



BMI optimizes industrial equipment performance by providing parts, solutions, and services for all types of industries.

PROTECT,
HARDFACE,
RELIABILITY,

Your Industrial
Equipment

Groupe BMI

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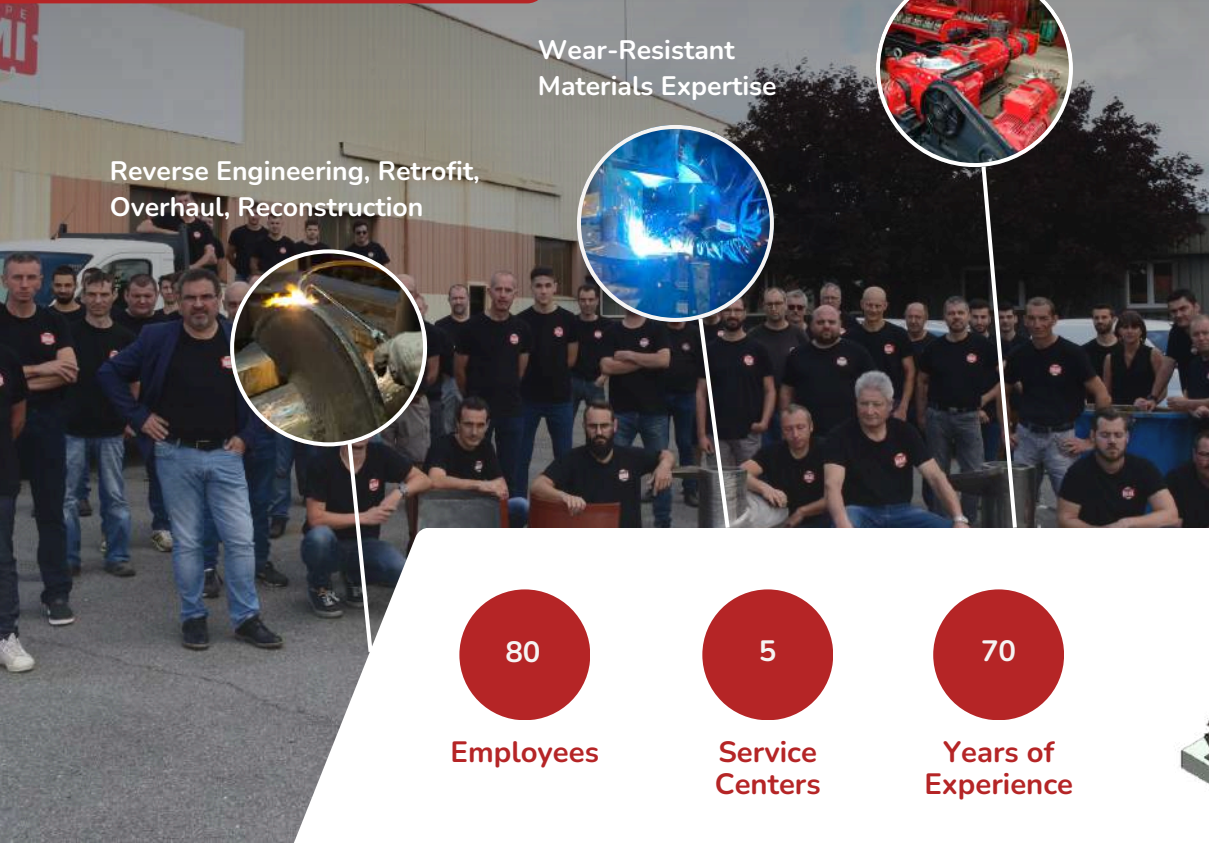
groupe-bmi.fr

BMI Group

Manufacturer of Machines and Equipment for the Brick and Tile Industry

Wear-Resistant Materials Expertise

Reverse Engineering, Retrofit, Overhaul, Reconstruction



80

Employees

5

Service Centers

70

Years of Experience



We design, manufacture, install, and maintain durable solutions to optimize the wear resistance of your equipment.

With a team of 80 employees, we help industrial companies reduce wear, lower maintenance costs, and improve equipment reliability.

Company specialized in complete lines for raw material preparation and processing.

PELERIN
Pièces Services Machines

CERTIFIED PREMIUM SERVICES & QUALITY

Because we fully manage all stages in-house: engineering, cutting, machining, hardfacing, steel fabrication, and on-site services.

