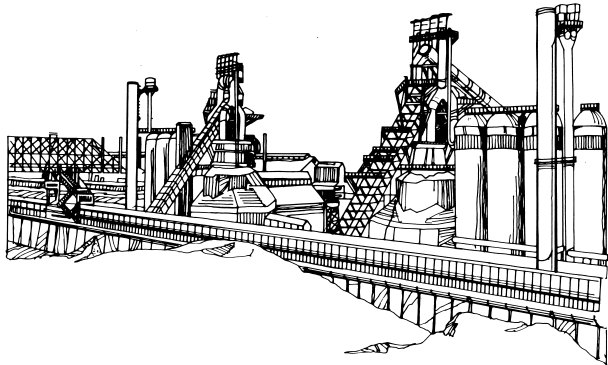




VAUTID WEAR PLATES

the reliable and
universally applicable

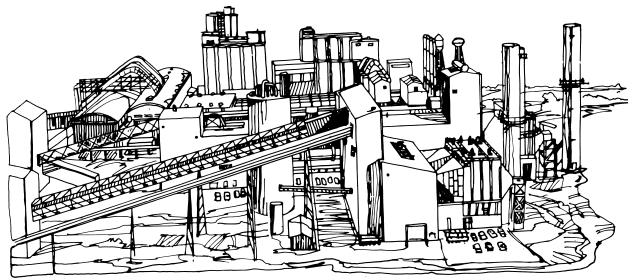
WEAR PROTECTION



Wear protection in the iron and steel industry

for example for

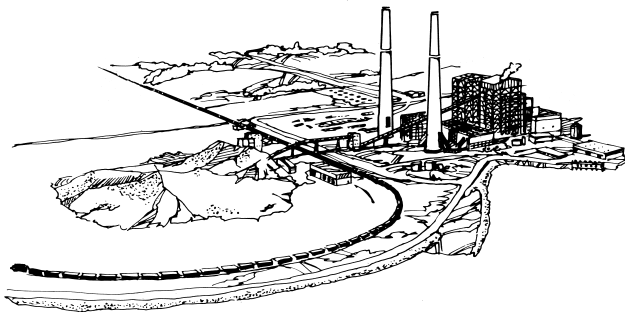
- chutes
- screens
- bunkers
- blast furnace bells
- distribution chutes
- blast furnace armour plates
- sinter feeding drums
- transfer points
- gas cleaning systems
- ventilators



Wear protection in the cement industry

for example for

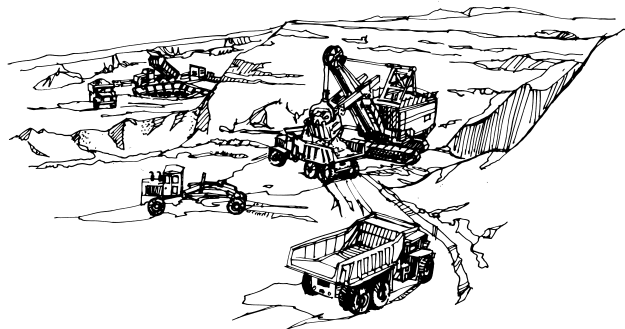
- clinker chutes
- cyclones
- ventilators
- chutes
- separators
- mill linings
- screw conveyors



Wear protection in power stations

for example for

- coal transfer points
- pipe lines
- mill linings
- silo bunkers
- elbows of coal dust pipings
- burner nozzle



Wear protection in the sand and gravel industry

for example for

- excavator buckets
- bunkers
- chutes
- loaders
- screw conveyors



VAUTID WEAR PLATES

The three decisive differences

1. Highly wear resistant means long lifetime

The decisive advantages: VAUTID wear plates cannot be compared with sheets hardfaced with the conventional method.

For their manufacture we employ the VAUTID-Metalarc-Process:

