# BRAZING

*Pioneering Industrial Sustainability*
*www.castolin.com*

# EutecRod 157

## Tin-Silver Brazing Rod For Stainless Steels, Brass, Bronze And Nickel Alloys

**DESCRIPTION**

EutecRod 157 rod soldering alloy is particularly suitable for stainless steel assemblies, brass and bronze components, nickel alloys, and most carbon steels when used with Eutectic Flux 157. Deposits are corrosion resistant and do not tarnish in service.

*All-purpose Cadmium-free, Lead-free solder
*Best balance of mechanical properties with low-temperature application
*Good corrosion resistance and electrical conductivity
*Excellent color match to stainless steels

**APPLICATIONS:**

For soldering dairy utensils, food-handling equipment, plumbing fixtures and potable water containers and piping. Also useful for joining electrical connectors.

**PROCEDURE FOR USE:**

**Preparation:** Clean joint area with RotoClean OS or use a proprietary VOC-free solvent. For best results apply EutecTor 157 Flux to the joint prior to fit-up.

**Note:** *For best results maintain joint clearances between 0.001" and 0.005".*

**Technique:** Heat insert parts slowly and indirectly to reduce thermal shock to promote uniform flow. When flux begins to bubble, apply solder.

**Post-brazing:** Thoroughly clean all fl ux residue with a wire brush and warm water Allow parts to cool naturally. Parts can be quenched to help with flux residue removal. Flux will become corrosive if not removed prior to putting part in service.

**TECHNICAL DATA:**

Tensile Strength: 105 N/mm2 (15,000 psi)
Thermal Expansion Coef.: 12 x 10-6 in/ °F (20-212°F)
Working Temperature[1]: 430°F (220°C)
Max Brazing Temp: 450°F (230°C)
Elec. Conductivity: 16.5 IACS
Heating Methods: Oxy-fuel torch, induction, resistance heating and furnace soldering

[1] The solidus temperature is the highest temperature at which the part remains solid i.e. the start of melting.
[2] The liquidus temperature is the lowest temperature at which the part is molten i.e. *complete*

| Electrode |
|---|
| 3.2mm |
| 4.0mm |

# EutecRod 190

## Low Temperature Aluminum Brazing Rod

### DESCRIPTION

EutecRod 190 provides exceptional thin-flowing properties when oxy-fuel brazing sheet, tubing and most wrought forms of aluminum. Excellent color match with smooth, uniform fillets. Properties are highly compatible with aluminum grades 3xxx & 4xxx.

- Perfect for high strength joining of aluminum tee and lap joints
- High strength fillet and bead joints on sheet, extruded and cast aluminum
- Excellent bridging properties for poor fit joints
- Aluminum joining without melting base metal

### APPLICATIONS:

- Automotive and Bus Bodies
- Light-Gauge Truck Bodies
- Aluminum Housings
- Irrigation Piping
- Farming Implements
- Office Furniture
- Refrigeration Equipment
- Air-Conditioning Equipment

### PROCEDURE FOR USE:

**Preparation**: Clean joint area and lightly abrade using a stainless steel wire brush or wire wool. For best results a slight gap of between .005" and .010" is recommended. No preheat is necessary with thin gauge material. For thicknesses up to 1/8" a nominal broad preheat of 200°F is suggested. EutecTor® 190 flux can be applied to the joint by making a paste with a small amount of water or alcohol

Note: EutecRod 190 requires the use of EutecTor® 190 flux..

**Technique**: Adjust the oxy-fuel flame so that it is slightly reducing or carburizing. Keep the torch moving rapidly to prevent localized overheating with the inner flame cone 1" to 2" from the joint. When the flux becomes molten apply the brazing alloy at equal points along the joint seam. Cool slowly.