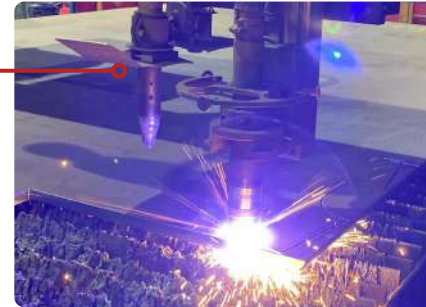
We provide our customers with unmatched responsiveness and continuous quality monitoring.



Engineering Department

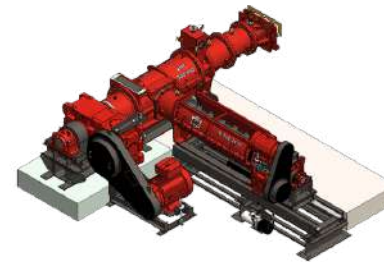
+ Cutting Workshop

Laser / Plasma / Oxy-Fuel Shearing & Punching



+ Machining Workshop

CNC Turning
Machining Centers
EDM Machining



+ Steel Fabrication Workshop

Forging
Steel Fabricators / Welders
Robotic Welding
Painting

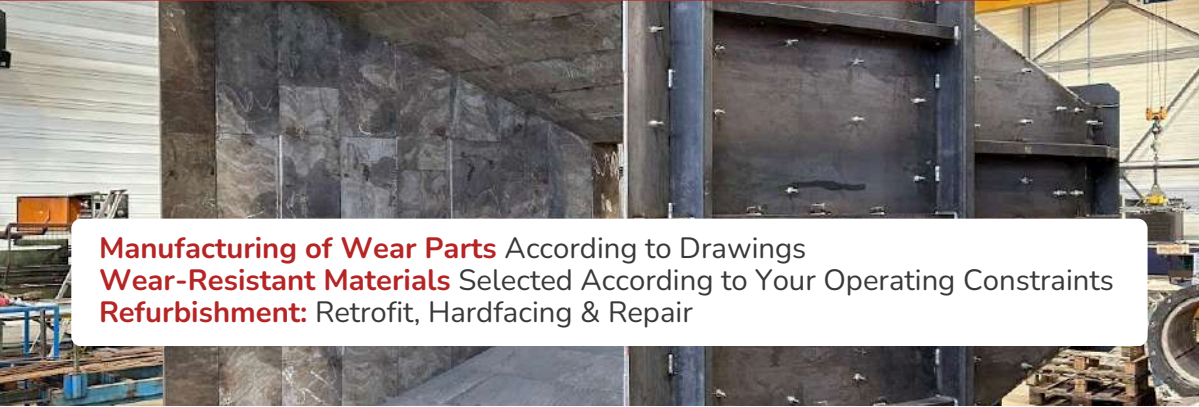


Hot Forging



Heat Treatment

Wear Solutions & Wear Parts



Manufacturing of Wear Parts According to Drawings
Wear-Resistant Materials Selected According to Your Operating Constraints
Refurbishment: Retrofit, Hardfacing & Repair



Mining & Quarrying

- Hammers
- Scalpers / Screens
- Bucket Wheel Excavators
- Bucket Components
- Liners & Wear Linings
- Piping / Hoppers



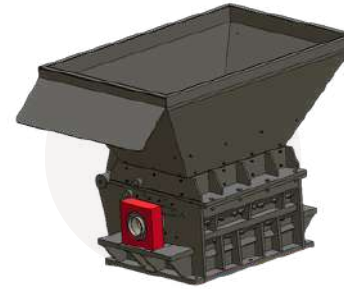
Brick & Tile Industry

- Mixer Blades & Hubs
- Extruder Augers
- Anti-Rotation Pins / Scrapers
- Pressure Heads
- Mill Rollers
- Grinding Tracks
- Hoppers / Ducts

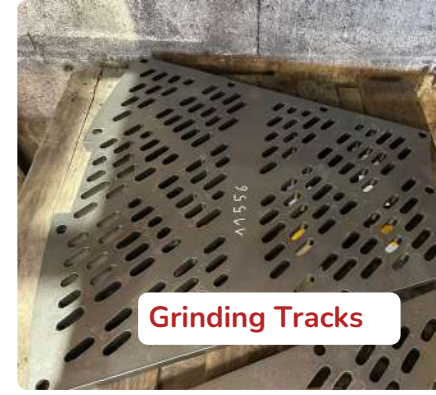


Wherever wear is a challenge, BMI can design and manufacture custom wear parts tailored to your operating constraints.

