



# MAINTAINING ASSET INTEGRITY IN THE POWER INDUSTRY

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Belzona Protective Coatings and Engineering Composites

## OUR HISTORY

Established in 1952, Belzona pioneered innovative polymer technology that revolutionised industrial repair and maintenance procedures. Today, Belzona is the world leader in the supply of polymer repair composites and industrial protective coatings and is continuously developing solutions to meet the ever increasing market demand.



Durable coatings for corrosion, erosion and cavitation protection



Long-lasting abrasion resistant linings



Cold applied composites for bonding, shimming and rebuilding



Chemically resistant mortars and coatings

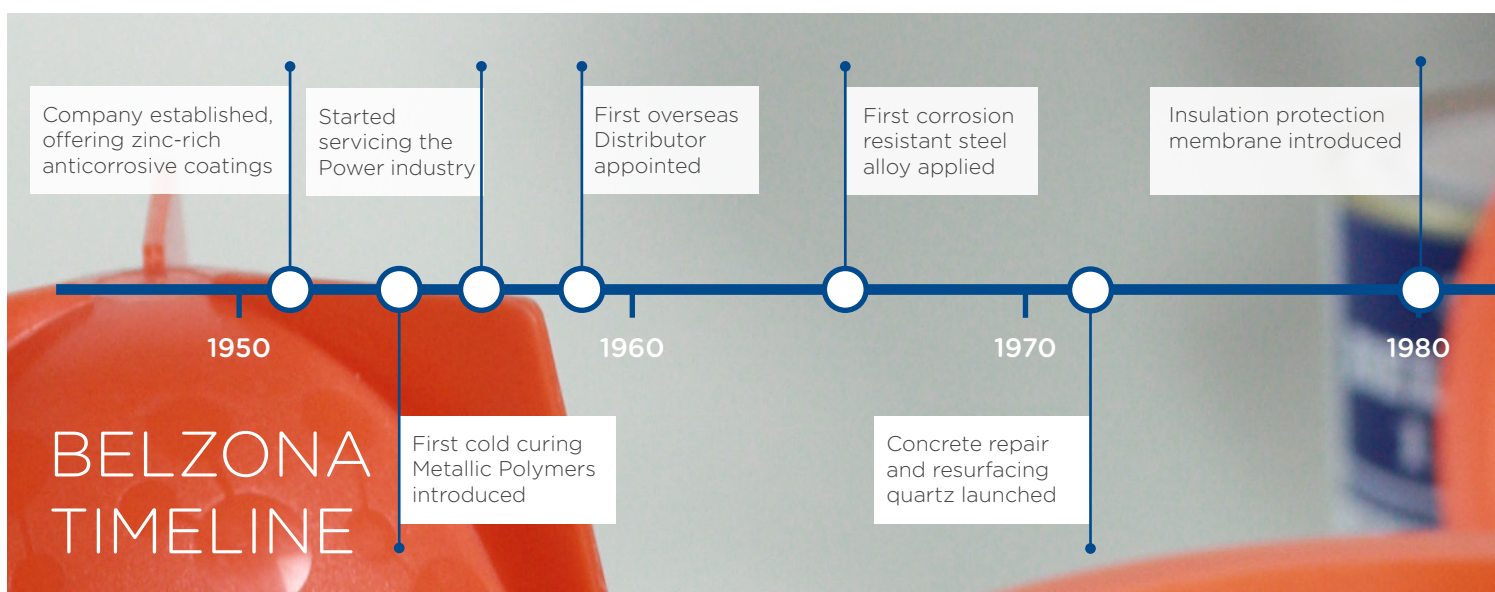
## ENSURING LONG-LASTING PERFORMANCE

Erosion-corrosion, cavitation, aggressive chemicals and physical attack can be detrimental to equipment and structures critical to the Power industry. Elevated temperature and pressure levels commonly exacerbate the problem and necessitate high performance repair and protective materials with a proven track record.

Whether generating power by nuclear, fossil or renewable means or distributing energy to end users, Belzona works with its clients to provide a unique solution to fit their specific needs. Our cost effective solutions minimise downtime, labour and equipment replacement costs and will increase the performance and reliability of the plant to ensure environmental compliance. Belzona offers innovative routine or unexpected maintenance solutions for today's power plants which help to:

- Reduce capital expenditure
- Lower maintenance costs
- Improve efficiency and safety
- Reduce downtime
- Simplify maintenance procedures
- Extend machinery and equipment life

Our range of coatings and repair composites has been carefully formulated to address the various issues faced by the Power industry. We take pride in the quality of our materials as well as the comprehensive training and field support we provide to ensure the highest possible application standards.



