

MAXCLAD™ is the top tier of the QAME range — a chromium carbide overlay reinforced with fused tungsten carbide, engineered for fine-particle abrasion and elevated temperatures where standard CCO is not enough.

Fused WC particles fill the spaces between the primary M_7C_3 chromium carbides, reducing the inter-carbide spacing so fine, hard particles cannot erode the softer matrix. The result: outstanding wear life in PF pipework, fan blades, cyclones and other fine-particle duties, up to 595 °C.

MATERIAL & MICROSTRUCTURE

- Primary M_7C_3 carbides plus fused WC in a eutectic austenite matrix
- Total carbide volume fraction >37% (6000) and >45% (8000) incl. WC
- WC fills inter-carbide spacing to shut out fine-particle erosion

MECHANICAL PROPERTIES

- Bulk hardness >700 HV30
- Primary M_7C_3 carbides ~1500 HV0.5; WC harder still
- Withstands continuous impact

QUALITY & WORKABILITY

- Single-pass weld deposition for consistent quality
- High-strength metallurgical bond with a defect-free interface
- Excellent machinability for cutting, rolling, forming and fabrication

Benefits

- Fused tungsten carbide for extreme fine-particle abrasion
- Welding into position made easy by the mild steel base
- Elevated temperature capability to 595 °C
- Available in thickness combinations up to 50-on-20 (70 mm)
- Proven where nothing else survives

Applications

Applications involving high sliding abrasion and medium impact, such as:

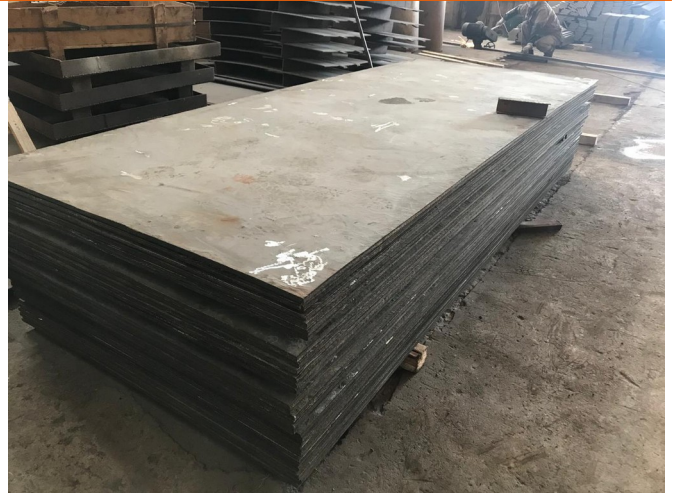
- PF mill & pipework
- Fan blades
- Cyclones & separators
- Chutes & ore bins
- Feeders
- Excavator buckets
- Stackers
- TLO systems
- Screen decks
- Slurry pipe linings

QAME stocks MAXCLAD™ in both grades. **Standard thickness** is available in the following combinations, however any thickness combination is achievable:

Hardface (mm)	6	6	7	8	9	8	9	10	12	8	9	10	17	20
Backing (mm)	6	8	8	8	8	10	10	10	10	12	12	12	12	12
Total thickness (mm)	12	14	15	16	17	18	19	20	22	20	21	22	29	32



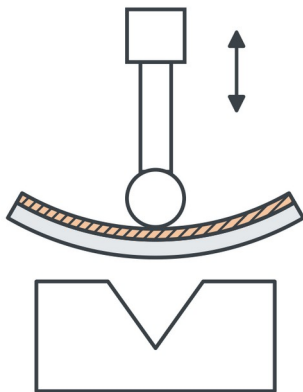
MAXCLAD™ wear package — bucket wheel excavator



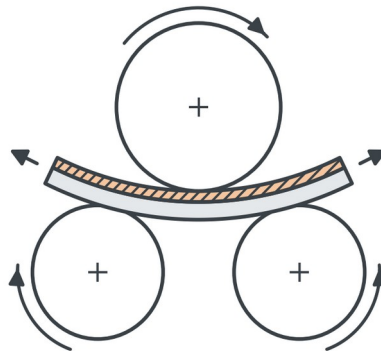
MAXCLAD™ plate stock ready for dispatch

FORMING & FABRICATION

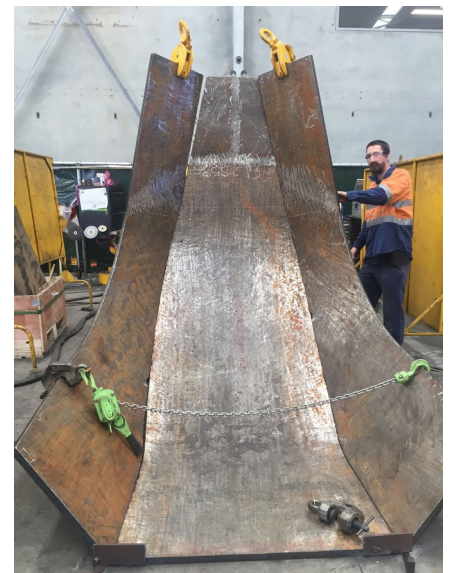
MAXCLAD™ can be press-bent or rolled to suit chutes, hoppers, pipes and formed liners — form perpendicular to the bead direction with wide-set, rounded tooling. Plate can be plasma cut, drilled from the mild steel side, and attached by plug welds, studs or perimeter fillet welds.



Press bending



Rolling — perpendicular to beads



Formed transfer chute liner

CHEMICAL COMPOSITION

Grade	C	Si	Mn	Cr	W	Mo+Nb+Ti+V+W	Bal.
FLOW60	3.5–7.0%	0.5–2.5%	0.5–2.5%	23–35%	–	–	Fe
FLOW80	3.5–6.0%	0.5–2.5%	0.5–2.5%	23–35%	–	2.0–4.0%	Fe
FLOW6000	3.5–7.0%	0.5–2.5%	0.5–2.5%	23–35%	3.0–7.0%	–	Fe

Typical weld deposit chemistry. Values are indicative and may vary with plate thickness and number of deposit layers.

MAXCLAD™ wear plate is particularly suited to material handling systems across the mining, cement and power generation industries, where it significantly reduces maintenance costs and improves production efficiency. Plates can be cut, rolled and fabricated to suit, and customised in a range of thicknesses and specifications to meet specific operational requirements — contact our team to discuss your application.



In service — bucket wheel excavator, high sliding abrasion duty