrode (AS/NZS 2576: 1435-A4)



# Build-up & Hardfacing Wires - Open Arc & Gas Shielded

## Stoody 105-G



- 1.6mm gas shielded tubular wire.
- Tough, machinable, crack-free steel deposit.
- Resistant to high compressive loading.
- For re-building worn steel components such as tractor rollers, crane wheels, idler rolls

### Classifications:

AS/NZS 2756: 1445-B5  
WTIA Tech. Note 4: 1445-B5

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.6           | 250-300              | 25-26                 | 20-25                 | Coil      | 27kg        | 11441100 |

DC electrode positive

### Typical All Weld Metal Deposit Analysis:

C: 0.2% Mn: 2.0% Si: 1.3% Fe: Bal  
Cr: 2.8% Mo: 0.4% V: 0.15%

### Typical Weld Deposit Hardness:

| All weld metal deposit | HRC | HV30 |
|------------------------|-----|------|
|                        | 45  | 440  |

### Finishing Recommendations:

Machinable with difficulty

### Recommended Shielding Gas:

Argon + 2% O<sub>2</sub> ISO14175: M13

### Deposit Characteristics:

|                      |                 |
|----------------------|-----------------|
| Abrasion resistance  | Very good       |
| Impact resistance    | Good            |
| Compressive strength | Good            |
| Hardness             | 45HRC           |
| Surface cross checks | No              |
| Magnetic             | Yes             |
| Deposit layers       | Three           |
| Machinability        | With difficulty |

### Comparable Thermadyne Products:

Cobalarc 350 extruded electrode (AS/NZS 2576: 1435-A4)

Stoody Super Build Up-G/O (AS/NZS 2576: 1435-B5/B7)

## Stoody 102-0/Cobremax



- Self shielded (-O) tubular build-up wire.
- H12 tool steel type deposit.
- Resistant to high compressive loading.
- Good for hotwear applications up to 600°C.
- For rebuilding worn steel components such as crane wheels, forging dies and shear blades.

### Classifications:

AS/NZS 2756: 1550-B7  
WTIA Tech. Note 4: 1550-B7

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 2.4           | 200-350              | 24-28                 | 20-30                 | Coil      | 27kg        | 11906700 |
| 2.8#          | 300-450              | 26-30                 | 20-35                 | Coil      | 27kg        | 11891800 |

DC electrode positive #Indent item

### Typical All Weld Metal Deposit Analysis:

C: 0.4% Mn: 2.00% Si: 0.9% Fe: Bal  
Cr: 7.2% Mo: 1.4% W: 1.2%

### Typical Weld Deposit Hardness:

| Single layer on Mild Steel | HRC | HV30 |
|----------------------------|-----|------|
|                            | 48  | 480  |
| All weld metal deposit     | HRC | HV30 |
|                            | 58  | 580  |

### Finishing Recommendations:

Machinable with carbide tools

### Recommended Shielding Gas:

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Product:

Cobalarc 650 extruded electrode (AS/NZS 2576: 1855-A4)

## Stoody RA45-0



- Self shielded (-O) tubular hardfacing wire.
- Seamless copper coated sheath for outstanding arc starting and wire feeding.
- Developed for out of position 'open arc' hard surfacing of sugar mill rolls.
- Martensitic steel surfacing deposit for enhanced roll toughness and wear resistance.

### Classifications:

AS/NZS 2756: 1845-B7  
WTIA Tech. Note 4: 1845-B7

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 2.0#          | 240-300              | 28-35                 | 40-50                 | Coil      | 25kg        | 11121100 |
| 2.8           | 300-350              | 30-35                 | 40-50                 | Coil      | 25kg        | 11122200 |

DC electrode positive #Indent item

### Typical Weld Deposit Hardness:

| Single layer on Cast Iron | HRC | HV30 |
|---------------------------|-----|------|
|                           | 40  | 400  |
| All weld metal deposit    | HRC | HV30 |
|                           | 45  | 440  |

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

Open arc  
Welding grade CO<sub>2</sub> or Argon + CO<sub>2</sub> gas mixtures

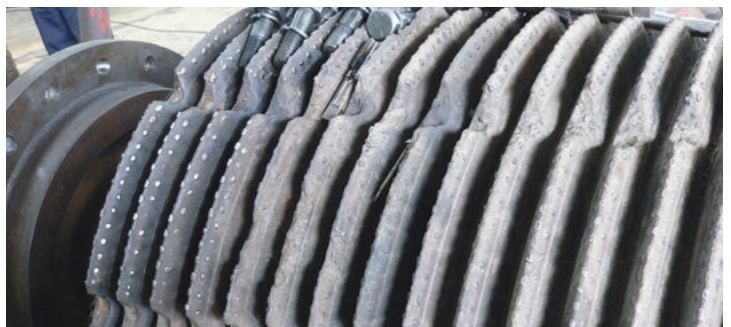
### Comparable Thermadyne Product:

Stoody 117 Hardfacing wire

### Welding positions:

For roller arcing applications, Stoody RA45-0 can be used in the flat, horizontal, vertical up and vertical down welding positions.

