

# Plates



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#### THE SHARD

London, the UK.  
The tallest building in the UK and the fourth tallest in Europe.  
Metinvest steel used: hot-rolled plates.

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#### HUDSON YARDS

New York, US  
Multi-functional complex in Manhattan, the largest development in NYC since the Rockefeller Centre.  
Metinvest steel used: hot-rolled plates.

According to European standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Non-alloy structural steels	EN 10025-2	S185	4-180	1500-3150	4000-25000	35 max
		S235JR, J0, J2				
		S275JR, J0, J2				
		S355JR, J0, J2, K2				
		E295				
Normalized rolled fine grain structural steels	EN 10025-3	S275N	4-150	1500-3150	4000-25000	30 max
		S275NL				
		S355N				
		S355NL	8-100			20 max
		S420N, NL				
		S460N, NL				
Structural steels with improved atmospheric corrosion resistance	EN 10025-5	S355J0W, S355J2W, S355K2W	5-100			

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.



According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Carbon structural steels	ASTM A36/A36M	A36/A36M	4-150	1500-3150	4000-25000	30 max
Carbon steel plates for general application	ASTM A283/A283M	C, D				
Structural carbon steel plates of improved toughness	ASTM A573/A573M	58, 65, 70	4-40			16 max
High strength low-alloy structural steel	ASTM A588/A588M	A, B	4-80			
Normalized high strength low-alloy structural steel plates	ASTM A633/A633M	A, C, D	4-100			20 max
		E	8-100			
Carbon and high strength low-alloy structural steel for bridges	ASTM A709/A709M	50 type1, type 2	4-100	16 max		
		50W type A, type B	5-80			

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.

## According to European standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Non-alloy structural steels	EN 10025-2	S235JR, J0, J2	6-200	1500-3200	6000-12500	10,5 max
		S275JR/J0/J2				
		S355JR, J0, J2, K2				
Normalized rolled fine grain structural steels	EN 10025-3	S275N, NL	6-100	1500-3200	6000-12500	10,5 max
		S355N, NL				
		S420N, NL				
		S460N, NL				
Thermomechanically rolled fine grain structural steels	EN 10025-4	S275M, ML	6-50	1500-3200	6000-12500	10,5 max
		S355M, ML				
		S420M, ML				
		S460M, ML				
Structural steels with improved atmospheric corrosion resistance	EN 10025-5	S235J0W, J2W S355J0W, S355J2W, S355K2W	6-130	1500-3200	6000-12500	10,5 max
Fine grain structural steels, quenched and tempered	EN 10025-6	S690Q, QL, QL1	8-100	1500-3200	6000-12500	10,5 max
		S890Q	8-25			
Non-alloy structural steel	EN 10025 + A1:1993	S235JR, JRG1, JRG2, J0, J2G3, J2G4	6-200	1500-3200	6000-12500	10,5 max
		S275JR, JRG1, JRG2, J0, J2G3, J2G4				
		S355JR, JRG2, J0, J2G3, J2G4, K2G3, K2G4				
Structural steel for general applications	DIN 17100	St 33, St 37-2, St 37-3, RSt 37-2, USt 37-2, St 44-2, St 44-3, St 52-3		1500-3200	6000-12500	10,5 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.  
For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

