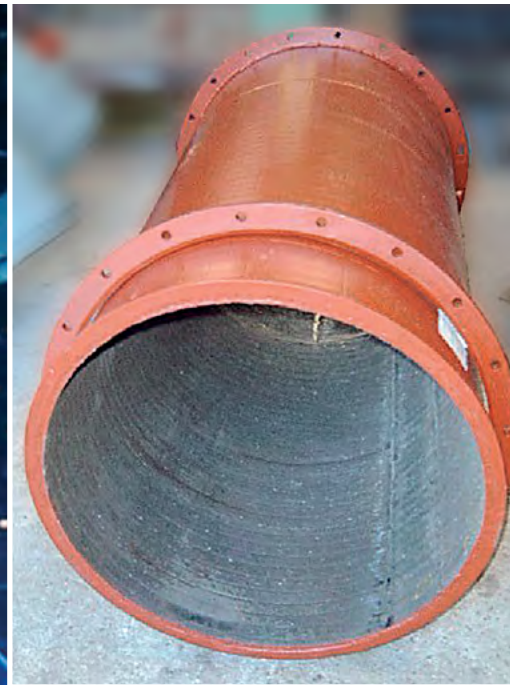


»» **Kalenborn Abresist  
KALMETALL® Overlay Plates**  
with High Amount  
of Chromium Carbides



# >> KALMETALL® Overlay Plates

## Cost-Effective Protection for Abrasive Applications

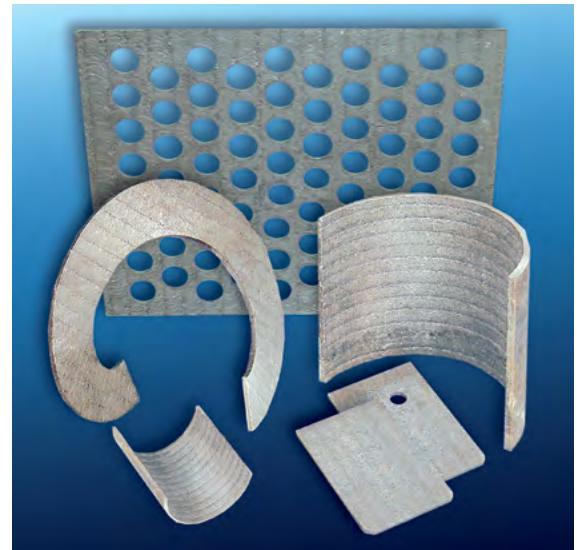


Kalenborn Abresist provides the equipment and expertise to fabricate KALMETALL® chrome carbide weld overlay, standard grades of carbon and AR plate into wear resistant plates, piping and a variety of complete wear protected structures and assemblies. KALMETALL can also be adapted to specific uses by varying the alloy of the hard overlay welding.

KALMETALL incorporates several hard overlay welded steel systems that consist of a tough basic body and hard overlay welding. The base metal provides the toughness of the system. Depending on the specific application, it is made of standard or special steels. The hard overlay welding is the wear layer. It consists of a C-Cr-Fe system with primary chromium carbides.

The carbides provide the extreme hardness of the overlay welding. Depending on the composition of the alloy, the hardness may be up to 820 HV.

Suitable for a range of industries, these quality wear protected components are made to match your specific applications and requirements.



### Typical Applications –

- Cylcone linings
- Screens
- Concrete mixer linings
- Clinker coolers
- Clinker chutes
- Dust pipes
- Fan lining
- Fan blades
- Grinding rolls
- Grinding tables
- Mill linings
- Raw material chutes
- Screw conveyors
- Separator blades
- Separator linings
- Belt transfer points
- Blast furnace center pipes
- Bunkers
- Chutes
- Distributing chutes
- Dust collecting pipes
- Flumes
- Furnace top bells
- Pressure equalizing pipes
- Sieves for hot and cold sinter
- Sinter cooler linings