For conventional hardfacing applications Stoody RA45-0 is restricted to use in the flat and horizontal welding positions.



# Build-up & Hardfacing Wires - Open Arc & Gas Shielded

## Stoody BoroClad-0



- Self shielded (-0) tubular hardfacing wire.
- Seamless copper coated sheath for outstanding arc starting and wire feeding.
- Developed for out of position 'open arc' hard surfacing of sugar mill rolls.
- Martensitic steel surfacing deposit for enhanced roll toughness and wear resistance.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 2260-B7 |
| WTIA Tech. Note 4: | 2260-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 2.0           | 240-300              | 28-35                 | 40-50                 | Coil      | 25kg        | 11131100 |
| 2.8           | 300-350              | 30-35                 | 40-50                 | Coil      | 25kg        | 11133300 |

DC electrode positive

### Typical Weld Deposit Hardness:

|                           | HRC | HV30 |
|---------------------------|-----|------|
| Single layer on Cast Iron | 52  | 540  |
| All weld metal deposit    | 62  | 750  |

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

Open arc  
Welding grade CO<sub>2</sub> or Argon + CO<sub>2</sub> gas mixtures

### Comparable Thermadyne Product:

Cobalarc BoroChrome extruded electrode (AS/NZS 2576: 2560-A4)

### Welding positions:

For roller arcing applications, Stoody BoroClad-0 can be used in the flat, horizontal, vertical up and vertical down welding positions.

For conventional hardfacing applications Stoody BoroClad-0 is restricted to use in the flat and horizontal welding positions.

## Stoody 965-G/0



- Gas (-G) & Self shielded (-0) tubular hardfacing wires.
- Air hardening, crack free Martensitic steel deposit.
- Resistant to high particle abrasion and moderate impact loading.
- Typical applications include the surfacing of agricultural points, shares and tynes, sand dredge cutter heads, dredge rollers and tumblers, conveyor screws, bucket lips, etc.
- 1.2mm & 1.6mm sizes can be used for vertical surfacing by depositing overlapping horizontal stringer passes.
- 1.2mm & 1.6mm wires are B5 type wires which require shielding gas. 2.0mm & 2.4mm size are B7 type open arc wires which require no shielding gas.

### Classifications:

|                    | 1.2mm & 1.6mm | 2.0 & 2.4mm* |
|--------------------|---------------|--------------|
| AS/NZS 2756:       | 1855-B5       | 1855-B7      |
| WTIA Tech. Note 4: | 1855-B5       | 1855-B7      |

\*2.0mm & 2.4mm sizes require shielding gas.

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.2           | 120-220              | 18-24                 | 15-20                 | Spool     | 15kg        | 11423100 |
| 1.6           | 140-250              | 23-26                 | 20-25                 | Spool     | 15kg        | 11501500 |
| 2.0           | 180-300              | 24-28                 | 20-30                 | Coil      | 27kg        | 11813100 |
| 2.4           | 200-350              | 24-28                 | 20-30                 | Coil      | 27kg        | 11869900 |

DC electrode positive

### Typical All Weld Metal Deposit Analysis:

C: 0.60% Mn: 1.70% Si: 1.40%  
Cr: 6.20% Fe: Bal

### Typical Weld Deposit Hardness:

|                            | HRC | HV30 |
|----------------------------|-----|------|
| Single layer on Mild Steel | 55  | 600  |
| All weld metal deposit     | 58  | 640  |

### Finishing Recommendations:

Not machinable. Grinding only.

### Recommended Shielding Gas:

1.2mm & 1.6mm 965-G  
Ar + 1-3% O<sub>2</sub> or equiv. ISO14175: M13  
2.0 & 2.4mm 965-0  
Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Product:

Cobalarc 650 extruded electrode (AS/NZS 2576: 1855-A4)



## Stoody 965 AP-G



- Gas (-G) shielded all-positional.
- Air hardening, crack free, martensitic steel deposit.
- Resistant to hard particle abrasion and moderate impact loading.
- Typical applications include the surfacing of agricultural points, shares and tynes, sand dredge cutter heads, dredge rollers and tumblers, conveyor screws, bucket lips, etc.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1855-B5 |
| WTIA Tech. Note 4: | 1855-B5 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.2           | 140-220              | 26-29                 | 15-20                 | Spool     | 15kg        | 11807800 |
| 1.6           | 170-270              | 24-30                 | 20-25                 | Spool     | 15kg        | 11808600 |

DC electrode positive

### Typical All Weld Metal Deposit Analysis:

C: 0.60% Mn: 1.70% Si: 1.40%  
Cr: 6.20% Fe: Bal

### Typical Weld Deposit Hardness:

|                            | HRC | HV30 |
|----------------------------|-----|------|
| Single layer on Mild Steel | 55  | 600  |
| All weld metal deposit     | 58  | 640  |

### Finishing Recommendations:

Not machinable. Grinding only.

