



POLYUREA



SPECIALIST

BLACKBEE SPECIALIST



Company Capability Statement



COATINGS

Specialist Polyurea Coatings

www.blackbeecoatings.com.au

“Mining Industry Polyurea Experts”

Blackbee Specialist Coatings Pty Ltd, ABN 88 688 681 579, PO Box 231,
Rockingham WA 6968, Tel: 0407 265 117, www.blackbeecoatings.com.au



Mining Industry Polyurea Coating Experts

Blackbee Specialist Coatings Pty Ltd is a West Australian-based Protective Coatings Company specialising in protecting and maintaining their clients' assets with high-performance spray-applied coatings.

Our comprehensive fleet of mobile surface preparation and coating units provides an Australia-wide on-site service for emergencies, shut-downs, projects and maintenance.

Workshop-based polyurea coating and industrial painting services are provided at our Perth and Kalgoorlie centres.

BSC has an enviable reputation, most notably in the demanding mining sector, for delivering challenging projects safely, on time, on budget and to the highest quality standards.

We are experts in polyurea specification and application with over 20 years of experience in this technically demanding field.



About Us

Our Vision

To be the leading provider of polyurea coating services in the Australian mining industry; delivering quality projects consistently on time, on budget and with the highest safety standards.

Our Values

Commitment

Commitment is our unwavering undertaking to ourselves and our customers, to deliver on our promises across all aspects of our business operations.

One Team One Dream

One Team – One Dream; consistent quality, safety and performance can only arise from close teamwork.

Innovation

Innovation drives progress and shapes our world. We apply innovative products and innovative thinking for significant positive impacts on our customers' businesses.

Well-Being

We support the well-being of our staff, clients and the environment and measure our success against how well this value is upheld.

Integrity

Integrity means treating each other how we would like to be treated.

Equal Opportunity

We provide equal opportunities for employment and advancement is based on abilities, attitudes and contribution to our team.



“One team

One dream.”



Company Overview

Locations

Customer site-based, and with fixed premises offering abrasive blasting, industrial painting and polyurea coating services.

Head Office - Perth, Western Australia – Unit 8/6 Richardson St, Kwinana-Beach 6167 WA.

Goldfields Branch - Kalgoorlie Western Australia – 8 York St, Kalgoorlie-Boulder 6430 WA.

Australia, International and Long-Term Contracts

BSC's fleet of fully self-contained surface preparation and coating application trucks mobilise to any site in Australia.

Containerised units are available for long-term contracts and international customers.



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Mobile Plant and Equipment

BSC's large range of latest-generation, well-maintained mobile equipment is available for maintenance, projects, shutdowns and emergencies.

Including:

- Fully self-contained mobile coating trucks (2)
- Skid-mounted, integrated plural spray coating machines (5)
- Abrasive blast units complete with hopper feed bins (8)
- Mobile compressors (4)
- Airless pumps (4)
- Internal pipe-lining equipment

All equipment is fully certified and compliant with mine and safety regulations.





Our Services

BSC are high-performance, spray-applied polyurea coatings and industrial painting experts. Polyurea has broad applications across many industries including Mining, Mineral Processing, Transport, Infrastructure, Water, Oil and Gas.

The company's core services include:

- Mobile and workshop application of high-performance, fast-cure polyurea linings and coatings.
- Mobile and workshop abrasive sandblasting and industrial painting.
- Long-term site maintenance contracts
- Shutdown maintenance
- Emergency response
- Quality Assurance / Quality Control (NACE Level 1 and 2)
- Coating inspections, including surface preparation and holiday detection
- Preparation of Coating Specifications and Procedures
- Preparation of Quality, and Inspection and Testing Plans

Our Commitments

To constantly improve the quality of our services, systems and outcomes to achieve 100% customer satisfaction.

To take all reasonably practicable measures to eliminate or otherwise minimise risks to the physical and mental health, safety and well-being of our people and our clients' people. Our work is never so urgent or important that we cannot take the time to do it safely.

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Polyurea Applications

Polyurea formulations have unique physical properties – ideal for many critical projects.

We recognised the potential of polyurea over twenty years ago and now offer a range of Nukote polyurea-based products to our clients.

