KCL INDUSTRIES

CAPABILITY STATEMENT

INNOVATIVE ENGINEERING SOLUTIONS
FOR THE MINING INDUSTRY

ABOUT KCL INDUSTRIES

Founded in 2006, KCL Industries is a Mackay-based engineering company specialising in innovative and sustainable solutions for the mining sector. With nearly two decades of experience, we have built a reputation for delivering high-quality, reliable, and cost-effective products that meet the demanding conditions of the industry.

Sustainability is at the heart of how we operate. Our 100% off-grid workshop prevents more than 57 tonnes of carbon emissions from entering the environment each year, reflecting our commitment to responsible manufacturing and smarter energy use.

At KCL, innovation drives everything we do – from developing patented designs that extend equipment life, to engineering safer solutions that reduce manual handling risks and improve site productivity. Our focus is on providing tailored, practical outcomes that make mining operations safer, cleaner, and more efficient.

CORE CAPABILITIES

• PIER TO PIER SERVICE

Our pier-to-pier service model ensures that we oversee every aspect of your project, from initial consultation and design through to final installation and ongoing maintenance. This end-to-end service guarantees seamless operations, reducing downtime and improving overall efficiency.

• DESIGN

We combine cutting-edge engineering with sustainability to create designs that not only enhance safety but also improve wear life, reduce environmental impact, and increase overall productivity.

• ENGINEERING

We offer tailored engineering services that meet the specific challenges of your project, from design and development to implementation.

• MATERIAL ANALYSIS REPORTING

Our material analysis reporting provides in-depth insights into the properties and performance of materials used in your project. We employ advanced testing techniques to evaluate factors like wear resistance, tensile strength, and durability, ensuring that each material choice meets the highest standards of quality and reliability for your operations

• METALLURGY

Our metallurgy services focus on the careful selection and engineering of metals and alloys to enhance performance in demanding environments. We apply cutting-edge metallurgical techniques to optimise material properties such as strength, hardness, and corrosion resistance, ensuring maximum durability and efficiency in all components.

• CASTING

By leveraging proprietary alloy blends and state-of-the-art casting methods, KCL delivers components that offer superior wear resistance and extended service life, reducing the need for frequent replacements and minimising downtime in critical operations.

• MACHINING

Our machining capabilities include the use of cutting-edge technology and expert craftsmanship to produce durable components that stand up to the harshest conditions.

UNIQUE ADVANTAGES

• FULL FOUNDRY CAPABILITIES

KCL Industries offers complete foundry services, from initial design to final production, ensuring that each component meets the highest standards of quality and performance, giving us full control over the manufacturing process. This enables us to deliver customised solutions that meet the unique needs of the mining and industrial sectors.

• COST EFFECTIVE PARTS

KCL Industries delivers high-quality, cost-effective parts designed to meet the specific needs of the mining and industrial sectors. By leveraging advanced manufacturing techniques and optimised production processes, we ensure that our customers receive durable, reliable components at competitive prices, reducing overall operational costs.

• SPECIALISTS IN CHPP CRUSHING & SIZING PARTS

KCL Industries specialises in the design and manufacture of high-performance crushing and sizing parts for Coal Handling and Preparation Plants (CHPP). With our in-depth knowledge of the industry and its challenges, we provide custom-engineered solutions that enhance operational efficiency and reduce maintenance costs in CHPP operations.

CASE STUDIES

HAIL CREEK

CHALLENGE - The maintenance team at Hail Creek Mine needed more than just high wear resistance. During the trial, the site informed us they required not only durability and a high polish, but also flowers that presented a smooth side.

SOLUTION - KCL supplied shafts designed for high wear but during the trial, site informed us that they needed not just high wear and a high polish, but the flowers also need to present a smooth side as well. After making some metallurgical changes to the Chevrons and refining the flower design, the result was a part with outstanding wear qualities, self-polishing properties, and cleaner surfaces that reduced sticking and fouling.

RESULTS -

- Improved wear life and reduced clay build-up.
- Cleaner shaft surfaces with minimal post-cleanup required.
- Cost-saving measures implemented, including extended bearing life and reduced need for carrying multiple critical spares.

SEDGMAN

CHALLENGE - Sedgman faced extremely hard material passing through the circuit causing excessive shock loading, leading to cracking on the chevrons and shaft jewellery becoming loose.

SOLUTION - In collaboration with Sedgman, KCL developed and trialled an alternative shaft design built to withstand the harsh operating conditions.

RESULTS -

- Shaft wear life increased from 3-5 months to more than 12 months.
- Reduced breakdowns and maintenance interventions.
- Lower downtime, improving overall plant efficiency.
- Partnership with Sedgman continues after 8 years, built on trust, performance, and innovation.

DOUG PAUL

BUSINESS OWNER/MANAGING DIRECTOR

Doug Paul is the Managing Director of KCL Industries, a Mackay-based engineering business he established in 2006. With nearly two decades of leadership, Doug has grown KCL into a respected name– known for its quality, flexibility, and commitment to sustainability.

Doug brings a practical, hands-on approach to everything he does. He's led the way in developing innovative systems/products in the CHPP crushing and sizing sector, including the operation of a 100% off-grid workshop, which has already prevented more than 57 tonnes of carbon emissions from entering the environment. His focus on manufacturing and engineering means every product that leaves the Mackay workshop is designed to provide longevity and reliability to the client.

CERTIFICATIONS & AWARDS

RESOURCE INDUSTRY NETWORK

Manufacturing Excellence Award Winner **(2024)**

QUEENSLAND MINING INDUSTRY HEALTH & SAFETY CONFERENCE

Health Innovation Award Highly Commended **(2025)**

LET'S INNOVATE TOGETHER

Contact us today to explore tailored solutions for your site's challenges.

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