

Wear Resistant Materials for Decanter Centrifuges

TENMAT Wear offers wear resistant materials for demanding parts of decanter centrifuges for increased reliability and efficiency in operation whilst being time saving during fitting and service.

For scroll flight protection, our weldable tungsten carbide composite material, *FEROBIDE*, is the ideal solution. Unlike conventional tungsten carbide tiles, it welds directly to the scroll using standard methods without requiring an intermediate carrier. Eliminating the carrier allows *FEROBIDE* tiles to provide a larger wear-resistant surface area, protecting more of your equipment.

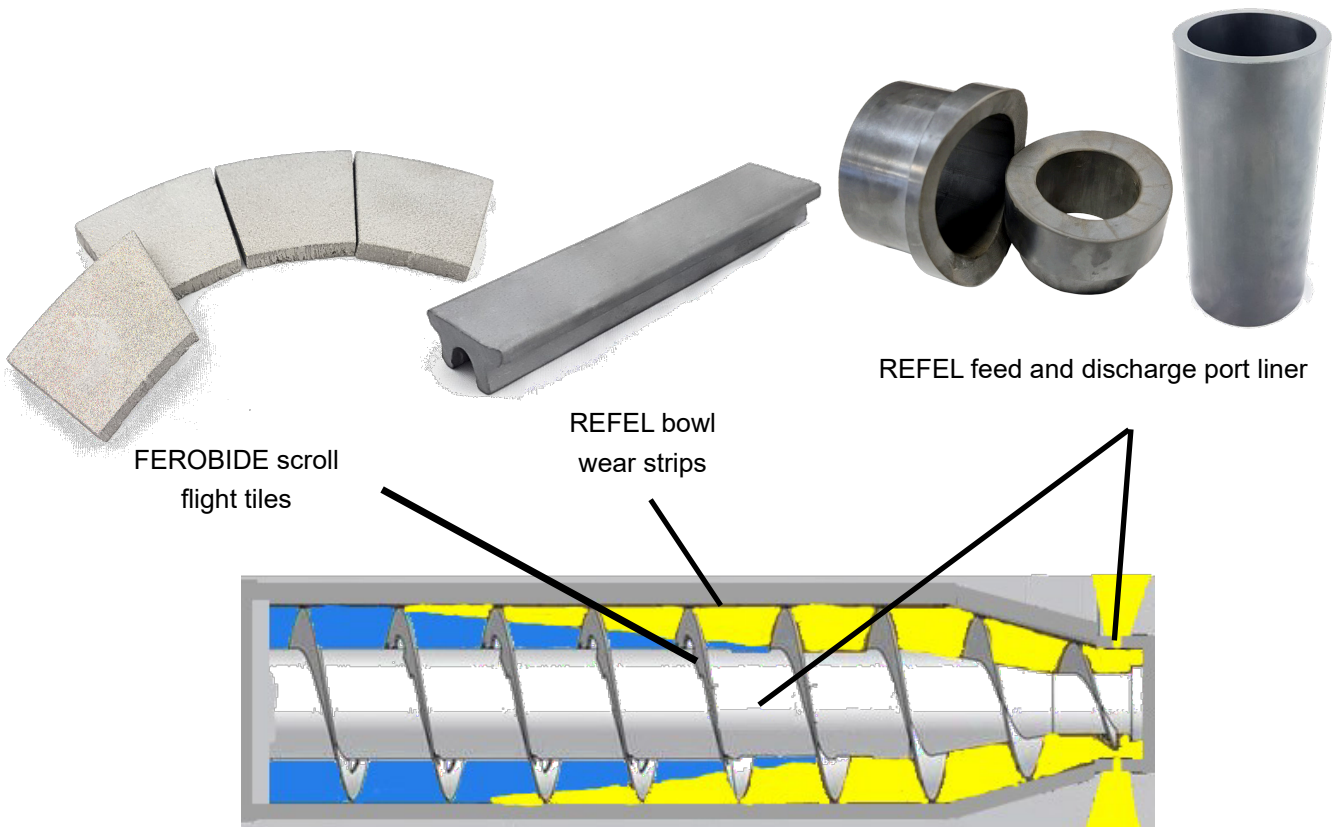
For feed and discharge port liners, our fine-grained, reaction-bonded silicon carbide material, REFEL, delivers heavy-duty wear performance. Its exceptional chemical inertness ensures a long service life while protecting the surrounding steel structure from abrasion. Beyond port liners, REFEL is highly effective for bowl wear strips and scroll flight protection.

Applications

- Decanter centrifuge flight tiles
- Feed and discharge port liners
- Wear strips for bowls

Customer Benefits

- Improves maintenance frequencies
- Protect vital parts from wear
- Fit to any centrifuge scroll design
- Quick, easy to install with reliable weld
- Higher strength of weld joint for Ferobide that avoids tile delamination





Decanter centrifuge fitted with Ferobide tiles

FEROBIDE

The typical results for FEROBIDE in ASTM G65 tests is 3mm³ of wear, comparable to that of tungsten carbide.

When compared to other common wear resistant materials in sliding abrasion, Ferobide is:

- 15 times better than 500 HB hardened steels,
- 8-10 times better than chromium carbide plates and hardface welds,
- 6 times better than cast white iron,
- 4 times better than 97% alumina.

REFEL

REFEL reaction bonded silicon carbide products contain a microstructure, which gives superb interlocking strength and surface quality.

- Fine Grained Micro structure
- 5x Lighter than Tungsten Carbide
- High Wear Resistance
- High Strength
- Lightweight
- Anti-corrosion Properties
- High Thermal Conductivity
- Thermal Shock Resistance