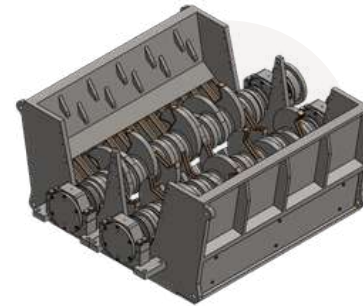
Hopper + Shredder



Crusher Rotor



Grinding Tracks



Shredder



Crusher Grate

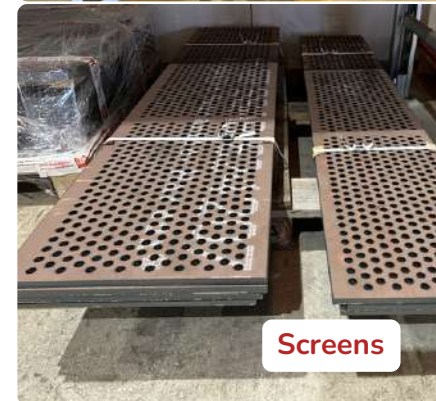
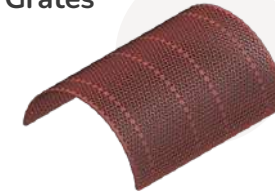
Crusher Cradle



Hammers

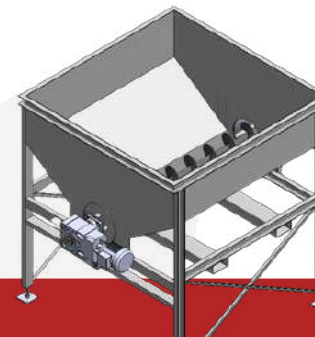


Grates

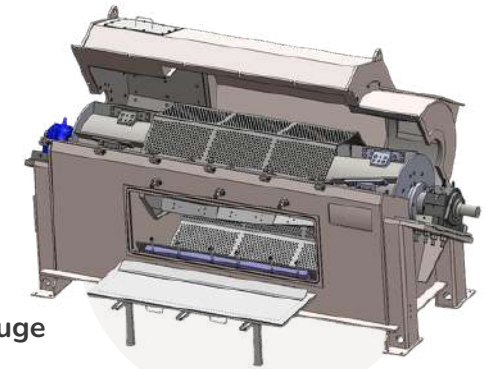


Screens

Plastic Recovery Hopper + Screw Conveyor



Centrifuge



Hardfacing & Repair Services

BMI provides component repair and refurbishment services



Hardfacing Types

Tungsten Carbide Overlay
Flux-Cored Wires
PTA



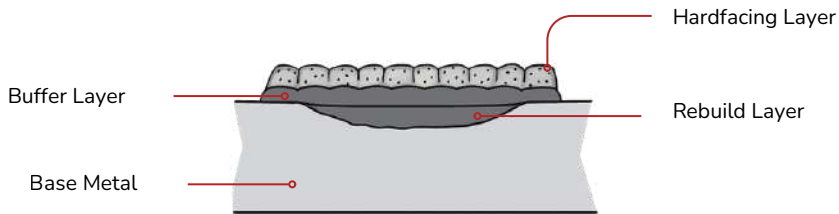
Wear Mechanisms

Moderate Abrasion
High-Pressure Abrasion
Severe Abrasion / High Impact
Adhesion / Friction
Erosion
Cavitation
Thermal Fatigue
Contact Fatigue
Corrosion



BMI masters the hardfacing of all types of components, adapting to every wear mechanism (abrasion, impact, corrosion, temperature).

Thanks to the combination of high-performance materials and adapted processes, we provide tailor-made solutions to significantly extend the service life of your components.



Why Repair Your Components Instead of Replacing Them?



Cost Savings

Hardfacing significantly reduces costs compared to manufacturing a new component.



Safety / Assembly

No risk associated with non-compliant remanufacturing



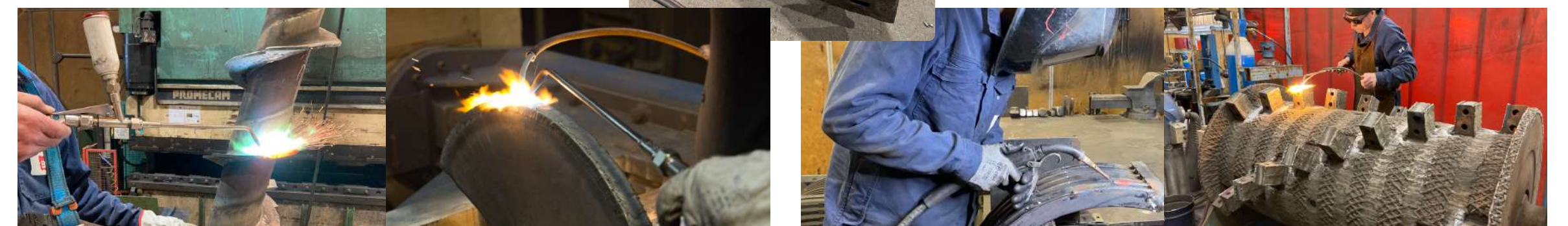
Lead Time

Back in service within weeks instead of several months for a new component.