# GLOBAL PRESENCE - LOCAL SUPPORT

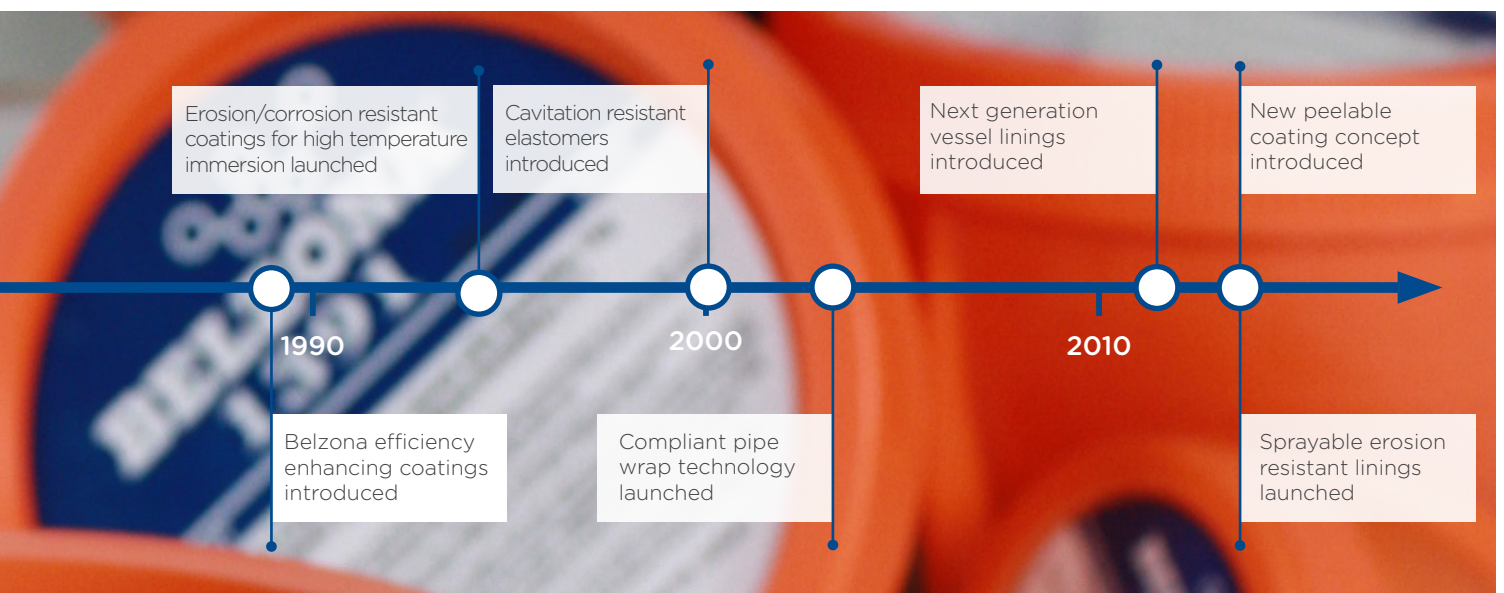
Belzona has over 140 Distributors in more than 120 countries ensuring not only the availability of Belzona materials, but also specification support, project management, application and supervision services. Distributorships and their teams are supported by Belzona Corporate offices in Europe, North America and Asia.

To find your local Belzona representative visit [www.belzona.com/find](http://www.belzona.com/find)

**CORPORATE OFFICES**

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Our expert Technical Consultants with years of field experience and advanced training are available to assist you every step of the way to: diagnose the problem, discuss material selection options, recommend a solution and provide on-site application support.



# INTERNAL SURFACE PROTECTION OF FLUID HANDLING EQUIPMENT

Cold-applied repair composites and protective linings for erosion-corrosion environments

Aggressive erosion-corrosion of fluid handling equipment can lead to a reduction in the hydraulic efficiency of cooling water systems. Belzona solutions eliminate corrosion by isolating the metal from the environment and can also reduce the effects of cavitation and erosion by utilising high performance repair composites and protective coatings. These solutions increase efficiency and asset life and simultaneously time lower maintenance costs. In-situ application and fast turnaround ensures that downtime can be minimised.

## PUMPS – PROVEN LONG-TERM PROTECTION

Pump deterioration can lead to decreased pumping efficiency, higher energy consumption and eventual costly part replacement. Pitting, worn wear ring clearances as well as thin-wall and through-wall casing defects can be rebuilt using cold-applied paste grade composites which provide long-term corrosion and erosion resistance.