### Recommended Shielding Gas:

1.2mm & 1.6mm 965 AP-G  
Ar + 25% CO<sub>2</sub> ISO14175: M21

### Comparable Thermadyne Product:

Cobalarc 650 extruded electrode (AS/NZS 2576: 1855-A4)

# Build-up & Hardfacing Wires - Open Arc & Gas Shielded

## Stoody 850-0



- Self shielded (-0) tubular hardfacing wire.
- Air hardening, crack prone high carbon, Martensitic steel deposit.
- Resistant to severe abrasion and low impact loading.
- Typical applications include the hard surfacing of agricultural, mining and materials handling equipment including tynes, points, conveyor screws, dredge buckets, cane harvester cutters/elevators and sugar mill scraper plates.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1865-B7 |
| WTIA Tech. Note 4: | 1865-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.2           | 120-220              | 18-24                 | 15-20                 | Spool     | 15kg        | 11945500 |

DC electrode positive.

### Typical All Weld Metal Deposit Analysis:

C: 0.95% Mn: 0.6% Si: 0.9%  
Cr: 6.5% Mo: 3.5% B: 1.5% Fe: Bal

### Typical Weld Deposit Hardness:

|                        |     |      |
|------------------------|-----|------|
|                        | HRC | HV30 |
| All weld metal deposit | 62  | 750  |
| Work hardened          | 65  | 830  |

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

## Stoody 101HC-G/0



- High alloy, tubular hardfacing wire.
- High Chromium-Carbide Iron deposit for ground engaging applications.
- Resistant to severe abrasion and low to moderate impact loading.
- Typical applications include the hard surfacing of crusher cones and mantles, swing hammers, earthmoving buckets, scarifier points and sugar harvesting and milling equipment.
- 1.2mm size is suitable for vertical-up surfacing using a wide weaving technique.

### Classifications:

|                    | 1.2mm*  | 1.6mm** |
|--------------------|---------|---------|
| AS/NZS 2756:       | 2360-B5 | 2360-B7 |
| WTIA Tech. Note 4: | 2360-B5 | 2360-B7 |

\*1.2mm 101 HC-G is a B5 type wire which requires shielding gas.

\*\*1.6mm 101 HC-G is a B7 type wire which requires no shielding gas.

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.2           | 150-200              | 22-26                 | 12-20                 | Spool     | 15kg        | 11436300 |
| 1.6           | 200-260              | 24-28                 | 15-25                 | Spool     | 15kg        | 11304700 |

DC electrode positive

### Typical All Weld Metal Deposit Analysis:

Single layer on Mild Steel  
C: 4.0% Mn: 0.7% Si: 0.7% Cr: 14.0% Fe: Bal

### All weld metal deposit

C: 5.2% Mn: 0.7% Si: 0.7% Cr: 19.0% Fe: Bal

### Typical Weld Deposit Hardness:

|                            |     |      |
|----------------------------|-----|------|
|                            | HRC | HV30 |
| Single layer on Mild Steel | 55  | 600  |
| All weld metal deposit     | 60  | 700  |

Deposits contain Chromium Carbides with hardness up to 1,500 HV (80HRc).

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

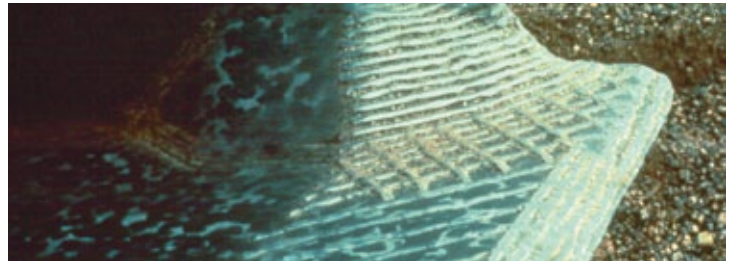
1.2mm 101 HC-G  
Ar + 1.3% O<sub>2</sub> or equiv ISO14175: M13

### 1.6mm 101 HC-0

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Product:

Cobalarc CR70 extruded electrode (AS/NZS 2576: 2355-A4)



## Stoody 100HC-0



- Self shielded (-0) tubular hardfacing wire.
- High Chromium Carbide Iron deposit.
- For ground engaging applications.
- Resistant to coarse abrasion and low to moderate impact loading.
- Primary Chromium Iron Carbides in single layer.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 2360-B7 |
| WTIA Tech. Note 4: | 2360-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 2.4           | 250-350              | 25-30                 | 35-55                 | Coil      | 27kg        | 11313400 |
| 2.8           | 300-450              | 27-33                 | 35-55                 | Coil      | 27kg        | 11001000 |
| 2.8#          | 300-450              | 27-33                 | 35-55                 | Drum      | 226kg       | 11235400 |

DC electrode positive #Indent item

### Typical All Weld Metal Deposit Analysis:

Single layer on Mild Steel  
C: 4.0% Mn: 1.0% Si: 1.0% Cr: 20%  
Mo: 0.7% Fe: Bal

### All weld metal deposit

C: 4.5% Mn: 1.5% Si: 1.5% Cr: 25%  
Mo: 1% Fe: Bal

### Typical Weld Deposit Hardness:

|                            |     |      |
|----------------------------|-----|------|
|                            | HRC | HV30 |
| Single layer on Mild Steel | 55  | 600  |
| All weld metal deposit     | 63  | 780  |

Deposits contain Chromium Carbides with hardness up to 1,500 HV (80HRc).

