

The Triten Alloy Products Group is a major international manufacturer and fabricator of wear resistant materials, with dedicated production centres in North America and Europe.

European Manufacturing Centre

Triten operates extensive workshop facilities working to ISO 9002 and other internationally recognised quality standards. These provide a total wear protection service from the profiling of flat liners to the fabrication of complete sections of plant. Triten also has the ability to combine overlay plate with other materials and various hardfacing techniques to create a cost-effective system of protection that matches wear patterns and physical limitations such as weight.

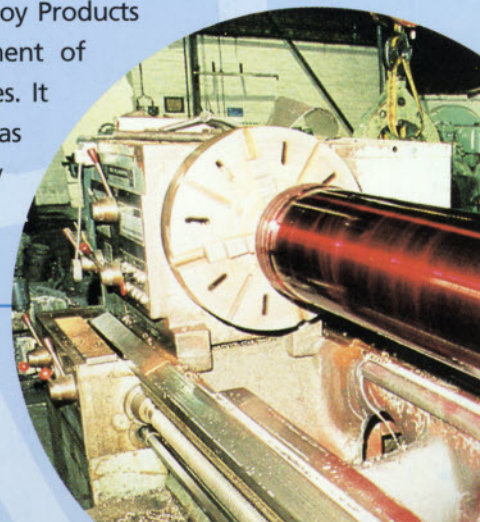
The Company's hardfacing departments offer a repair and refurbishment service which protects new components or rebuilds worn items, applying a wide range of wear resistant alloys using modern hardfacing techniques.

Fabrication and Refurbishment Expertise

As a major manufacturer of overlay wear resistant plate, Triten has in-depth knowledge of the physical and mechanical characteristics of such material. This enables Triten to recommend the most appropriate fabrication technique and select the optimum weld bead orientation for applications in which material flow is a factor. Similarly, Triten can offer special low friction finishes for adhering (sticky) materials or 'captured material' techniques for severe environments.

Triten's workshop has developed extensive experience in the profiling, forming and fabrication of overlay plate into complex shapes including curved and conical sections. These can have alloy facing on either the inside (pipe work and reduction sections) or the outside (classifier cones and externally clad pipe).

The Trimay Engineering Services Division, which is part of Triten's Alloy Products Group, is a leading specialist in the manufacture and refurbishment of hardfaced rolls for steel mills, food manufacture, and other industries. It also undertakes a wide range of general engineering projects such as the manufacture and repair of roll bearing housings, including heavy duty chocks, roll end furniture, drive shafts, and spindles.



Quality Standards

Triten's workshops operate to the following internationally recognised quality standards.

ISO9002 – Certified processes include:

Overlay plate manufacturing, fabrication workshop including hardfacing and roll refurbishment, tubular electrode manufacturing section.

EN ISO 13920

Applied to fabrications using overlay plate and covers dimensional and flatness tolerances.

A.S.M.E.

Welding procedures for carbon alloy steels and high alloy materials (not overlay plate) up to A.S.M.E. 1X.

CNC Plasma-Arc profiling for plate dimensions up to 4.5m x 3.5m x 35mm

Orbital tool post for countersinking.

Plate marking under CNC for pressing guides.

2D CAD input including most DXF formats.

Auto/manual nesting and remnant facilities.

Press brake – 250 tonne capacity

Producing corners, cones, rings, kinks, plus flattening.

Rolls – 200 tonne capacity

Bending, straightening and pinch rolls can produce full cylinders down to 400mm internal diameter.

Full welding service

Manual and semi-automatic systems.

Automatic boom for internal or external hardfacing. Pipe sections down to 305mm ID.

2 axis manipulators

2 tonne, 3 tonne, 5 tonne, 10 tonne capacity.

Dynamic balancing

Up to 1 tonne water flow and pressure testing.

Extensive machining facilities

Lathes up to 7.4 metre centres, heavy duty milling, slotting, surface and cylindrical grinders, radial drills, 2 axis horizontal borers with digital read-outs, 6 tonne table and 102mm spindle. Powersaws, shot blasting and finishing shop.

Overhead Cranes

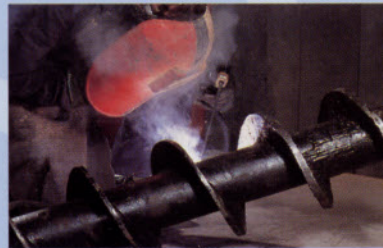
Workshops are served by 2 adjacent 10 tonne overhead cranes with a maximum combined lift of 18 tonnes, on items of over 6m long.

Hardsurfacing,¹ Repair and Refurbishment Services

Triten offers a comprehensive hardsurfacing service including the repair and refurbishment of worn components such as steel mill rolls, crusher parts, augers, etc. Structural welds, fixing bolt heads and other vulnerable areas can also be protected by local hardsurfacing with compatible alloys. Special fixing systems are also available at customer request.

Typical Processes Employed

Semi-automatic and manual flux-cored MIG wires, Triten's proprietary manual tubular hardfacing electrodes, bulk welding.



For further information visit our web site on <http://www.triten.com> or contact Triten at one of the addresses below.