DURSTEEL®
ACIERS ET COMPOSANTS ANTI-USURE

DURSTEEL ® 460

DURSTEEL 460 is a wear resistant hardened steel featuring a nominal hardness of 450 HB.

It resists to severe wear conditions and its high limit of elasticity allows it to absorb significant impacts without deformation.

Main applications

Armouring, wear blades, buckets, gondola cars, hoppers, chutes, hammers, cutter blades, skips, bulldozers, worm screws, screens, grippers, etc.

Hardness

420-480 HB

Mechanical properties

Typical values
Thickness 20 mm

Rp 0.2: 1250 MPa
Rm: 1400 MPa
A%: 10

Resilience

Typical values
Thickness 20 mm

Impact energy 35j at -40°C

Composition chimique

Typical values

Thickness. (mm)	C (Max %)	Si (Max %)	Mn (Max %)	P (Max %)	S (Max %)	Cr (Max %)	Ni (Max %)	Mo (Max %)	B (Max %)
3-8	0.2	0.7	1.55	0.025	0.015	0.25	0.2	0.25	0.005
8-20	0.2	0.7	1.55	0.025	0.015	0.25	0.2	0.25	0.005
20-40	0.22	0.7	1.55	0.025	0.015	1.0	0.2	0.3	0.005

CEV

Valeur Typique

Thickness. (mm)	CEV	CET
3-8	0.45	0.32
8-20	0.50	0.34
20-40	0.55	0.36

Dimensions

Available in coils : From 3 to 6 mm
Available in Quarto : From 6 to 30 mm (30 to 80 mm on request)

153 Rue Aristide berges 73000 CHAMBERY
Numéro SIREN : 788137461
Numéro SIRET : 78813746100042
Numéro TVA Intracommunautaire : FR50788137461

PRODUR
ENGINEERED BY WELDING ALLOYS

Tolerances	Compliant with EN 10 029 for QUARTO sheets and 10 051 for coils – Shape, length and thickness tolerances. Class A – Flatness tolerances as per Class N.
Surface condition	Compliant with EN 10 163-2 – Surface requirements as per Class A.

Implementation

DURSTEEL 460 has an excellent capacity for rolling, stretching and bending.

DURSTEEL 460 maintains its properties up to a temperature of 250°C.

The use of DURSTEEL 460 for heat treatments or hot galvanising is not recommended.

For any use of a wear resistant steel at higher temperature, we recommend you to use our CREUSABRO (refer to datasheet at www.wa-produr.com)

Weldability

DURSTEEL 460 is a hardened steel with low carbon equivalent that allows a good weldability. However, welding precautions are required. Preheating is recommended for thicknesses equal to or greater than 20mm.

Preheating temperature and recommended minimum inter-pass temperature based on the thickness in millimeters:

0-10 mm	10-20 mm	20-40 mm	40-80 mm
		125°	150°

The recommended WA PRODUR filler metals for welding DURSTEEL 460 are as follows:

EASYCOR 70M : Copper tubular cored wire without slag for horizontal butt welding

EASYCOR 700M : Copper tubular cored wire with high limit of elasticity for horizontal butt welding

CORINOX 307G : Stainless steel cored wire for heterogeneous assembly

CORINOX 312G : Stainless steel cored wire with high mechanical properties for heterogeneous assembly

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

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