

Product Programme 2024-25
Chromium Carbide Range Wear Plates

WEAR FACTOR	PRODUCT	HARD OVERLAY COMPOSITION	NOMINAL HARDNESS ROCKWELL C	VOLUME FRACTION OF CARBIDES %
Impact and abrasion	ULTRAPLATE 1000	Primary M7C3 Carbide	55-60	30
	ULTRAPLATE 3000	Rich Primary M7C3 Carbide	57-60	40
	ULTRAPLATE 5000	Rich Primary M7C3 Carbide + Boron Carbide	57-62	45
Severe impact and abrasion	ULTRAPLATE 6000 / CTC 6000	Rich Primary M7C3 Carbide + Ni + W and B Carbides	60-64	65
	ULTRAPLATE 7000		58-64	60
Abrasion and erosion	ULTRAPLATE 2000 / CTC 2000	Rich Primary M7C3 Carbide + Nb Carbide	57-60	45
Abrasion and erosion at elevated temperature	ULTRAPLATE 4000	Rich Primary M7C3 Carbide + Nb, Mo & B Carbides	60-65	50
	ULTRAPLATE SUPER	Rich Primary M7C3 Carbide + Nb, Mo, V & W Carbides	60-65	60
Extreme abrasion	ULTRAPLATE W2C	PTA applied Tungsten Carbide in Ni, Cr, B, Si matrix	55-58	60

Minex Range Wear Plates

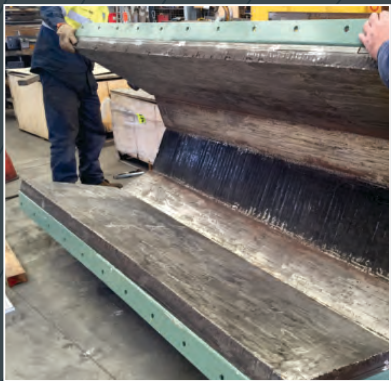
WEAR FACTOR	PRODUCT	HARD OVERLAY COMPOSITION	NOMINAL HARDNESS ROCKWELL C	VOLUME FRACTION OF CARBIDES %
Low Impact & High abrasion	MINEX 1	M7C3 with Chromium Borides	65-70	55
Moderate impact and High Abrasion	MINEX 2	M7C3 with Complex Borides	62-67	60
High Abrasion with erosion	MINEX 3	Complex Carbides & Borides	63-68	65

- Additional information on microstructure and wear resistance at room temperature and at elevated temperature as per ASTM standards available on request.
- Products to suit specific application needs can be designed and developed.
- ULTRAPLATE 3000 & ULTRAPLATE 5000 also available with Titanium Carbides.
- Titanium Carbides and Tungsten Carbides can be offered in other alloy combinations too.

Availability

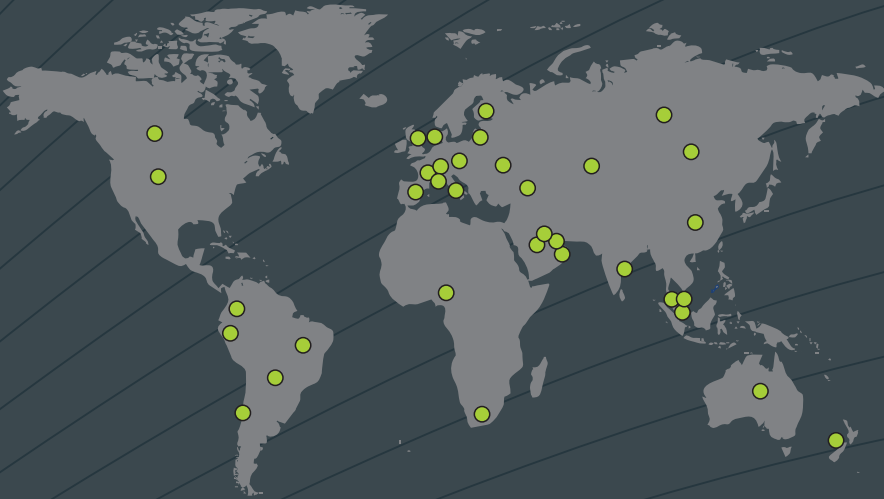
STANDARD SHEETS	COATING THICKNESS	PLATE THICKNESS	BASE MATERIAL	READY TO INSTALL FORMS
1000 x 1500 mm 1400 x 2850 mm 1750 x 2850 mm 2100 x 2850 mm	3 mm - 50 mm	3 mm to any available plate thickness	Structural steel (Standard) Wear resistant steel (Optional) Stainless steel (Optional)	Pipes, bends & elbows Hoppers & Chutes Cones & Cyclones Screens

- Since we innovate constantly product specifications are subject to change without prior notice.