Carbon Footprint

Reduced carbon footprint



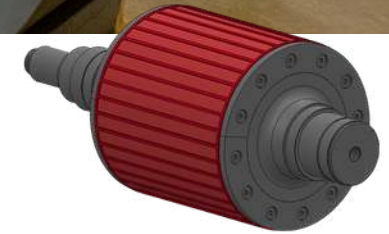
Maintenance & Retrofit

PELERIN supports you in the refurbishment of your industrial machines and the maintenance of your rotating equipment.

+ On-site or Workshop Intervention
Multi-brand

Maintenance of Rotating Equipment

Roll Crushers / Disintegrators / Lump Breakers / Crusher Rotors ...
Multi-brand



Our Expertise

Diagnosis & Reverse Engineering
Wear Analysis, Crack Repair

Replacement Parts
Tyres, Wear Rings,
Shafts / Wear Coatings
Bearings, Pulleys,
Tie Rods and Nuts,
Crowns and Hubs

Assembly, Balancing, Painting
Complete Logistics



Machine Types

Industrial Mixers
Extrusion Group / Extruder
Primary or Secondary Crushers
Crushers
Conveyors / Conveyor Belts
Mixers and Raw Material Dosing Systems
Dosing and Feeding Systems

Our Expertise

Turnkey Solutions
Engineering, Reconditioning, Installation

**Hardfacing
& Wear Components**

Complete Logistics

Refurbishment and Modernization of Machines

? Why Choose PELERIN

Historic expertise in clay preparation machinery
Ability to work on all machine brands
Expertise in wear materials and wear parts
Maintenance services in France and abroad



Custom Screw Conveyors & Flighting

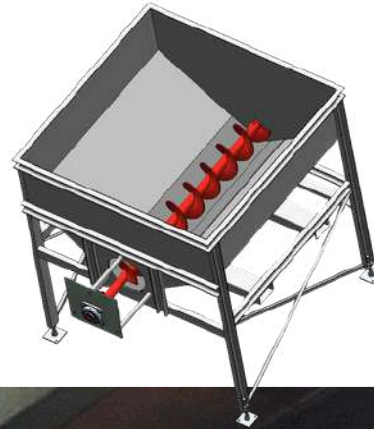
BMI supports you in the development and manufacturing of your screw conveyors.

+ Integrated Industrial Capabilities (forging, cutting, hardfacing...)



Options

Cold-Formed or Hot-Formed Inlets
Perforated Flights
Variable or Progressive Pitch



