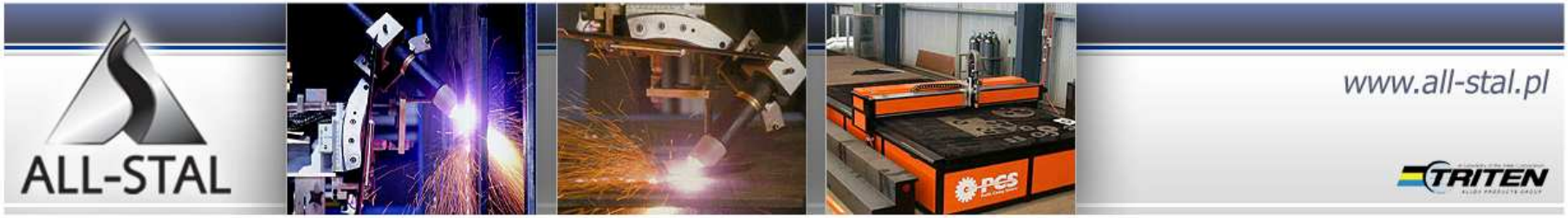
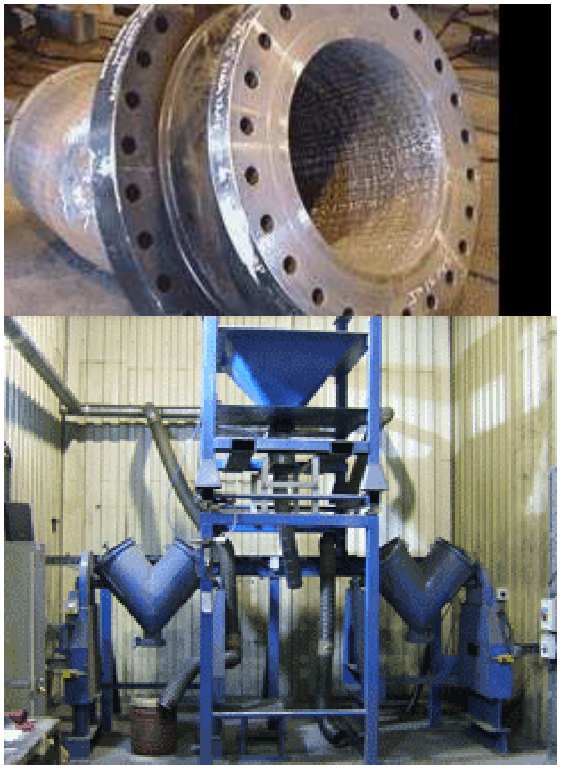


Triten Alloy Product Group's method of manufacturing overlay plate produces high-quality overlay that greatly extends component service life. Our narrow overlay bead morphology and characteristic fine pattern of stress-cracking deliver optimum resistance to the loss of the protective overlay in even the most severe conditions.

Our process methodology incorporates high-density, wear-resistant carbides in a tough, wear-resistant matrix. This helps to ensure maximum durability and performance.

Our process controls ensure consistent, high-quality overlays. We carefully monitor the development and application of overlays, from customized alloy mixes to our standard alloy mixes.

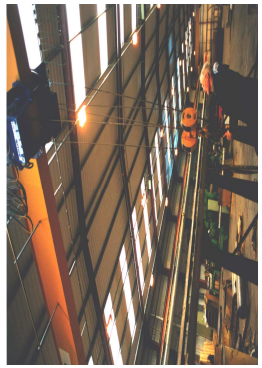


ABRASION / Custom Alloys

Triten Alloy Products Group offers unique expertise in customized alloys to match requirements of different industries. Alloy powders are formulated and mixed on-site and matched to the customer's specifications. These specifications are often industry- or customer-modified standards. Custom formulas can be designed to solve specific chronic-wear problems.

Customized alloys undergo the same rigorous process controls and production standards as standard alloys.

HOW TO WORK WITH OVERLAYS



Our overlays combat abrasion, erosion and impact at either ambient or elevated temperatures. Although the hardfacing material exhibits extreme wear characteristics, it can be cut, formed and shaped like conventional grades of steel.

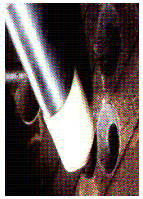
The recommended method of cutting overlay plate is by plasma arc, as the high chromium and carbon content of the hardfacing precludes the use of oxy-fuel and most mechanical means. The special properties of very hard overlay alloy and ductile substrate allow these materials to be formed and fabricated into complex shapes, including concave or convex curves.

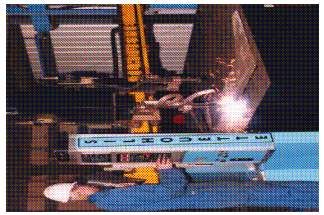
Wear-resistant liners may be installed into structures using a variety of methods, including plug welding, stud welding and bolting. Fabrication can be accomplished by conventional welding of the carbon steel substrate. It is strongly recommended that all structural joints exposed to wear be protected by capping with a hardfacing alloy compatible with the overlay, using Triten tubular hardfacing electrodes.

CUTTING:

Plasma Arc Cutting

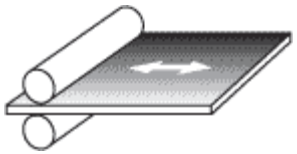
Carbon Arc Cutting (Arc Gouging)





FORMING:

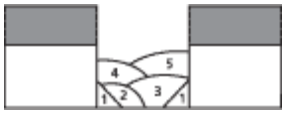
Cold and Hot Forming



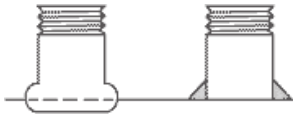
METHOD OF ATTACHMENT:

Fillet welding

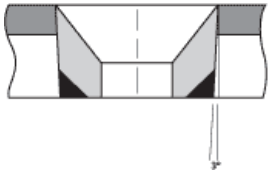
Plug welding



Stud welding

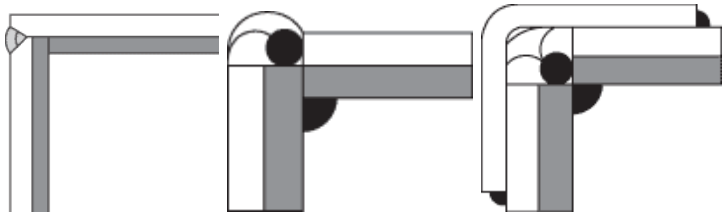


Countersunk Bolts



STRUCTURAL WELDING:

Filled welds



But t welds