

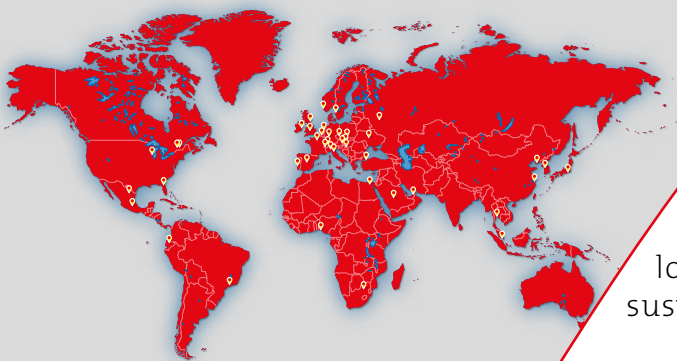


Recycling Industries

Wear management solutions
for the **recycling** industry

Pioneering Industrial Sustainability

www.castolin.com www.eutectic.com



Global Wear Management Network with **Local Support**

Our service centers offer local technical support, while our expertise extends globally.

Our global key industry network combines the resources to solve difficult wear challenges, and our local teams implement the most cost effective and sustainable solutions.



1538
Employees



10
Supply centers



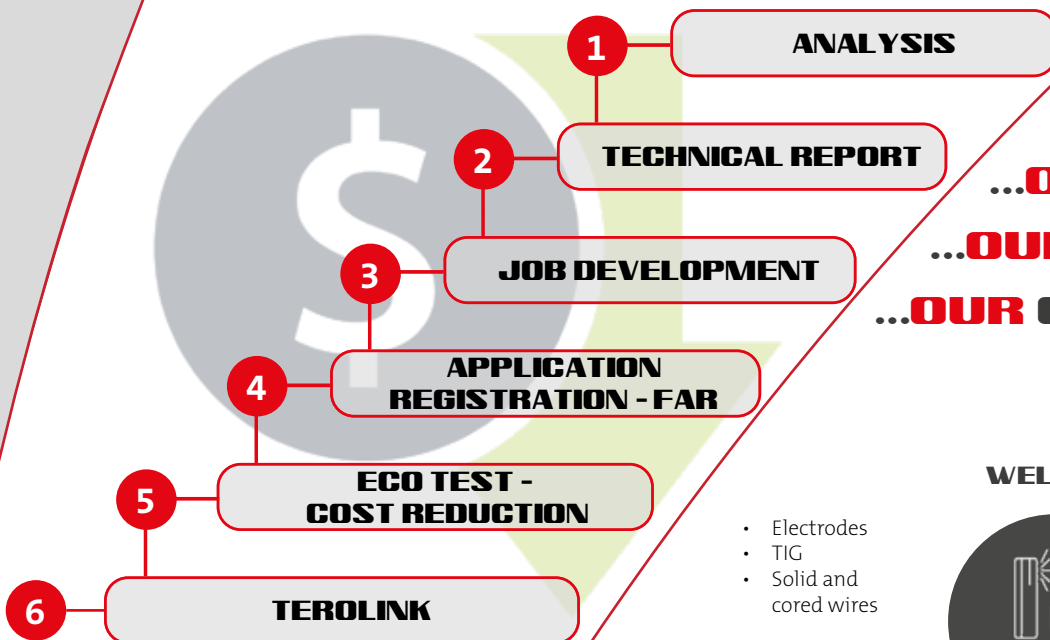
20
Service centers



31
Market centers

PARTNERSHIP PROGRAM

SMART MAINTENANCE AND REPAIR



...OUR SOLUTIONS
...OUR EQUIPMENT
...OUR CONSUMABLES

WELDING

- Electrodes
- TIG
- Solid and cored wires

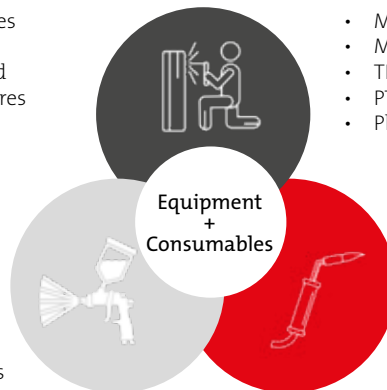
- MMA
- MIG/MAG
- TIG
- PTA
- Plasma cutting

COATING

- Laser Cladding
- PTA
- Arc Spray
- HVOF
- Flame Spray
- Ceramic Polymers

BRAZING

- Fluxes
- Pastes
- Rods
- Torches
- Water-based oxyfuel stations



Sustainable development based on increasing efficiency and reducing costs

For over 100 years, our company has been a pioneer in the development and implementation of innovative solutions to industrial wear. Our technologies help customers to extend service life, minimize inventory, reduce unplanned downtime and increase efficiency.



