



DURSTEEL® Mn

DURSTEEL Mn is a manganese work hardenable and non-magnetic steel. The non work-hardened (austenitic) structure allows a very high stiffness. The work-hardened (martensitic) structure up to 540 HB allows a very high wear resistance. This material, which features a work hardenable working surface (thickness from 1 to 3 mm) and a flexible core structure is ideal for many applications combining impact and abrasion.

Main applications

Anti break-in bars, screen grids, crushing hammers, armouring plate, impact sheets, chain conveyer guides, snowplow blades

Hardness

200 as delivered – 490 to 540 HB in work hardened condition

Mechanical properties

Typical values

Rp 0.2 : 325 MPa

Rm : 920 MPa

A% : 50

Resilience

Typical values

Chemical composition

C (%)	Si (%)	Mn (%)	P (%)	S (%)	Cr (%)
1.2	0.35	12	0.009	0.0003	0.3

Dimensions

Available in 6 m bars of 12 to 35 mm thick rounds

Rectangular cross-section flats, thickness 6 to 20, width 35 to 120, length 6000 mm

Channel cross-section flats, thickness 10 to 20, width 30 to 70, length 6000 mm

2 to 25 mm plates with 1500x3000 or 1000x2000 formats



Implementation

DURSTEEL MN maintains its mechanical properties up to a temperature of 450°C.

For any use of a steel featuring wear resistance characteristics, we recommend our DURSTEEL 410, 460 and 510 alloys (refer to datasheet at www.wa-produr.com)

Weldability

DURSTEEL MN is easily weldable in its non-hardened version with our CORINOX 307 alloy, available with or without shielding gas. When the steel has been hardened, it is not recommended for assembly. Rebuilding is possible under certain conditions. Please consult us beforehand.

Rebuilding wires:

CORMIX WG: 16% Mn flux-cored rebuilding wire. Welded deposit is austenitic with a hardness of 240HB. Impact hardenable, achieving a hardness of 48HRC.

All technical data sheets for the wires in the WA PRODUR range are available on our website: www.wa-produr.com.