## According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Carbon structural steel	ASTM A36/A36M	A36/A36M	6-200	1500-3200	6000-12500	10,5 max
	ASME SA36/SA36M	SA36				
Common carbon steel plates for general application	ASTM A283/A283M	A, B, C, D	6-200	1500-3200	6000-12500	10,5 max
	ASME SA283/283M	D				
Quenched and tempered alloy steel plate	ASTM A514/A514M	B	8-31,8	1500-3200	6000-12500	10,5 max
		F	8-65			
		H	8-50,8			
		Q	8-152,4			
Normalized high strength low-alloy structural steel plates	ASTM A633/A633M	A	8-50	1500-3200	6000-12200	10,5 max
Carbon steel plate, furnished to chemical composition requirements	ASTM A830/A830M	1045	8-200	1500-3200	6000-12200	10,5 max
Carbon and high strength low-alloy structural steel for bridges	ASTM A709/A709M	36, 50, 50W	6-100	1500-3200	6000-12500	10,5 max
Structural carbon steel plates of improved toughness	ASTM A573/A573M	58, 65, 70	6-40	1500-3200	6000-12500	10,5 max
High strength low-alloy structural steel	ASTM A572/A572M		42	6-150	1500-2700	8,7 max
			50	6-100		
			55	6-50		
			60	6-32		
			65	6-32		
	ASTM A588/A588M		A, B	6-200	1500-2700	8,7 max
			K	6-50		

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.  
For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

According to CIS standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t		
Carbon steel rolled plates	GOST 14637	St2ps, St2sp, St3ps, St3sp, St3Gps, St3Gsp, St4ps, St4sp, St5ps, St5sp, St5Gps	6-200	1500-3200	6000-12500	10,5 max		
	GOST 1577	08, 10, 15, 20, 25, 30, 35, 40, 45, 50, 65G, 20H, 40H						
Rolled steel with increased strength	GOST 19281	09G2S, 09G2SD, 09G2D, 10G2S, 14G2, 15Gf, 16G5, 17G5, 17G1S, 16G2AF and other						
Structural steel rolled products	GOST 27772	S235, S245, S255, S275, S345, S345K, S390, S390K, C440						
Structural alloy steel	GOST 4543	30HGSA					8-200	6000-12200
Low-alloy structural rolled products for bridge construction	GOST 6713	16D					8-60	
		15HSND					8-50	
		10HSND					8-40	
Low-alloy steel plates with improved weldability and cold resistance	TU 14-1-4083-86	13G5, 13G5-U, 13G1S-U, 08G2BT-U, 09G2FB, 10G2FB					8-50	6000-11800
High strength low-alloy steel plates	TU 5.961-11650-97	AB2-M (12HN3M)					8-35	2000-3200

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

According to other standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Structural steel for general applications	CSA-G 40.21	260W (33W), 260WT (33WT), 300W (44W), 300WT (44WT), 350W (50W), 350WT (50WT), 380W (55W), 380WT (55WT), 400W (60W), 400WT (60WT)	6-100	1500-3200	6000-12500	10,5 max
	JIS G 3101	SS330, SS400, SS490, SS540	6-200			
Rolled steel for welded structure	JIS G 3106	SM400A, SM400B	6-150			
		SM400C	6-100			
		SM490A, SM490B	6-150			
		SM490C	6-50	1500-2700	8,7 max	
		SM490YA, SM490YB	8-100	1500-3200	6000-12200	10,5 max
Common structural steel plate	JIS G 3136	SH490B	8-50			
Structural steel	IRA M-IAS U500-42	F-24	8-150			
Hot rolled medium and high tensile structural steel	IS 2062	FE410WB	8-120			

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.



\*Annual plates production capacity



## According to European standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Non-alloy and alloy steels with specified elevated temperature properties	EN 10028-2	P235GH, P265GH, P295GH, P355GH	4-120	1500-3150	4000-25000	25 max
		16Mo3	5-100			20 max
		13CrMo4-5	8-80			16 max
Weldable normalized fine grain steels	EN 10028-3	P275NH, P275NL1, P275NL2, P355N, P355NH, P355NL1, P355NL2	4-120	1500-3150	4000-25000	25 max
		P460NH, P460NL1, P460NL2, P420NH, P420NL1, P420NL2	8-100			20 max
Nickel alloy steels with specified low temperature properties	EN 10028-4	13MnNi6-3	8-40	1500-3150	4000-25000	14 max
		12Ni14	8-50			12 max
Weldable fine grain steel for dangerous product transportation	NF A36-215:1997	P440NJ4	8-20	1500-3150	4000-25000	12 max
		P460NJ4	8-16			10 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.