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Product:

Cobalarc CR70 extruded electrode (AS/NZS 2576: 2355-A4)



# Build-up & Hardfacing Wires - Open Arc & Gas Shielded

## Stoody Fineclad

HV<sub>30</sub>  
830



DC  
+



- Self shielded (-O) tubular hardfacing wire.
- Chromium Carbides in a hard martensitic matrix.
- Resistant to fine, wet or dry abrasion.
- High deposit hardness – typically 65HRC.
- For the hardfacing of dredge components, chutes and scraper blades.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 2565-B7 |
| WTIA Tech. Note 4: | 2565-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.6           | 200-260              | 24-28                 | 15-25                 | Spool     | 15kg        | 11945800 |
| 2.4           | 250-350              | 25-30                 | 35-55                 | Coil      | 25kg        | 11945900 |

DC electrode positive

### Typical All Weld Metal Deposit Analysis:

Single layer on Mild Steel  
C: 3.5% Mn: 0.3% Si: 0.4% Cr: 14%  
B: 0.4% Fe: Bal

All weld metal deposit  
C: 4.8% Mn: 0.5% Si: 0.6% Cr: 20%  
B: 0.75% Fe: Bal

### Typical Weld Deposit Hardness:

|                           | HRC | HV30 |
|---------------------------|-----|------|
| Single layer on Cast Iron | 62  | 750  |
| All weld metal deposit    | 65  | 830  |

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Product:

Cobalarc Borochrome extruded electrode (AS/NZS 2576: 2560-A4)

## Stoody 143-0

HV<sub>30</sub>  
780



DC  
+



- Self shielded (-O) tubular hardfacing wire.
- Complex Niobium/Chromium Carbide Iron deposit.
- Resistant to severe fine or coarse abrasion and low to moderate impact loading.
- For high temperature applications up to 650°C.
- Can be used in many applications where severe wear is a problem.
- Applications include steel industry (crushers, hoppers, exhaust fan blades), cement/refractory industries (screws, furnace parts, presses), non-ferrous (ladles, scrapers) and mining (wear plate, bucket teeth and slurry pipes).

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 2460-B7 |
| WTIA Tech. Note 4: | 2460-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.6           | 200-300              | 22-26                 | 20-25                 | Spool     | 15kg        | 11877000 |
| 2.8           | 300-450              | 27-33                 | 35-55                 | Coil      | 27kg        | 11867800 |
| 2.8#          | 300-450              | 27-33                 | 35-55                 | Drum      | 226kg       | 11857800 |

DC electrode positive. #Indent item

### Typical All Weld Metal Deposit Analysis:

Single layer on Mild Steel  
C: 3.7% Mn: 0.6% Si: 0.3% Cr: 16%  
Nb: 5% Fe: Bal

All weld metal deposit  
C: 5.2% Mn: 0.7% Si: 0.4% Cr: 22%  
Nb: 7.3% Fe: Bal

### Typical Weld Deposit Hardness:

|                            | HRC | HV30 |
|----------------------------|-----|------|
| Single layer on Mild Steel | 58  | 670  |
| All weld metal deposit     | 62  | 760  |

Deposits contain Niobium Carbides with hardness up to 2,400 HV.

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

Open arc or welding grade CO<sub>2</sub> ISO14175: C1

### Comparable Thermadyne Product:

Cobalarc 9e extruded electrode (AS/NZS 2576: 2460-A4)

## Stoody 600

HV<sub>30</sub>  
700



DC  
+



- Self shielded (-O) tubular hardfacing wire.
- Crack free, martensitic alloy steel containing hard Titanium Carbides.
- Excellent resistance to high stress abrasion and heavy impact.
- Applications include hammer mills, crushing rolls and bucket lips

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1955-B7 |
| WTIA Tech. Note 4: | 1955-B7 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.6           | 200-300              | 22-26                 | 20-25                 | Spool     | 15kg        | 11886600 |
| 2.4#          | 300-400              | 25-27                 | 30-35                 | Coil      | 27kg        | 11846000 |
| 2.4#          | 400-500              | 26-28                 | 30-35                 | Drum      | 226kg       | 11929400 |
| 2.8#          | 400-500              | 26-28                 | 30-35                 | Coil      | 27kg        | 11814400 |

DC electrode positive. #Indent items

### Typical All Weld Metal Deposit Analysis:

C: 1.7% Mn: 1.6% Si: 0.5%  
Cr: 7.5% Mo: 1.3% Ti: 5.3% Fe: Bal

### Typical Weld Deposit Hardness:

|                            | HRC | HV30 |
|----------------------------|-----|------|
| Single layer on Mild Steel | 58  | 670  |
| Two layers of Mild Steel   | 60  | 690  |
| 3-8 layers of Mild Steel   | 60  | 690  |

Deposits contain Titanium Carbides with hardness up to 3,200 HV.

