



Ferobide

Weld-on Tungsten Carbide tiles and plates for sliding wear applications.

What is Ferobide?

Ferobide is a weldable tungsten carbide composite material, which combines high levels of wear resistance with the ease and reliability of a weldable material.

The unique features of Ferobide closes the gap between conventional tungsten carbide which requires brazing and weldable materials which have a significant lower wear performance.

Ferobide is ideal in situations where brazing is not an option and for applications involving sliding wear. Ferobide has found its use in critical applications in several different industries such as agriculture, separation, mining, mixing, mineral processing and road maintenance.

The material is available in a range of standard tile sizes with custom designs available upon request.

Industries Served

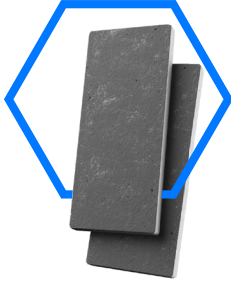
- Mining
- Cement
- Power / Energy
- Road Construction Equipment
- Agriculture
- Asphalt
- Pulp and paper
- OEM's

Typical Applications

- Chutes
- Mill liners
- Chain conveyors
- Guide rails and pads
- Screw conveyors
- Mixer paddles and scrapers
- Decanter centrifuge flights
- Rippers, plows and drills
- Fan blade and housing liners
- Buckets and dump truck bodies
- Hammers

Providing a solution for many more abrasion problems.

Customer Benefits



- Quick and easy to cut and weld on site
- Increase lifetime of components and equipment
- Significantly reduce downtime
- Keep designed engineered shapes for longer
- Protect critical machinery parts
- Various sizes to suit your application

Key Features

- Extreme abrasive wear resistance
- Weldable and bolt-on applications
- Easy installation

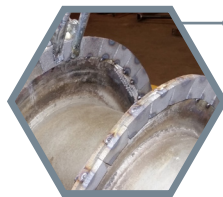
Application Examples



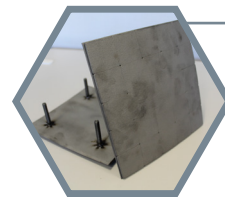
Chutes



Chain Conveyors



Screw conveyor flight



Ferobide with weld stud for easy mounting on baffle plate



Skids and shoes

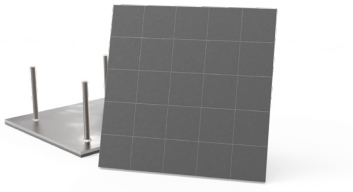


Buckets and shovels

Standard

Sizes

Besides the standard range of tiles, we can also supply bespoke shapes. Please contact us for more information.

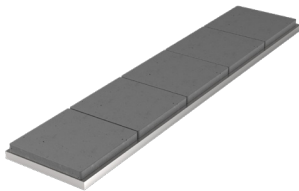


Plates

Ferobide tiles welded to a steel plate, a less time consuming alternative to fixing individual tiles to a larger surface area. We offer the following:

(200 x 200mm)

(Available in various thicknesses ranging from 6mm to 12mm)



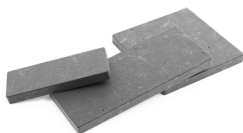
Strips

Ferobide tiles welded to a steel strip, a less time consuming alternative to welding individual tiles to a length in application. We offer the following:

(40 x 200mm)

(25 x 180mm)

(Available in various thicknesses ranging from 6mm to 12mm)