Services



Welding



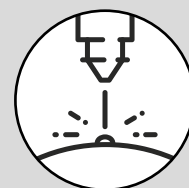
Brazing



Coating



Equipment



Cladding

We have transitioned from being a family owned business into **a global company** while maintaining our industry expertise, people focus and our deep rooted belief in **SUSTAINABILITY**.

SUSTAINABILITY / CARBON FOOTPRINT

SUSTAINABILITY/ CO₂ FOOTPRINT

By giving a second life to wornout damaged industrial components, we contribute to the circular economy and reduce the carbon footprint.



ENERGY SAVING/ COST SAVING

Our surface protection technologies prolong component lifespan, leading to major cost savings because replacement parts don't need to be purchased or stored. Critical industrial components functioning optimally consume less energy.



PRODUCT INNOVATION

We launch products & services with limited impact on the environment and safer for the operators: brazing flame without carbon and UVs, no-CMR brazing fluxes, chrome-free welding wires etc.



OUR COMPANY CULTURE

We will continuously act **ethically** and in a manner that fulfills the expectations of our **environment, customers, employees** and **shareholders**.



Innovation



Trust and Safety



Friendly Working Environment

HYDRAULIC GARBAGE GRAPPLE

1

Grapples suffer great wear issues due to the harsh environment they work in. Abrasion and impact are their worst enemies.



► Our proven applications extend the life of the grapples from 4 to 10 times. More efficient grabbing make the work environment safer.

