

Super-Clad is a super-tough material that lasts up to 30 times longer than mild steel and up to 20 times longer than manganese steel in applications that demand unusually high abrasion resistance. It is manufactured by metallurgically bonding a composite of chromium-iron-carbon alloy and chromium carbides to mild steel substrate, in a process that yields a highly abrasion-resistant "overlay" material. It also has good impact capabilities.

### MAJOR FEATURES AND BENEFITS:

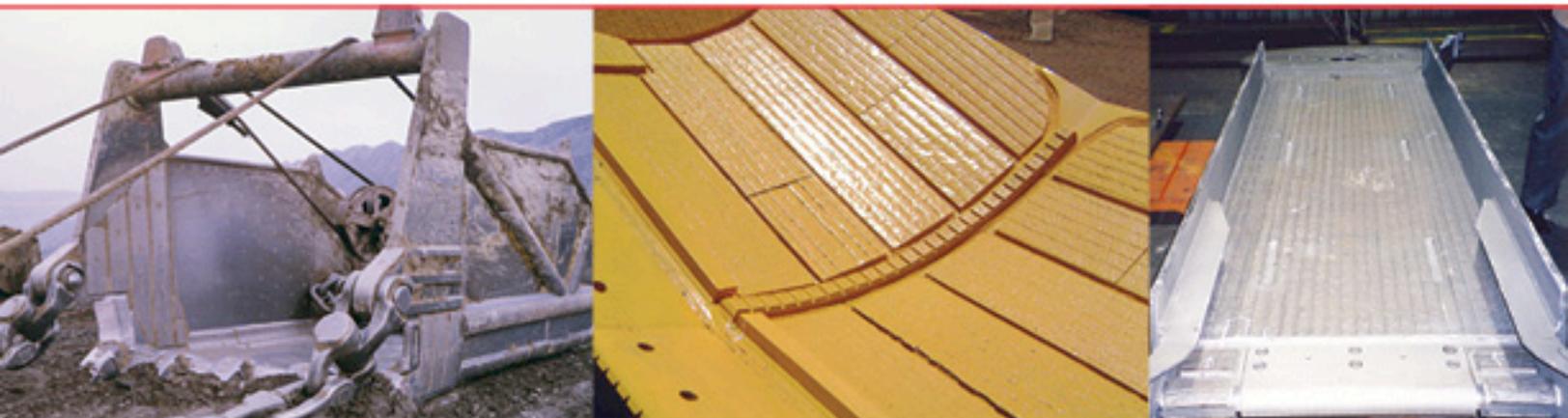
- Outstanding abrasion resistance due to its 600 BHN matrix
- Far more cost effective than conventional abrasion resistance materials with shorter service lives
- Good impact resistance
- Can be cold or hot formed
- Less maintenance—less downtime, too
- Easily welded
- Corrosion resistant

### CHEMICAL AND PHYSICAL COMPOSITION:

Backing plate .....	mild steel
* Overlay: typical analysis	
Carbon .....	6.0%
Manganese .....	2.7%
Chrome .....	30.0%
Silicon .....	0.77%
Sulphur .....	0.001%
Phosphorus .....	0.001%
Moly .....	1.25
Boron .....	0.005
Hardness .....	600 BHN
*Standard deposit	

### MECHANICAL PROPERTIES:

Backing plate	73,000 psi. ultimate tensile strength
Overlay .....	11,000 psi



### APPLICATIONS

- |                 |                         |
|-----------------|-------------------------|
| Grizzly Screens | Bucket Liners           |
| Skip Liners     | Screen Decks            |
| Skirt Plates    | Fan Blade Liners        |
| Feeder Trays    | Breaker Liners and Bars |
| Hopper Liners   | Truck Bed Liners        |
| Crusher Liners  | Feed Nozzles            |

**STOCK SIZES:**

Offered in 96" x 120" sheets or cut to your specific requirements. Available in 1/8" and 1/4" single overlay thicknesses and double overlay thicknesses of 5/16", 3/8", and 1/2". Standard base plate is 3/16", 1/4", 3/8", and 1/2" thick, however, 5/16", 5/8", 3/4", 7/8", and 1" is available upon request for single or double overlay plate.

**CUTTING:**

Use plasma or air arc. Plasma arc is preferred for factory environment. Air arc is satisfactory at on-site locations for trimming and fitting pre-cut plates or cutting strips to length.

**FORMING:**

Can be cold rolled or pressed to 10" radius-hot pressed to a tighter radius. Consult our Engineering Department for further information.

**HOLES:**

Plasma cut holes oversize, then weld in pre-machined mild steel plug. When accuracy is required, mild steel plug should be drilled after installation. Countersink holes can be cut using Buggo machine with compatible plasma torch.

**WELDING:**

Strips and plates can be welded into position using mild steel electrodes to weld the base plate to a mild steel component. When welding to a dissimilar metal, use AWS E309-16 hydrogen electrode. When plates larger than 4 sq. ft. will be exposed to high impact, plug weld the central area of plates to prevent fatigue caused by micro movements. For hardfacing over low hydrogen welds, we recommend two passes with 26% to 30% chromium content welding electrode.

**APPLICATIONS**

- |   |                             |
|---|-----------------------------|
| Fan Housing Liners                                    | Shredder Knives             |
| Rotating chute Liners                                 | Cyclone Entry Target Plates |
| Transition Sections                                   | Cheek Plates                |
| Screw Conveyors and Troughs                           | Flume Liners                |
| Dredge Inlet Liner                                    | Drag Slat Conveyor Liners   |
| Dragline, Shovel, Loader, and Excavator Bucket Liners | Rock Grapple Liners         |
|   | Truck Bed Liners            |