



**Welding  
Alloys  
Group**



ACTING GLOBAL  
WELDING LOCAL

# 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

Bucket wheel excavator for open pit mine

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

Further welding consumables:

Hardfacing cored wires

Joining cored wires

Electrodes





Mechanical bucket



Bulldozer



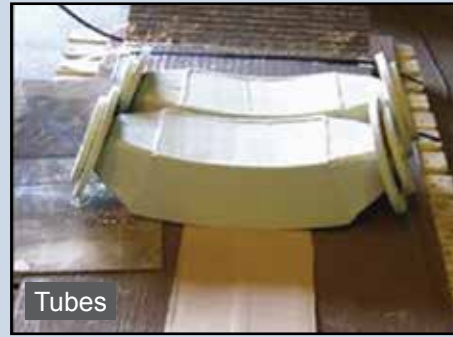
Carrier roller



Hammers



Internally clad elbows



Tubes



Chute



Cone refurbishment



Dynamic classifier



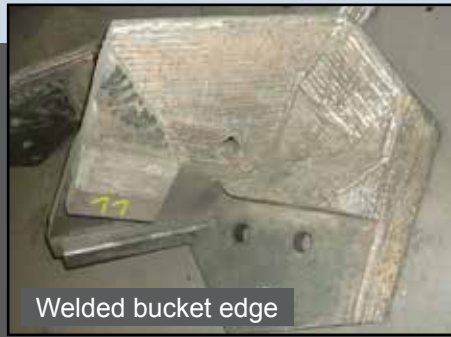
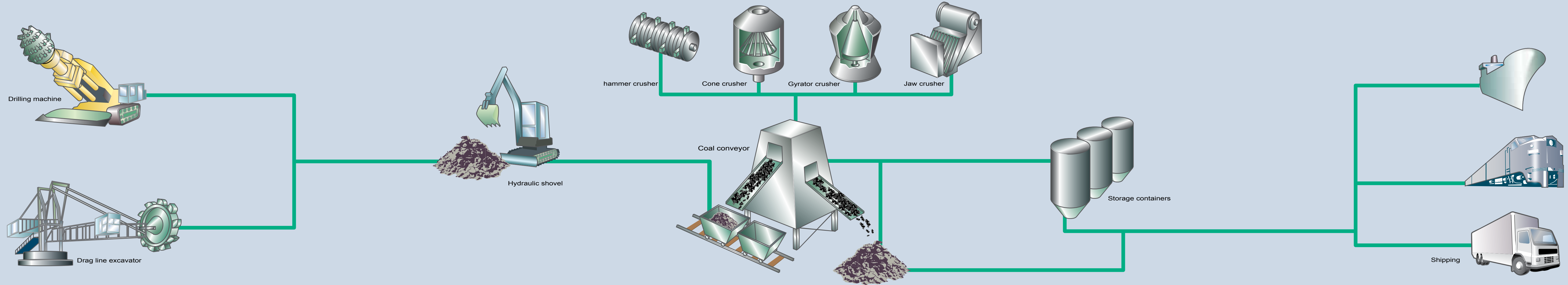
Front impact plate



Transport pipes



Screw



Welded bucket edge



Coal conveyor



Reclaimer bucket



ID-Clad Tubes



Segment of a cone housing



Driller



Gyrator



Cone construction



Distributor



Valves



Chutes

From mining to shipping, always a WA Solution



# Our Technical 'Spark' Solves Your Industrial Challenges



## WA Consumables

The go-to provider  
of advanced welding  
consumables



## WA Machines

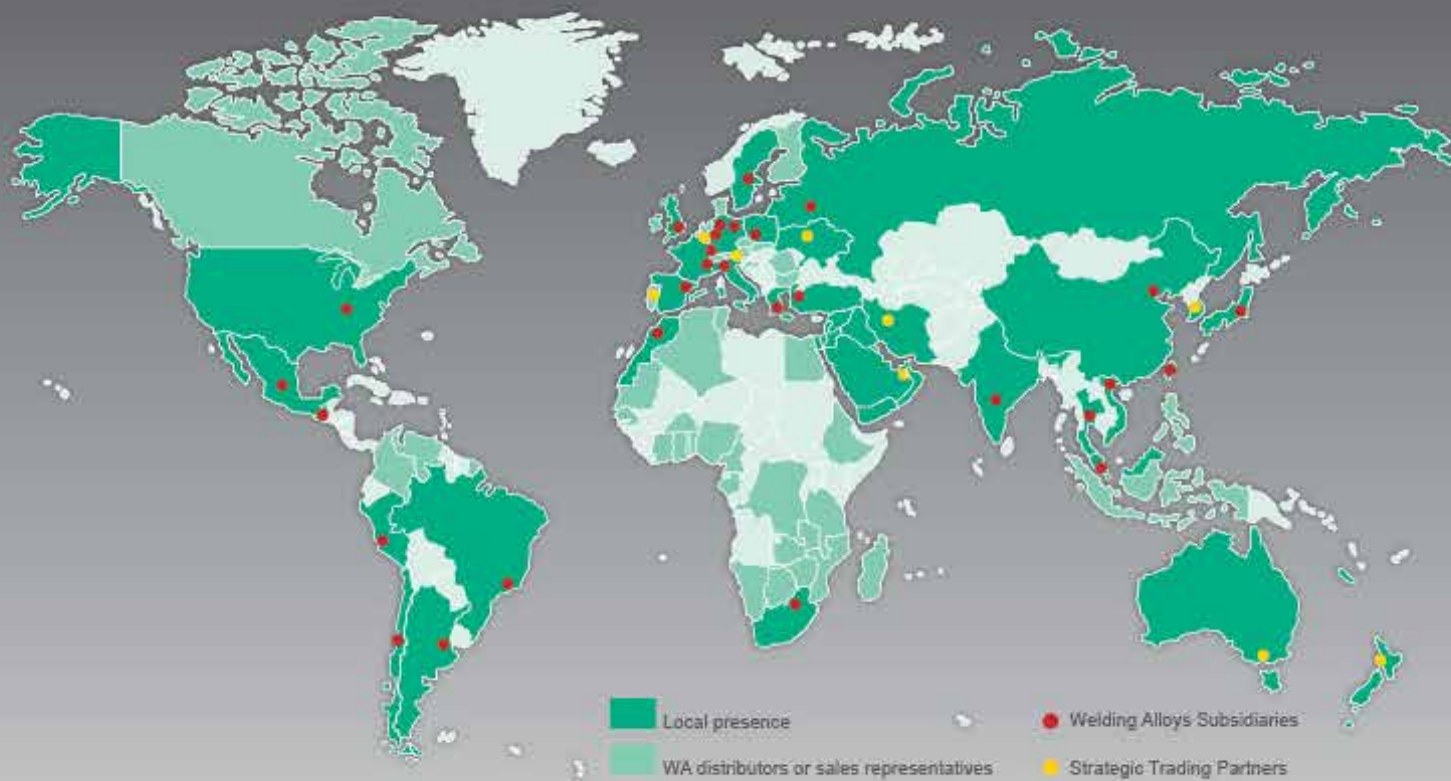
The go-to provider  
of automated equipment  
for wear protection



## WA Integra™

The go-to provider  
of engineered wear  
protection solutions

## A worldwide presence



[www.welding-alloys.com](http://www.welding-alloys.com)