After the surface profile has been rebuilt, the pump internal areas can be protected for the long term against the effects of erosion-corrosion with a Belzona 1300 Series coating. Pumping efficiency can be restored and enhanced with the use of a hydrophobic smooth lining. Belzona 1341 (Supermetalglide) has demonstrated efficiency increases of up to 7% on new equipment and up to 20% on refurbished assets.

For more information on Belzona solutions for pumps view a 3D map on [belzona.com/maps/pumps](http://belzona.com/maps/pumps)

## COOLING TOWER BASINS

Commonly, cooling tower basins are constructed from steel or concrete and, over time, suffer from general corrosion. The water treatment chemicals used to prevent scale and fouling further accelerate corrosion rates. Corrosion of the hot well and sump at the base of the tower is a common problem which can be prevented with Belzona.

Belzona 5800 Series coatings are specifically designed to be suitable for continuous immersion in aqueous solutions such as cooling water. These materials will also continue to provide protection even if the water chemistry is seriously compromised.



Video: Pump repair



Erosion on internal surfaces of pump



Pump rebuilt and coated



Cavitated impeller



Damaged areas rebuilt



Efficiency coating



Corrosion damage to basin



Basin protected

## HEAT EXCHANGER AND CONDENSER REPAIR AND PROTECTION

When exposed to an electrolytic solution, galvanic corrosion can occur at the interface of the tube and the tube sheet. Belzona materials halt galvanic corrosion, preventing continuing metal loss, and offer excellent erosion and chemical resistance. This eliminates the need for part replacement and significantly reduces maintenance expenses. A Belzona 1100 Series rebuilding metal can be used to rapidly repair and rebuild damaged tube sheets in situ, prior to the application of a long-lasting protective coating.



*Corroded tube sheet*

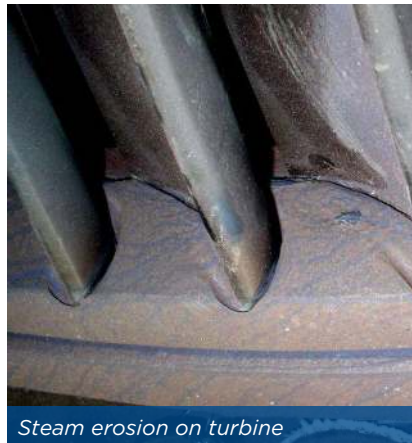


*Corrosion damage rebuilt*

In order to prevent galvanic corrosion, new heat exchangers can be protected with a Belzona 1300 Series coating, which will isolate the dissimilar metals thus reducing expenses associated with repairs or replacement.

## STEAM TURBINE PROTECTION

Despite their importance, steam turbines are often condemned due to operating inefficiency or rising vibration levels. In cases where evidence of steam erosion-corrosion is visible, a Belzona solution can be utilised to provide a long-term repair. Turbine diaphragms, flanged joints and rotors can be repaired and protected using Belzona 1100 Series rebuilding composites and Belzona 1300 Series coatings. Our solutions offer exceptional continual wear resistance whilst demonstrating excellent erosion-corrosion protection. By utilising a Belzona solution, steam turbine operators can expect significant cost savings when compared to equipment replacement.



*Steam erosion on turbine*



*Repaired turbine diaphragm*

## PIPEWORK AND VALVE PROTECTION

Common causes of damage and deterioration to pipes, valves and fittings can include impact and frost damage, corrosion, erosion and chemical attack. Belzona provides a wide range of cold-curing repair composites and epoxy-based immersion coatings specifically designed to offer outstanding erosion and corrosion protection coupled with excellent chemical resistance.

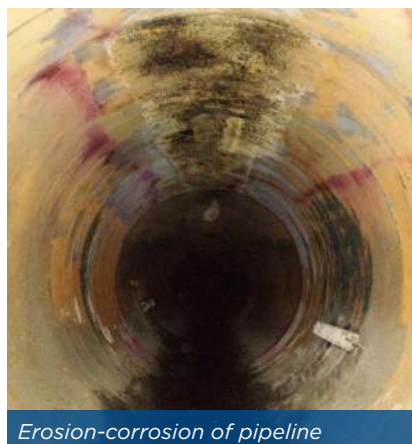


*Erosion-corrosion on valve body*



*Corrosion resistant coating applied*

Belzona pioneered a spray-friendly pipe lining system that offers outstanding erosion-corrosion protection. The substitution of hard ceramic fillers for a thermoplastic filler blend ensures there is very little wear spray equipment. These linings allow for in-situ spin spray applications at wet film thickness over 1,200 microns without sagging, effectively covering girth welds and joints in a single coat.



