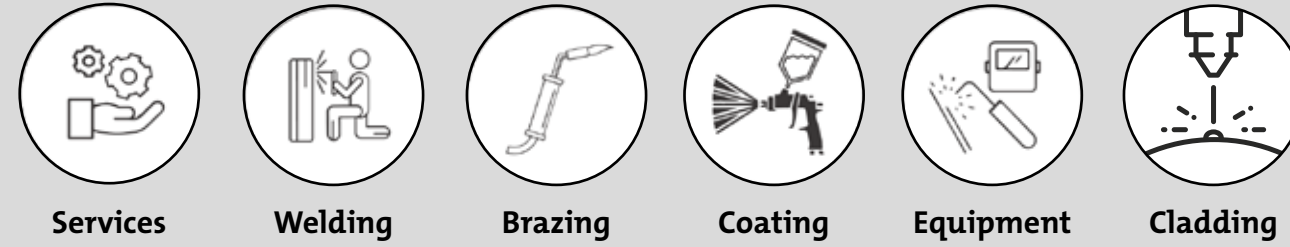


Sustainable development based on increasing efficiency and reducing costs

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

Pioneering Industrial Sustainability



Hydropower

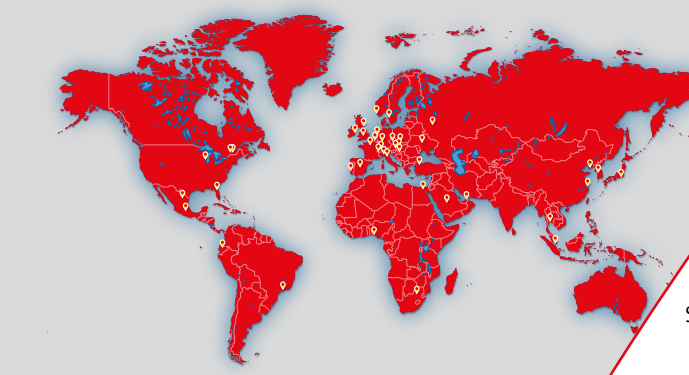
Wear management solutions for the **hydropower** industry



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



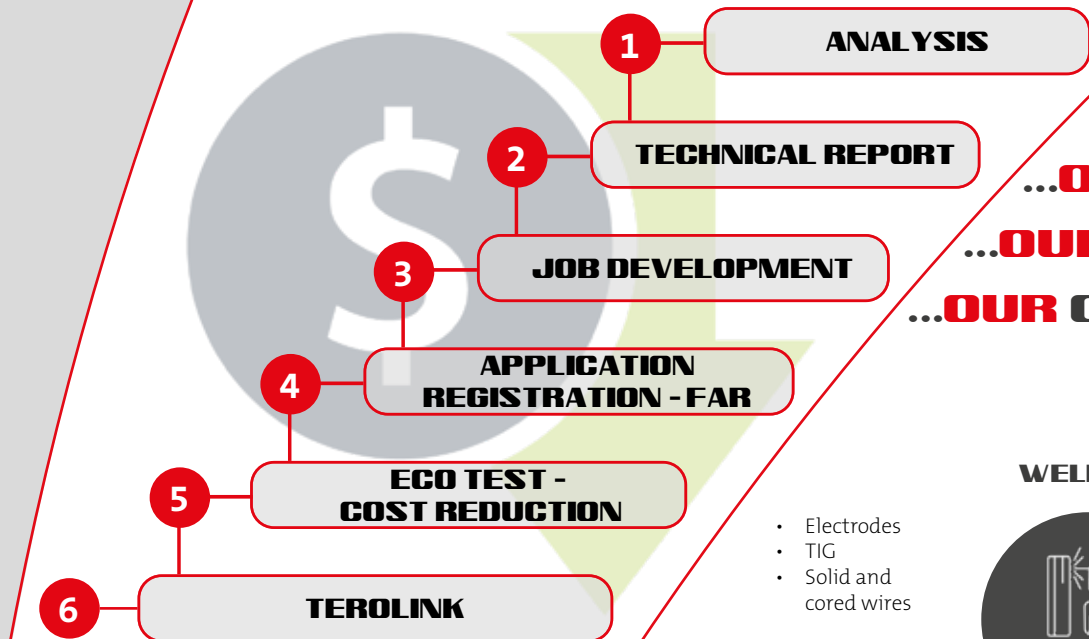
20
Service centers



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

Your resource for protection, repair and joining solutions

Statement of Liability: Due to variations inherent in specific applications, the technical information contained herein, including any information as to suggested product applications or results, is presented without representation or warranty, expressed or implied. Without limitation, there are no warranties of merchantability or of fitness for a particular purpose. Each process and application must be fully evaluated by the user in all respects, including suitability, compliance with applicable law and non-infringement of the rights of others, and Castolin Eutectic and its affiliates shall have no liability in respect thereof.

