

QBRAZE™ 2000 is solid cemented tungsten carbide (WC-Co) tile, vacuum-brazed in a mosaic pattern onto a Q355B steel backing plate — the most wear-resistant product in the QAME range.

Where chromium carbide overlay and even welded tungsten carbide overlay wear out, solid carbide tile is the step up. The steel backing carries all fixing features and welds into position in the normal way, while the tiles present a continuous carbide wearing surface to the material stream.

MATERIAL & CONSTRUCTION

- Solid cemented tungsten carbide (WC-Co) tiles — YG-class per GB/T
- Vacuum furnace brazed — continuous joint across the full tile face
- Q355B steel backing — weldable, drillable, carries all attachment

MECHANICAL PROPERTIES

- Tile hardness ≥ 88 HRA ($\approx \geq 70$ HRC equivalent — CCO tops out near 65 HRC)
- Transverse rupture strength $\geq 1,500$ MPa; density ~ 14.5 g/cm³
- Braze joint shear strength ≥ 150 MPa typical; service to ~ 450 °C

Typical values. Certified batch test figures are provided with each order.

QUALITY & SUPPLY

- ISO 9001:2015 system — every batch tested, certified reports with shipment
- Liners manufactured to final size and shape, to your drawing
- Custom tile layouts, liner shapes, holes and radii on request

QAME supplies QBRAZE™ 2000 in the following **standard combinations**, designated backing + tile (mm). Custom combinations — tile 6–22 mm on backing 6–35 mm — are available on request:

Designation (backing + tile)	Tile (mm)	Backing Q355B (mm)	Total (mm)	Overlay-convention equivalent
6 + 10	10	6	16	10 mm carbide on 6 mm backing
16 + 10	10	16	26	10 mm carbide on 16 mm backing
20 + 6	6	20	26	6 mm carbide on 20 mm backing

Benefits

- The hardest wearing surface in the QAME range
- 5–10× CCO life reported in severe sliding abrasion
- Much thinner, lighter liner packages
- Continuous vacuum-brazed joint — not spot fixing
- Finished liners — drilled and profiled before brazing

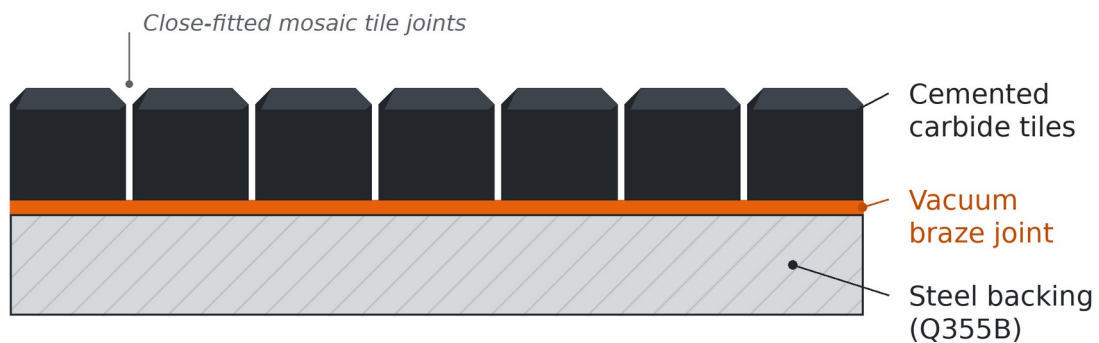
Applications

Extreme sliding abrasion, such as:

- Transfer chutes & dead-boxes
- Skirt liners
- Hopper & bin wear zones
- Cyclone & classifier parts
- Feeder & screen wear strips
- Iron ore · coal · lithium · hard rock · cement

CONSTRUCTION

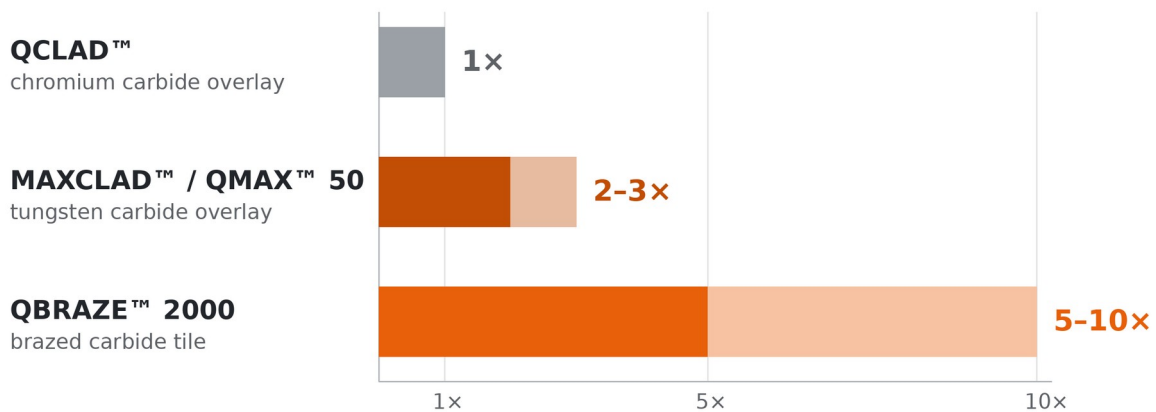
Chamfered carbide tiles are laid out as a close-fitted mosaic and vacuum-brazed to the steel backing. The braze joint is continuous across the full tile face, so the tile is supported everywhere it is loaded.



QBRAZE™ 2000 construction — carbide tile mosaic, vacuum braze joint, steel backing

WHERE QBRAZE™ 2000 FITS

QBRAZE™ 2000 sits above MAXCLAD™ (tungsten carbide reinforced overlay) and QMAX™ 50 (PTA-deposited fused tungsten carbide) at the top of the QAME wear range:



In severe sliding-abrasion service, solid carbide tiles commonly return **5–10× the life of chromium carbide overlay** — and allow much thinner, lighter liner packages. Application experience includes a 63 mm overlay liner package replaced by 26 mm of brazed carbide liner, and iron-ore chute liners at 20 + 6 running beyond two years. These figures reflect application experience, not a guarantee — actual life depends on the duty.

DESIGN & ATTACHMENT

Tiles cannot be cut, welded or formed after brazing — every QBRAZE™ 2000 liner is manufactured to final size and shape. Each liner is drilled and profiled to the customer drawing before brazing, so liners arrive ready to install. Attachment is through the steel backing:

- Countersunk bolt holes
- Welded studs
- Plug-weld pockets in tile-free zones

Site welding is confined to tile-free zones of the backing, keeping the braze joint below its ~450 °C service limit. Send us the liner drawing — or the worn liner — and QAME will detail the tile layout, fixing positions and backing to suit.



Formed transfer chute liner — QAME fabrication



Wear plate production — QAME, Qingdao

QBRAZE™ 2000 is built for the wear zones that consume everything else — transfer chutes and dead-boxes after crushers, skirts, hoppers, cyclones and screen wear strips in iron ore, coal, lithium, hard-rock mining and cement. Where a welded overlay is being changed out every few months, a brazed carbide liner package can run years — contact our team to discuss your application.