*Erosion-corrosion of pipeline*



*Belzona lining applied*

# EXTERNAL CORROSION REPAIR AND PROTECTION

Repair composites and protective coatings for corrosive environments

For over 60 years, Belzona has pioneered the design and manufacture of materials to restore, protect and reinforce pipes, tanks and other critical equipment from the effects of external corrosion and environmental damage. Utilising a high quality Belzona material will ensure the long-term integrity of the repair.

## FLANGE PROTECTION

Repairing flange crevice corrosion can be a very costly exercise and common preventative measures, in most cases, are not 'inspection friendly'. Belzona's encapsulating membrane system seals bolted flange connections preventing corrosion. The system includes a corrosion inhibitor and is designed to allow for periodic inspection, where the flexible protection can be cut, peeled back and then easily resealed. To maintain safety, the system is hand applied, cures at ambient temperatures and can resist common corrosive media.

For more information visit [belzona.com/3412](http://belzona.com/3412)



Severely corroded pipe



Belzona wrap applied



Corroded flange



Coating applied



Inspection

## PIPE REPAIRS

Thin-wall and through-wall defects caused by external corrosion can be repaired using a Belzona wrap system or a simple cold plate bonding technique.

Applied at ambient temperatures, Belzona 1100 Series rebuilding metals strongly adhere to the substrate. Design and maintenance scenarios that would historically involve hot work can be completed with the use of polymeric cold bonding composites that add structural strength to the pipe. This technology is applied and cures at ambient temperatures, thus improving safety and reducing downtime.

A wrap system is composed of a reinforcement sheet and a Belzona composite material, tailored to the asset's performance criteria, such as presence of contaminants, operating temperature and pressure levels amongst others. Following almost five decades of pipe wrap applications, Belzona SuperWrap II was introduced to repair corroded, weakened and holed pipe and tank walls. This system is compliant to ASME PCC2 Article 4.1 and ISO/TS 24817.

For more information, read In Focus: Pipe Wraps on [belzona.com/if/wraps](http://belzona.com/if/wraps) and In Focus: Cold Bonding on [belzona.com/if/bonding](http://belzona.com/if/bonding)



Liquid transfer pipes



Leaking pipe



Steel plate bonded



Video: SuperWrap II

Belzona SuperWrap II compliant to ASME PCC2 Article 4.1 and ISO/TS 24817

## CUI REPAIRS AND INSULATION PROTECTION

Corrosion under insulation progresses at an accelerated rate and can remain undetected for long periods of time. Taking affected parts of the pipework out of service for repairs or replacement can, in turn, lead to high costs and lengthy downtime. To address this problem, in the late 1990s Belzona formulated a series of heat activated repair composites and coatings that facilitate on-line repair and protection. These materials adhere exceptionally well to hot surfaces and penetrate deep into the substrate, eliminating the need for an angular blast profile prior to application.

Simple manual surface preparation and brush application to on-line equipment have inspired the use of Belzona heat activated materials to combat CUI globally. Insulation can then be sealed with a breathable membrane to prevent further liquid permeation. The Belzona membrane can be easily cut open for localised inspection and resealed with little impact on the process.

For more information visit [belzona.com/cui](http://belzona.com/cui)

## TRANSFORMER REPAIR AND MAINTENANCE

Transformer leaks are commonly caused by degrading gaskets or holing as a result of corrosion and impact in the radiator fins or steel tanks. Often these leaks present as slow drips but, over time, large volumes of oil can be lost, spilling hundreds of gallons of mineral oil into the environment. If a failure like this occurs it can cause the transformer to short circuit and result in health and safety concerns. These dangers, coupled with the transformers' isolated locations, make inspection, repair and maintenance a major challenge.

By utilising a Belzona 1200 Series emergency rebuilding paste grade material, repairs can be undertaken quickly and in situ without the need to drain the transformer oil.

Surface-tolerant, fast-curing materials such as Belzona 1212 will bond strongly to oily and wet metal surfaces. These cold-applied materials eliminate the need for hot work and have been designed to be easy and safe to use.

For more information visit [belzona.com/eds](http://belzona.com/eds)



CUI coating



Insulation protected



8 years in service



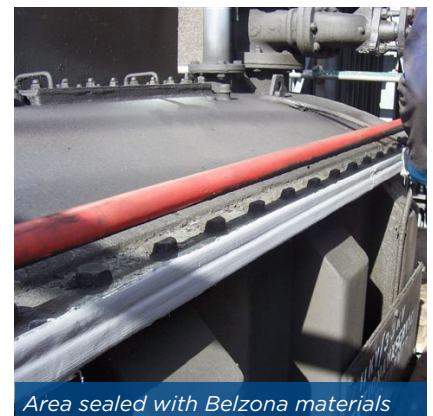
Transformer leaking oil from cracks



Leak repaired with plate bonding



Leaking flange on transformer



Area sealed with Belzona materials



Video: Transformer oil leak repair



## MAINTENANCE OF COOLING TOWER FAN BLADES

Cooling tower fan blades commonly suffer from erosion, corrosion, impingement and UV degradation. On leading edges this can reduce the overall efficiency and operation of the cooling system, raising concerns over blade replacement.