**Post-Brazing:** Remove flux, scrubbing in hot water and rinse. Note: It is mandatory to remove all traces of flux residues. If these are not removed they will cause corrosion

### TECHNICAL DATA:

Tensile Shear Strength:234 N/mm2 (34,000 psi)
Electrical Conductivity IACS: 42%
Solidus Temperature: 1070°F (575°C)
Liquidus Temperature: 1080°F (580°C)
Max. Brazing Temperature: 1120°F (605°C)

Heating Methods: Oxy-fuel, resistance, induction

Color Match Properties: Similar to wrought aluminum (will darken if anodized)

| DIAMETER |
|---|
| 2.4mm |
| 3.2mm |
| 4.0mm |
| 4.8mm |

# EutecRod 1601

## Cadium-Free Silver Brazing Rod

### DESCRIPTION

A bare brazing rod requiring preparatory fluxing with XuperBraze 100 or Xuper Braze 100H. Available in 18" lengths in 16/1" diameter. Packaged in 0.5 lb. and 1 lb. packs.

- Cadmium - free bare rod general purpose brazing alloy
- Widely used on joints where greater corrosion resistance is needed
- It exhibits good wetting action and flow
- Useful in bridging gaps where poor joint fitups cannot be avoided
- Excellent corrosion resistance
- Joint clearances of .008. - 003 inches recommended for proper capillary action

- Perfect for high strength joining of aluminum tee and lap joints
- High strength fillet and bead joints on sheet, extruded and cast aluminum
- Excellent bridging properties for poor fit joints
- Aluminum joining without melting base meta

### APPLICATIONS

Suitable for brazing tungsten carbide inserts, generaltool tipping, and stainless steel food containers and food handling equipment. Used where greater corrosion resistance is required. l

### PROCEDURE FOR USE

**Preparation:** The base metal surfaces to be brazed must be clean and free of all dirt, oil, grease and oxides such as rust.

**Finishing**: All the corrosive flux residue must be removed after brazing. Rinse with water while the parts are still warm, or rinse with hot water

**Specification:** Generally, the joint strength using 1601 will exceed the strengths of the base metals being joined. Type of joint, design of joint, joint clearances, and brazing procedures will effet the finished joint strength.

### Technical Data

Solidus: 1220°F (660°C)
Liquidus: 1435°F (779°C)
Brazing Range: 1435 - 1585°F (779 - 863°C)
Electrical Conductivity: 16.8% IACS
Electrical Resistivity: 10.27 Microhm-cm

*The recommended maximum operating temperature of 1601 is up to 400°F in continued service and up to 600°F in intermittent service.*

Color, as Brazed: Light Yellow
For Joint Clear: .003 to .008 inches

| DIAMETER |
|---|
| 1.6mm |
| 2.4mm |
| 3.2mm |
| 4.0mm |
| 4.8mm |

# EutecRod 1801

## Cadium-Free Silver Brazing Rod, Coil And Strip

### DESCRIPTION

EutrcRod 1801 G is an excellent general purpose brazing alloy that is often associated as the ideal replacement for many of the cadmium bearing alloys. 1801 G is suitable for joining ferrous, nonferrous and dissimilar base metals with close joint clearances. Generally, the joint strength using 1801 G will excede the strengths of the base metals being joined. Type of joint, design of joint, joint clearances, and brazing procedures will effect the finished joint strength. 1801 G is available in bare brazing rod, coil or strip requiring preparatory fluxing with XuperBraze® 100.

- A cadmium- free silver brazing alloy filler metal available in bare rod, coil or strip
- An excellent general purpose brazing alloy that is often associated as the ideal replacement for many of the cadmium bearing alloys
- It is suitable for joining ferrous, nonferrous and dissimilar base metals with close joint clearances
- Excellent fluidity for joint clearances of .002 - .006 inches

### APPLICATIONS:

- Food and dairy industry
- Electrical industry
- Brass parts / piping
- Aircraft engine coolers

### PROCEDURE FOR USE:

Preparation: The base metal surfaces to be brazed must beclean and free of all dirt, oil,grease and oxides such as rust.

Finishing: All the corrosive flux residue must be removed after brazing. Rinse with water while the parts are still warm, or rinse with hot water.

