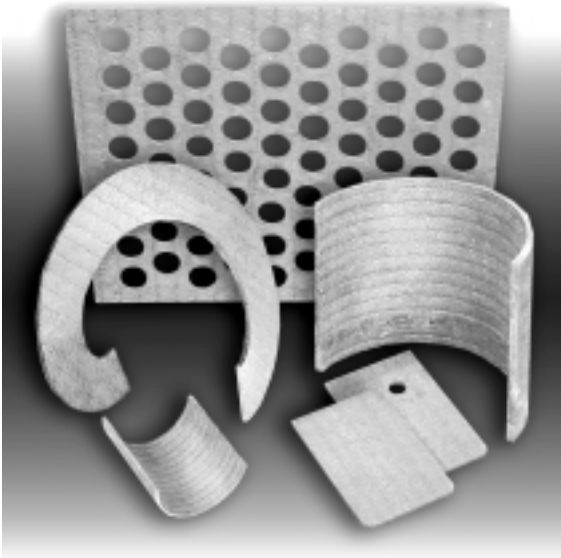


Cost-Effective for Large Surfaces ...

Hardfacing KALMETALL W of Different Alloys



Different hard-faced steel systems are offered under the designation KALMETALL W.

They consist of a strong base material and the hard-facing.

The base material of the systems is the strength carrier.

It is made up of standard metal plates matched to the specific application. S 235 JRG 2 is the standard material for operating temperatures up to 350 °C. The standard thickness of the base material is 5,6 and 8 mm respectively.

Hardfacing is the wear protection layer. It consists of a C-Cr-Fe system with primary chromium carbides. It ensures the great hardness of the hardfacing which - depending on the composition of the alloy - may be up to 65 HRC.

Standard sizes of hardfaced metal plates range from 900 x 1900 mm to 1400 x 2900 mm.

The Advantages of KALMETALL W:

- hard-faced metal plates of different qualities, thickness and dimensions
- depending on the alloy of the hardfacing, it is characterized by high resistance to abrasion, high impact strength and high temperature stability
- specially fabricated, customized components are possible
- wide range of application and adaptation to the specific use
- low weight and high economic efficiency is provided when the component has been designed as a self-supporting structure

At Any Rate the Correct Material:

KALMETALL W - the Optimal Problem Solution for Varying Applications

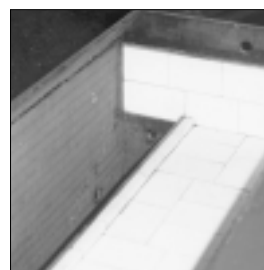
Various hardfacing alloys are offered. They are selected with due regard to stress resulting from abrasion, impact and temperature.



Cyclone with hardfaced lining for use at high temperatures.

Kalenborn offers

- complete lining systems consisting of hardfaced metal plates for installation into existing steel structures
- self-supporting fabrications with hardfacing
- combinations of ceramic and metallic systems for wear-resistant design of high economic efficiency



Combination of KALMETALL W and high-alumina ceramics KALOCER.

Technical Data (Reference values)

KALMETALL	Chemical composition of welding material %						Hardness HV	Max. application Temp °C	Resistant against		
	C	Cr	Mo	Nb	B	Fe			abrasion	impact	temp.
W 100	5	30	-	-	-	60	700	350	xx	x	x
W 143	5	22	-	7	-	60	740	350	xxx	x	x
W 145	5	21	7	7	-	60	800	750	xxx	x	xxx
W 150	5	30	-	-	1	60	820	350	xxxx	-	x
W 151	5	30	3	-	-	60	700	550	xx	x	xx

Typical Applications

- concrete mixer lining
- bunker lining
- mill lining
- chutes
- pipes (dust pipes, ash pipes, etc.)
- separator lining
- sieves
- fans (linings, fan blades)
- cyclone lining

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

Get in touch with us.
We offer materials and know-how for efficient wear protection - including metallic based solutions.