Matériaux

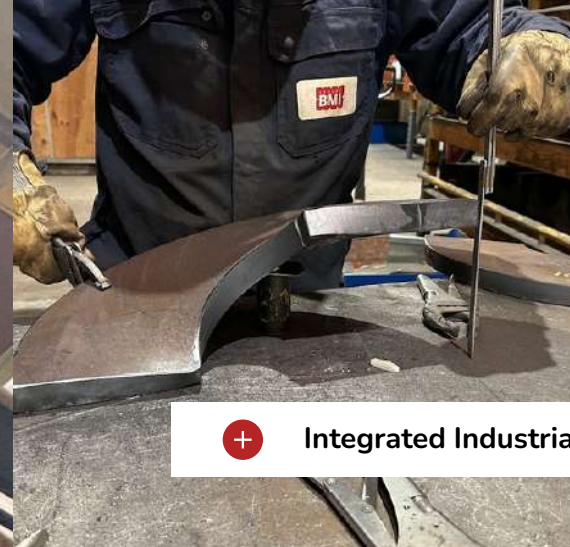
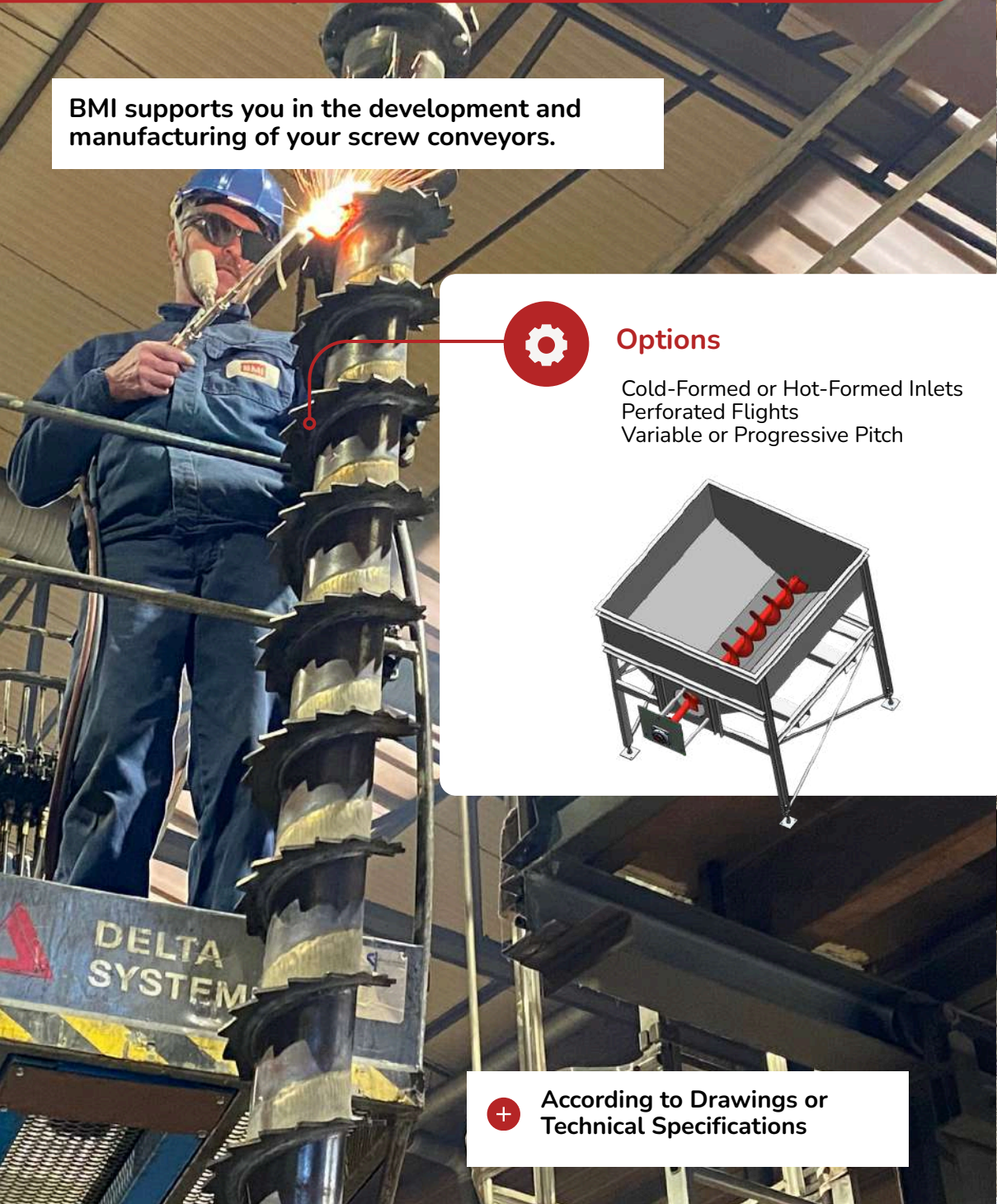
Structural Steels
HLE Steels
Stainless Steels
Anti-Abrasion Steels
HVOF / Plasma Coatings
Wear Linings
Tungsten Carbide Hardfacing



Retrofit & Refurbishment



+ According to Drawings or Technical Specifications



Wear-Resistant Materials



RAEX® Wear-Resistant Steels



Hardness
400/450/500 HB

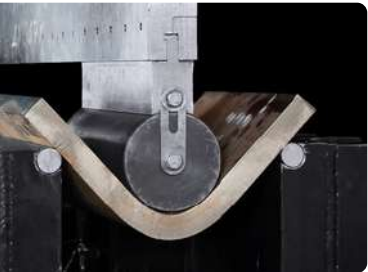


Moderate to Severe Abrasion



Good Mechanical Strength

	Hardness HBW	Impact Strength (Charpy V-Notch at J)	Mechanical Properties			Thicknesses mm
			Yield Strength (Rp 0.2)	Tensile Strength (Rm)	Elongation (A%)	
RAEX 400	360-440	30J à -40°C	1100	1300	10	Sheet: 3 to 8 Plate: 6 to 80
RAEX 450	420-500	30J à -40°C	1250	1450	9	
RAEX 500	470-540	30J à -40°C	1300	1650	10	



Applications

Crushers and conveying systems, blades, wear shells, chutes, augers, conveyor screws, knives, liners, hoppers, tanks, crushing equipment ...