### TECHNICAL DATA:

Solidus: 1195°F (646C)
Liquidus: 1250°F (676 C)
Brazing Range: 1260°F - 1500°F.(682C - 815 C )
Electrical Conductivity: 19.0 % IACS
Electrical Resistivity: 9.08 Michrohm-cm

### AVAILABILITY:

ROD:
Length: 18“
Diameters: 1.6mm, 2.4mm

COIL:
Diameters: 0.30“

STRIP:
Size:0.005“ x 1“, 0.020“x 1.5“

Color, as Brazed: Yellow White
For Joint Clearances: .002 to .006 inches

| DIAMETER |
|---|
| 1.6mm |
| 2.4mm |
| 3.2mm |
| 4.0mm |
| 4.8mm |

# Eutecrod 1805

## Tube To Tube Sheet Joining Torch Brazing Rod For Self-Fluxing Copper-To-Copper Joints

**Description**

Copper-phosphorus-silver alloy, developed for the capillary joining of copper metal parts

**Outstanding Features:**

- Low melting brazing alloy.
- Strong, ductile, leak-proof joints.
- Silver-bearing; thin flowing.
- Good corrosion resistance.
- Self fluxing for copper to copper brazing.

**Product Details**

Name: Castolin 1805
Description: Flux-free capillary joining of copper
Type: Self-Fluxing Brazing Alloys for Copper
Category: Low Temperature Brazing and Soldering Alloys

**Applications**

Heat exchangers
Air conditioners
Refrigerating systems
Sanitary facilities
Electrotechnical equipment

**Technical Data**

Bonding Temperature:1200F ( 650 C)
Solidus Temperature: 1190F (645°C)
Liquidus Temperature:1517F ( 825°C)

Tensile Strength: 250 N/mm2 (36,000 psi )

| DIAMETER |
|---|
| 1.6mm |
| 3.15mm |

**PROCEDURE FOR USE**

**Preparation**

Clean the joint surfaces and round off any sharp edges.
Degrease the parts if necessary with an appropriate solvent.
Although flux is not necessary for copper parts, it is recommended to improve the quality of the assemblies and act as an indicator for the bonding temperature.
Recommended fluxes: CASTOLIN 800 (powder form), CASTOLIN 808 PF (paste form).
Place the parts in their definitive position.
Adjust the torch to obtain a neutral flame, either oxy-acetylene or oxy-propane.
Heat a broad area of the parts to be joined up to the bonding temperature.
Melt a drop and spread it with a continuous movement of the flame.
The alloy filler metal spreads to the hottest areas of the surfaces to be joined.
Melt the filler metal until the joint has been completely filled.

**Cleaning**

Once the flux has been used, washing with hot water or soaking in cold water will remove the flux residue

# Xuper 145 XFC

## Flux Coated Brazing Rod For Joining All Type Of Steel, Stainless Steel, Cu Alloy, Cast Iron & Galvanized Steel

**Description** :

Braze welding alloy with a controlled composition,made from high purity elements, designed to performexcellent quality joints. CASTOLIN 146 XFC is an «ELASTEC» flux-coated rod with a remarkable flexibility, allowing excellent visibility of the molten pool during the joining operation.

**Outstanding Features:**

- Durable and flexible flux coating.
- Retains corrosion resistance properties after brazing on galvanized surfaces.
- No smoke, fumes; clear visibility of molten pool.
- Superior wettability.
- Can be brazed directly on contaminated surfac

**Applications:**

Exhaust manifold, metal frames, car bodies, piping, flanges, cast iron housing, copper base plumbing and galvanised sheets & tubes.

**PROCEDURE FOR USE**

- Clean the joint surfaces and round off any sharp edges.
- If necessary, degrease with an appropriate solvent.
- If necessary, coat the surfaces to be joined with
- Castolin 146 or Castolin 18 flux.
- Place the parts in their definitive position.
- Adjust the welding torch to obtain a neutral flame.Heat locally up to the flux melting point.Melt the end of the rod on the joint.
- Bond the drop to the base metal, melt a new drop
- by moving forward and so on.
- Do not overheat, leave to air cool.