EN 06-2024

Pioneering Industrial Sustainability

www.castolin.com www.eutectic.com



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 print. Always focusing on our deep-rooted belief in sustainable business practices.



Product range of common solutions

Stick electrodes	Comments	Wires
CaviTec GMA	Uniquely Engineered Electrodes and Wires Designed to Resist Severe Cavitation-Erosion Damage	CaviTec SMA
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
2222XN	High integrity joints all steel grades, specially when big section parts are involved. Maximum Safety Marging.	DO*622
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). SafeHard Cr and Ni free for safer use and higher protection.	SafeHard 600 DO*351
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 resistant against abrasion and erosion, working temperature up to 450°C
4666	Resistant against abrasion and erosion combined with little impact, working temperature up to 450°C
4623i	Resistant against abrasion combined with extreme impact, working temperature up to 150°C
4624	Resistant against abrasion combined with moderate impact, working temperature up to 250°C
3952	Resistant against 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 resistant against erosion and abrasion

MeCaTec – Ceramic Surfacing Polymers	
MeCaFix 120	Low temperature cure, stainless steel and titanium filled metallic repair putty.
MeCaWear A5	High performance paste grade polymer coating with fiber.
MeCaWear A7	Wear Protection Compound with Kevlar®
MeCaWear 306	Silicon carbide based ceramic polymer coating with paint like viscosity.
MeCaWear 350	Ceramic epoxy composite coating for Severe Erosion at Elevated Temperatures.
MeCaWear 706	Sprayable two component epoxy based Ceramic Surface Coating
MeCaCorr 710	Fluid ceramic polymer coating for Industrial Corrosion Resistance.
MeCaCorr 780	Ceramic hybrid epoxy coating to provide a thermally stable high performance polymer matrix.

For further details contact your Castolin Eutectic application specialist

VALVE RING RESTORATION 4

Valve rings suffer from heavy corrosion and lose their efficiency.



► Our specific corrosion applications repair and protect these pieces of equipment increasing their efficient work life.

RUNNER RING REPAIR 3

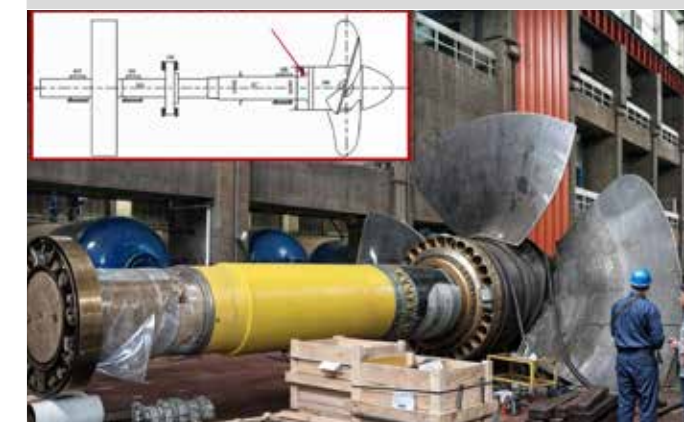
The abrasive conditions, impacts and pressure, causes extreme wear at the blades.



► Our specific applications make the reconstruction of complex pieces possible.

TURBINE SHAFT CRACK REPAIR 2

The constant use causes structural damage in this big turbine pieces.



► Our applications make possible the reuse and restauration of this shafts In Situ. Decreasing substantially the stoping time.

VALVE SPINDELS 1

Spindles help opening and closing valves and suffer from constant wear.



► Castolin Eutectic solutions make possible the reuse of such important piece of equipment.

TURBINE CASING RESTORATION AND PROTECTION 5

Abrasion in turbine casings is primarily caused by the movement of water containing sediments through the turbine system.