### Finishing Recommendations:

Grinding only.

### Recommended Shielding Gas:

Open arc operation



# Build-up & Hardfacing Wires - Open Arc & Gas Shielded

## Stoody 130-0



- Self shielded (-O) tubular hardfacing wire.
- Tungsten Carbide Iron deposit.
- Resistant to extreme abrasion and low impact loading.
- For earth cutting and boring applications.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 3460-B7 |
| WTIA Tech. Note 4: | 3460-B7 |

### Typical All Weld Metal Deposit Analysis:

C: 2.4% Mn: 0.5% Si: 0.1%  
W: 58.0% Fe: Bal

### Finishing Recommendations:

Grinding only.

### Typical Weld Deposit Hardness:

|                        |     |      |
|------------------------|-----|------|
|                        | HRC | HV30 |
| All weld metal deposit | 65  | 825  |

### Recommended Shielding Gas:

Open arc operation

### Comparable Thermadyne Product:

Stoody ACDC Tube Borium electrode (AS/NZS 2576: 3460-A1)

Deposits contain Tungsten Carbides with hardness up to 2,200 HV.

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.6           | 90-120               | 18-24                 | 15-20                 | Spool     | 15kg        | 11413200 |
| 2.8#          | 120-150              | 18-24                 | 30-35                 | Coil      | 27kg        | 11001100 |

DC electrode positive. #Indent item

## Stoody 160/160DM



- Self shielded (-O) tubular hardfacing wire.
- Tungsten Carbide in Ni-Si-B type deposit.
- Resistant to extreme abrasion and low impact loading.
- For earth cutting, dredging and boring applications.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 3665-B7 |
| WTIA Tech. Note 4: | 3665-B7 |

### Typical All Weld Metal Deposit Analysis:

C: 2.8% Mn: 0.5% Si: 0.4%  
B: 1.4% W: 51% Ni: Bal

### Finishing Recommendations:

Grinding only.

### Typical Weld Deposit Hardness:

|                        |     |      |
|------------------------|-----|------|
|                        | HRC | HV30 |
| All weld metal deposit | 65  | 825  |

### Recommended Shielding Gas:

Open arc operation

### Comparable Thermadyne Product:

Stoody 160E electrode (AS/NZS 2576: 3665-A1)

Deposits contain Tungsten Carbides with hardness up to 2,200 HV.

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.6           | 90-120               | 18-24                 | 15-20                 | Spool     | 11.3kg      | 11413200 |
| 2.8#          | 120-150              | 18-24                 | 30-35                 | Coil      | 22kg        | 11001100 |

DC electrode positive. #Indent item



# Build-up & Hardfacing Wires - Submerged Arc

## Stoody 104

HV<sub>30</sub>  
300

AC  
DC



- Submerged arc (-SA) tubular build-up wire.
- Tough, machinable, low carbon pearlitic steel deposit.
- Resistant to high compressive loading.
- For the unlimited build-up of worn steel components.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1125-B1 |
| WTIA Tech. Note 4: | 1125-B1 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 3.2#          | 350-400              | 26-30                 | 25-35                 | Coil      | 27kg        | 11820300 |
| 3.2#          | 350-400              | 26-30                 | 25-35                 | Half Pack | 90kg        | 11040900 |
| 3.2#          | 350-400              | 26-30                 | 25-35                 | Drum      | 226kg       | 11039500 |

AC, DC electrode positive or negative

### Typical All Weld Metal Deposit Analysis:

C: 0.07% Mn: 2.90% Si: 1.25%  
Cr: 1.15% Fe: Bal

### Typical Weld Deposit Hardness:

|                           |     |      |
|---------------------------|-----|------|
|                           | HRC | HV30 |
| Single layer on Cast Iron | 29  | 290  |

### Finishing Recommendations:

Machinable.