Cleaning
The flux residues can be removed by a mechanical
process: emery grinding, sanding, scraping, etc.

**Technical Data**

Size: 3.15mm, 5.00 mm
Bonding Temperature: 1560F (850 C)
Solidus Temperature: 1190F (645°C)
Liquidus Temperature: 1517F ( 825°C)
Tensile Strength:448 N/ mm2 (65,000 psi).

| DIAMETER |
|---|
| 2.5mm |
| 3.15mm |

# Xuper 16 XFC

## Flux Coated, Nickel-Silver, Low Fuming Brazing Rod

### DESCRIPTION

Xuper 16 XFC is a nickel-containing flexible flux coated bronze brazing rod. 16 XFC is pre-flux coated with the ocrrect amount of flux so there is no preparatory fluxing required. Xuper 16 XFC is an excellent replacement for high cost silver brazing alloys when higher brazing temperatures are acceptable. 16 XFC is a blue colored flexible flux coated brazing rod. Available in 18" lengths in 8/1" diameter 11 lb. packs and 32/3" diameter 11 lb. packs.

- No prepatory fluxing required
- Excellent replacement for expensive silver brazing alloys
- Easily machinable
- Excellent corrosion resistance
- Joins base metals at lower temperatures than gas or arc welding
- Minimizes thermal stress and distortion with less cracking
- High strength fillets

### APPLICATIONS

For brazing tungsten carbide, carbon steels, nickel alloys, and cast iron. Building-up overlaying worn parts as gear teeth, bearings and valve seats. Suitable for tubular structures

### PROCEDURE FOR USE

**Preparation**: The base metal surfaces to be brazed must be clean and free of all dirt, oil, grease and oxides such as rust.

**Finishing:** All the corrosive flux residue must be removed after brazing. Rinse with water while the parts are warm, or rinse with hot water.

### TECHNICAL DATA:

Tensile Strength: 480N/mm2 (70,000 psi)
Elongation, : 25%
Typical hardness: 120 HB
Solidus: 1665°F (907°C)
Liquidus: 1680°F (916°C)
Brazing Range: 1720 - 1800°F (938 - 982°C)
Electrical Conductivity: 5.5% IACS
Electrical Resistivity: 31.4 Microhm-cm

Color, as Brazed: Blue
For Joint Clearances: .001 to .005 inches

| DIAMETER |
|---|
| 2.5mm |
| 3.15mm |

# Xuper 185 XFC

## Nickel Enhanced, Copper-Base, Brazing Rod For Tough Re-Builds And Low Frictional Overlays

### DESCRIPTION

Xuper 185 XFC is a premium flux-coated brazing rod for appliations involving wear due to frictional compressive forces. The controlled nickel addition improves application toughness and depresses fuming tendencies for welder friendly use.

Xuper 185 was engineered for selective bearing surfaces on cast iron, steel, and some nickel alloys. Xuper 185 exhibits good deepdrawing properties.

- Controlled Nickel content for improved mechanical properties
- Low-fuming rod for Welder friendly use
- Good resistance to grinding wear

### APPLICATIONS

- Stamping dies
- Drawing dies
- Bearing surfaces
- Guide arms
- Hydraulic seal areas

### PROCEDURE FOR USE

**preparation:** Lightly roughen highly polished base metals to facilitate quicker bonding. Clean joint area with RotoClean® OS or use a proprietary VOC-free solvent. Align parts and preheat locally to facilitate quicker joint area heat-up. When brazing on cast iron prepare the surface by searing using an oxidizing flame. This will help to remove free graphite from the surface and help with bonding.
**Technique:** Use a neutral to 1x carburizing flame to prevent oxidation. After preheating deposit the filler metal using a continuous "dropand- melt" technique. Continue until the joint is slightly overfilled.