Key Benefits of Nukote Polyurea

- Fast preparation, application, and cure – reduces project and downtime considerably.
- Flexible linings that don't crack.
- Standard formulations with very good abrasion and chemical resistance, and speciality products with enhanced properties
- Suitable for many substrates, such as steel, concrete, wood, composites, rubber, and recoating over existing protective coatings.
- High tolerance to cold and moisture during the application
- Seamless lining system - no seams means added reliability
- Unlimited film build means that product thickness can be increased at high wear/abrasion zones
- Repairable and re-sprayable thanks to advanced nano-technology inter-coat adhesion primers.

Examples of typical applications are shown on the following pages.

Process Tanks

Tank liners in mineral processing are frequently subjected to high abrasion, chemicals and impact. When the liner fails, the tank is at risk.

Maintaining these liners is expensive - not only the actual cost of repairs, but also the downtime while tanks are off-line.

BCS's expertise and range of polyurea formulations bring considerable benefits and cost savings to their clients.

- Reduced project schedule – less downtime
- Flexible and impact-resistant
- Good chemical and abrasive resistance
- Seamless, monolithic system
- Unlimited film build in a single application and can vary the thickness for high or low wear zones
- Cures in cold temperature
- Fast repairs and recoats

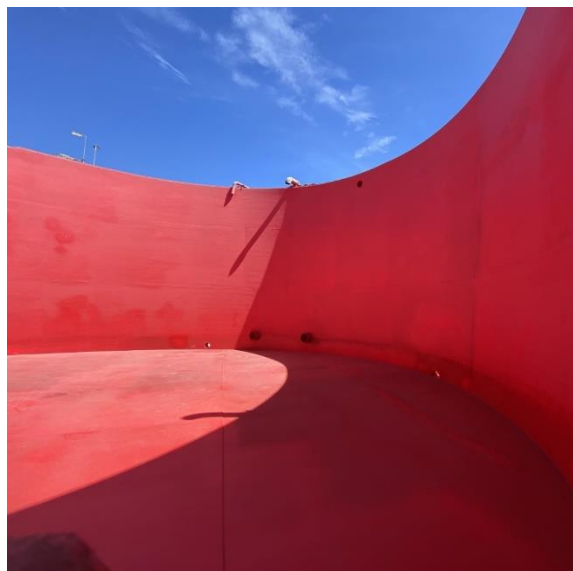
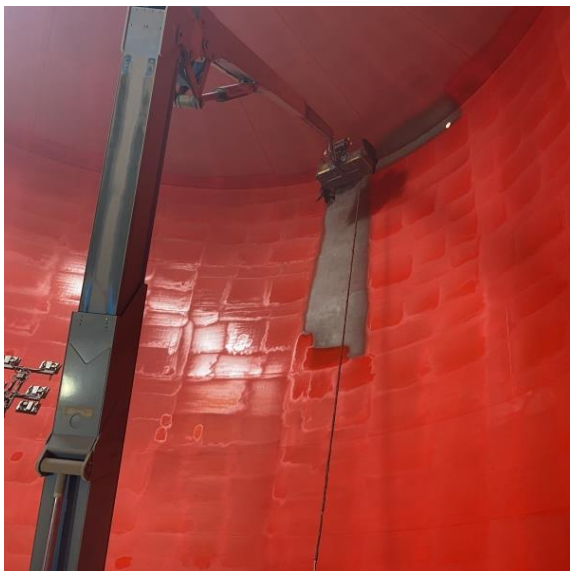
CIL and Leach Tanks



Thickeners



Process Water and Chemical Tanks



Trommels and Screen Decks

The trommels and screen decks used for screening ores and slurries experience very high abrasion. Rubber lining has traditionally been used however rubber lining is expensive and slow, and failures at the seams allow slurries to 'race' or wear away the steel.

BCS apply tough, flexible polyurea coatings to new equipment, refurbished plant, or operational plant during shutdowns.

