

Steel grades of sheet pile sections

Steel grade EN 10248	Min. yield strength R_{eH} MPa	Min. tensile strength R_m MPa	Min. elongation $L_0=5.65\sqrt{S_0}$ %	Chemical composition (% max)					
				C	Mn	Si	P	S	N
S 240 GP	240	340	26	0.25	–	–	0.055	0.055	0.011
S 270 GP	270	410	24	0.27	–	–	0.055	0.055	0.011
S 320 GP	320	440	23	0.27	1.70	0.60	0.055	0.055	0.011
S 355 GP	355	480	22	0.27	1.70	0.60	0.055	0.055	0.011
S 390 GP	390	490	20	0.27	1.70	0.60	0.050	0.050	0.011
S 430 GP	430	510	19	0.27	1.70	0.60	0.050	0.050	0.011

ArcelorMittal mill specification

S 460 AP	460	550	17	0.27	1.70	0.60	0.050	0.050	0.011
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AMLoCor	Min. yield strength R_{eH} MPa	Min. tensile strength R_m MPa	Min. elongation $L_0=5.65\sqrt{S_0}$ %	Chemical composition (% max)							
				C	Mn	Si	P	S	N	Cr	Al
Blue 320	320	440	23	0.27	1.70	0.60	0.05	0.05	0.011	1.50	0.65
Blue 355	355	480	22	0.27	1.70	0.60	0.05	0.05	0.011	1.50	0.65
Blue 390	390	490	20	0.27	1.70	0.60	0.05	0.05	0.011	1.50	0.65

All the sections can be delivered in steel grades according to EN 10248-1, but not all sections are available in all steel grades. Below table summarizes the current possibilities. Special steel grades like **S 460 AP**, American **ASTM A 572** steel grades, steels with improved corrosion resistance like **AMLoCor** and **ASTM A 690**, or steels with copper addition in accordance with EN 10248 Part 1 Chapter 10.4 can be supplied on request. A modified steel grade A 690 with higher yield strength is also available upon request.

Please contact us for updated information. Galvanisation has an influence on the chemical composition of the steel and must therefore be specified in the purchase orders.

We strongly recommend informing us of all surface treatment to be applied to the product when placing orders.

ArcelorMittal can also provide steel grades complying with other standards (see table below).

Europe	EN 10248	S 270 GP	S 320 GP	S 355 GP	S 390 GP	S 430 GP	S 460 AP ¹⁾
USA	ASTM	A 328	–	A 572 Gr. 50; A 690	A 572 Gr. 55	A 572 Gr. 60	A 572 Gr. 65
Canada	CSA	Gr. 260 W	Gr. 300 W	Gr. 350 W	Gr. 400 W	–	–
Japan	JIS	SY 295	–	–	SY 390	–	–

¹⁾ ArcelorMittal mill specification.

Section	Steel Grade	EN 10248						ASTM		AMLoCor™			
		S 240 GP	S 270 GP	S 320 GP	S 355 GP	S 390 GP	S 430 GP	S 460 AP*	A 572	A 690	Blue 320	Blue 355	Blue 390
Belval	AZ-770/700	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	AZ	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	AU	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	PU	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Dabrowa	GU 6N	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 7N	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 7S	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 8N	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 8S	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 18N	✦	✓	✦	✓	✗	✗	✗	✗	✗			
	GU 12-500	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 13-500	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 15-500	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 16-400	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	GU 18-500	✦	✓	✦	✓	✓	✓	✗	✗	✗			
	Belval	AZ 26-700		✓	✓	✓	✓	✓				✓	✓
AZ 28-700			✓	✓	✓	✓	✓				✓	✓	✗
AZ 38-700N			✓	✓	✓	✓	✓				✓	✗	✗
AZ 40-700N			✓	✓	✓	✓	✓				✓	✗	✗
AZ 44-700N			✓	✓	✓	✓	✓				✓	✗	✗
AZ 46-700N			✓	✓	✓	✓	✓				✓	✗	✗
AZ 26		✓	✓	✓	✓	✓				✓	✓	✓	
AZ 28		✓	✓	✓	✓	✓				✓	✓	✗	

✓ available without restrictions

✦ available with restrictions

✗ currently unavailable

(*) ArcelorMittal Mill specification