Belzona erosion and corrosion resistant paste grade materials and coatings are extensively used by power plant engineers to repair, protect and even increase the efficiency of damaged fan blades. After rebuilding the leading edge profile with a paste grade material for pit filling or by cold bonding a steel plate where the damage is more extended, a Belzona 1300 Series erosion resistant coating is applied to provide long-term protection. A Belzona 5000 Series coating can be used on the blade body to protect it against corrosion and environmental degradation.



Erosion of fan blades



Fan blades rebuilt and coated



Corroded tank base



Base sealed with a Belzona coating

## PROTECTION OF STORAGE TANKS

Sealant failure, adverse weather conditions or condensation can lead to corrosion of the tank base, leakage and ultimately tank failure. To combat these problems, Belzona formulated a tank base sealing system in the mid 1960s, which is liquid applied in conjunction with a reinforcement sheet. As a membrane, the system possesses a unique breathable feature; liquid cannot permeate the membrane. However, the vapour escapes freely, allowing for the base seal to stay dry. The system remains flexible in service and adapts to thermal expansion loading, while at the same time offering excellent UV resistance.



Tank roof leaking at bolted joints



Joints fully encapsulated

Tank roofs are susceptible to rapid deterioration caused by the corrosive vapour of the storage media and is exacerbated by external forces. Roof damage can be safely repaired in situ and on-line, eliminating the need to degas and drain the tank.



Corrosion at joints on storage tank



Composite patch repair

Tank walls can also suffer from corrosion and leaking welds. Belzona repairs can be carried out on-line with the use of cold bonded doubler plates or a reinforced composite system. The cold bonding technique can be utilised, not only for repairs, but also for bonding rails, pipe supports and other fittings.

Spray applied, corrosion resistant epoxy coatings provide easy to clean surfaces and long-term corrosion protection for tank external surfaces.

For more information visit [belzona.com/tanks](http://belzona.com/tanks)



External tank corrosion



Protective coating applied



# BUILDINGS AND STRUCTURES MAINTENANCE

Repair and protection of concrete structures from chemical attack and degradation

## REPAIR OF CONTAINMENT AREAS

Chemical spillages will corrode and deteriorate the sumps and bunds designed to contain them, which could lead to potentially catastrophic consequences. Repairing with concrete can take 28 days to cure, leading to lengthy downtime. Belzona Magma Polymers were first used for bund repairs in the 1980s. Their adhesion to concrete is stronger than concrete's cohesive strength. Magma Polymers can solidify within a few hours and rapidly achieve their full chemical resistance properties within three days.



## PROTECTION OF CONTAINMENT AREAS

In addition to repairing deteriorated containment areas, Belzona can prevent the problem from occurring with the use of protective coatings. With a number of coatings formulated to resist different chemicals at varying concentrations, Belzona is able to specify the right solution for each situation.

Belzona 4000 Series coatings provide seamless protection and eliminate the risks of undetected delamination and corrosion of the underlying substrate. They adhere equally well to various substrates, including concrete, metals, tiles and other Belzona materials, offering a lasting solution where other technologies have failed.

For more information visit [belzona.com/containment](http://belzona.com/containment)



*Deteriorated sump*



*Concrete rebuilt*



*Concrete coated*



*Damaged bund*



*Belzona being applied*



*Full refurbishment*

## SHIMMING AND CHOCKING

Load bearing floor areas, plinths and supports can suffer damage caused by impact, vibration or chemical attack. Belzona's epoxy based repair materials adhere strongly to the existing concrete and cure in a matter of hours, achieving full mechanical hardness soon after. Their high compressive strength, chemical and abrasion resistance, together with a simple application method, make them ideal for the repair of damaged supports and plinths, as well as fixing of anchor bolts.

Belzona 7111, a 100% solids pourable chocking compound, was developed in 2014. This impact and vibration resistant system is ideal for pouring foundations for heavy equipment and maintaining precise alignment under machinery, ensuring effective load bearing.