## According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Pressure vessel alloy steel plates	ASME SA203/SA203M; ASTM A203/A203M	D, E	8-60	1500-3150	4000-25000	14 max
	ASME SA387/SA387M; ASTM A387/A387M	Grade 11 CL.1, Grade 11 CL.2, Grade 12 CL.1, Grade 12 CL.2	8-80			16 max
Pressure vessel carbon steel plates	ASME SA285/SA285M; ASTM A285/A285M	A, B, C	4-50	1500-3150	4000-25000	14 max
Pressure vessel manganese-silicon carbon steel plates	ASME SA299/SA299M; ASTM A299/A299M	A	5-80			16 max
Pressure vessel carbon steel plates	ASME SA516/SA516M; ASTM A516/A516M	55, 60, 65, 70	4-90	1500-3150	4000-25000	18 max
Pressure vessel heat-treated carbon-manganese-silicon steel plates	ASME SA537/SA537M; ASTM A537/A537M	Class 1	4-80			16 max
Pressure vessel carbon-manganese-silicon steel plates	ASME SA662/SA662M; ASTM A662/A662M	A, B, C	4-50	1500-3150	4000-25000	16 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.

## According to European standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Non-alloy and alloy steels with specified elevated temperature properties	EN 10028-2	P235GH, P265GH, P295GH, P355GH, 16Mo3	6-130	1500-3200	6000-12500	10,5 max
Weldable normalized fine grain steels	EN 10028-3	P275NH, P275NL1, P355N, P355NH				
		P275NL2, P355NL1, P355NL2	8-50	1500-3200		
Weldable thermomechanically rolled fine grain steels	EN 10028-5	P355M, P355ML, P355ML2, P420M, P420ML, P420ML2, P460M, P460ML, P460ML2	8-50	1500-3200	6000-12200	10,5 max
Steels for simple pressure vessels	EN 10207	P235S, P265S, P275SL	8-60	1500-3200	6000-12200	10,5 max
Steels for pressure purposes	BS 1501-1	151-430A, 151-430B, 161-430A, 161-430B, 223-490A, 223-490B, 224-460A, 224-460B, 224-490A, 224-490B	8-150	1500-3200	6000-12200	10,5 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

## According to CIS standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Carbon, low-alloy and alloy steel plates for boilers and pressure vessels	GOST 5520	15K, 16K, 18K, 20K	6-60	1500-3200	6000-12500	10,5 max
		22K	25-70			
		09G2S, 16GS, 10G2S1, 12HM	6-135			
		17GS, 17G1S	6-50			
		14HGS	8-10			
Low-alloy steel plates for pressure vessels	TU 14-1-5065-2006	09G2SUCH	8-50	1500-3200	6000-12200	10,5 max
Steel plates for gas and petrochemical industry	TU 14-1-4853-90	20UCH	8-135	1500-3200	6000-12200	10,5 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

## METINVEST PRODUCTION IN UKRAINE

According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Pressure vessel carbon steel plates	ASME SA285/SA285M	A, B, C	6-50	1500-3200	6000-12500	10,5 max
	ASTM A285/A285M					
	ASME SA515/SA515M	60, 65, 70	6-135			
	ASTM A515/A515M					
	ASME SA516/SA516M	55, 60, 65, 70	6-135			
	ASTM A516/A516M					
Pressure vessel alloy steel plates	ASME SA202/SA202M	A, B	8-50	6000-12200	10,5 max	
Pressure vessel manganese-silicon carbon steel plates	ASTM A299/A299M	A	8-135			
Pressure vessel quenched and tempered alloy steel plates	ASTM A517/A517M	B	8-32			
		F	8-65			
		Q	8-135			
Pressure vessel heat-treated carbon-manganese-silicon steel plates	ASME SA537/SA537M	Class 1	8-50			
		Class 2	8-130			
		Class 3				

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.