- Reduced project schedule – less downtime on shutdowns
- Long service life between repairs
- High Abrasion Resistance formulations for superior wear performance
- Seamless, monolithic system – no seams means no racing
- Two colour coat system can be sprayed to provide a wear indicator
- Unlimited film build and can increase the thickness in high-wear zones
- In-situ repair and coating rebuild/refurbishment is available
- Can be sprayed onto rubber with the correct primers

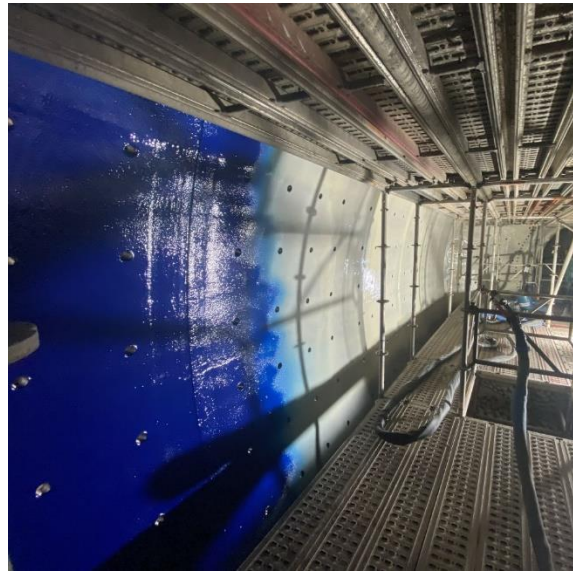


SAG and Ball Mills

SAG and Ball mill shells are traditionally lined with rubber, however when this needs to be replaced, or removed for crack inspections, the relining process is very slow, leaving seams where slurry can 'race' or wear away the steel shell. Where the cost of downtime is measured in tens of thousands of dollars an hour, saving time is of crucial importance, but not at the risk of future reliability and service life.

Since 2008, the BSC team have been relining mills with Nukote polyurea, proving the system in Australia and internationally.

- Reduced project schedule – can save days compared with re-lining with rubber
- Eliminates the racing and shell wear caused by slurry in rubber lining seams
- No need to remove the full charge from the mill
- Reliable and proven shell lining system – clients report fewer bolt breakages and downtime on a Nukote-lined mill
- Repairable and re-coatable if the liner is damaged or needs to be removed in places for inspections or shell repairs
- Cure is independent of temperature – can be applied in cold conditions



Containment and Concrete Protection

Concrete structures often hold toxic liquids or are exposed to corrosive conditions. Many lining systems cannot withstand the chemicals or movement of the concrete.

Caustic, acid, cyanide, elution, process water etc - all must be kept from escaping into the environment.

Other structures such as plinths, and column supports gradually erode away as chemicals attack and break down the concrete.

BSC polyurea liners and coatings are specified depending on the application to protect concrete, and contain acids and other chemicals.

- Fast surface preparation and application process
- Low permeability
- Flexible, high elongation and impact resistant
- Higher chemical and fire-resistant formulations available
- High film build in a single application to cover over damaged concrete
- Touch dry within seconds and return to service within a day



Transportation Liners

Many bulk minerals and ores transported around the country are abrasive or corrosive - wearing out the truck bodies, bins and wagons carrying them.

Protect them from new or refurbish them with a suitable spray-on liner from BSC.

Our fully mobile surface preparation and lining equipment comes to your site, you can send your equipment to us, or for larger projects, we will set up a temporary facility at or near your site.



Miscellaneous Applications

BSC have extensive experience applying Nukote polyurea in a vast array of applications in mineral processing. There are few items requiring a coating to protect, line or rebuild that the BSC team has not been asked to spray.

Following is a selection of these applications.