For more information visit [belzona.com/7111](http://belzona.com/7111)



*Deteriorated support*



*Belzona conditioning*



*Belzona shim*



*Pourable for precise alignment*



*Belzona 7111 chocking compound*

# BUILDINGS AND STRUCTURES MAINTENANCE

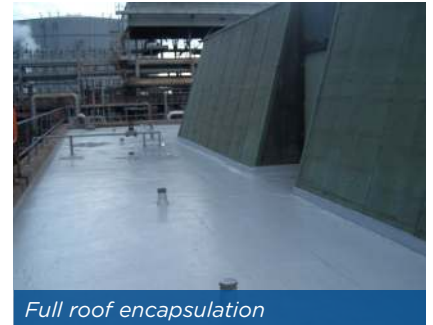
Roof, wall and floor problem areas - high performance polymeric solutions

## ROOFING MEMBRANES

Movement, loading and weathering can lead to the deterioration of roofing protection. Belzona liquid applied 3000 Series membranes can seal the entire roof or localised leaking areas and adhere to various substrates and geometries. Protection is seamless and moves in sympathy with the substrate, allowing for expansion and contraction. Emergency solutions are also available, which can be applied directly onto wet surfaces.



Leaking joints sealed



Full roof encapsulation

For more information visit [belzona.com/roofs](http://belzona.com/roofs)

## FLOORING SYSTEMS

Concrete surfaces can be rebuilt using fast curing Belzona 4100 Series Magma Polymers, which also provide excellent abrasion, impact and chemical resistance.

Joints and concrete nosings are susceptible to deterioration caused by impact, thermal cycling, mechanical and chemical attack. Belzona 2000 Series Elastomers are used to recreate expansion joints but allow for even greater movement due to their excellent elongation.

Belzona 4400 slip reduction systems incorporate durable, hard-wearing aggregates which remain maintenance-free for long periods of time. The system adheres to a range of surfaces, including concrete and steel, and will not wear off easily as a result of movement and impact.



Edges rebuilt, Belzona joint installed

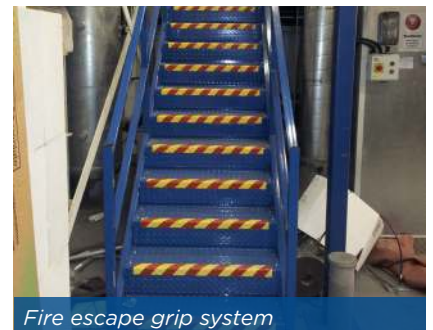


Floor resurfacing

For more information visit [belzona.com/floors](http://belzona.com/floors)



Loading bay refurbishment

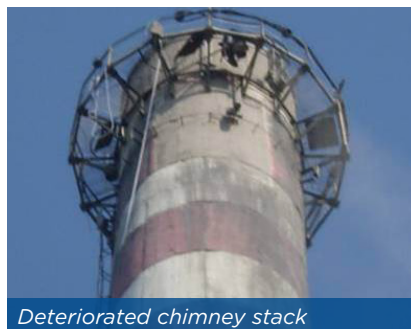


Fire escape grip system

## WALL MAINTENANCE

Walls and chimneys suffering from physical, bacterial and chemical attack, as well as water ingress, can be protected with Belzona 5000 Series coatings. Our range of wall coatings provides excellent UV protection and their smooth surface does not attract dirt and will 'self-clean' during rain fall.

For more information visit [belzona.com/walls](http://belzona.com/walls)



Deteriorated chimney stack



Chimney coated with Belzona



# SOLUTIONS WITHIN THE COAL POWER INDUSTRY

Abrasion resistant materials for long-term protection of critical equipment

## FGD SYSTEMS

Flue Gas Desulphurisation (FGD) systems and associated equipment are exposed to highly severe environments. These include high abrasion, high temperature and temperature fluctuations, aggressive acid atmospheres and wet-dry cycles, or a combination of these. Construction materials can be easily damaged when exposed to these conditions and require repair and protection solutions able to withstand this environment.

Belzona paste grade composites for metal repair can be used to rebuild deteriorated FGD equipment. Withstanding different damage mechanisms, such as high erosion or elevated temperatures, these materials help to significantly slow down the erosive process even in areas such as piping, ductwork and absorbers, where chemicals are present. A Belzona coating can then be specified to protect the equipment from further deterioration.



Damage to pipework



Damaged area repaired

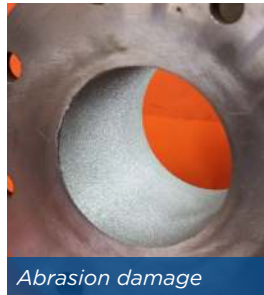


Completed application

## PULVERISERS AND CRUSHERS

Coal pulverisers, crushers and other equipment suffer from extreme abrasion and wear, which can render equipment inoperative in a matter of months.