### Recommended Flux:

Stoody S

### Deposit Characteristics:

|                      |           |
|----------------------|-----------|
| Abrasion resistance  | Low       |
| Impact resistance    | Excellent |
| Compressive strength | Excellent |
| Hardness             | 29 HRC    |
| Surface cross checks | No        |
| Magnetic             | Yes       |
| Deposit layers       | Unlimited |
| Machinability        | Yes       |

### Comparable Thermadyne Product:

Stoody Build Up-O self shielded tubular wire (AS/NZS 2576: 1125-B7)

## Stoody 107

HV<sub>30</sub>  
400

AC  
DC



- Submerged arc tubular build-up wire.
- Tough, machinable, crack free steel deposit.
- Resistant to high compressive loading.
- Ideal as an underbase prior to hardfacing.
- For re-building worn steel components.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1440-B1 |
| WTIA Tech. Note 4: | 1440-B1 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 3.2           | 350-400              | 26-30                 | 25-35                 | Drum      | 90kg        | 11041200 |
| 3.2#          | 350-400              | 26-30                 | 25-35                 | Drum      | 226kg       | 11039800 |

AC, DC electrode positive or negative. #Indent item

### Typical All Weld Metal Deposit Analysis:

C: 0.14% Mn: 1.9% Si: 0.8%  
Cr: 2.2% Mo: 0.3% Fe: Bal

### Typical Weld Deposit Hardness:

|                               |     |      |
|-------------------------------|-----|------|
|                               | HRC | HV30 |
| Multiple layers on Mild Steel | 38  | 380  |

### Finishing Recommendations:

Machinable.

### Recommended Flux:

Stoody S

### Deposit Characteristics:

|                      |            |
|----------------------|------------|
| Abrasion resistance  | Good       |
| Impact resistance    | Excellent  |
| Compressive strength | Good       |
| Hardness             | 38 HRC     |
| Surface cross checks | No         |
| Magnetic             | Yes        |
| Deposit layers       | up to 20mm |
| Machinability        | Yes        |

### Comparable Thermadyne Products:

Cobalarc 350 extruded electrode (AS/NZS 2576: 1435-A4)

Stoody Super Build Up-GO (AS/NZS 2576: 1435-B5/B7)

## Stoody 105

HV<sub>30</sub>  
450

AC  
DC



- 3.2mm submerged arc tubular build-up wire.
- Tough, machinable, crack-free steel deposit.
- Resistant to high compressive loading.
- Ideal as an underbase prior to hardfacing.
- For re-building worn steel components.

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1445-B1 |
| WTIA Tech. Note 4: | 1445-B1 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 3.2#          | 350-400              | 28-30                 | 25-35                 | Half Pack | 90kg        | 11041000 |
| 3.2#          | 350-400              | 28-30                 | 25-35                 | Drum      | 226kg       | 11039600 |

AC, DC electrode positive or negative. #Indent items

### Typical All Weld Metal Deposit Analysis:

C: 0.2% Mn: 2.0% Si: 1.3%  
Cr: 2.8% Mo: 0.4% V: 0.15% Fe: Bal

### Typical Weld Deposit Hardness:

|                                |     |      |
|--------------------------------|-----|------|
|                                | HRC | HV30 |
| 3 layers maximum on Mild Steel | 45  | 440  |

### Finishing Recommendations:

Machinable with difficulty

### Recommended Flux:

Stoody S

### Deposit Characteristics:

|                      |                 |
|----------------------|-----------------|
| Abrasion resistance  | Very good       |
| Impact resistance    | Good            |
| Compressive strength | Good            |
| Hardness             | 45HRC           |
| Surface cross checks | No              |
| Magnetic             | Yes             |
| Deposit layers       | Three           |
| Machinability        | With difficulty |

### Comparable Thermadyne Products:

Cobalarc 350 extruded electrode (AS/NZS 2576: 1435-A4)

Stoody Super Build Up-G/O (AS/NZS 2576: 1435-B5/B7)

# Build-up & Hardfacing Wires - Submerged Arc

## Thermaclad 102

HV<sub>30</sub>  
550

DC  
+



- Submerged arc tubular build-up wire.
- Tough, machinable crack free steel deposit.
- Resistant to high compressive loading.
- Tool steel type deposit for the rebuilding of work rolls, edge rolls, crane wheels and dragline pins

### Classifications:

|                    |         |
|--------------------|---------|
| AS/NZS 2756:       | 1550-B1 |
| WTIA Tech. Note 4: | 1550-B1 |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 3.2           | 350-500              | 26-30                 | 30-40                 | Drum      | 226kg       | 11820400 |

DC electrode positive

### Typical All Weld Metal Deposit Analysis:

C: 0.3% Mn: 1.6% Si: 0.8%  
Cr: 6.0% Mo: 1.6% W: 1.4% Fe: Bal

### Typical Weld Deposit Hardness:

3 layers maximum on Mild Steel HRC HV<sub>30</sub>  
52 550

### Finishing Recommendations:

Machinable with difficulty

### Recommended Flux:

Stoody R20

### Deposit Characteristics:

|                      |                 |
|----------------------|-----------------|
| Abrasion resistance  | Good            |
| Impact resistance    | Good            |
| Compressive strength | High            |
| Hardness             | 52 HRC          |
| Surface cross checks | No              |
| Magnetic             | Yes             |
| Deposit layers       | Three           |
| Machinability        | With difficulty |

### Comparable Thermadyne Products:

Cobalarc 650 extruded electrode  
(AS/NZS 2576: 1855-A4)

Stoody 965-G/O  
(AS/NZS 2576: 1855-B5/B7)

Stoody Cobremax-O  
(AS/NZS 2576: 1550-B7)

## Stoody Fluxes

### Stoody 'S' Flux

#### Description & Applications:

Stoody 'S' Flux is an active fused flux designed for use with Stoody Submerged Arc Welding Wires (other than Thermaclad® wire). As the deposit composition is significantly altered from the wire composition, care should be exercised in the matching of this flux to the right wire.