Note: When additional fluxing is called for use EutecTor 16, and for bronzes and chromium-bearing tool steels used EutecTor 16B.

**Post-Brazing:** If necessary, parts can be cooled in water to
"shock off" the flux residue.

### Technical Data

Tensile Strength: 586 N/mm2 (85,000 psi)

Typical hardness:
As-Deposited : 130 HB
Work Hardened : 200 HB

Brazing Temp. Range: 1680 - 1720°F (915 - 940°C)

Heating Methods: Oxy-fuel, induction, air furnace

Supplemental Flux: EutecTor® 16 or 16B* (when brazing bronzes the perferred flux is EutecTor 16B)

| DIAMETER |
|---|
| 2.5mm |
| 3.15mm |

# Alutin 51L

## Low Temperature, Self-Fluxing, Tin-Silver Soldering Paste

**DESCRIPTION**

AluTin 51 is supplied as a viscous gel flux. It is designed for the soldering of aluminium and the joining of aluminium with copper, brass or copper-aluminium.

**Application**

This flux is basically used with the following alloys:
CASTOLIN 1827 and Alutin 51

Aluminium joining: (Si + Mg < up to 2%), orfor the dissimilar joining of copper/aluminium.

**PROCEDURE FOR USE**

**Preparation :**

If necessary, clean the joint surfaces and round off any sharp edges.

- Degrease the parts with an appropriate solvent.
- Coat all the joint parts with AluTin 51 flux.
- Place the parts in their definitive position.
- Adjust the welding torch to obtain a gentle, slightly carburising flame.
- Indirectly and uniformly heat the parts to be joined, up to the bonding temperature.
- Do not overheat the flux, in order to prevent deterioration and do not apply the flame directly onto the flux.
- Apply the end of the filler alloy rod to the joint. The alloy filler metal spreads to the hottest areas of the surfaces to be joined.
- Melt the filler metal until the joint has been completely filled.

**Instructions for Use:**

The AluTin 51 Flux residues are water soluble. They are generally removed by washing in hot water.

***NOTE: AluTin 51 is avaliable in Rod form**

| DIAMETER |
|---|
| 2.5mm |
| 3.15mm |

**TECHNICAL DATA:**

Tensile Strength: 105 N/mm2 (15,000 psi)
Shear Strength: 68 N/mm2 (10,000 psi)
Electrical Conductivity - IACS: 16.5%
Thermal Expansion Coef.: 12 x 10-6 in / °F (20 - 212°F)
Solidus Temperature1: 430°F (220°C)
Liquidus Temperature2: 430°F (220°C)
Maximum Brazing Temp.: 450°F (230°C)

# StainTin 157 PA

## Low Temperature, Self-Fluxing, Tin-Silver Soldering Paste

**DESCRIPTION**

Eutectic StainTin 157PA is a paste soldering alloy particularly suited to stainless steels, thoroughly compatible with most copper, aluminum and carbon steel alloys. The corrosion resistance of deposits in service ensure they remain bright and tarnish-free for a reliable, clean joint.

- Free-flowing eutectic alloy with good capillary action
- Controlled Viscosity for easy, precise application
- Excellent choice for automated brazing and soldering
- Ideal for 300 Stainless steels in Food, medical and delicate applications

**APPLICATIONS**

For soldering dairy utensils, food-handling equipment, plumbing fixtures, potable water containers and piping. Also useful for joining electrical connects.

**PROCEDURE FOR USE**

**Preparation:** Clean joint area with RotoClean® OS or use a proprietary VOC free solvent. Thoroughly mix the 157PA so that the flux and metal particles are well amalgamated and show a smooth consistency. Use a fine brush or spatula to apply the paste.

*Note: It is important not to allow any movement while the solder alloy cools and solidifies.*

*Note: For the best results maintain joint clearances between 0.001" and 0.005".*

**TECHNIQUE:** Heat insert parts slowly and indirectly to reduce thermal shock so as to promote uniform flow.

*Note: During the melting phase it is important that the parts being soldered do not move. Observe flow indications so that all contact surfaces are fully soldered.*

POST WELDING: Allow parts to cool naturally. Parts can be quenched to help with flux residue removal.