Belzona 1800 Series of abrasion resistant linings combine hard wearing ceramic aggregates in a polymeric binder to rebuild the lost metal and provide a tough sacrificial lining. New equipment can also be lined with these materials to significantly slow down wear rates. These linings are applied and cure at room temperature, eliminating the need for hot work. Their solvent-free formulation allows the materials to be safely applied in confined areas.



Abrasion damage



Pipe lined



Pipes at various stages

## REPAIR OF CONVEYOR BELTS

Due to general wear, tear and heavy abrasion, conveyor belts regularly become worn, ripped or torn. Belzona Elastomers are ideal for the in-situ repair of conveyor belts without the need to disassemble the equipment. These flexible materials can be applied without the need for specialist tools, vulcanisation or heat and will adhere to almost any surface. They provide excellent resistance to wear, abrasion and atmospheric degradation and, in addition, offer high elasticity and exceptional mechanical strength.

For more information on Belzona solutions for Coal Power view a 3D map [belzona.com/maps/coal](http://belzona.com/maps/coal)



Erosion damage to pipe bend



Internal section lined with Belzona



Torn conveyor belt



In-situ cold repair

## SOLUTIONS WITHIN THE NUCLEAR POWER INDUSTRY

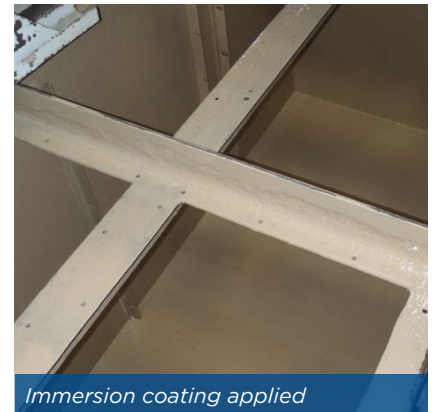
High performance materials for corrosive and erosive environments

Aside from the common maintenance challenges found within the power industry, generating nuclear power presents other complex issues. Belzona materials offer simple solutions to erosion, corrosion, chemical attack, abrasion and wear and many carry the Nuclear Industry DBA Approval in accordance with ASTM 3911.

### REPAIR OF RUBBER LINED VESSELS

Due to the highly corrosive and erosive environments encountered in the nuclear power industry, many vessels are rubber lined in order to protect the steel surface from abrasion damage. Damage to this rubber lining can allow abrasive solids or corrosive fluids to come into direct contact with the steel shell of the vessel leading to corrosion damage. Belzona 2100 Series of durable abrasion resistant elastomers are commonly used to repair damaged rubber linings, extending the life of the equipment. Localised repairs or complete tank relining can be achieved using these cold applied materials.

Tanks can be relined with a Belzona coating which provides outstanding corrosion and chemical resistance and protects equipment for the long term.



## SOLUTIONS WITHIN THE WIND POWER INDUSTRY

Surface-tolerant repair composites and coatings for in-situ repairs

### OFFSHORE/ONSHORE WIND FARM REPAIRS

Wind turbines, unlike conventional power generating equipment, are exposed to highly variable, harsh weather conditions which often results in the rapid degradation of their associated components.

By utilising a Belzona paste grade material, leak repairs can be undertaken quickly without taking the equipment offline, reducing shutdown periods, clean-up costs or potential environmental damage from a fluid or gas leak.

Belzona also offer in-situ maintenance with Belzona 5721, a coating designed specifically for leading edge protection. This innovative system strikes the balance between flexibility and toughness, capable of withstanding severely erosive environments.

For more information visit [belzona.com/5721](http://belzona.com/5721)



# SOLUTIONS WITHIN THE HYDROELECTRIC POWER INDUSTRY

Resistance against corrosion, erosion and cavitation combined with efficiency enhancement

Hydroelectric turbines withstand tremendous amounts of water pressure and fluid flow. Erosion, corrosion and cavitation damage on fluid handling components such as the penstock, wicket gates, stay vanes as well as the turbines themselves must be considered and addressed as it can lead to decreased efficiency and eventually costly downtime.

Belzona 1300 Series of erosion-corrosion resistant repair composites and ceramic coatings eliminate the need for hot work repairs and can be easily applied on site and in confined spaces as they are solvent free. Our ceramic coatings have a proven track record of increasing efficiency in fluid flow situations, as well as stopping corrosion and significantly slowing down erosion. Our resilient polyurethane coatings are designed to absorb and disperse the cavitation energy, resisting its effects.

## MAINTENANCE OF HYDROELECTRIC TURBINES

Belzona has years of experience repairing the stay vanes, runners and wicket gates of hydroelectric turbines. Simple rebuilding and coating procedures allow turbines to be returned to service with minimal downtime and experience even longer operating life. Other areas such as worn turbine shafts and bearings can be rebuilt using a forming technique with a Belzona cold applied paste grade composite.