\*Annual plates production capacity

## METINVEST PRODUCTION IN EUROPE

According to European standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Non-alloy steels for quenching and tempering	EN 10083-2	C40, C45, C40E, C45E, C50E	8-150	1500-3150	4000-25000	35 max
Alloy steels for quenching and tempering	EN 10083-3	20MnB5, 30MnB5, 38MnB5, 27MnCrB5, 33MnCrB5, 39MnCrB6, 34CrMo4, 42CrMo4	7-50	1500-3150	4000-20000	18 max
Case hardening steels	EN 10084	16MnCr5, 20MnCr5	8-150	1500-3150	4000-25000	34 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.

## METINVEST PRODUCTION IN UKRAINE

According to European standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Thermomechanically rolled steels for cold forming	EN 10149-2	S315MC, S355MC, S420MC, S460MC	6-20*	1500-3200	6000-12500	10,5 max
		S500MC, S550MC, S600MC	6-16*			
Non-alloy steels for quenching and tempering	EN 10083-2	C45	6-200			
Non-alloy steels for quenching and tempering	EN 10083-3	20MnB5, 30MnB5, 38MnB5, 27MnCrB5, 33MnCrB5, 39MnCrB6, 42CrMo4	6-100			
Steels for quenching and tempering	DIN 17200	C45, Ck45	8-200		6000-12200	

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

\* Production of TMCP plates with thickness over specified by EN 10149-2 should be agreed during contract conclusion.

## METINVEST PRODUCTION IN UKRAINE

## According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Carbon steels for general application	SAE J 403	G10120/1012, G10200/1020, G10210/1021, G10450/1045	8-150	1500-3200	6000-12200	10,5 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

## According to CIS standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Spring steel	GOST 14959	65, 70, 65G	6-100	1500-3200	6000-12500	10,5 max
Steel plates for engineering	TU U 27.1-26416904-201-2010	25HGSR	8-40		6000-12200	
	TU 14-1-5517-2005	16H2GSB	8-60			
	Technical requirements (TT) with customer	16HGMFTR	8-35			
	TU U 27.1-26416904-150-2005	06GB, 06GBD, 06G2BD	8-50			

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.



**SPARTAN UK**  
220 000 t\*



\*Annual plates production capacity

## METINVEST PRODUCTION IN EUROPE

## According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Weldable structural steels for fixed offshore structures	EN 10225	S355G2+N	5-20	1500-3150	4000-25000	10 max
		S355G3+N	5-40			14 max

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.

## According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Structural steel plate for offshore structures	API Specification 2H	42, 50	5-80	1500-3150	4000-25000	16 max
High strength low-alloy steel for fittings	ASTM A860	WPHY 42, WPHY 46, WPHY 52	4-100			20 max
		WPHY 60; WPHY 65	8-60			14 max
		WPHY 70	8-50			20 max
	MSS SP75	WPHY 42, WPHY 46, WPHY 52	4-100			14 max
		WPHY 60; WPHY 65	8-60			20 max
		WPHY 70	8-50			14 max
Plates for welded pipes production	Technical requirements for the supply of plates ANSI/API 5L	B/L245NB; X42/L290NB; X46; X52/L360NB	4-100			20 max
		X60/L415QB	8-60	14 max		
		X65/L450QB	8-50			
		X70/L485QB	8-50			

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.



According to European standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Plates for welded pipes production	EN 10208-1	L210GA - L360GA	9-32*	1500-3200	6000-12200	10,5 max
	EN 10208-2	L245NB - L415NB, L245MB - L485MB				
Weldable structural steels for fixed offshore structures	EN 10225	S355G2+N, S355G5+M	8-20			
		S355G3+N, S355G6+M	8-40			
		S355G7+N, S355G8+N, S355G9+N, S355G10+N	8-150			
		S355G7+M, S355G8+M, S355G9+M, S355G10+M, S420G1+M, S420G2+M, S460G1+M, S460G2+M	8-50			
		S420G1+Q, S420G2+Q, S460G1+Q, S460G2+Q	8-100			

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts. For plates with thickness 135-200 mm mechanical properties should be agreed during the conclusion of contract.