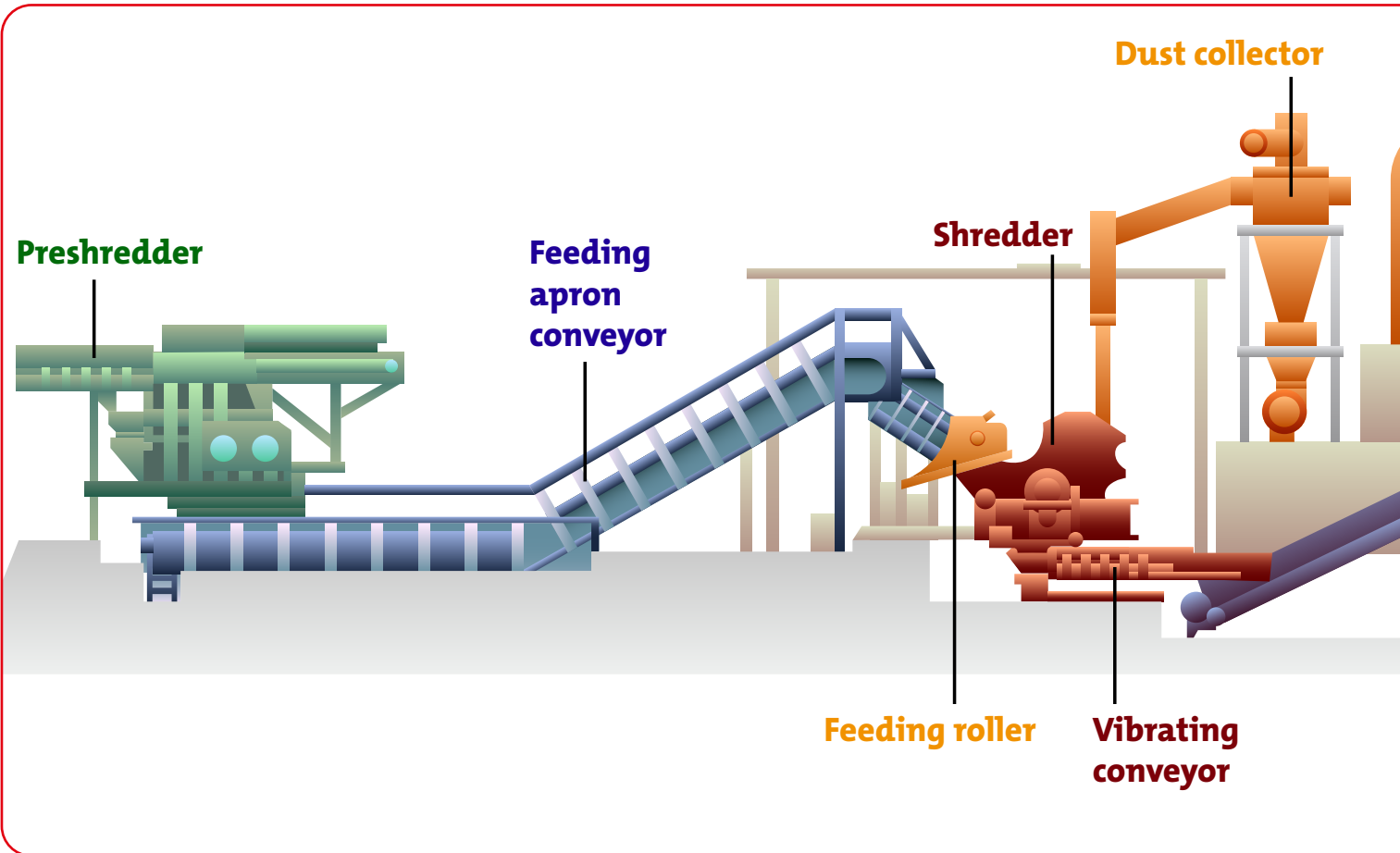
ROTORS

3

The rotors are responsible for the Shredding process. The wear by impact and abrasion creates the need for constant maintenance.



► Our solutions not only repair the damaged teeth but guarantee a substantial increase of the workload of the equipment by 2 to 10 times.



FEEDING CHUTES

2

The constant abrasion of metal against the walls of the chute, produce an extreme wear overtime.



► Reinforcing the chute walls with our CDP solutions has proved to significantly increase the longevity of the equipment.

SHREDDER

4

Shredders are faced with the toughest environment of the line due to high impact, high abrasion and very high temperatures.



► Castolin solutions, both curative and preventive prove to extend the service life of this important piece of equipment.

CYCLONES

5

The dust particles in the dust produce huge wear by erosion in specific parts of the cyclones.



► The cyclones fitted with our CDP solutions proved very effective against erosion increasing the life of the equipment substantially.