## PROTECTION OF PENSTOCKS AND DRAFT TUBES

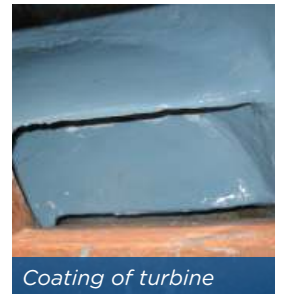
Penstocks, draft tubes and outlets are subject to the same erosion-corrosion damage as the turbines and can be protected using a similar Belzona coating system. The newest generation of pipe lining systems provide impact and sliding erosion resistance whilst allowing application by airless spray, ideal for large areas.



Damaged runner blade



Blades rebuilt



Coating of turbine



Damaged wicket gate



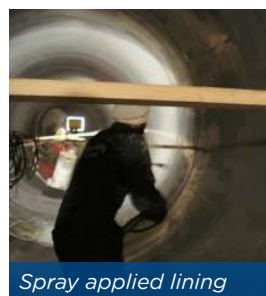
Blade after rebuilding



Blade after coating



Penstock



Spray applied lining



Completed application



[belzona.com/hydro](http://belzona.com/hydro)

## GLOBAL APPLICATION STANDARDS



### PREQUALIFICATION

Belzona materials are subject to stringent independent and in-house testing, documented in the product specification sheets and chemical resistance charts. Testing is performed in our ISO 9001 audited laboratory to recognised standards, including NACE, ASTM, ISO, Lloyds and many more. Numerous high profile Power companies prequalify the use of Belzona materials at the design stage and for asset maintenance.

Data collected from the field influences improved formulations and application methodology to ensure increasingly efficient in-service performance.



### SPECIFICATION

Optimum materials and application procedures are selected to meet specific design and operating conditions of the asset. Dedicated project engineers coupled with round the clock head office technical support allow for the correct material and application procedure to be specified.

We also maintain a comprehensive database accessible by the Global Belzona Distributor network, which facilitates sharing of information and experience, improving specification and application standards.



### APPLICATION

Application standards, including surface preparation, are integral to the success of solution implementation. Belzona recognises the need to set and monitor global application standards.

Applications are carried out by experienced and trained personnel. Belzona runs training programmes with theoretical and practical courses, including validated training. Combined with method statements, quality control procedures and daily inspection reports we strive to ensure application standards are maintained.



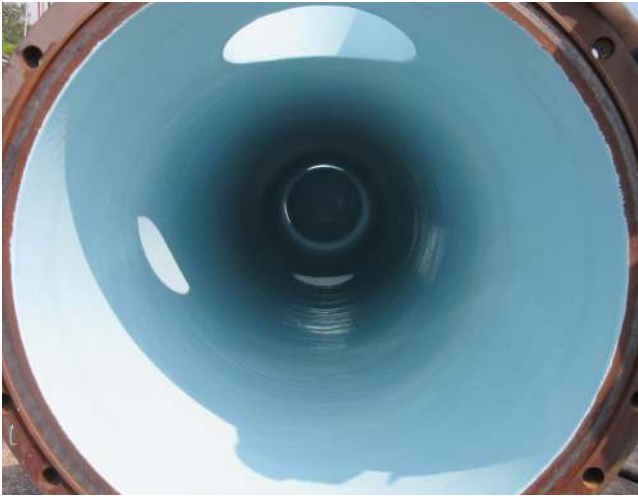
### INSPECTION

Inspection is carried out by certified inspectors (e.g. NACE, FROSIO) prior to, during and upon completion of the application to ensure Belzona systems are applied in accordance with our standards and client's requirements.

Upon nearing the end of the system's expected service life, the asset is inspected again and appropriate action recommended, which may involve minor repair work or no action, as Belzona systems tend to outlast projected service life.

# BELZONA SOLUTIONS FOR THE POWER INDUSTRY

**HIGH PERFORMANCE LININGS**  
for erosion and corrosion resistance



**PASTE GRADE COMPOSITES**  
for metal rebuilding



**COLD BONDING**  
to replace hot work



**ABRASION RESISTANT MATERIALS**  
for long-term repair and protection



**MEMBRANE SYSTEMS**  
for flexible and microporous sealing



**MAGMA POLYMERS**  
for the maintenance of floors and concrete structures



# PRODUCT INFORMATION, VIDEOS AND SOLUTIONS MAPS AT YOUR FINGERTIPS



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ISO 9001:2008  
Q 09335  
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