Precision Engineering & Design Services

Technofast operates a well-equipped facility featuring advanced technology and a highly skilled workforce dedicated to producing **precision-engineered** solutions.

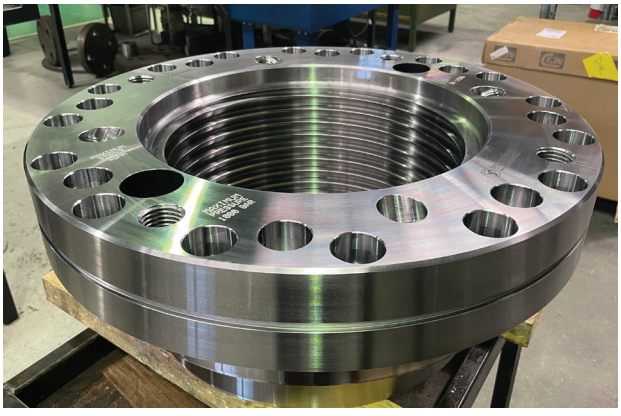
By conducting all aspects of **design, machining, and testing** in-house, we maintain full control over quality and delivery timelines.

Our commitment to continuous improvement ensures that we consistently meet the stringent standards of third-party certifying organisations while providing exceptional service with meticulous attention to detail.

Engineering and Custom Design

Our engineering staff utilise state-of-the-art 3D modelling and drafting packages to develop our range of unique hydraulic tensioning solutions.

- **Performance Optimisation:** Designs are assessed using Finite Element Analysis (FEA) to run virtual experiments. This allows our team to optimise custom solutions, reduce component size, and achieve significant cost savings for clients
- **3D Printing and Prototyping:** We utilise 3D printing technology to verify fitment and feel on specific applications. This allows users to confirm a proposed custom solution before moving to manufacture
- **Specialised Engineering:** Our team handles diverse tasks from bespoke nuts and bolts to the production of intricate prototype parts



In-House Manufacturing and Testing

All components are produced in-house using modern CNC machines to ensure exceptional quality throughout the manufacturing process.

- **CNC Milling and Turning:** Versatile machining capabilities for both custom components and small, complex pieces
- **Materials and Finishing:** Certified alloy steels are typically used for maximum toughness. Products can be finished with various surface treatments to suit specific environmental conditions
- **Testing and Validation:** Rigorous load testing and cycle testing are performed to ensure mechanical integrity and reliability
- **Dot Peen Marking:** Permanent mechanical identification is available for asset registers, including part numbers, serial numbers, and special instructions