CASINGS

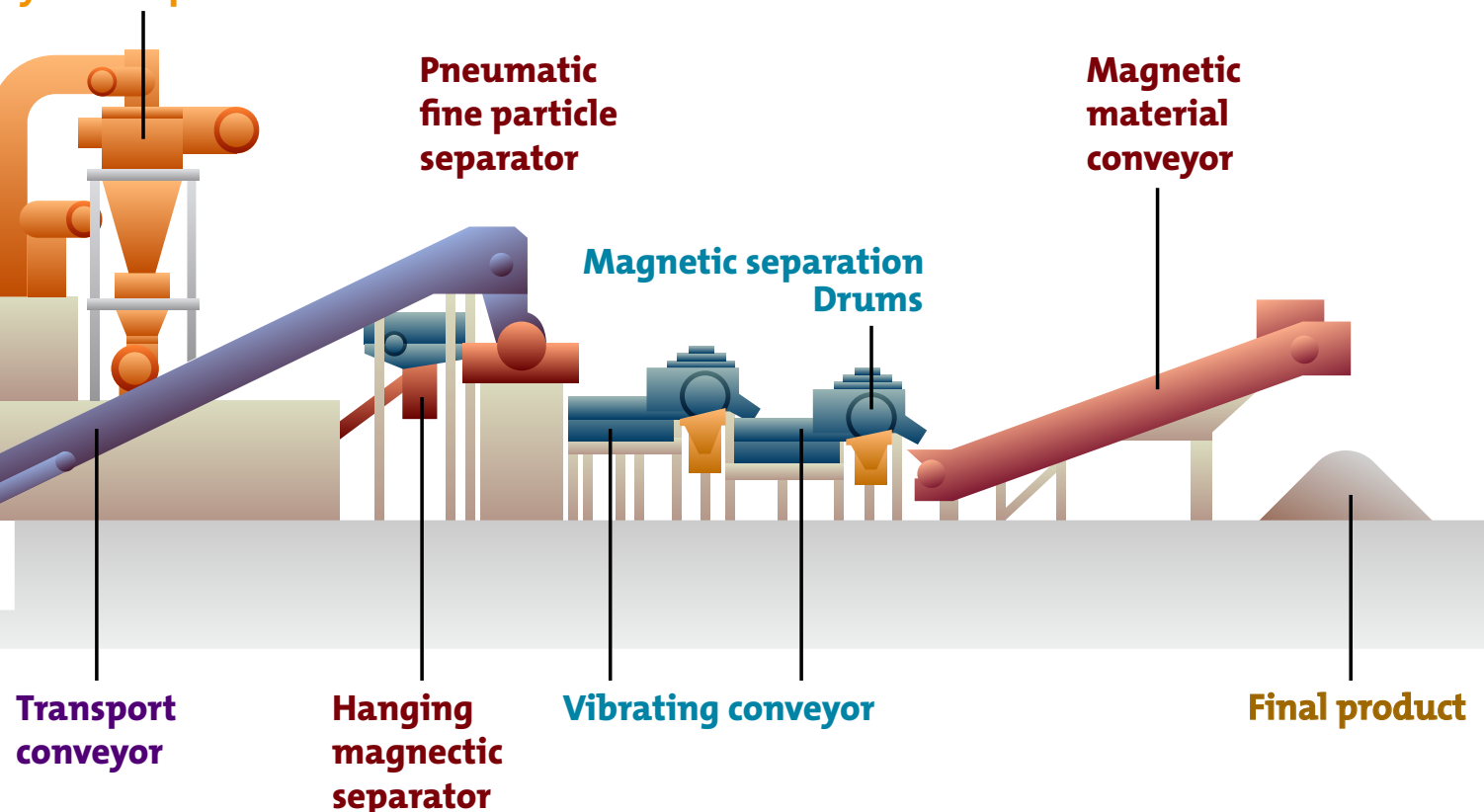
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Every casing in the line from which drum casings are not exempt, are subject to wear by abrasion and impact. Our applications help extend the live of this piece of equipment.



► Various applications have proven very effective preventing early wear of the equipment. The increase in the lifetime of the equipment exceeded 5 to 6 times.

Cyclone separator



PIPING

6

The recycling industry consumes a big deal if pipping. This pipes are exposed to erosion, specially at the corners or elbows.



► Our CastoTube solutions have proven very effective preventing erosion and increasing the lifespan of the equipment.

PUMPS

8

Pumps and ventilators are subjected to a great amount of erosion and suffer from intensive wear.



► Our MeCaTec and MeCaWear solutions are proven to work against corrosion and erosion increasing the lifespan of the pump.

Sustainability is our DNA

Over the course of 100 years, we have been pioneering sustainability through, different welding technologies, challenging ourselves to extend useful life, reduce maintenance costs and increase industrial productivity, lowering consequently, the CO₂ footprint. Always focusing on our deep-rooted belief in sustainable business practices.



Product range of common solutions

Stick electrodes	Comments	Flux cored wires
6327 XHD	Perfect balanced resistance against impact & abrasion involving high stresses, even at high temperatures.	DO*327
6088	Composite Ni base WC. Superior resistance to combined severe Impact, Pressure, Abrasion, Corrosion & Temperature.	DO*11 DO*611X
2230 XHD	Exceptional mechanical properties for Cast Iron welding and joining with steels and other alloys.	DO*23
XHD 646	Work hardening, high toughness and ductility, typical alloy for buffer layers and joining.	DO*02
Xuper 5006 N	Intensive abrasive resistance with moderate impact and corrosion. Good hardness retention until 650 °C.	DO*31
701	Universal wear protection alloys (superior 600 HB type). SAFE-HARD Cr and Ni free for safer use and higher protection.	SAFE-HARD 600 DO*351
2222XN	High integrity joints all steel grades, specially when big section parts are involved. Maximum Safety Marging.	DO*622
4914	Composite alloys Fe base. High concentration of WC. Maximized abrasion resistance.	DO*48
-	Ultra hard nano scale structure for exceptional performance against severe abrasion & erosion at high temperature.	DO*390
6710 XHD	High efficiency electrode. Premium resistance to abrasion under pressure and moderate impact.	-
6868 XHD 690 SF	Overlaying and repairing of dissimilar and difficult to weld steels. Remarkable mechanical properties and crack resistance.	-
-	Good resistance to fine particles pure abrasion and erosion. High hardness in only one pass.	DO*30