Agitator Blades and Shafts



Hungry Boards



Tank Boot Seals



Waste Water Treatment Containers



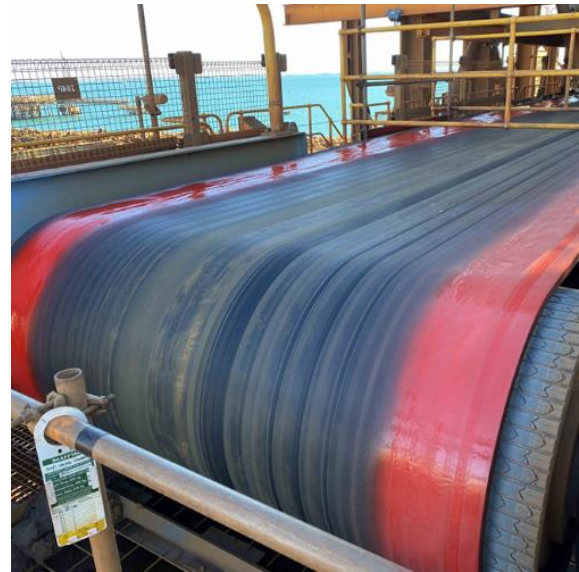
Hoppers



Chutes



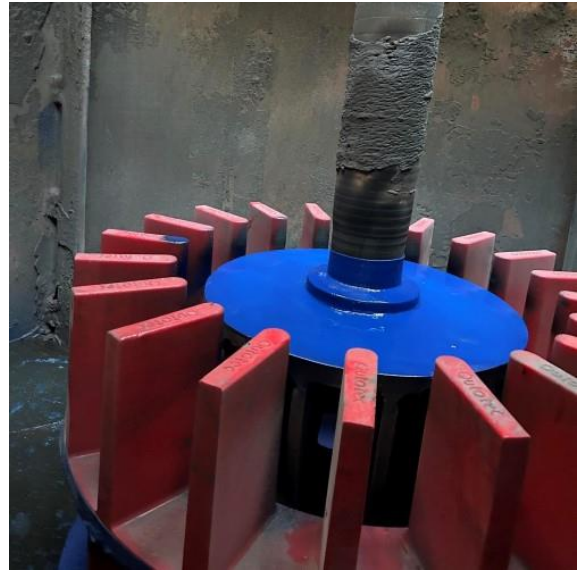
External/Internal pipes



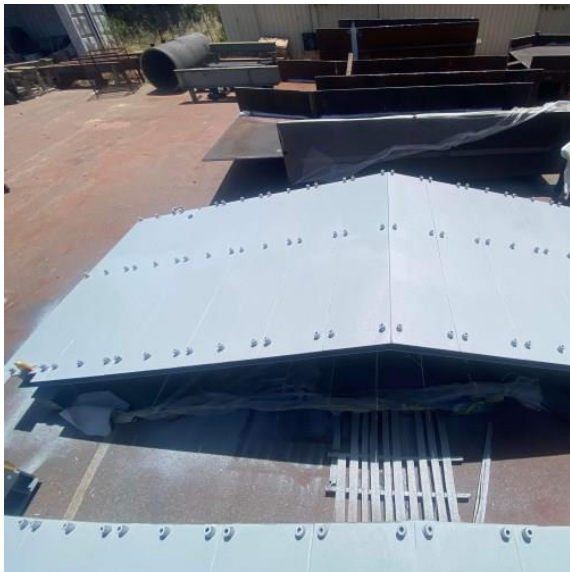
Conveyor Belt Repairs



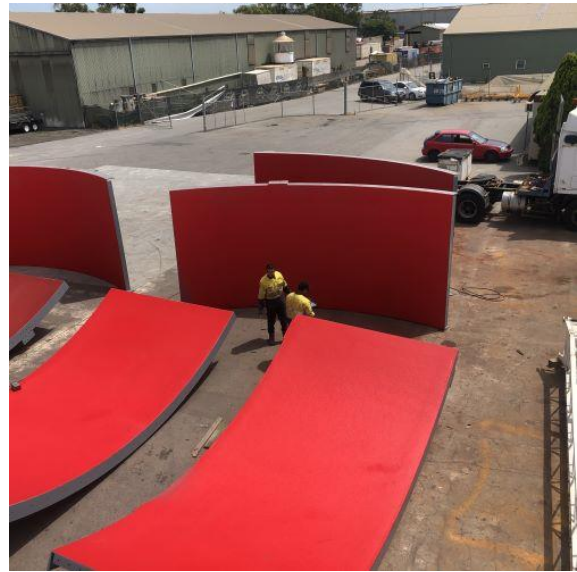
Launders



Float Cells



Shedder Plate



Iron Ore Bin