

Innovative low temperature hardfacing

TeroCote®

Enduring Performance...

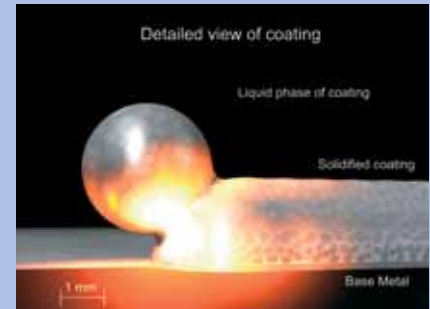
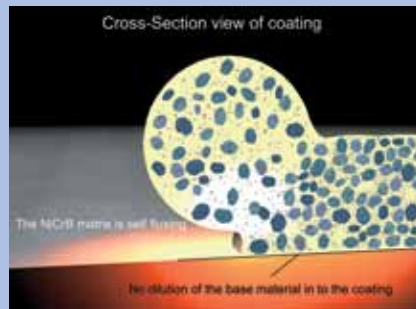


*Stronger, with
Castolin Eutectic*

BRAZING

- High-performance anti-wear products
- Low temperature Ni based alloys require less heat input
- Easy to apply

**Castolin Eutectic®
Eutectic Castolin**



TeroCote® 7888 LT

TeroCote® 7888 LT is a flexible rope coated with tungsten carbides in a nickel based matrix. 7888 LT utilizes the newest advancement in low temperature nickel alloys, and has a fusion temperature of 940°C, which is about 100°C below that of existing products on the market today.

7888 LT (low temperature) is an advance for wear-facing technologies.

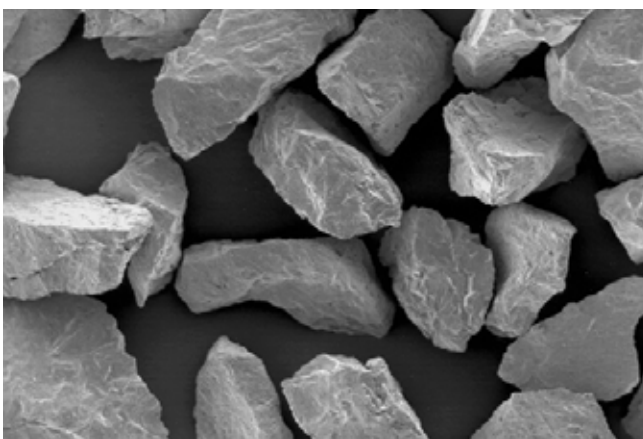
7888 LT combines the excellent wear resistance of 7888 T with a newly developed low temperature nickel alloy. This new alloy flows at 100 °C lower than similar products found on the market today.

Lower temperatures mean less heating, less structural change of the base metals and carbides, less thermal stress and faster application.

7888 LT is very easy to apply and leaves a very smooth, dense and homogeneous coating. By having a smooth surface, less post-brazing grinding will be required (if required at all).

Industry Examples

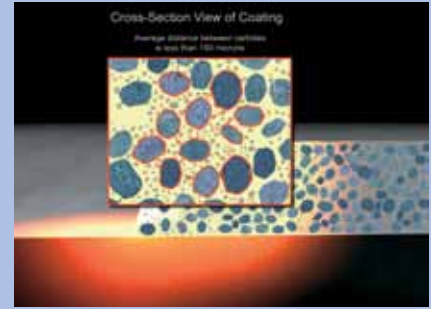
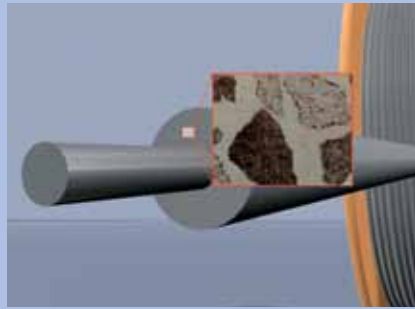
- **Mining and earth moving:** ripper teeth.
- **Oil exploration and extraction:** drill bits, stabilizers.
- **Brick and cement making:** mixer and scraper blades, extrusion press screws.
- **Mineral processing:** conveyor or decanter screws, pump rotors and sleeves.
- **Iron and steel:** guides and scraper blades.
- **Agriculture:** cutting edges on plough shares.