CastoDur Diamond Plates® – Wearfaced Parts and Solutions

CDP® – Weld Cladded Range

XuperWave 5	Extreme abrasion and erosion, working temperature up to 450°C
4666	Abrasion and erosion combined with little impact, working temperature up to 450°C
4623i	Abrasion combined with extreme impact, working temperature up to 150°C
4624	Abrasion combined with moderate impact, working temperature up to 250°C
3952	Abrasion and erosion, working temperature up to 600°C

CDP® – Powder Plate Range

112	Abrasion and erosion, working temperature up to 600°C.
496	Abrasion and adhesion – very low coefficient of friction

CDP® – Laser Plate Range

LC8	Extreme erosion and abrasion
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MeCaTec – Ceramic Surfacing Polymers

MeCaFix	Easy and fast repair compounds for reconstruction, repair and bonding
MeCaCorr	Coatings against corrosion and caking - fan wheels, chutes etc.
MeCaWear	Abrasion and erosion resistant polymer coatings

Equipment	Type	Process	Mains connection	Welding current	Technology	Kg	L x B x H
AirJet 1100	Plasmacutting		16A 3x400V	100A	Inverter	24,0	595 x 185 x 390 mm
PowerMax 4.0	MMA		16A 1x230V	150A	Inverter	6,3	365 x 135 x 275 mm
CastoTIG 2302 AC/DC	TIG		16A 1x230V	230A	Inverter	8,1	480 x 160 x 320 mm
XuperMig 3000	MIG/MAG		16A 3x400V	300A	Inverter	24,0	560 x 280 x 390 mm

The 3R+1 Initiative

The 3R Initiative aims to promote the „3Rs“ (**reduce, reuse and recycle**) globally so as to build a sound-material-cycle society through the effective use of resources and materials. But we would like to add the 4th one: **REPAIR**

The principle of reducing waste, reusing and recycling resources and products is often called the „3Rs.“ Reducing means choosing to use things with care to reduce the amount of waste generated. Reusing involves the repeated use of items or parts of items which still have usable aspects. Recycling means the use of waste itself as resources. Waste minimization can be achieved in an efficient way by focusing primarily on the first of the 3Rs, „reduce,“ followed by „reuse“ and then „recycle.“



Wear management solutions for the **RECYCLING** industry

Castolin Eutectic offers tailor-made wear protection solutions for a wide range of components from the recycling industry. At any time, our knowledgeable and helpful service team will be delighted to provide you advice and suggest the best product and application technique. For the unique demands of our customers we divide the recycling industry into the following groups to always create individualized solutions:



Ferrous Metals



Non-Ferrous Metals



Glass



Plastics



Tires & Rubber



Textiles



E-Scrap

CDP® CastoDur Diamond Plates®

Wearfaced Parts and Solutions

Active protection against abrasion and erosion

- ▶ Reduce maintenance costs thanks to the extended service life cycles of protected surfaces
- ▶ Increase plant availability by means of longer maintenance intervals for heavily loaded surfaces
- ▶ Conserve resources and protect the environment with exchangeable liners

CastoTubes®

Preventive protection against severe abrasion and erosion

Small diameter, seamless CastoTubes for superior industrial performance:

- ▶ Extremely wear resistant, lightweight and easy-to-join
- ▶ Highly cost effective for rapid replacement of worn tubes
- ▶ Increase service life, plant availability and process productivity

MeCaTeC® Ceramic Surfacing Polymers

MeCaFix

Patch and go repair compounds for rebuild, repair and bonding

- ▶ Environmentally sustainable coatings
- ▶ Long term surface protection for critical industrial assets
- ▶ Solvent-free (100% solids), zero VOCs

MeCaWear

Abrasion and erosion resistant polymer coatings and grout

- ▶ Easy to apply with trowel, brush, MeCaSpray gun, or airless spray
- ▶ **Repair · Rebuild · Protect**

MeCaCorr

Corrosion resistant barrier coatings for immersion and chemical linings

*Pioneering
Industrial Sustainability*



Your resource for protection, repair and joining solutions

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