

PRODUCT DESCRIPTION

AB 400 is a highly alloyed composite wear plate with excellent performance against severe abrasive wear at elevated temperature conditions (> 600°C) and moderate resistance to impact conditions. Our fully automated production method and our quality control procedures secure a product with homogenous chemical analysis and hardness.

AB 400 ADVANTAGES

- Excellent wear resistance in high temperature conditions (>600°C)
- Flat and smooth surface
- Uniform hardness and composition
- Easily welded due to the mild steel backing plate
- Cold formed to shape
- Internal rolling diameter down to 250mm depending on total thickness
- Very good fusion to the base plate
- Low dilution of the alloy.
- Service life 6 to 12 times more than mild steel depending on the application
- Good heat resistance in high temperatures (Hardness of HRC 56±2)

INDUSTRIES & APPLICATIONS

Industries: Mining, Cement, Steel, Power Generation, Glass, Wood, Paper, Recycling.

Applications: Mill Linings, Separators, Screens, Clinker and Dust Ducts, Hot Gas Fans and Fan Housings, Chutes, Screw Feeders, Sinter Crushers Hot Dust Ducts, Grate Bars of Ore Processing Plants, Grates, Screw Conveyors, Grinding Rolls, Coal Ploughs, Earth Scrappers and Blast Furnace Exhaust Hoods.

○ Overlay composition

Chromium rich, high carbon and Multiple alloy complex carbides.
C-Cr-Mn-B-Mo-V-W-Nb-Fe

○ Base plate materials

All types of weldable structural steels including stainless steel

○ Microstructure

Multiple alloy complex carbides (Mo, V, W, Nb) together with chromium rich Primary Carbides M_7C_3 dispersed evenly in an austenitic matrix. Surface fraction for chromium is 45 -50% with 5 - 7% of multi alloy complex carbides.

○ Dimensions & Thicknesses

Standard Format

Standard plate sizes available in stock	
Base Plate	Clad Area
1.500 x 3.000 mm	1.400 x 2.950 mm
1.250 x 2.500 mm	1.150 x 2.450 mm

Special Format

Base Plate	Clad Area
2.000 x 4.000 mm	1.900 x 3.950 mm
1.000 x 2.000 mm	900 x 1.950 mm

ABRAPLATE AB 400 Standard THICKNESS

Standard plate thickness available in stock	
Base Plate Thickness mm	Cladding Thickness mm
5	3 to 4
6	3 to 4
8	3 to 10
10	3 to 17
12	3 to 18

Overlay thickness ≤ 6 mm: one layer
>6mm: two layers
>12mm: three layers

Minimum overlay applied: 3mm

Maximum overlay applied: 18mm in 3 layers

*customized base plate thicknesses upon request

○ Tolerances

- Thickness Tolerance: +1 mm, -0mm
- Flatness Tolerance: ±3 mm for length over 3000mm

○ Fabricating

- Cutting methods: Water jet, Plasma & Laser cutting (Oxy fuel is not effective)
- Bending with the use of rollers or press brake equipment
- Welding method as for conventional steel due to ABRAPLATE mild steel base plate
- Fixing and bolting using machined inserts, studs, or plug welding
- Machining and drilling is not possible



WEAR RESISTANT PLATES