WA Applications for Mining
WA Integra™

WA Integra offer innovative hardfacing and rebuilding solutions through a global network of service centres or in situ.

**Hardplate™**
Heavy duty composite wear plate
- Base metal and coating thickness selected according to the application
- Choice of several coating types
- Preferred solution for maintenance

**Hardlite™**
Ultra-thin composite wear plates - less than 5mm
- Designed for applications where weight is an issue
- Lighter and harder than comparable hard plates
- Advantageous for moving parts

**Tuffplate™**
Impact resistant wear plates
- Designed for applications susceptible to a combination of wear and impact
- Ideal solution for material transfer and transportation areas

**Cladded Tubes**
- Internally clad tubes to withstand high levels of abrasion
- Available in a range of internal diameters from 50mm
- Segmented elbow pipes easily changeable
- Customised diameters with maximum abrasion resistance
- Produced in our Integra workshops with our 3D-Touch MultiSurfacer machine

Gyratory refurbishment by welding done on site
Cone refurbishment by welding done on site
Automated welding solutions for the repair or refurbishment of complex parts

Welding Alloys Group offer a range of cored welding wires and hard plates designed to provide repair and refurbishment solutions for many wear related problems found in the mining industry.

The flexibility and ease of use of Welding Alloys products make them the ideal solution for a wide range of applications found in the repair shop or on site.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Type</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 14700 T Fe1</td>
<td>HARDFACE T - O</td>
<td>chains, drive sockets, mine car wheels</td>
</tr>
<tr>
<td>EN 14700 T Fe1 / Fe2</td>
<td>HARDFACE P - O</td>
<td>cable, sheavers, tractor parts</td>
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<tr>
<td>EN 14700 T Fe8</td>
<td>HARDFACE L - O</td>
<td>tractor and shovel parts, bucket teeth</td>
</tr>
<tr>
<td>EN 14700 T Fe15</td>
<td>HARDFACE HC - O</td>
<td>hammers, discs, pipes, screws, cones, valves, conveyers, crushers, plates, bars</td>
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<tr>
<td>EN 14700 T Fe15</td>
<td>HARDFACE CN - O</td>
<td>conveyors, crushers, valves</td>
</tr>
<tr>
<td>EN 14700 T Fe16</td>
<td>HARDFACE CV - O</td>
<td>conveyers, crushers</td>
</tr>
<tr>
<td>EN 14700 T Fe9</td>
<td>HARDFACE AP - O</td>
<td>bars, cones and jaws for crushers, hammers</td>
</tr>
<tr>
<td>EN 14700 T Fe10</td>
<td>HARDFACE 19 9 6 - O</td>
<td>buttering layers, mine car wheels, dissimilar welding</td>
</tr>
<tr>
<td>EN ISO 17 633-A T 29 9 U N 3</td>
<td>TRI S 312 - O</td>
<td>repair of gear teeth, sprockets, chain links, transmission parts</td>
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<tr>
<td>EN ISO 17 632-A T 38 Z W N 3</td>
<td>ROBOFIL T4</td>
<td>open arc joining wire</td>
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<tr>
<td>EN ISO 18 276-A T 68 5 Mn2NiCrMoM M1 H5</td>
<td>ROBOFIL M 700</td>
<td>gas shielded high strength cored wire</td>
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<tr>
<td>EN ISO 17 632-A T 46 2 P C 1 H5</td>
<td>ROBOFIL KX71T1+</td>
<td>gas shielded E71T1 wire for construction</td>
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<tr>
<td>EN 14700 T Cu1</td>
<td>CORBRONZE 302 - G</td>
<td>sealing seats, guides, shafts</td>
</tr>
</tbody>
</table>

Further welding consumables:
- Hardfacing cored wires
- Joining cored wires
- Electrodes
Our Technical ‘Spark’ Solves Your Industrial Challenges

WA Consumables
The go-to provider of advanced welding consumables

WA Machines
The go-to provider of automated equipment for wear protection

WA Integra™
The go-to provider of engineered wear protection solutions

A worldwide presence

www.welding-alloys.com