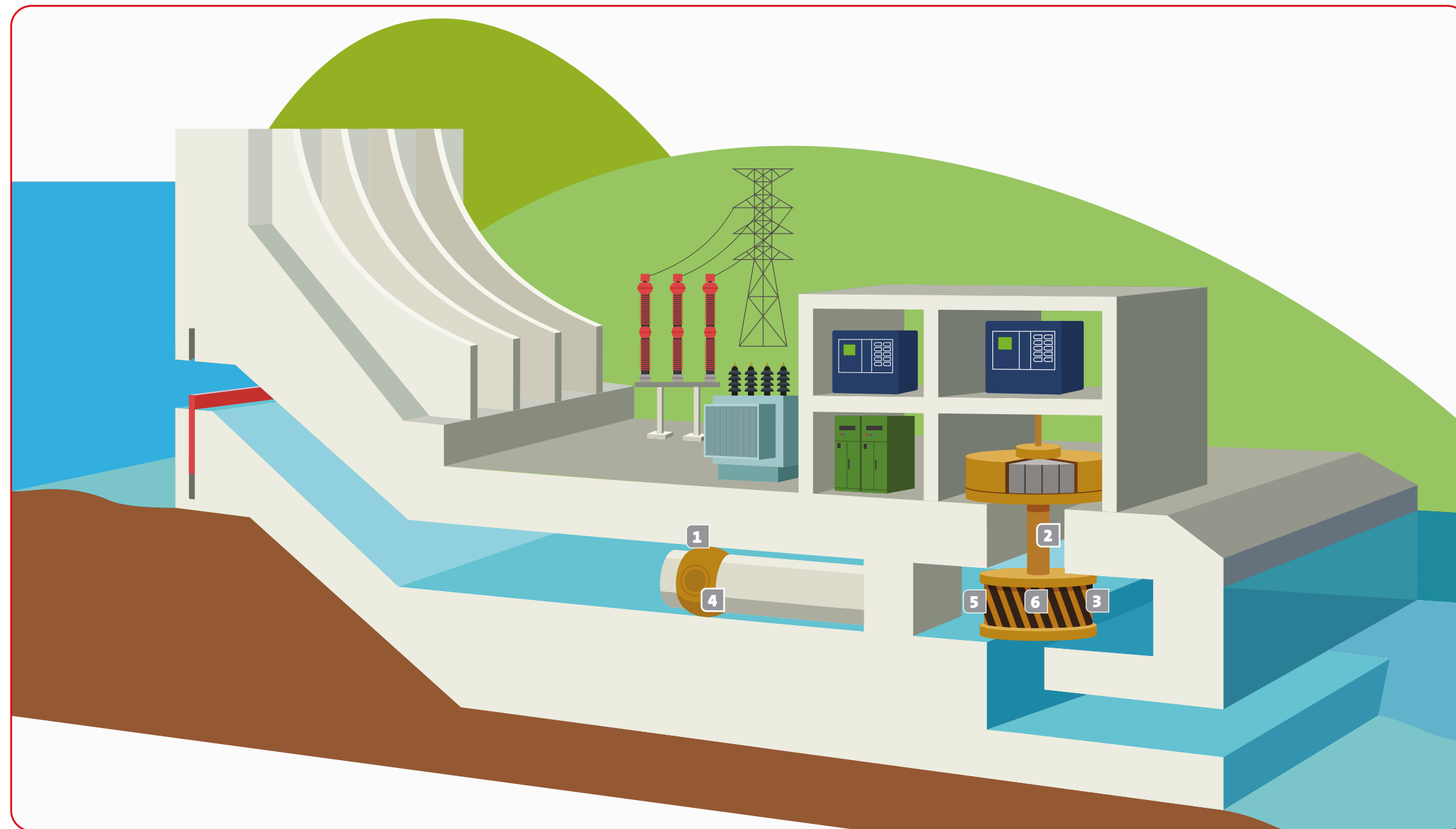
► The extreme wear due to abrasion in the casings can be restored and protected with our specific Castolin Eutectic applications.

BLADE REPAIR AND RECONSTRUCTION 6

Inefficiencies due to cavitation wear, is one of the biggest issues that we can find in the Hydropower industry.



► Castolin Eutectic applications with CaviTec solutions, efficiently and cost effectively repair these wear problems.



CaviTec

Uniquely Engineered Electrodes (SMA) and Wires (GMA)
Designed to Resist Severe Cavitation-Erosion Damage

CaviTec, with its enhanced properties, is an austenitic-type alloy containing controlled amounts of chromium, cobalt, silicon and manganese. The finely controlled balance of these elements significantly improves strain-hardening and shock-dampening properties. The result: improved cavitation-erosion resistance.

CaviTec is proven to last up to six times longer than traditional stainless steel overlays. This high strain, work-hardening austenitic stainless steel delivers maximum protection for areas needing frequent or major repairs. CaviTec's all position weldability also makes controlled overlapping and profiling very easy to do.

Essentially an austenitic-γ phase structure. This metastable phase transforms under cyclical stress to an α-martensitic phase which results in a very fine deformation twinning.

TYPICAL APPLICATIONS

- Francis turbines
- Kaplan turbines
- Propeller turbines
- Bulb turbines
- Draft tubes
- Impellers
- Pumps & valves
- Wicket gates

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

- | | | |
|---|---|---|
| <p>MeCaFix</p> <p>Patch and go repair compounds for rebuild, repair and bonding</p> <ul style="list-style-type: none"> ► Environmentally sustainable coatings ► Long term surface protection for critical industrial assets ► Solvent-free (100% solids), zero VOCs | <p>MeCaWear</p> <p>Abrasion and erosion resistant polymer coatings and grout</p> <ul style="list-style-type: none"> ► Easy to apply with trowel, brush, MeCaSpray gun, or airless spray | <p>MeCaCorr</p> <p>Corrosion resistant barrier coatings for immersion and chemical linings</p> <ul style="list-style-type: none"> ► Repair · Rebuild · Protect |
|---|---|---|