

HARDOX® HiTuf**ABRASION RESISTANT PLATE**

HARDOX HiTuf is an abrasion resistant plate with an extremely high crack resistance.

HARDOX HiTuf has a hardness of about 350 HBW and is intended for applications with extra high demands on the combination of toughness and abrasion resistance.

APPLICATIONS

Cutting edges, demolition tools and rippers.

CHEMICAL COMPOSITION

(charge analysis)

Plate thickness mm	C max %	Si max %	Mn max %	P max %	S max %	Cr max %	Ni max %	Mo max %	V max %	Nb max %	B max %	CEV Typical	CET Typical
40-70	0,20	0,50	1,60	0,020	0,010	0,70	2,0	0,70	0,060	0,04	0,005	0,56	0,38
70,1-120	0,20	0,60	1,60	0,020	0,010	0,70	2,0	0,70	0,090	0,04	0,005	0,64	0,39

The steel is grain-refined.

$$CEV = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Cu + Ni}{15}$$

$$CET = C + \frac{Mn + Mo}{10} + \frac{Cr + Cu}{20} + \frac{Ni}{40}$$

HARDNESS

HBW
310 – 370

MECHANICAL PROPERTIES

Typical values

Plate thickness mm	Yield strength $R_{p0,2}$ N/mm ²	Tensile strength R_m N/mm ²	Elongation A_5 %
40 - 70	950	980	16
70,1 - 120	850	900	16

IMPACT PROPERTIES

Typical values

Plate thickness mm	Testing temperature °C	Impact energy Charpy-V, longitudinal J
40 - 70	-40 (-40°F)	95
70,1 - 120	-40 (-40°F)	70

TESTING

Brinell hardness HBW according to EN 10 003-1, on a milled surface 0,5-2 mm below plate surface per heat and 40 t.

FORM OF SUPPLY

Quenched and tempered.

DIMENSIONS

HARDOX HiTuf is supplied in plate thicknesses of 40-120 mm. More detailed informations is provided in our brochure General Product Information, E-5.

TOLERANCES

According to EN 10 029.
– Tolerances on thickness according to Class A.
– Tolerances on flatness according to Class N.
(Normal tolerances)

SURFACE FINISH

According to EN 10 163-2.
– Requirements according to Class A.
– Repair conditions according to Subclass 1.
(Repair by welding is allowed)

GENERAL TECHNICAL DELIVERY CONDITION

According to our brochure General Product Information, E-5.