



**HIGHLY ABRASION  
WEAR RESISTANT  
STEELS AND  
COMPONENTS**

**Miilux<sup>®</sup> OY**

## HIGHLY ABRASION WEAR RESISTANT STEELS AND COMPONENTS MIILUX

### Hardness at the edges, through and over the entire surface!

Wear-resistant steel is used where a significant reduction in wear is expected on machinery and equipment parts operating under extremely difficult and highly abrasive conditions.

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### Wear-resistant steel applications

- working parts of excavators and loaders
- linings for mining conveyors
- wedges, cheek plates and other crusher parts
- side plates of crushers
- buckets and blades
- complete excavator and loader buckets or their components
- wedges, cheek plates and other crusher parts
- blades, strainers semi-trailers, conveyor troughs for stone and gravel
- protective panels

### Hard from Edge to Edge

Miilux uses its proprietary "Hard from Edge to Edge" technology, which involves the complete elimination of the thermal effects zone in the material, greatly extending the lifespan of entire units. This effect is achieved by processing the products completely before hardening. Manufactured elements retain nominal parameters, in particular hardness, in their entire cross-section and on the entire surface – from edge to edge.

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## **MACHINING**

Our sheets can be machined mechanically. The chip machining process should be carried out on CNC machine tools equipped with appropriate multi-plate tools or made using carbide technology.

## **PLASTIC FORMING**

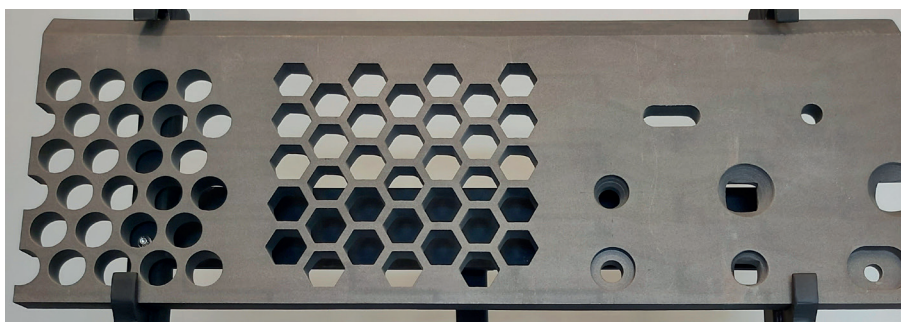
It is recommended to form Miilux sheets to the largest technologically possible radius. It is important to maintain the right quality of tools and machines adapted to the requirements of the material. It is also important to maintain the correct sequence of technological processes. Please contact our customer service if you wish to form sheets with a thickness of  $>20$  mm.

## **HEAT TREATMENT**

Miilux products must not undergo further heat treatment. The steel can be heated without loss of properties (hardness) to about  $200$  °C.

## **WELDING AND GAS CUTTING**

Miilux 400 is a material well suited to welding. Miilux 500 and 600 have more restrictions regarding the maximum amount and concentration of energy delivered in the welding process. Preheating is not required for Miilux 400 sheets if the sum of the thicknesses of the individual sheets does not exceed 40 mm in total, and for Miilux 500 sheets – if it does not exceed 20 mm. Preheating is required for Miilux 600 sheets over the entire thickness range.





### Marking

Miilux wear-resistant plates have at least the following markings:

- manufacturer mark
- order number
- grade designation
- dimensions
- heat number and rolling number



### Approvals and tests

Miilux wear-resistant sheets are supplied with an acceptance certificate 3.1 in accordance with the requirements of EN 10204. Sheets are subjected to Brinell hardness measurements in accordance with EN ISO 6506-1 on a cleaned surface to a depth of 0.5 – 2 mm. Hardness measurement is carried out for each batch or each time when any technological parameters of production were changed



### Dimensions and delivery conditions

Miilux sheets are supplied in thicknesses from 6 – 100 mm. The maximum width of the sheets is 2500 mm, the length is 6200 mm. Miilux products can also be delivered as semi-finished products or as products ready for further assembly.

**Miilux<sup>®</sup>oy**

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