

From rolling mills to blast furnaces, critical equipment in the steel industry is susceptible to abrasion, erosion, corrosion and chemical attack. Metal repair composites, erosion and corrosion resistant coatings and durable protective linings have been engineered to meet the aggressive demands of this industry.

Belzona solutions can be applied in-situ and offer unmatched performance in tough application areas. Our materials have been proven to reduce downtime and labour costs as well as increase the efficiency of your plant and ensure environmental compliance. We can provide solutions for the repair and protection of your facility, including:

- Fluid and gas handling equipment
- Containment areas
- Shimming of worn equipment
- Abrasion resistant and solids handling
- Facilities maintenance
- Liquid-applied, flexible roof membranes for weatherproofing buildings, structures and insulation
- Concrete and stonework repair and protection systems
- Environmental barrier polymers to protect against and reduce environmental impact
- Safety surfacing polymers for the prevention of slips and to provide positive grip



Belzona Is a Global Manufacturer of Repair Composite Materials & Industrial Coatings.



Visit us and check out our solutions



For more information, please contact your local Belzona® representative:

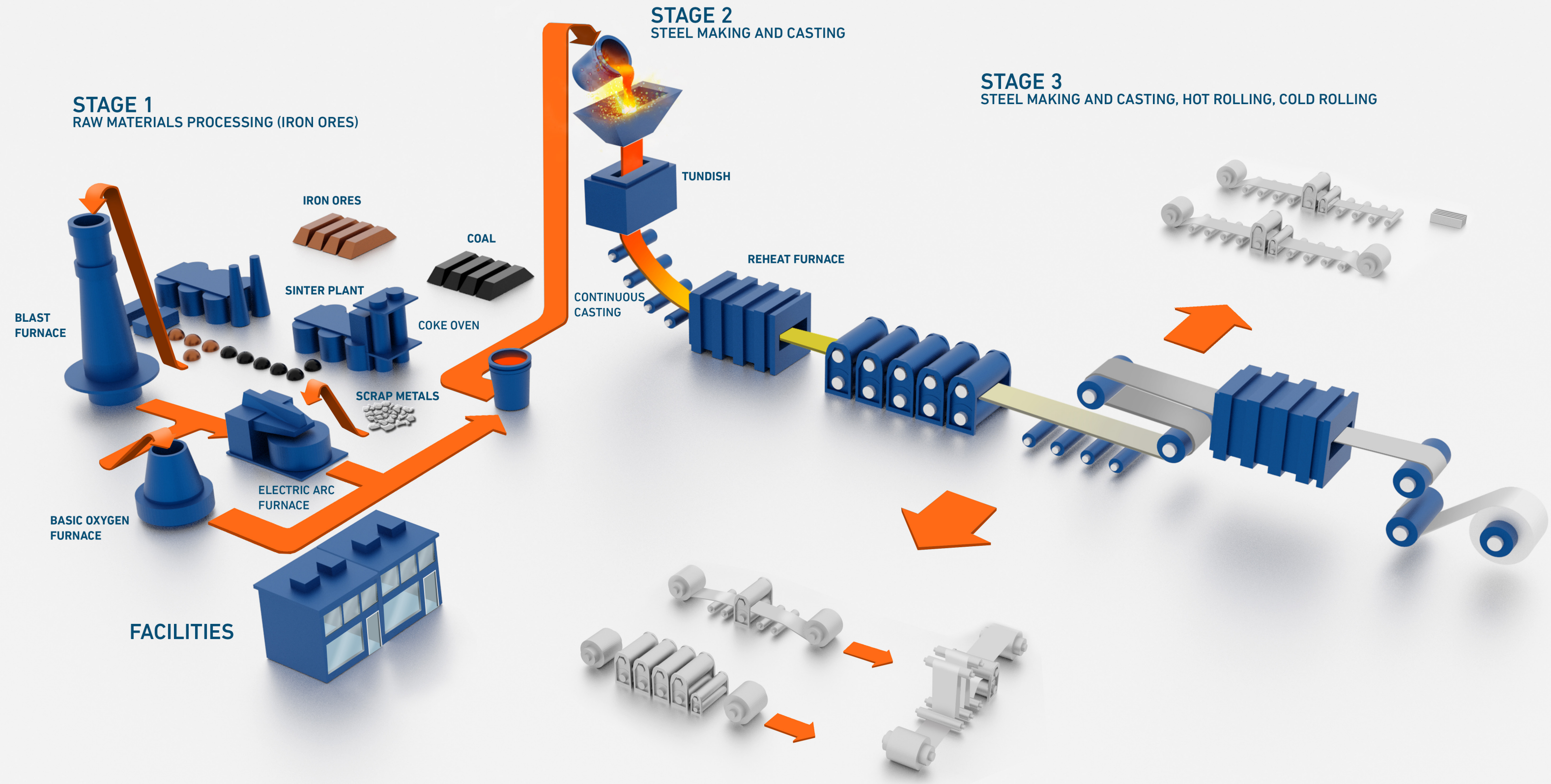


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PIPES
<p>TYPICAL PROBLEMS: Common causes of damage and deterioration to pipes can include impact and frost damage, corrosion, erosion and chemical attack.</p> <p>POTENTIAL SOLUTIONS: Cold-curing composite repair materials can return strength to weakened or holed pipes. Our versatile solutions include bonding patches and pads over damaged areas and the application of reinforced Belzona wraps which are ideal for the permanent repair of low pressure, non-critical equipment.</p>
PUMPS
<p>TYPICAL PROBLEMS: Pump performance will decrease after prolonged, heavy duty or aggressive service because of erosion, corrosion, chemical attack, wear and cavitation.</p> <p>POTENTIAL SOLUTIONS: Heavily damaged pumps can be restored to their original profile by using Belzona cold curing metal repair composites. Our epoxy coatings such as the Belzona 1000 Series are used for erosion-corrosion protection to reduce further deterioration, increasing pump efficiency and reducing frequent maintenance costs.</p>
CONTAINMENT AREAS
<p>TYPICAL PROBLEMS: Deterioration of chemical containment areas is often caused by acid attack, ph reduction, carbonation, sulphate attack, caustic attack, microbial degradation, corrosion of reinforcement and abrasive wear.</p> <p>POTENTIAL SOLUTIONS: Our chemical resistant coatings such as the Belzona 4000 Series will provide long-term chemical protection against a wide range of substances including acids and alkalis even at high temperatures.</p>