**TECHNICAL DATA:**

Tensile Strength: 105 N/mm2 (15,000 psi)
Shear Strength: 68 N/mm2 (10,000 psi)
Electrical Conductivity - IACS: 16.5%
Thermal Expansion Coef.: 12 x 10-6 in / °F (20 - 212°F)
Solidus Temperature1: 430°F (220°C)
Liquidus Temperature2: 430°F (220°C)
Maximum Brazing Temp.: 450°F (230°C)

# TeroCote 7888 C

## Terocote® 7888 C Has An Excellent Abrasion And Corrosion Resistance

**DESCRIPTION**

7888 C is a high-performance anti-wear product in the form of a flexible cord, comprising a nickel core wire, covered with an elastic binder containing a mixture of carbides and nickel alloy powder. The latter has a uniquely effective self-fluxing action, which gives 7888 C outstanding wetting properties. As a result, a smooth, even protective coat can be deposited quickly and easily. 7888 C deposits an extremely durable protective coating comprising a dense mass of ultrahard tungsten carbides embedded in a tough nickel-chromium alloy matrix. This structure offers extremely effective protection against erosive and abrasive attack by a wide variety of materials. The matrix composition helps to absorb moderate impact and improves resistance to corrosion, while the angular profile of the finely crystallised carbides makes ft very difficult to dislocate them from the matrix.

**TeroCote 7888 C is a new version in our TeroCote range :**

New matrix formulation
Improved fusion quality
Better appearance of the deposit
Product form: dark grey flexible cord.
Deposit appearance: smooth, matt metallic-grey

**APPLICATIONS**

*Anti-abrasion protection*

Important: 7888 C is not recommended for high-manganese austenitic steels.

- Oil exploration and extraction: drill bits, stabilisers.
- Brick/cement making: mixer and scraper blades, extrusion
- press screws.
- Mineral processing: conveyor or decanter screws,
- pump rotors and sleeves.
- Iron and steel: guides and scraper blades.
- Agriculture: cutting edges on ploughshares.

Wear parts in cement...

**PROCEDURE FOR USE**

DEPOSITION BY OXY/ACETYLENE FLAME:

1. Mechanically clean the area to be coated by grinding or grit blasting.
2. Adjust torch for a neutral to slightly oxidizing flame. Apply a general preheat. °650 - 400F (204 °343 -C), followed by a concentrated local heating of the area to be coated, 900 - 1000°F (482 - 538°C)
3. Bring the end of the coil into contact with the work piece, at an angle of 35° from the work surface, with the torch nozzle at 60 -70° pointing in the direction of travel.
4. As the alloy begins to melt, oscillate the torch nozzle from side to side advancing the flame along the alloy, which should be kept in contact with the work surface.Maintain a 3/16" gap between the inner flame coen and the work surface.

**TECHNICAL DATA:**

Macro hardness :55 HRC
Solidus Temperature1: 1080F (582 C)
Liquidus Temperature2: 1120F (604 C)
Max. Temperature Service: 1290F (700C)

| DIAMETER |
|---|
| 5.0mm |
| 6.0mm |
| 8.0mm |

# TeroCote 7888 T

## Carbide-Containing Brazing Alloy In Coil Form

### DESCRIPTION

TeroCote 7888T is a high performance anti-wear alloy. Produced in a single continuous coil from, 7888 T is a flexible continuous cord, comprised of a nickel core wire covered with an elastic binder which contains a high proportion of angular tungsten carbides and alloy powder. The coil is wound on a cellulosic material spool which can be mounted to facilitate use with automated wire feeder systems. 7888T deposits offer an extremely dense mass of ultrahard carbides (80% by weight) in a tough, durable coating with low sensitivity to cracking due to a nickel enhanced matrix.

