BRAZED BIMETALLIC WEAR PLATE

CHROMEBOND HC

Hardened high-chromium white iron vacuum-brazed to a carbon-steel backing for dry ore handling: surge bins, chutes, saddle inserts, feed wells and transfer points.

PROPERTY	SPECIFICATION
CONSTRUCTION	
Product	Brazed bimetallic wear plate: hardened HCWI wear face, carbon-steel backing
Bond	Vacuum-brazed metallurgical bond across the full interface
Typical build	19 mm HCWI on 6 mm carbon steel (ratio set per application)
Min. HCWI thickness	12.7 mm (½″) for heavy mining wear service
Backing plate	Structural carbon steel, grade per drawing; MTRs supplied
Assemblies	Tiled liners to approx. 2438 × 1219 mm; joint gaps < 3 mm
Features	Slotted holes, countersinks, irregular profiles, plug-weld slots
WEAR FACE: HARDNESS AND WEAR	
Grades	ASTM A532 Class II Type B (dry service) · Class III Type A (dry and wet service)
Heat treatment	Hardened, or hardened and stress-relieved, to ASTM A532 Level 2
Surface hardness	Min. 59 HRC / 650 HB / 715 HV (ASTM A532 Level 2)
Through-hardness	≥ 90% of min. surface hardness (≥ 53 HRC) to 50% of section depth
BOND QUALITY AND INSPECTION	
Bond acceptance	≥ 98% good bonding by UT, on min. 5% of each order (min. 1 piece)
Chemistry	Heat analysis of every heat; product analysis of every lot
Hardness checks	Min. 3 pieces or 5% of each heat-treatment furnace load
Visual / NDT	100% visual; PT on first article and production sample; no weld repair of HCWI
Calgary verification	PMI, spectrographic analysis, hardness and dimensional inspection
NDT personnel	ISO 9712, ASNT SNT-TC-1A or CGSB, min. Level II
Documentation	ITP, heat chemistry, hardness and UT reports, heat-treatment records, dimensional reports, backing MTRs, serial-number traceability

HCWI CHEMISTRY, WT% (ASTM A532)

Class / Type	C	Mn	Si	Ni	Cr	Mo	Cu	P	S
II B (15% Cr-Mo)	2.0–3.3	2.0 max	1.5 max	2.5 max	14.0–18.0	3.0 max	1.2 max	0.10 max	0.06 max
III A (25% Cr)	2.0–3.3	2.0 max	1.5 max	2.5 max	23.0–30.0	3.0 max	1.2 max	0.10 max	0.06 max

Values are minimum requirements of Foothills specification FSF-HCWI-STD-CST-00001 Rev. B unless noted. Grade, thickness and backing are confirmed per drawing at quotation. Class II Type B is recommended for dry service only; Class III Type A suits dry and aqueous service.

REQUEST A QUOTE

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

(403) 255-0125 · Fax (403) 252-8994
info@foothillssteel.ca
foothillssteel.ca