Properties

Hardness, matrix (HV30)	~400
Micro-hardness, carbides (HV1)	>2300
Carbide granulometry - 5,0 mm	0,2 - 0,7
Carbide granulometry - 6,0 mm	5,0
Carbide granulometry - 8,0 mm	1,2
Max. service Temperature (°C)	~700

TeroCote® 7888 LT is the result of several years of development. Independent studies show that the Castolin Eutectic TeroCote® products out perform competitor products by over 50%.



TeroCote® 7888 T

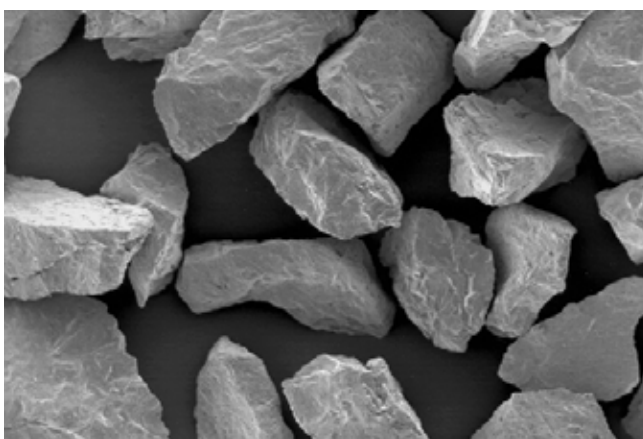
TeroCote® 7888T is a high-performance anti-wear product in the form of a flexible cord, comprising a nickel core wire, covered with an elastic binder containing a mixture of carbides and nickel alloy powder providing effective protection against erosive and abrasive attack by a wide variety of materials.

The matrix composition helps to absorb impact and improves resistance to corrosion, while the angular profile of the finely crystallized carbides makes it very difficult to dislocate them from the matrix.

7888 T deposits an extremely durable protective coating comprising a dense mass of ultra-hard 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.

Industry Examples

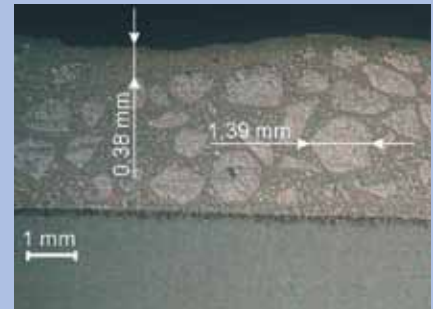
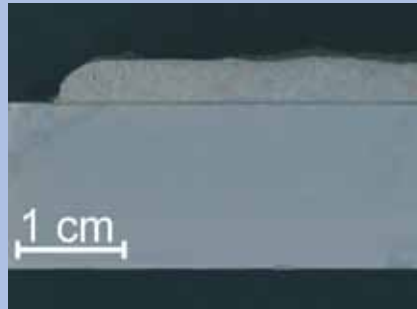
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Properties

Hardness, matrix (HV30)	~400
Micro-hardness, carbides (HV1)	>2300
Carbide granulometry - 5,0 mm	0,2 - 0,7
Carbide granulometry - 6,0 mm	5,0
Carbide granulometry - 8,0 mm	1,2
Max. service Temperature (°C)	~700

TeroCote® 7888 T out performs a “leading competitor” by 52%.



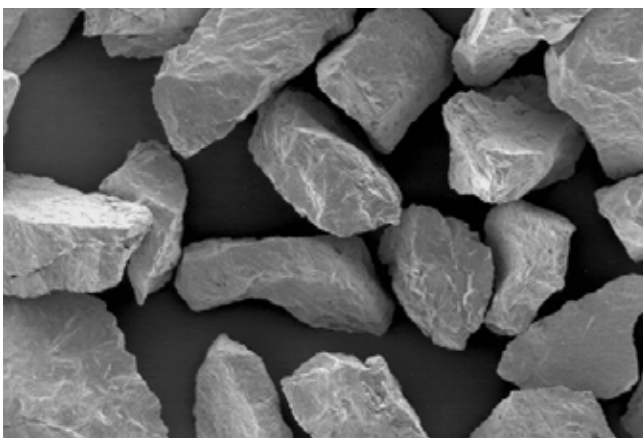
TeroCote® 7620

7620 T is a high-performance anti-wear product in the form of a rod, comprising a nickel rod, covered with an elastic binder containing a mixture of carbides and nickel alloy powder providing effective protection against erosive and abrasive attack by a wide variety of materials.

The matrix composition helps to absorb impact and improves resistance to corrosion, while the angular profile of the finely crystallised carbides makes it very difficult to dislocate them from the matrix.

