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**KALMETALL-HB Hard Steel:  
Cost effective Solution for Moderate Wear**

Kalenborn now offers a comprehensive array of KALMETALL-HB hard steel as cost-effective solution for moderate wear.

Compared with standard structural steel, this material allows a multiple extension of the service cycle. For Kalenborn, it provides another tool in the field of metallic wear protection.

The typical KALMETALL-HB material 400 features a hardness equivalent of approx. 400 Brinell. Materials of greater hardness are available if necessary. Among these is, for example, KALMETALL-HB 500 having a hardness equivalent of 500 Brinell.

The special hardness and impact resistance of KALMETALL-HB hard steel results from the production method as well as the time-tested alloys chosen for this purpose. The specific material properties are reached by the defined addition of, e.g., chromium at a low carbon content.

The special alloy of KALMETALL-HB hard steel ensures that the particular hardness is reached and that the steel has been designed to achieve high impact strength.

KALMETALL-HB is highlighted by high wear resistance and impact strength combined with sufficient toughness. These properties enable good workability. KALMETALL-HB is equally suited for forming and welding. In most cases forming will not require heat treatment.

KALMETALL-HB can likewise be cut, drilled and milled as needed.

The good workability of KALMETALL-HB allows the fabrication of complete plant components. This entails not only significant reduction of weight but also cost-effective solutions.

Hard steel is widely adopted by the basic industry. The use of KALMETALL-HB will be of advantage whenever bulk materials generate wear, either by abrasion or impact and if standard steel will not offer satisfactory duty cycles. Plant components made from KALMETALL-HB include loading shovels, cones, separators, dust collectors, etc.

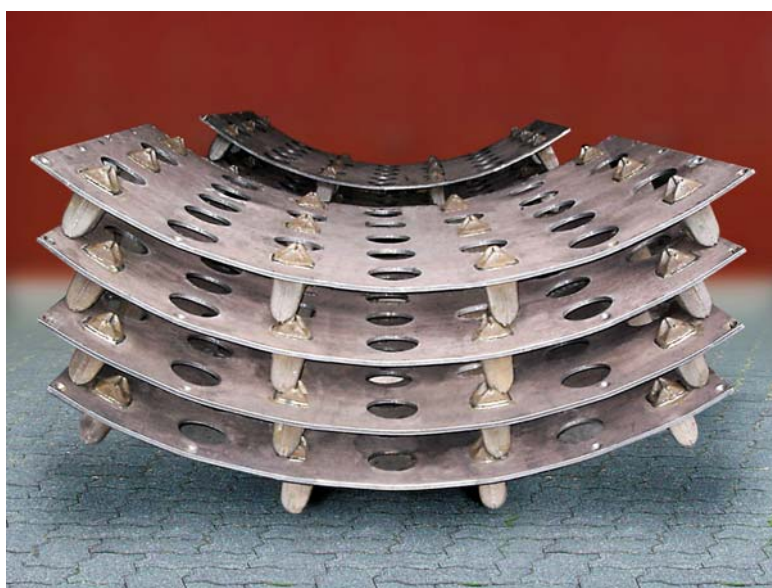
KALMETALL-HB solutions are of particular importance for the customer in view of the quick delivery time. Kalenborn maintains an adequate store of standard plates. Complete components can be made available in a minimum amount of time.

Apart from KALMETALL-HB hard steel Kalenborn supplies a wide range of metallic wear protection materials. For extreme wear conditions these include ferrochromium alloys such as KALMETALL-W hard overlay welding or KALMETALL-C hard casting. This series is supplemented by a wide spectrum of ceramic materials from ABRESIST fused cast basalt through to KALOCER high alumina ceramics.

The use of material combinations is of particular advantage for plant operators. This is true not only with respect to the combination of different metallic materials but also to the combination of metallic and ceramic wear protection. It allows matching the service life of the various plant components to each other. It constitutes a technically and economically optimal solution in the presence of both sliding and impact wear.



Efficient wear protection for large surfaces



Screens for a variety of basic industries are economically fabricated from KALMETALL-HB hard steel