\* For thickness over 22 mm producer's approval is required.

According to American standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
Plates for welded pipes production	Technical requirements for the supply of plates ANSI/API 5L	BM/L245M; X42/L290; X46/L320; X52/L360; X56/L390; X60/L415; X65/L450; X70/L485; X80/L555	9-32*	1500-3200	5800-12200	10,5 max
Structural steel plates for offshore structures	API Specification 2H	42, 50	8-50		6000-12200	
Quenched and tempered steel plates for offshore structures	API Specification 2Y	50, 60				

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.

\* For thickness over 22 mm producer's approval is required.

According to CIS standards

Product	Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t		
Plates for welded pipes production	TU 14-1-1921-76	12G2S	8-11	1500-3300	6000-12200	10,5 max		
		17G5, 17G1S						
	TU 14-1-1950-2004	17G1SU	8-17,5					
		6G2SAF	8,5-10,5					
	TU 14-1-3636-96	13G5, 13G5-U, 13G1S-U, 13G1SB-U	8-22				1500-3300	11500-11800
	TU 14-1-4034-96	10G2FB						
	TU 14-1-5293-95							
	TU 14-1-3978-96	09G2FB	9,5-22	1500-3300	11500-11900			
	TU 14-1-4083-86	13G5, 13G5-U, 13G1S-U, 09G2FB, 10G2FB, 10G2FBU, 10G2T, 10G2BT, 09G2BT, 10G2BU	8-50				1600-3200	6000-11800
	TU 14-1-4627-96	10G2FBU	8-32					
	TU 14-1-5339-96		16-60	1600-3200	6000-11800			
	TU 14-1-5346-97	13G5, 13G1S-U	8-12	1500-2500	5900-11800			
	TU 14-1-5351-97	X70 (K60)	9-30*	2000-3300	11500-12200			
	TU 14-1-5364-98	X65, X70	10-22	1830-3200	11300-11600			
	TU 14-1-5443-2002	08G1B	8-22	1500-3300	6000-12200			
	TU 14-1-5514-2005	07GBF-U	14-32					
	TU 14-1-5527-2006	06G1NMFBD	15-40	1500-3300	6000-12000			
	TU 14-1-5523-2005	X46, X52, X56, X60, K52	10-30*	1500-3300	11550-11650			
	TU 14-1-5540-2006	07GBF-U, 08GBF-U	12-32	1520-3300	11500-12200			
	TU 14-1-5477-2004	13G1S-U	10-20	1550-2530	11500-12000			
17G1S-U		8-16						
TU 14-1-5515-2005	05G2BU	20	2500-2650	18800-24300				

Dimensions, technical requirements and weight of flat products should be agreed during the conclusion of contracts.

\* For thickness over 22 mm producer's approval is required.

## American Standard

Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
ASTM A131/A131M	A, B, D, E, AH32, DH32, EH32, E32, FH32, AH36, DH36, EH36, E36, FH36	4-100	1500-3150	4000-25000	25 max

Note: Z test available on request (for thickness min. 15mm)