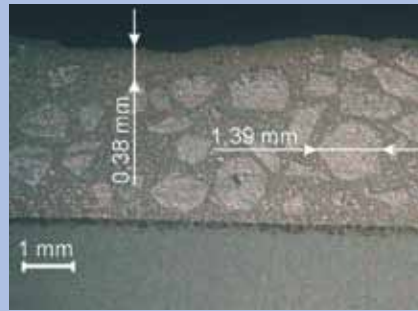
Industry Examples

- **Mining and earth moving:** ripper teeth.
- **Oil exploration and extraction:** drill bits, stabilizers.
- **Brick and 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 plough shares.



Properties

Hardness, matrix (HV30)	~400
Micro-hardness, carbides (HV1)	>2300
Carbide granulometry - 3,5 mm	0,85
Carbide granulometry - 5,0 mm	0,85
Carbide granulometry - 8,0 mm	1,5
Max. service Temperature (°C)	~700



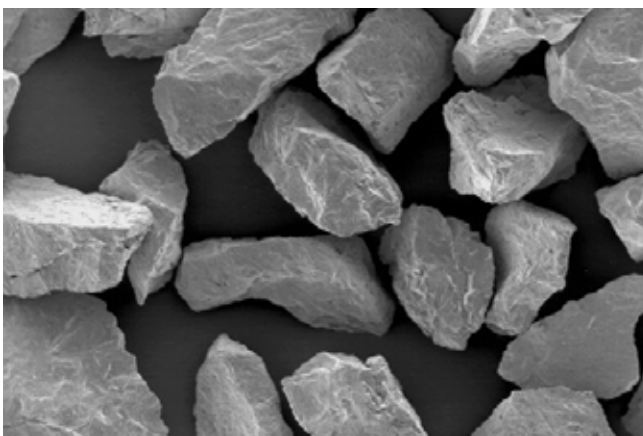
TeroCote® 8811

A carbide containing rod for producing the ultimate in abrasion resistance due to the high concentration of hard, wear resistant carbides within a self fluxing metallic matrix. For use on steels, stainless steel and cast iron components using Oxyacetylene, TIG and Eutalloy processes.

This unique alloy form provides a welded protective coating without dilution by the base metal. High density of carbide hard phases. Sound, crack free deposit. No deformation of the workpiece. Rod identification: Dark grey coating.

Industry Examples

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Properties

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Carbide granulometry - 5,0 mm	0,2 - 0,7
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Carbide granulometry - 8,0 mm	1,5
Max. service Temperature (°C)	~700

History of Castolin Eutectic



1906 Foundation of Castolin in Lausanne, Switzerland by Jean-Pierre Wasserman. His stroke of genius : to discover a way of welding cast iron at low temperature. In the following years, this innovation was further developed for all industrial metals including aluminium alloys.

1940 Foundation of Eutectic Welding Alloys Corporation in New York .

1952 Foundation of Castolin France.

1959 Foundation of Eutectic Japan Ltd.

1962 Foundation of Eutectic India Ltd.

1960's International consolidation under Castolin Eutectic.

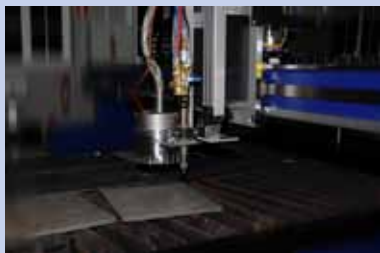
1970's Creation of training centers for Maintenance & Repair technologies.

1978 Establishment of World Head Quarters in St-Sulpice, Switzerland.

2000 Merger with Messer Cutting & Welding and creation of the MEC Group - Messer Eutectic Castolin.

2005 Part of the Messer World.

2006 100 years.



Together with our sister companies, the Messer Group, can offer customers a very powerful range of products and services. Being Part of the Messer World means :

- Investment of over € 420 million
- More than 6,000 motivated employees
- Over 100 factories to meet customer needs
- Technical sales support in over 120 countries
- 2,000 technical sales people in the field with our customers every day



Frost & Sullivan award 2011

Castolin Eutectic received the Frost & Sullivan triple awards in recognition of demonstrated excellence in Customer Service Leadership and Product Market Growth Leadership within the European Repair & Maintenance Welding industry. These awards reflect the close collaboration with our customers, and their satisfaction for more than a century.



Notes

20 horizontal grey bars for taking notes.

Stronger with...
Castolin Eutectic

WEAR & FUSION TECHNOLOGY



Your resource for protection, repair and joining solutions

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