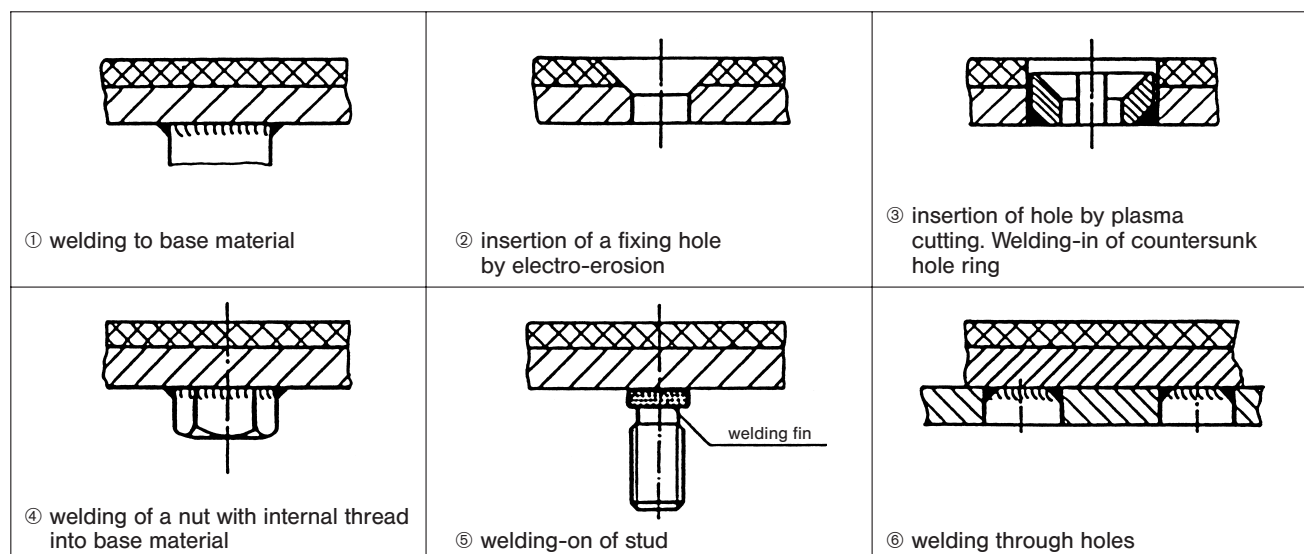
Characteristic	Your advantage
1. Minimal dilution with base material	Minimal risk of breakage
2. Selection of alloys to suit the application e.g., VAUTID-100, -143, -145, -150, -200	Maximum reliability
3. Rapid cooling of the highly alloyed smelting bath	Durable, dependable parts

2. Deposited layer is tailored according to the application:

Deposits of one or more layers available made with:

VAUTID-90, VAUTID-100, VAUTID-100 K, VAUTID-100 T, VAUTID-143, VAUTID-145, VAUTID-150, VAUTID-176, VAUTID-200, VAUTID-300.

3. Easy to install due to simple fixing methods



VAUTID WEAR PLATES

Available forms and shapes



1.1 Standard sheets

small 1900 x 900 mm large 2900 x 1400 mm
middle 2400 x 1150 mm xlarge 3000 x 5000 mm

1.2 Standard thicknesses

5+3, 6+4, 8+4, 8+5, 10+5, 12+5, 15+5 (base material/hardfacing)

1.3 Base materials

structural steel RSt 37.2 (S235JRG2), St 52.3 (S355J2G3)
boiler plate H II (P265GH), 15Mo3 (16Mo3),
 13CrMo44 (13CrMo4-5), 1.4878

fine grain
structural steel StE 690 V (S690Q)
wear resistant steel with 300, 400 and 500 Brinell

2. Plates cut to size

from 50 x 50 mm to 4000 x 4000 mm

square boring from 4 x 4 mm
circular boring from 3 mm ϕ
tear shape boring from 3 mm ϕ
slots from 1 mm

The plates are cut with plasma-, laser- and water jets.

3. Formed plates

Simple cold forming is possible only with VAUTID wear plates because of their low dilution between weld deposit and base material.

The smallest cold-rolled diameter is 170 mm.

4. Ready-to-install constructions

pipes from 170 mm ϕ upwards to 10 m
screens with different perforations (see 2.)
chutes
cyclones
elbows
troughs
distribution chutes
ventilators etc.



VAUTID WEAR PLATES

hardfaced with the
VAUTID-Metal-Arc process:
 More carbides – longer lifetime

- 5.5

Structure of a VAUTID wear plate [mm], with one layer of hardsurfacing by means of the VAUTID-Metal-Arc-process:

- 5.0

The structure of the hardfacing layer shows a high content of primary chromium carbides already close to the base metal.

- 4.5

- 4.0

A further important characteristic of quality is non-melted powder particles, which proves that the welding material is saturated with components of the alloy.

- 3.5

- 3.0

- 2.5

- 2.0

- 1.5

- 1.0

- 0.5

- 0



Hardfacing

Base material

Ordinary
 hardsurfacing
 with flux-cored wires:
 Less carbides – shorter lifetime