#### Packaging Data:

Stoody 'S' Flux is available in 22kg bags. Part No. 11008400



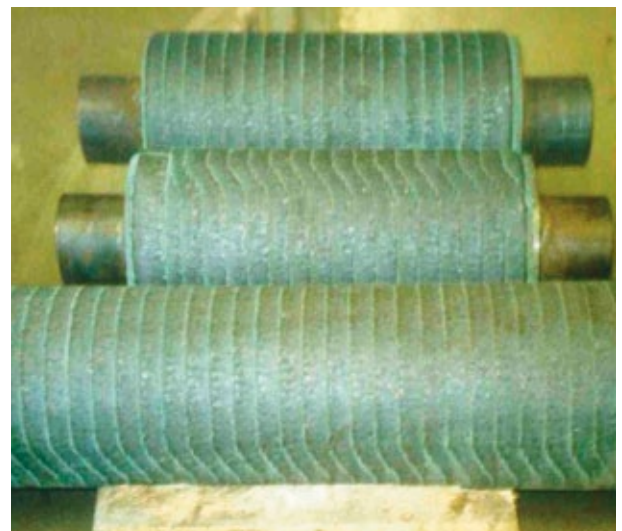
### Stoody R20 Flux

#### Description & Applications:

Stoody R20 Flux is a neutral flux that is specially designed for use with Stoody Thermaclad® wires. Applications include use with Thermaclad 104, 107 or 42 for undercarriage re-building and other Thermaclad wires for steel mill roll rebuilding. The flux is formulated to achieve excellent deposit composition control and slag removal.

#### Packaging Data:

Stoody R20 Flux is available in 25kg bags. Part No. 11810900



## Stoody SOS 308L



- Stainless steel flux cored wire.
- Convenient self shielded (open arc) operation for 'in situ' or outdoor applications.
- High deposition rate downhand welding.
- For downhand welding application on 19Cr/10Ni type stainless steels including type 301, 302, 304 and 304L.

### Classifications:

|                            |           |
|----------------------------|-----------|
| AWS/ASME-SFA A5.22:        | E308LTO-3 |
| WTIA Tech. Note 4/AS 2576: | 1315-B7   |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 2.4           | 300-350              | 28-30                 | 20-25                 | Coil      | 22kg        | 11175400 |

DC electrode positive

### Typical All Weld Metal Analysis:

C: 0.02% Mn: 1.20% Si: 0.50%  
Cr: 20.80% Ni: 10.2% Fe: Bal

### Typical All Weld Metal Mechanical Properties:

Tensile Strength 600 MPa  
Elongation 43%

### Ferrite Number:

6-10 FN

### Recommended Shielding Gas:

Not required.

### Comparable Thermadyne Products:

Verti-Cor 308LT all positional gas shielded FCAW wire (AWS A5.22: E308LT1-1/E308LT1-4)  
Autocraft 308LSi GMAW wire (AWS A5.9: ER308LSi)  
Comweld 308L Gas/TIG rod (AWS A5.9: ER308L)  
Satinchrome 308L-17 electrode (AWS A5.4: E308L-17)

## Stoody SOS 309L



- Stainless steel flux cored wire.
- Convenient self shielded (open arc) operation for 'in situ' or outdoor applications.
- For joining dissimilar steels or as a buffer layer prior to hard surfacing.
- High deposition rate downhand welding.

### Classifications:

|                            |           |
|----------------------------|-----------|
| AWS/ASME-SFA A5.22:        | E309LTO-3 |
| WTIA Tech. Note 4/AS 2576: | 1315-B7   |

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Electrode Stickout mm | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 2.4           | 300-350              | 28-30                 | 20-25                 | Coil      | 22kg        | 11231200 |

DC electrode positive

### Typical All Weld Metal Analysis:

C: 0.02% Mn: 1.20% Si: 0.5%  
Cr: 24.4% Ni: 12.6% Fe: Bal

### Typical All Weld Metal Mechanical Properties:

Tensile Strength 610 MPa  
Elongation 38%

### Ferrite Number:

10-18 FN

### Recommended Shielding Gas:

Not required.

### Comparable Thermadyne Products:

Verti-Cor 309LT all positional gas shielded FCAW wire (AWS A5.22: E308LT1-1/E308LT1-4)  
Autocraft 309LSi GMAW wire (AWS A5.9: ER308LSi)  
Comweld 309L Gas/TIG rod (AWS A5.9: ER308L)  
Satinchrome 309Mo-17 electrode (AWS A5.4: ER309Mo-17)

## Stoody 2209-T1



- For welding of 22%Cr/5%Ni/3%Mo duplex type stainless steels.
- Extra low carbon (<0.03%) corrosion resistant weld deposits.
- Precision layer wound for improved feedability and performance.
- For the joining of 2205 and other 22% Cr type duplex stainless steels.