## Shipping Registers

Grade**	Thickness, mm	Italian register (RINA)	Lloyds register (LR)	DNV GL	Bureau Veritas (BV)	American Bureau of shipping (ABS)
A, AH32*, AH36*	4 - ≤8	AR, N	AR, N	AR, N	AR, N	AR, N
	≥8 - ≤35	AR, CR, N	AR, N	AR, N, CR	AR, CR, N	AR, CR, N
	>35 - ≤40	CR, N	N	N, CR	CR, N	CR, N
	>40 - ≤50	N		N	N	N
	>50 - 60	N		N	N	-
4 - ≤8	AR, N	AR, N, CR		AR, N	AR, N	
B	≥8 - ≤35	AR, CR, N	N	AR, N, CR	AR, CR, N	AR, CR, N
	>35 - ≤40	CR, N		N, CR	CR, N	CR, N
	>40 - ≤50	N		N	N	N
	>50 - 60	N		N	N	-
	4 - ≤8	N		N	N, CR	N
≥8 - ≤35	CR, N	N, CR	CR, N		CR, N	
>35 - ≤40	CR, N	N, CR	CR, N		CR, N	
>40 - ≤50	N	N, CR	N		N	
>50 - 60	N	N	N		-	
E	4 - ≤50	N	N	N	N	N
	>50 - 60	-	N	N	-	-
EH32, EH36	4 - ≤50	N	N	N	N	N
	>50 - 60	-	N	N	-	-
AH27S	4- ≤25	-	AR, N	AR, N	-	-
	>25 - 60	-	N	N	-	-
DH27S	4-60	-	N	N	-	-
EH27S	4-60	-	N	-	-	-
FH32, FH36	5-35	N	-	-	-	-
510LF	8-35	N	-	-	-	-

\* - AR only up to 25 mm.

\*\* - Z test available on request (for thickness min. 15mm).

AR - as rolled, CR - control rolled, N - normalized

## American Standard

Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
ASTM A131/A131M	A, B, D, E, AH32, DH32, EH32, E32, AH36, DH36, EH36, E36, AH40, DH40, EH40, E40	6-50	1500-3200	6000-12500	10,5 max

## CIS Standard

Standard	Steel grades	Thickness, mm	Width, mm	Length, mm	Weight, t
GOST 5521	A, B, D, E, A27S, D27S, E27S, A32, D32, E32, A36, D36, E36, A40, D40, E40, A40S, D40S, E40S	6-50	1500-3200	6000-12500	10,5 max
GOST R 52927	A, B, D, E, A32, D32, E32, A36, D36, E36, A40, D40, E40		1500-2700		8,7 max

## Shipping Registers

Grade	Thick-ness, mm	Italian register (RINA)	Lloyds register (LR)	Germanischer Lloyds (GL)	Det Norske Veritas (DNV)	DNV-GL	Bureau Veritas (BV)
A, B	6 - ≤20	AR, NR	AR, NR, TMCP	AR, CR	AR, NR	NR, CR	AR, NR, TMCP
	≥20 - ≤25						
	≥25 - ≤40		NR, TMCP		NR		
	≥40 - ≤50	N	N	N	-	N	N
	≥50 - ≤90						-
≥90 - 100							
D	6 - ≤20	AR, NR	AR, NR, TMCP	CR	NR, N	CR, NR	NR, TMCP
	≥20 - ≤25						
	≥25 - ≤40	NR, TMCP	CR, N	-	-	CR/NR (up to 35mm), N (35-40mm)	NR, TMCP, N
	≥40 - ≤50	AR, NR, N	-	-	-	-	NR, TMCP, N
≥50 - ≤90	N	-	-	-	-	N	
E	6 - ≤20	N, TMCP	N, TMCP	N, TMCP	TMCP	N	N, TMCP
	≥20 - ≤25						
	≥25 - ≤40						
	≥40 - ≤50	N	-	-	-	N	
	≥50 - ≤90						
A32, AH32	6 - ≤20	NR, TMCP	AR, NR, TMCP	CR, TMCP	NR, TMCP	CR, NR	NR, TMCP
	≥20 - ≤25						
	≥25 - ≤40	NR, TMCP	N, TMCP	-	-	N	N, TMCP
	≥40 - ≤50	N, TMCP	-	-	-	-	N
	≥50 - ≤100	N	-	-	-	-	N
D32, DH32	6 - ≤20	NR, TMCP	AR, NR, TMCP	CR, TMCP	NR, TMCP	CR, NR	NR, TMCP
	≥20 - ≤25						
	≥25 - ≤40		NR, TMCP	N, TMCP	-	-	N, TMCP
	≥40 - ≤50	N, TMCP	-	-	-	-	N, TMCP
E32, EH32	6 - ≤20	N, TMCP	N, TMCP	N, TMCP	N, TMCP	N	N, TMCP
	≥20 - ≤25						
	≥25 - ≤40						
	≥40 - ≤50	TMCP	-	-	-	-	
A36, AH36	6 - ≤20	NR, TMCP	AR, NR, TMCP	CR, TMCP	NR, TMCP	CR, NR	NR, TMCP
	≥20 - ≤25						
	≥25 - ≤40	NR, TMCP	N, TMCP	-	-	N	N, TMCP
	≥40 - ≤50	N, TMCP	-	-	-	-	N
	≥50 - ≤100	N	-	-	-	-	N
E36, EH36	6 - ≤20	N, TMCP	N, TMCP	N, TMCP	N, TMCP	N	N, TMCP
	≥20 - ≤25						
	≥25 - ≤40						
	≥40 - ≤50	-	-	-	-	-	
	≥50 - ≤62						
D36, DH36	6 - ≤20	NR, TMCP	AR, NR, TMCP	CR, TMCP	NR, TMCP	CR, NR	NR, TMCP
	≥20 - ≤25						
	≥25 - ≤40	NR, TMCP	N, TMCP	-	-	N	N, TMCP
	≥40 - ≤50	N, TMCP	-	-	-	-	N, TMCP
	≥50 - ≤62	-	-	-	-	-	-
A40, D40, E40, AH40, EH40, DH40	6 - ≤42	TMCP	QT	-	TMCP, QT	QT	-
	≥42 - ≤50				TMCP	-	-
F40	6 - ≤42	-	-	-	QT	QT	-

