

**Pronamic® H1 tires and grinding plates**

for Raw Material, OPC/Clinker/Slag, Coal

*Pronamic®* H1 tires and grinding plates are highly wear-resistant grinding parts that are manufactured using proprietary technologies, materials and procedures. *Pronamic®* H1 tires and grinding plates are composite elements. The composite is made out of a tough structural steel and successive welded-on layers, including intermediate transition layers and wear-resisting layers.

**Applications**

*Pronamic®* H1 tires and grinding plates are designed for highly abrasive applications under compression (three body abrasion).

*Pronamic®* H1 tires and grinding plates are suitable for general applications and can advantageously replace traditional cast high chromium white irons.

Restriction: *Pronamic®* H1 grinding parts should not be used for metal-to-metal contact or impact loading.

**Variants**

<i>Pronamic®</i> Variant	Usage
<i>Pronamic®</i> H1 - Raw	Cement raw mill applications
<i>Pronamic®</i> H1 - OPC/Cement/Slag	OPC and composite cements, blast furnace slag, slag cements and fly ash containing mixes
<i>Pronamic®</i> H1 - Coal	Hard coal, lignite, anthracite and pet coke

Note: The variant must be specified when ordering.

**Physical and chemical properties**

*Pronamic®* H1 grinding parts have outer abrasion-resistant layers. The layers consist of narrow weld beads in the as-welded state, with a dispersion of fine stress-relief cracks (“check cracks”). The layers contain primary chromium carbides and eutectic carbides of the type  $M_7C_3$  type and comply with specification standard EN 14700, type T Z Fe16.

Chemical analysis (wt. %)				
C	Si	Mn	Cr	Fe
4.5 - 6.0	1.5 max.	1.0 max.	25.0 - 29.0	Balance
Hardness				
61 – 65	HRc			

**Resurfacing/refurbishing**

*Pronamic®* H1 tires and grinding plates can be resurfaced/refurbished with *Pronamic®* wires and procedures. For continued use, the original weld hardface must not be fully worn prior to hardfacing.

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.