CONVEYOR BELTS
<p>TYPICAL PROBLEMS: Conveyor systems are exposed to heavy wear due to the abrasive nature of the materials that cause premature failure of belts, fasteners and drive rollers. Belts can suffer rips, tears, holes and slits due to the demanding conditions of the steel industry.</p> <p>POTENTIAL SOLUTIONS: Belzona's 2000 series of flexible rubber repair materials can be used in situ to resurface worn areas of conveyor belts, where durability, elasticity, abrasion resistance and tear resistance are required. They are also commonly used for joining, splicing and re bonding belts and even sealing metallic clips to protect them from corrosion and mechanical damage.</p>
CHOCKING AND SHIMMING
<p>TYPICAL PROBLEMS: Large machinery installed in industrial environments can suffer from high vibration and impact, causing slack bolts, loose chocks and misalignment of engines and other base-mounted equipment.</p> <p>POTENTIAL SOLUTIONS: Belzona shimming and chocking solutions are ideal for pouring foundations, shimming or chocking and other large industrial equipment where alignment and anchorage are essential. Their load bearing capability is demonstrated by its high compressive strength. Unlike other liquid applied chocking systems, it provides longer storage time without the risk of particle setting.</p>
SHAFT REPAIR
<p>TYPICAL PROBLEMS: Common causes of damage and deterioration to shafts are accelerated due to abrasion, erosion, impact, corrosion and dust and fine particles found in between mating surfaces.</p> <p>POTENTIAL SOLUTIONS: The cold curing paste grade materials of the Belzona 1000 series are designed to simplify mechanical repairs and prevent any further damage from reoccurring. Belzona's metallic repair compounds can quickly reinstate failed or damaged equipment ensuring rapid return to service. These cold curing paste grade materials are a better alternative to hot work, as hot work can rarely be done on site and not without stripping the equipment.</p>

This process flow chart of a typical steel facility is designed based upon data retrieved from various sources. It is to be used as general guidance only. It describes the most common repair and maintenance problems found in steel plants together with Belzona solutions which could potentially help mitigate such problems. It does not aim to supersede any drafted process flow charts in use at these facilities. It is strongly recommended that each user of this guide contact the local Belzona representative to discuss the specific needs and operation conditions of their steel facility.