Datasheet

ABRA-CEM® Concrete



High Resistance to Sliding Abrasion

Applications :

Tanks, Pressure Heads, Mixer Liners, Ducts, Pipes, Chutes ...

Datasheet



ABRA-FACE® Clad Plates



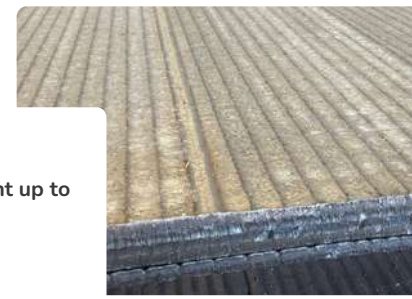
Hardness
62-63-64 HRC



Extreme Abrasion



Resistant up to 650°C



	Hardness HRc	Service Temperature (°C)	Thicknesses mm	Datasheet
ABRA-FACE 63	58-62	300°C	4+2 5+3 6+4	
ABRA-FACE 65-450	59-63	450°C	8+5 12+8 20+5	
ABRA-FACE 67-650	60-64	650°C	25+5	

Applications : Components subjected to severe wear and high temperatures, steel industry, cement plants, recycling, thermal power plants, asphalt plants.



ABRA-GLIDE® Clad Plates



62 HRC Hardness



Resistant up to 450°C



Reduces Build-Up Risks



Thicknesses: 5+5 / 6+6 / 10+10 / 12+12

Applications: Screening, liners, sliding plates, hoppers, etc.



Datasheet



Consumables



Hardfacing,
Repair,
Manufacturing of New Components



Flux-Cored Wires

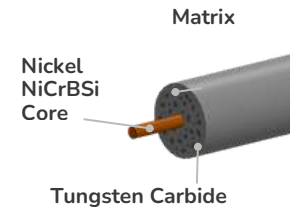
		Abrasion Resistance	Impact Resistance	Temperature Resistance	Other Characteristics
High-Chrome Cast Iron	FCW63	★★★★☆	★★★☆☆	300°C	
	FCW63B	★★★★☆	★★★☆☆	300°C	
	FCW65-450	★★★★★	★★★★☆	450°C	
	FCW67-650	★★★★★	★★★★★	650°C	
Tool Steels	FCW600HB	★★★☆☆	★★★★★	450°C	Friction
	FCW650HB	★★★★☆	★★★★★	500°C	Friction
	FCW600TIC	★★★★☆	★★★★★	250°C	
High Performance	FCW70NANO	★★★★★	★★★★☆	750°C	
	FCW TUF-Mn-O	★★★★☆	★★★★★	250°C	Friction
	FCW60WC	★★★★★	★★★★★	600°C	Corrosion



Resistant to abrasion, impact, heat and friction

FLEXCARB® : Flexible Cords

criteria	Spherical FR92 Carbide	Crushed FR82 Carbide
Shape		
Adhesion to the Matrix	Lower, smooth surface	Better, thanks to angular edges
Wear Resistance	★★	★★★★
Impact Resistance	★★★★	★★
Applications	Components subjected to impacts, moving parts	Highly abrasive surfaces without major impacts



Electrodes

	Hardness	Targeted Wear Type	Available Diameters (mm)
SE63	~60-63 HRc	Moderate Shock Abrasion	3.2
SE68	~64 HRc	Extreme Abrasion	3.2 / 4
SE29-9	~240 HB	Stainless / Dissimilar Assembly	3.2
SE-Fonte-Ni	~180 HB	Cast Iron Repair	2.5 / 3.2 / 4 / 5



Poudres

Hardfacing Powders (NiCrBSi)
 Hardness: 16 to 60 HRC
 Good resistance to abrasion, corrosion and heat

Blended Powders (Nickel Base + Tungsten Carbide)
 Hardness: up to 60 HRC
 Carbide Hardness: 1800 to 2400 Hv
 Very Severe Abrasion (sliding / regular flow)



High Purity Level
Controlled Particle Size