

Data Sheet: ARMOX 500T

PROTECTION PLATE

Chemical Composition (ladle analysis)	C	Si	Mn	P	S	Cr	Ni	Mo	B
	max %	max %	max %	max %	max %	max %	max %	max %	max %
	0,32	0,1 - 0,4	1,2	0,015	0,010	1,0 ¹⁾	1,8 ¹⁾	0,7	0,005

The steel is grain-refined.
¹⁾ For plate thicknesses >70 mm Cr ≤1,5 and Ni ≤3,5

Mechanical Properties	Hardness HBW 480 - 540	Charpy-V -40°C ¹⁾ 10 x 10 test specimen ²⁾ Min. 25 Joule	Yield strength Rp 0,2 N/mm ² Min. 1250	Tensile Strength Rm N/mm ² 1450 - 1750	Elongation A5% 50% Min. 8 Min. 10
-----------------------	------------------------------	--	---	---	---

¹⁾ Average of three tests. Transverse to rolling direction.
Single value min 70% of specified average.
²⁾ For plate thicknesses under 12 mm subsize Charpy V-specimens are used. The specified minimum value is then proportional to the specimens cross-section.

Testing	Brinell hardness test	EN ISO 6506-1	Each heat treatment individual
	Charpy impact test	EN 10 045-1	Each heat and thickness >4 mm
	Tensile testing	EN 10 002-1	Each heat and thickness <20 mm
	Ultrasonic testing	EN 10 160	Each plate in thickness 60 - 150 mm

Delivery Condition	Quenched and tempered.
--------------------	------------------------

Dimensions	ARMOX 500T is supplied in plate thicknesses 3 - 150 mm. Plate thickness ≥60 mm are supplied with mill edge or by special agreement only.
------------	--

Tolerances	Dimensional tolerances according to EN 10 029 excluding thickness tolerances - Thickness tolerances:
------------	---

Plate thickness in mm	Standard Tolerances in mm
< 13	-0,0 + 0,8
13 < 20	+ 1,0
20 < 40	+ 1,2
40 < 60	+ 1,6
60 < 80	+ 2,0
80 < 110	+ 2,4
110 - 150	+ 3,0

Other thickness tolerances by special agreement.
Dimensional tolerances for plate with mill edge according to special agreement.
Flatness tolerances according to class N or according to special agreement.

Surface Properties	According to EN 10 163-2 Class B Subclass 3.
--------------------	--

Data Sheet: ARMOX 500T

PROTECTION PLATE

**General Technical
Delivery Condition**

According to EN 10 021 and EN 10 204. Unless otherwise agreed, inspection documents are issued in English with certificates of 3.1B type.

**Heat Treatment
and Fabrication**

ARMOX 500T may not be heated above 200°C (400°F) if guaranteed hardness is to be maintained. For further information on machining, cutting and welding, please see special brochure or contact us.

Appropriate health and safety precautions must be taken when welding, cutting, grinding or otherwise working on the product. Grinding, especially of primer coated plates, may produce dust with high particle concentration. Our Technical Customer Service Department will provide further information on request.