The deposit structure of 7888T offers demonstrably superior anti-abrasion properties against a wide variety of mineral matter. This is due not only to the extremely high hardness of the carbides, but also to their angular profiles. Unlike spheroidal shapes, carbides with angular profiles resist being ejected from the matrix as it wears around the carbides.The fluxing properties of both the binder and the alloy powder help control oxidation during deposition.For problems of very aggressive fine particle abrasion, 7888T can be applied in conjuction with a Eutalloy® powder such as 10112.

- Heavy-duty protection against abrasion
- Utilizes angular carbides which remain captured in the matrix during service
- Excellent wetting action for smooth and even deposits

### APPLICATIONS

7888T is designed expressly to provide durable protection of large industrial components against wear by abrasion, thereby greatly extending effective service life. It can be applied to a wide variety of ferritic base metals, although not for steels containing high percentages of Manganese (ie. %14 - 12 Mn).

*IMPORTANT: 7888SH is not recommended for use on high manganese, austenitic steel*

- Ripper Teeth= Mining & Earthmoving
- Drill Bits, Stabilizers, = Oil Exploration
- Mixer & Scraper Blades= Brick/Cement making
- Extrusion Press Screws= Mineral Processing
- Conveyor Screws= Iron & Steel
- Decanter Pump Rotors and Sleeves= Agriculture
- Guides & Scraper Blades
- Cutting Edges on Plow Shares

### PROCEDURE FOR USE

DEPOSITION BY OXY/ACETYLENE FLAME:

1. Mechanically clean the area to be coated by grinding or grit blasting.
2. Adjust torch for a neutral to slightly oxidizing flame. Apply a general preheat. °650 - 400F (204 °343 -C), followed by a concentrated local heating of the area to be coated, 900 - 1000°F (482 - 538°C)
3. Bring the end of the coil into contact with the work piece, at an angle of 35° from the work surface, with the torch nozzle at 60 -70° pointing in the direction of travel.
4. As the alloy begins to melt, oscillate the torch nozzle from side to side advancing the flame along the alloy, which should be kept in contact with the work surface.Maintain a 3/16" gap between the inner flame coen and the work surface.

### TECHNICAL DATA:

Typical hardness
Hardness, Matrix:55 HRC
Micro-Hardness, Carbides: K2500
Max. Temperature Service:1300°F (704°C)

| DIAMETER |
|---|
| 5.0mm |
| 6.0mm |
| 8.0mm |

# TeroCote 7888 M

## Carbide Composite Coating: Erosion / Abrasion High Quality Deposit.

TeroCote® 7888 M is a composite wire consisting in a nickel base and a flexible coating containing a mixture of tungsten carbides and a nickel-chromium alloy.
The deposit ensures a very high resistance to abrasion wear even in extreme conditions. The formula optimises the deposit appearance as well as the application of the product.

**Applications**

The metallographic structure of the deposit gives the coating an exceptional erosion and abrasive wear resistance.
TeroCote® 7888 M is recommended for extending the service life of numerous parts, for protective maintenance in a wide range of industrial sectors:

- Oil: drilling tools.
- Brick & cement manufacture.
- Mixer & scraper blades, extrusion screws.
- Mining sectors: conveyor screws, pump rotors.
- Iron and steel: guides and scraper blades.
- Agriculture: ploughshares.

**TECHNICAL DATA:**

Matrix Hardness :40HRC
Tungsten Carbide Hardness : K 2300
Max. Temperature Service: 2012F (1100°C)

| DIAMETER |
|---|
| 5.0mm |
| 6.0mm |
| 8.0mm |

**PROCEDURE FOR USE**

**Preparation**

Remove cracked or damaged material.
Clean the welding areas.
Preheat the workpiece broadly or entirely to -300 °350C.
At the beginning of the coating process, locally increase the preheating temperature to -600 °700C.
During further heating to the working temperature, melt the welding consumable. To improve wetting and uniform distribution of tungsten carbides, keep the consumable in contact with the base material.
When gas welding, set a neutral to reducing flame.
Allow to cool in still air.