### Classifications:

|                     |              |
|---------------------|--------------|
| AWS/ASME-SFA A5.22: | E2209 T1-1/4 |
|---------------------|--------------|

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Wire Feed Speed m/min | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.2           | 150-210              | 24-27                 | 7-11                  | Spool     | 15kg        | 11925600 |
| 1.6           | 190-270              | 24-28                 | 5-8                   | Spool     | 15kg        | 11892000 |

DC electrode positive.

### Typical Wire Analysis:

C: 0.03% Mn: 0.9% Si: 0.7%  
Cr: 22.80% Ni: 8.63% Mo: 3.10%  
N: 0.14% P: 0.018% S: 0.007%  
Cu: 0.06% Fe: Bal

### Ferrite Number:

30-45 FN (procedure dependent)

### Typical All Weld Metal Mechanical Properties:

Welding Grade CO<sub>2</sub>:  
0.2% Proof Stress 660 MPa  
Tensile Strength 820 MPa  
Elongation 28%  
CVN Impact Value 60J av @ -40°C  
80J av @ -20°C  
100J av @ +20°C

### Recommended Shielding Gas:

Ar + 20-25% CO<sub>2</sub>  
Welding Grade CO<sub>2</sub>

### Comparable Thermadyne Products:

Comweld 2209 TIG rod (AWS A5.9: ER2209)  
Autocraft 2209 GMAW wire (AWS A5.9: ER2209)

# High Alloy Joining & Cladding Wires

## Stoody 2594-T1



- For welding of 25%Cr/9%Ni/4%Mo super duplex type stainless steels.
- Extra low carbon (<0.03%) corrosion resistant weld deposits.
- Precision layer wound for improved feedability and performance.
- Applications include the joining of 2507 and other super duplex type stainless steels or to weld low alloy steels to duplex stainless steels.

### Classifications:

AWS/ASME-SFA A5.22: E2594 T1-1/4

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Wire Feed Speed m/min | Pack Type | Pack Weight | Part No  |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|----------|
| 1.2           | 150-210              | 24-27                 | 7-11                  | Spool     | 15kg        | 11998000 |
| 1.6           | 190-270              | 24-28                 | 5-8                   | Spool     | 15kg        | 11998100 |

DC electrode positive.

### Typical Wire Analysis:

C: 0.012% Mn: 1.60% Si: 0.44%  
 Cr: 22.80% Ni: 8.63% Mo: 3.10%  
 N: 0.14% P: 0.018% S: 0.007%  
 Cu: 0.06% Fe: Bal

### Recommended Shielding Gas:

Ar + 20-25% CO<sub>2</sub>  
 Welding Grade CO<sub>2</sub>

### Ferrite Number:

40-50 FN (procedure dependent)

### Typical All Weld Metal Mechanical Properties:

Welding Grade CO<sub>2</sub>:  
 0.2% Proof Stress 670 MPa  
 Tensile Strength 850 MPa  
 Elongation 26%  
 CVN Impact Value 60J av @ -40°C  
 80J av @ -20°C  
 100J av @ +20°C

## Stoody 625 & 625LI



- Joins Nickel-Chromium-Molybdenum alloys.
- Clads sides of joints in steels clad with Nickel-Chromium-Molybdenum weld metal.
- Surfacing steel with Nickel-Chromium-Molybdenum weld metal.
- Joining steels to Nickel based alloys.
- Joining 9% Nickel Steel for cryogenic applications.

### Classifications:

A5.34-2007 ENiCrMo3T1-1/4

### Packaging and Operating Data:

| Wire Diam. mm | Current Range (amps) | Voltage Range (volts) | Wire Feed Speed m/min | Pack Type | Pack Weight | Part No       |
|---------------|----------------------|-----------------------|-----------------------|-----------|-------------|---------------|
| 625           | 1.2                  | 150-210               | 24-27                 | 7-11      | Spool       | 15kg 11872500 |
| 625LI         | 1.2                  | 150-210               | 24-27                 | 7-11      | Spool       | 15kg 11977400 |

DC electrode positive.

### Typical Wire Analysis: (625)

C: 0.03% Mn: 0.4% Si: 0.3%  
 Cr: 22.0% Mo: 9.2% Fe: 3.0%\*  
 Nb: 3.8% S: 0.002% P: 0.010%  
 Ni: Bal

### Recommended Shielding Gas:

75% Ar + 25% CO<sub>2</sub>  
 Welding Grade CO<sub>2</sub>

\*For 625LI the typical Fe content is 0.3%

### Typical All Weld Metal Mechanical Properties:

Tensile Strength 820 MPa  
 Yield Strength 510 MPa  
 Elongation 34%  
 CVN Impact Value 67J av @ -196°C  
 Lateral Expansion 0.89mm





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