World's largest manufacturer of
composite weld overlay plates!

500,000 sqm per year ...
and expanding...



Expanding rapidly around the globe, now present
in more than 35 countries across 5 continents...



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Since 1996...

**A modest 6000 sqm per annum,
to over 500,000 sqm today, and
marching towards 1000,000 sqm!**

Catering to the wear protection requirements of core sector industries like coal-fired Power, Cement, Mining, Iron & Steel and their OEMs in India and overseas, Tecknoweld products are being exported to countries in Asia Pacific, Middle East, Africa, Europe and the Americas.

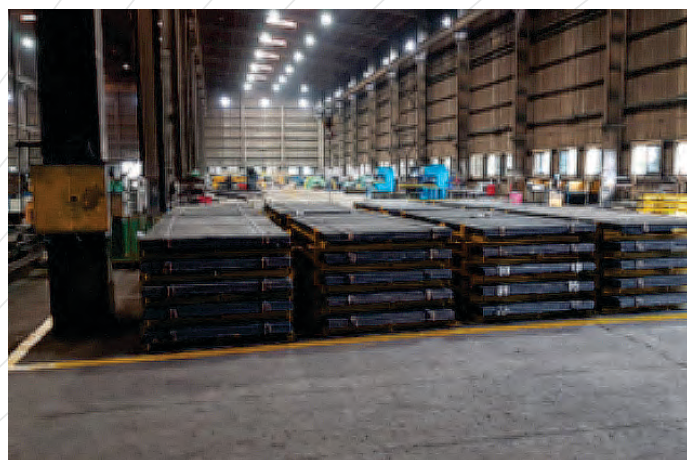
Tecknoweld products cover an entire spectrum of hard facing including simple Chromium Carbides, complex Carbides, Titanium Carbides, Tungsten Carbides, Chrome Tungsten Carbides, Chromium Borides and PTA applied Tungsten Carbides.

Premium raw materials, Cutting Edge Technology, State-of-the-art-manufacturing.

Tecknoweld Ultraplates are manufactured by a unique in-house-developed open arc process that ensures minimum dilution level and uniform distribution of rich carbides up to the interface, offering better wear life. The process employs CNC/PLC controlled systems ensuring uniform coating thickness and bead width.

Flux cored wires, principal raw material required for manufacturing ULTRAPLATES are produced in-house, thus ensuring sound control on the quality of end product.

Finished products are packed in wood-free all-metal packing.



Wear plates ready for dispatch



Battery of coating machines



Battery of pipe welders



CNC Controlled PTA wear plate machine



Battery of CNC controlled cutting machines



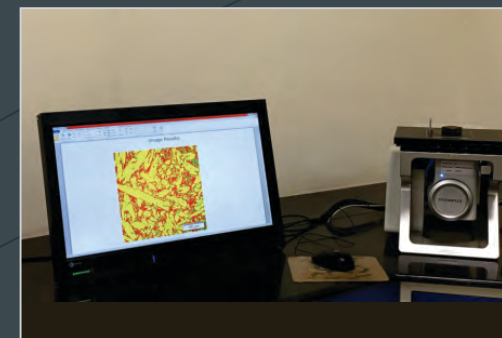
Fully equipped Fabrication shop for 1500 tons /month



Wet lab



Leco Globe Discharge Spectrometer



Olympus Image Analyser



Vickers Micro and Macro Hardness
plus Rockwell Superficial Hardness Testers



ASTM Dry Abrasion and Air jet Erosion
Test Rigs until 800 deg C

Innovative products through intensive R&D and metal expertise... A fully equipped QA lab.

Our team's vast experience with metals & carbides and our extreme knowledge about user industries help us in developing products that meet specific application requirements.

A well laid out Quality Assurance Plan right from raw material sourcing to delivery ensures that only quality products leave our shop floor.

A fully equipped Materials Testing Lab ensures rigid control over incoming raw materials. Our state-of-the-art Metallurgical Lab sports LECO Globe Discharge Spectro and Olympus Image Analyser.

Both micro and macro hardness profiles of hard overlay are being tested using Digital Vickers and Automatic Rockwell Hardness Testers.

Wear testing lab with ASTM G 65 Dry Abrasion and ASTM G 76 Airjet Erosion Test Rigs stimulate abrasive and erosive environment, even at high temperature of up to 800 deg C and confirm that wear properties are as per product design.

Our lab is accredited with NABL approval and our reports are acceptable in over 100 countries. Online in-process-check procedures ensure that thickness control, flatness and cross-check patterns meet international requirements.

Finally end-to-end barcoding ensures complete traceability, a 'Jewel in the Crown'.



End-to-end Barcoding to ensure full traceability