

*Press release*

# Presse-Information

*Service de presse*

## Highly Abrasion and Impact Resistant

### KALMETALL-W from Kalenborn Gains wide Recognition

To help operators of industrial plants overcome wear problems the Kalenborn wear-protection experts offer optimal hard-facing solutions. Available since the end of 2003 KALMETALL-W incorporates various steel systems that consist of a tough basic body and hard overlay welding.

Depending on the alloy of the hard overlay welding, KALMETALL-W linings are highly abrasion and impact resistant as well as resistant to temperature changes. The range of KALMETALL-W products offered by Kalenborn includes hard-faced standard plates, complete lining systems for existing steel structures and self-supporting structures with hard overlay welding. The thickness of the basic materials is from 5 mm and the thickness of the hard overlay welding is standardwise up to 12 mm.

Fastening is done by means of welding, by screws or by way of suspension systems. Typical applications of this type of lining include concrete mixers, bunkers, chutes, pipes, grinding mills, screws, separators, screens and fan blades.

In case of special requirements, different materials from the Kalenborn wear protection program may be combined, e.g. KALOCER high alumina ceramics, KALCRET hard compound or KALEN slide promotion plastics. Such combinations of materials frequently provide significant economic benefits.

Apart from being a producer of wear protected structures and material combinations Kalenborn wear protection experts should be contacted for the regeneration of worn structural components. Refurbishing wear parts is a useful and economic alternative to a complete new manufacture.

Worn components can be assessed at the site to decide jointly with the customer whether they should be regenerated or fabricated new. The regeneration of components will be advantageous especially if the items affected by wear still have a high percentage of base material remaining. These are normally thick walled components that display a worn down working side. Typical examples are grinding rolls and grinding tables made of hard cast steel and used for pulverizing of coal and cement.

Grinding rolls or grinding tables can be regenerated by the Kalenborn coating service using a special welding technique. To avoid the costly dismantling of grinding tables, these can be regenerated insitu. The grinding table is then turned by means of an auxiliary drive while the welding process proceeds automatically until the final contour of the table has been restored. The service cycle of such components can be more than doubled after being regenerated with KALMETALL-W 100.

Kalenborn offers a complete range of products for solving problems of wear from a single source:

- measurement and engineering
- supply of the complete range of ceramic and metallic wear protection materials
- supply of ready-to-fit parts and/or installation at site



Pipe sections lined with KALMETALL-W are excellently suited for trouble-free continuous operation



Material combinations allow optimized wear protection: areas lined with KALMETALL-W hard overlay welding protect the basic structure; KALCOR zirconium corundum blocks absorb high wear and impact stress; the illustration shows a table on which sintered material is dropped in steelworks



Worn components can be regenerated without any problem by specialized companies that have gained extensive experience in that line; the illustration shows hard-facing of a grinding roll in a coal pulverizer with KALMETALL-W hard overlay welding