

Data Sheet: ARMOX 600T

PROTECTION PLATE

Chemical Composition (ladle analysis)	C	Si	Mn	P	S	Cr	Ni	Mo	B																								
	max	max	max	max	max	max	max	max	max																								
	%	%	%	%	%	%	%	%	%																								
	0,47	0,1 - 0,7	1,0	0,010	0,005	1,5	3,0	0,7	0,005																								
	The steel is grain-refined.																																
Mechanical Properties	Hardness	Charpy-V -40°C ¹⁾			Yield strength ³⁾		Tensile Strength ³⁾		Elongation ³⁾																								
	HBW	10 x 10 test specimen			Rp 0,2 N/mm²		Rm N/mm²		A5%																								
	570 - 640	Min. 12 Joule			Typical 1500		Typical 2000		Typical 7																								
	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																																
³⁾ The value will not be reported on the Test Certificate.																																	
Testing	Brinell hardness test	EN ISO 6506-1		Each heat treatment individual																													
	Charpy impact test	EN 10 045-1		Each heat and thickness																													
	Tensile testing	-		Not tested on a regular basis.																													
	Ultrasonic testing	EN 10 160		Each plate in thickness 60 - 100 mm																													
Delivery Condition	Quenched and tempered.																																
Dimensions	ARMOX 600T is supplied in plate thicknesses 5 - 100 mm. Plate thicknesses \geq 25 mm are supplied with mill edge or by special agreement only.																																
Tolerances	Dimensional tolerances according to EN 10 029 excluding thickness tolerances																																
	- Thickness tolerances:																																
	<table><tr><td>Plate thickness</td><td colspan="2">Standard</td></tr><tr><td>in mm</td><td colspan="2">Tolerances in mm</td></tr><tr><td>< 13</td><td>-0,0</td><td>+ 0,6</td></tr><tr><td>13 < 20</td><td></td><td>+ 0,8</td></tr><tr><td>20 < 40</td><td></td><td>+ 1,0</td></tr><tr><td>40 < 60</td><td></td><td>+ 1,4</td></tr><tr><td>60 < 80</td><td></td><td>+ 1,6</td></tr><tr><td>80 - 100</td><td></td><td>+ 2,0</td></tr></table>									Plate thickness	Standard		in mm	Tolerances in mm		< 13	-0,0	+ 0,6	13 < 20		+ 0,8	20 < 40		+ 1,0	40 < 60		+ 1,4	60 < 80		+ 1,6	80 - 100		+ 2,0
	Plate thickness	Standard																															
	in mm	Tolerances in mm																															
< 13	-0,0	+ 0,6																															
13 < 20		+ 0,8																															
20 < 40		+ 1,0																															
40 < 60		+ 1,4																															
60 < 80		+ 1,6																															
80 - 100		+ 2,0																															
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.																																

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**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 600T may not be heated above 180°C (360°F) if guaranteed hardness is to be maintained. For further information on machining, bending, 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.