FOOTHILLS STEEL

BRAZED BIMETALLIC WEAR PLATE

CHROMEBOND HC

HIGH-CHROMIUM WHITE IRON. STEEL-BACKED. BUILT FOR ABRASIVE ORE HANDLING.

ChromeBond HC is a hardened high-chromium white iron wear face vacuum-brazed to a carbon-steel backing plate. You get the abrasion resistance of white iron with a backing that absorbs impact and installs like steel: welded, bolted or plug-welded in place.

≥98%	59 HRC	≥90%	2 grades
BONDED AREA, UT VERIFIED	MIN. SURFACE HARDNESS*	HARDNESS HELD TO 50% DEPTH*	A532 II-B & III-A

IMPACT-TOLERANT

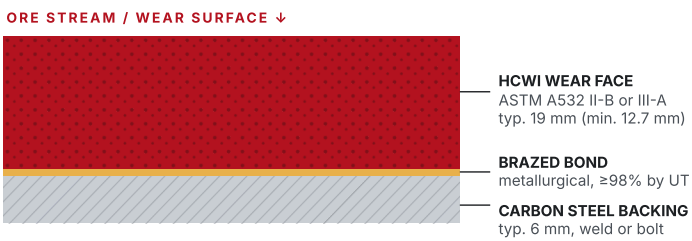
The steel backing absorbs impact energy and supports the white iron, reducing the risk of cracking and spalling that limits solid white-iron liners.

NO RELIEF-CHECK CRACKS

Unlike weld-overlay plate, the cast HCWI wear face is continuous and uniform through its full thickness, so wear life doesn't depend on bead pattern or dilution.

INSTALLS LIKE PLATE

Weld, bolt or plug-weld through slots in the backing. Tiles are fabricated into large liner assemblies with tight joints, ready for your chute, bin or saddle.



Not to scale. HCWI/backing thickness ratio is set per application.

WHY BRAZED?

A brazed joint forms a metallurgical bond across the full interface. That is why industry HCWI specifications for heavy mining rank brazed bimetallic plate as the **first choice for dry ore handling**, ahead of co-cast plate (mechanically anchored on studs) and stand-alone HCWI liners.

* Qualification requirements of FSF-HCWI-STD-CST-00001 Rev. B and the client specification it supports. Hardness per ASTM A532 Level 2 (min. 59 HRC / 650 HB / 715 HV).

CHOOSE THE GRADE

TWO HCWI GRADES, ONE BOND STANDARD

ASTM A532 Class II Type B (15% Cr-Mo, 14–18% Cr) for dry ore handling, where the Mo-bearing chemistry gives excellent through-hardness and abrasion resistance.

ASTM A532 Class III Type A (25% Cr, 23–30% Cr) for dry *and* wet service. Higher free chromium in the matrix adds corrosion resistance for aqueous and slurry-exposed applications.

Both grades are hardened to ASTM A532 Level 2, and hold at least 90% of minimum surface hardness through 50% of the section, so wear resistance doesn't fall off as the face wears down.

WHERE IT WORKS

DRY ORE HANDLING

- Surge bins and saddle inserts
- Transfer chutes and hoppers
- Feed wells and feed boxes
- Crusher discharge and dump pockets
- Screen decks and impact zones
- Truck bed and bucket liners

Not sure which grade or thickness? Send the drawing and service conditions; our engineers will specify it.

LINER OPTION	BOND TO BACKING	IMPACT TOLERANCE	WEAR FACE	INSTALLATION
ChromeBond HC (brazed bimetallic)	**Metallurgical braze, ≥98% by UT**	**High: steel backing absorbs impact**	**Hardened HCWI, uniform through thickness**	**Weld, bolt or plug-weld**
Co-cast bimetallic	Mechanical, on studs in a steel frame	Good	Hardened HCWI	Weld or bolt
Stand-alone HCWI	None	Lower: risk of cracking/spalling	Hardened HCWI	Bolt-in only
Chromium carbide overlay	Weld-deposited	Good	Overlay with relief-check cracks; properties vary with dilution	Weld or bolt; can be formed

FABRICATION

BUILT TO YOUR DRAWING

- Typical build 19 mm HCWI on 6 mm carbon steel; ratio set per application
- Min. HCWI thickness 12.7 mm (½″)
- Tiles assembled into liners up to approx. 2438 × 1219 mm, joint gaps under 3 mm
- Slotted holes, countersinks, irregular profiles and plug-weld slots
- Serial number marked on every piece

QUALITY & DOCUMENTATION

Manufactured and inspected to Foothills specification FSF-HCWI-STD-CST-00001, with an Inspection & Test Plan issued for each order.

Heat chemistry · Product analysis · Surface hardness per furnace load · Heat-treatment records · UT bond reports · Dimensional reports · Backing plate MTRs · PMI / spectro

ISO 9001 · **CSA W47.1** · **COR** · **APEGA Permit**

QUOTE CHROMEBOND HC

Send liner drawings or a bill of materials. We'll confirm grade, thickness and lead time.

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Typical data. Final specifications are confirmed at quotation for each application.