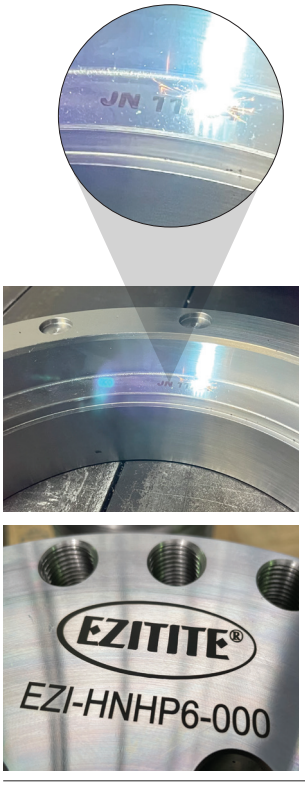
Industrial Laser Marking

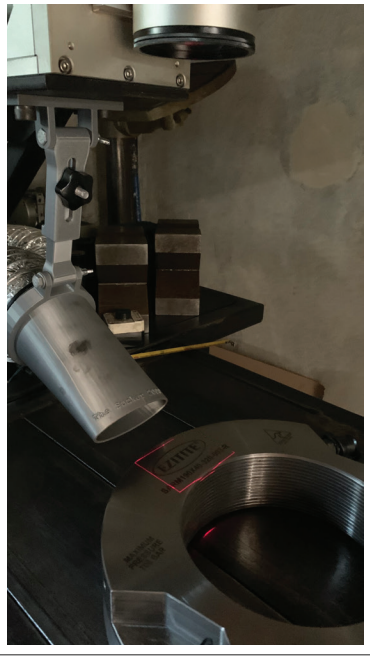
Technofast offers a comprehensive marking service utilising state-of-the-art, computer-operated technology. This system guarantees precise identification without the use of chemicals or ink. Currently supplying major electrical distribution and transportation companies across Australia, our services support everything from individual labels and logos to barcode and QR code marking. Every project is completed to the highest standard, ensuring durability and long-term traceability for components across the engineering, construction and mining sectors.

Advanced Laser Systems

The process uses a digitally controlled, focused beam to alter a material's surface properties without the need for inks or coatings. Depending on the application, we utilise Fiber, CO^2 or Galvo lasers to achieve surface colour changes, controlled engraving or micro-structuring.

These systems integrate into existing manufacturing processes to reduce downtime, while MOPA technology ensures fine control over finish and contrast. Marks are placed with extreme accuracy, ensuring they remain readable throughout the product's entire lifecycle.

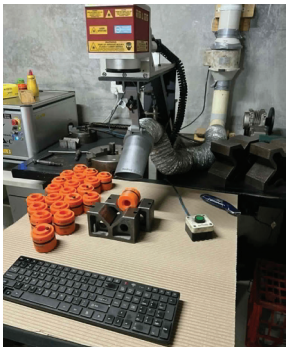




Materials and Applications

Our machines are configured to mark a wide range of industrial materials including aluminium, stainless steel, titanium, carbon fibre and polymers. Marking tools and equipment improves accountability and safety through the application of:

- **Identification:** Product, part, job and serial numbers, including Australian Made references
- **Data Capture:** High-contrast QR codes, barcodes and data matrix codes optimised for asset tracking
- **Traceability:** Permanent marks for product authentication, quality assurance and maintenance tracking



Engraving vs Marking

While the terms are often used interchangeably, they serve different industrial purposes:

- **Laser Engraving:** physically removes material to form deeper, permanent marks that are both visible and tactile. It is ideal for parts enduring extreme industrial wear
- **Laser Marking:** Alters the surface contrast through oxidation without removing material. This maintains part integrity, providing smooth, high-contrast results for barcodes and logos

Technofast Laser Capabilities

- **Open Room Laser:** No size limitations for large tooling or equipment
- **4th Axis Rotation:** Handles components up to 300.0mm diameter and 20.0kg
- **Marking Area:** 260.0mm x 260.0mm in a single pass (larger marks via multiple passes)
- **Versatile Scale:** Suitable for tiny components through to large asset registers