

ABRA-STEEL 500®

Wear-Resistant Steel 500 HB

ABRA-STEEL 500® is a hardened steel designed to withstand abrasion, with a hardness of 500 HB. It has been selected by our experts for its high abrasion resistance, as well as its good forming and welding properties.

PROPERTIES & APPLICATIONS

Its wear resistance provides excellent abrasion protection, while its high yield strength allows it to absorb significant impacts without deformation.

ABRA-STEEL 500® plates are used in various industries where abrasion is a major operational challenge.

Main applications : *Crushers and conveying systems, blades, wear shells, chutes, troughs, transport/grinding screws, knives, cutting edges, hoppers, tanks, crushing equipment, and more.*

CHEMICAL COMPOSITION

Mass composition in % (max):

C	Si	Mn	P	S	Mo	Ni	Cr	V	Nb	B
0.3	0.8	1.7	0.025	0.015	0.5	1	1.5	0.08	0.05	0.005

MECHANICAL PROPERTIES

(Typical values at delivery state):

Hardness at ambient temperature : 470 – 530 HB

Yield strength (Rp 0.2) : 1300 MPa

Tensile strength (Rm) : 1600 MPa

Elongation (A%) : 8

Toughness (typical values in J) : 30 at -40°C

DIMENSIONS & THICKNESSES

From **6 to 50 mm**, plate dimensions as per request.

APPLICATION

This steel has **excellent rolling and bending properties**, maintaining its characteristics up to a service temperature of **250°C**.

Performance may be affected by **excessive heating**, so **thermal treatment is not recommended**.

Recommended welding: Use our FCW 307 or FCW 312 cored wires, or our SE 307 or SE 312 coated electrodes.