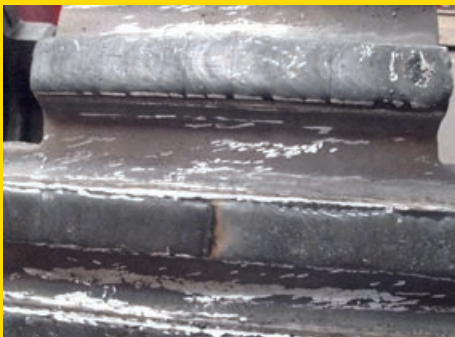


# Dispersion Hardening «DH» Wearfacing Alloy Range



- High performance solutions for hot abrasion / erosion problems.
- Advanced dispersoidal matrix for special resistance to fine erosive particles.
- Better cost/ wear resistance ratio against severe abrasion than conventional high alloyed chromium castings.
- Low heat input for minimal dilution ensuring best possible weld layer properties.

WELDING

## Dispersion Hardening Range “DH”

Dispersion Hardening is the solid state diffusion process in which small, sub-micron, Dispersoid particles of a new phase precipitate in the crystalline matrix to harden the alloy by hindering dislocation movements. The Dispersion Hardening alloys have MESOMORPHOUS characteristics which is an intermediate, hybridstate between Crystalline & Amorphous.



## Reducing costs, a modern day challenge

Why consider the Maintenance Department a department that creates costs and not a department that generates value for the Company?

Why can't the maintenance department actively contribute to a significant reduction in production costs?

The mission of modern companies is to create value; this must be created at different levels, value in the organisation, value to the personnel and value to shareholders.

In the difficult current situation, in many instances, this comes down to a “simple” reduction of costs.

Can this task be carried out without reducing efficiency, performance, production, well-being and the other factors that affect both, equipment and parts as well as the personnel responsible? Clearly not!!

Can this task be carried out at the same time as contributing to the conservation of our environment? Clearly yes!!

## Castolin Eutectic

We are a maintenance by welding organisation that has had an Environmental and Financial outlook for nearly 100 years, every day we are committed to carry on working according to: “Our benefit must be part of your savings”.

This is why our work philosophy is geared towards current priority needs, and in this spirit we are developing our products and activities made available to you through our experienced network of commercial technicians, our engineering service, our Terolink applications database and our Castolab Specialised Workshops.

Our activities today are geared towards collaborating with our customers in the search for solutions for which we will use our customary working method, which has always been aimed towards this goal.

Dispersion Hardening (DH) Range of welding alloys has been developed in accordance to that philosophy and is looking for the best results to generate a “REAL” benefit in technical, commercial and financial departments.

### Eutectrode 6070 N

#### Main Application:

For wearfacing components against abrasion and erosion, especially where both fine and coarse grain mineral particles are present. Especially good when high temperatures are part of the process.

Suitable for a wide range of steels including medium carbon steel, low alloy steels and austenitic manganese steels.

#### Special Features:

- High speed performance electrode with 250% metal recovery.
- Low dilution single pass attains close to maximum hardness.
- Multipass capability for thick coatings.
- Easy striking, restriking, contact welding for anti-wear patterns.
- Ready formation of stress relieving cracks.



- Retains over 1150 HV up to 800°C.

#### Mechanical Properties

Hardness: 920-1110 HV

### EnDOtec DO\*8336

#### Main Application:

Steel, Cement, Waste & Recycling - Transport screws, furnace chutes, exhaust fans, cyclones, conveyors, mixer blades.

#### Special Features:

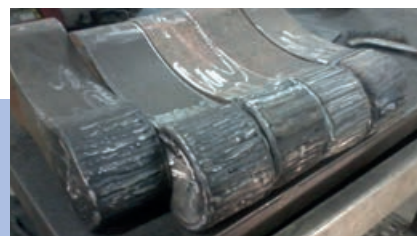
- High temperature oxidation resistance to 850°C.
- Weld deposit exhibits stress relieving microfissures.

- Versatile usage over wide parameter range.
- Faster deposition rate for reduced labour costs.
- Extreme resistance to abrasion, erosion

#### Mechanical Properties

Hardness (one layer) : 70 HRC

Hardness (two layers) : 71 HRC



## Eutectrode 4119 EC

### Main Application:

Designed for protective coatings with extreme resistance to abrasion, erosion combined with moderate shock on carbon, alloy, stainless and cast steels. For sinter plant ventilator fans, agglomeration fans, screws and heads in the ceramics industry

### Special Features:

- High efficiency metal recovery (190%).

- FastSingle, thick passes attain close to maximum hardness.
- Low coefficient of friction without lubrication.
- Better cost/ wear resistance ratio against severe abrasion than conventional chromium castings

### Mechanical Properties

Hardness : 68 - 70 HRC

(Single pass on carbon steel)



## EnDotec DO\*33

### Main Application:

Public works. Brickworks. Quarries. Dredgers. Extruder/press screw segments and pug mill augers. Dust extractors - Hot screens and furnace retorts

### Special Features:

- Better cost/ wear resistance ratio against severe abrasion than conventional chromium castings.
- Exceptional positional weldability.

- Regular bead profile, virtually spatter free.
- High performance solution for hot abrasion / erosion problems. Smooth bead improves resistance to fine erosive particles.
- 70% saving in welding time and in filler metal used because 68 HRC hardness is obtained with one pass.

### Mechanical Properties

Hardness : 68 HRC



## TeroMatec 4395 N

### Main Application:

Specifically developed for outdoor maintenance and repair welding of thick, heavy components where faster weld deposition rates, are required.

Sinter crusher bars, furnace chutes, mixer blades, paddles, scrapers

### Special Features:

- Useful bulk hardness values retained to red heat.
- Ideal choice for fieldwork or on site applications.
- Unique peripheric arc characteristics.

- Core deoxidisers tolerate air currents or draught effects
- Variable electrode stick out capability improves control over heat input, dilution, deposition rate, visibility and access in tight spaces
- No need for costly gas cylinders, regulators or flow meters

### Mechanical Properties

Hardness (one layer) : 69 HRC

Hardness (two layers) : 70 HRC





**Stronger, with  
Castolin Eutectic**



[www.castolin.com](http://www.castolin.com)

Ask for a demonstration from our  
Application Specialists.