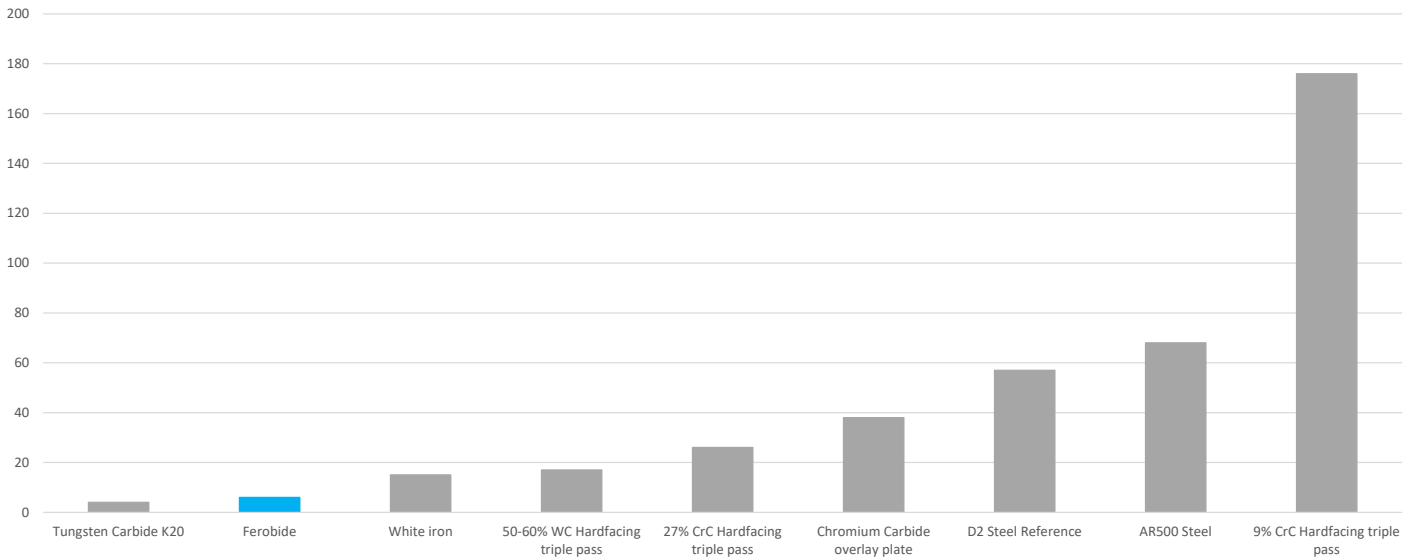
Tiles

Our individual Ferobide tiles come in a variety of sizes. We offer the following:

Thickness (mm)	Width (mm)	Length (mm)
4	8	40
4	15	40
4	40	40
4	25	60
6	15	40
6	40	40
6	25	60
8	15	40
8	40	40
8	25	60

Wear Performance

Direct result based on G65-A test method. Resultant mm³ of wear; smaller number = better performance



ASTM G65-A is a standard test method to illustrate the abrasive wear resistance of different materials.

As shown in the graph above, Ferobide has superior wear resistance compared to other weldable options.

Welding and cutting

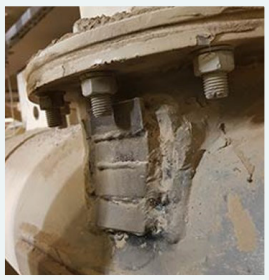
Ferobide has been designed to be easy to cut, weld and install in many applications.

- Cut using angle grinder and vice
- Use standard welding equipment and welding rod/wire
- Clamp parts before welding or cutting

Welding and cutting procedure can be provided upon request.

Application

Testimonials



Saint Gobain Byggprodukter, Sweden

Cement pipe repair

“A good solution for repairing holes due to concentrated wear! In this case the cement is only flowing against the area where the Ferobide tiles are welded. These tiles have a good hardness and are ideal as a wear resistant surface.”



Cement Pipe Products, Australia

Cement batch mixer scrapers

“Using Ferobide has definitely showed a big improvement on life compared to previous scraper, tiles are still living up to expectations.”



Pocklington, UK

Scraper units on ripper / subsoiler

“We fitted to scrapers and have since completed over 3000 acres of abrasive sand. There has been a saving of £1500 worth of wearing metal, 60 man hours' maintenance, with an outlay of only £225.”



Glass Recycling Plant, UK

Feeder transfer point

“We have a high impact point where glass cullet comes off one conveyor before dropping onto another. There is a constant flow of glass cullet here which is very abrasive. Chromium carbide often only lasts around 8 weeks, so we were looking for a longer lasting alternative. We have been very impressed with the Ferobide liner plate which we still have installed and shows no significant wear after 44 weeks”



Hanson Keepershield Quarry, UK

Transfer point at a Quartz Dolerite (Basalt) quarry

“One of our transfer points sees 30mm rocks flow at a rate of 115 tph which was previously wearing a hole right through 500 Brinell steel every 4 months or so. We resolved the issue by patching this area with a Ferobide plate. It was installed around 6 months ago and still shows minimal wear”



JSP Agri, UK

Ground engaging tools

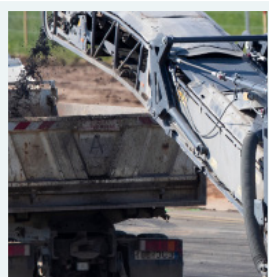
“These two points completed 180 hectares on the same plough at the same time. The left hand point had been treated Ferobide, the right hand point with welded hard facing. The Ferobide point lost only 65g, the right hand point lost 1500g.”



Skanska Vinci, Sweden

Cutterhead of tunnel boring machine

“We welded Ferobide plates around the cutterhead. 2 km of tunnel was bored in highly abrasive granite, where high speed subjects the face to extreme forces. Ferobide gives significant lifetime increase of 6-7 times.”



Markon Ltd, UK

Asphalt planing skids

“Using Ferobide has definitely showed a big improvement on life compared to the steel and crushed carbides used previously and has certainly surpassed expectations.”



Asphalt Plant, UK

Screen deck liner plates

“We had a problematic area where 20mm granular material comes off an elevator chute and then it slides onto a plate before reaching a screen deck. The temperature here is around 180 degrees and we had to replace AR 500 plates every 6 months in an area which was difficult to access. We installed 2 Ferobide plates in this area 7 months ago and they currently show less than 0.5mm of wear. We expect them to last several years before needing replacing which frees us up some valuable maintenance time”

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