### Fastening Systems –

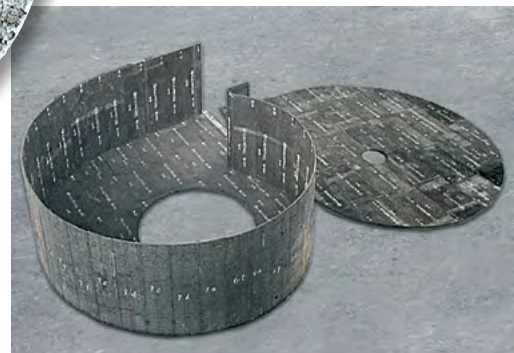
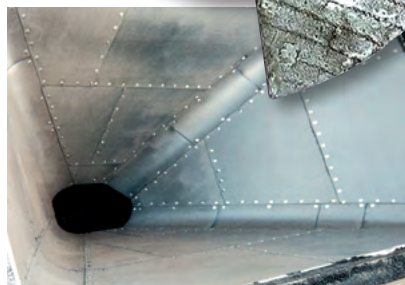
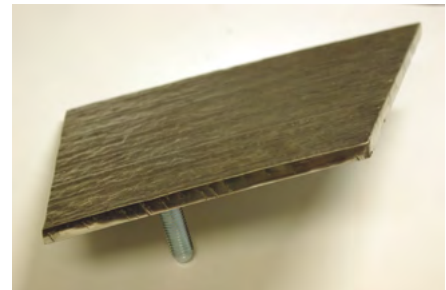
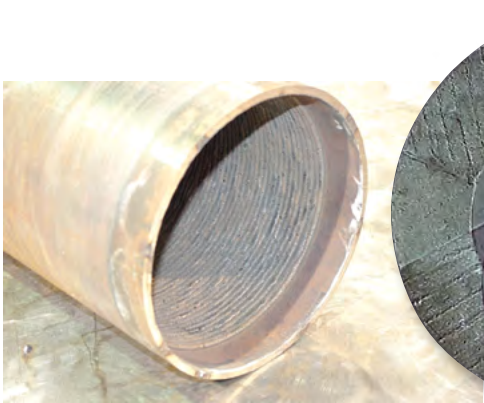
- Plug welding
- Rear welding to the basic body
- Rear welding to a nut with internal thread
- Screw-type fastening by stud welding
- Screw-type fastening by counter sunk rings
- Suspended systems



**Extensive inventory –  
Two U.S. locations  
and one in Canada**



- Suitable for power plants and other facilities in the cement, mining, steel and other industries where daily abrasion is a challenge.
- Installs into existing steel structures.
- Designed as a cost-effective, low weight, self-supporting structure.
- Standard base material is carbon steel for operating temperatures up to 662 °F / 350° C.
- Standard base thickness is 3/16" or 1/4". Others available.
- Standard hard-faced metal plates range from 48" x 96" to 60" x 120".
- Wide selection of fastening systems.
- Roll repair services in the plant and on-site with a variety of wear-resistant alloys, as well as grinding table rebuilds.
- Custom hard facing overlay welding services, machine tool rebuilding and custom lined piping.
- Weld based services, fabrication and materials using KALMETALL chrome carbide weld overlay technology and also standard grades of carbon and AR plate.
- Individual overlay welding for a variety of elements and components.
- KALMETALL allows Kalenborn Abresist to be a specialist in the regeneration of grinding systems.
- Standard plates are offered at varying qualities, thicknesses and dimensions. Special components can be custom fabricated any time.





KALMETALL Properties				
Base	Thickness	Hardface	Weight	
			US	Metric
3/16" (4.8 mm)		3/16" (4.8 mm)	14.5 lbs/ft <sup>2</sup>	71 kgs/m <sup>2</sup>
1/4" (6.3 mm)		1/4" (6.3 mm)	19.5 lbs/ft <sup>2</sup>	95 kgs/m <sup>2</sup>
3/8" (9.5 mm)		1/4" (6.3 mm)	24 lbs/ft <sup>2</sup>	114 kgs/m <sup>2</sup>
3/8" (9.5 mm)		3/8" (9.5 mm)	35 lbs/ft <sup>2</sup>	170 kgs/m <sup>2</sup>
Standard Plate Sizes		Large	60" x 120"	1524 x 3048 mm
Base Material		ASTM A 283 M Grade A or B, others available		
Hardness		Up to 820 HV		
Maximum Service Temperature for the Complete KALMETALL			662°F	350°C

Technical Data is the result of tests performed on selected samples, and some variations are to be expected. Kalenborn Abresist does not represent, warrant or guarantee the accuracy, completeness or reliability of same. Due to the production process, variations in the product may be expected. These include, but are not limited to dimensional tolerances, surface finish, voids, and porosity. Fractures in the hard overlay are normal and indicate good quality.

**Ask Kalenborn Abresist for further information**

**Kalenborn Abresist**

PO Box 38, 5541 North State Road 13, Urbana, IN 46990

Phone (800) 348-0717 • Sales Fax (260) 774-3832

email: [info@abresist.com](mailto:info@abresist.com) • [www.kalenborn.us](http://www.kalenborn.us)