AR – as rolled, CR – control rolled,  
N – normalized, NR – normalized rolling,  
QT – quenched and tempered,  
TMCP – termomechanically rolled

## Shipping Registers

Grade	Thick-ness, mm	American Bureau of shipping (ABS)	Russian ship- ping register (RSR)	Russian River shipping regis- ter (RRSR)	Register of Ukrainian shipping (RSU)	Nippon Kaiji Kyo- kai (NKK)	Indian register (IRS)
A, B	6 - ≤20	AR, CR, TMCP	AR, CR, NR, TMCP	CR, NR	AR, CR, NR	AR	AR, CR, TMCP
	≥20 - ≤25				AR, CR, NR, N		AR, CR
	≥25 - ≤40						
	≥40 - ≤50	-	-	-	-	-	-
	≥50 - ≤90						
≥90 - 100							
D	6 - ≤20	CR, TMCP	AR (max 35mm), CR, NR, TMCP	CR, NR	CR, NR	CR	CR, TMCP, N
	≥20 - ≤25				CR, NR, N		
	≥25 - ≤40	CR, TMCP	CR, NR, TMCP	-	-	-	N
	≥40 - ≤50	CR, TMCP	CR, NR, TMCP	-	-	-	-
≥50 - ≤90	-	-	-	-	-	-	
E	6 - ≤20	N, TMCP	N, TMCP	TMCP	N, TMCP	N	TMCP (max. 30mm)
	≥20 - ≤25						
	≥25 - ≤40						
	≥40 - ≤50	TMCP	-	-	-	-	-
	≥50 - ≤90	-	-	-	-	-	-
A32, AH32	6 - ≤20	CR, TMCP	CR, TMCP	TMCP	CR, TMCP	CR	N, TMCP
	≥20 - ≤25				N, TMCP		
	≥25 - ≤40	N, TMCP	-	-	-	-	-
	≥40 - ≤50	N, TMCP	-	-	-	-	-
	≥50 - ≤100	-	-	-	-	-	-
D32, DH32	6 - ≤20	CR, TMCP	CR, TMCP	TMCP	CR, TMCP	CR	N, TMCP
	≥20 - ≤25				N, TMCP		
	≥25 - ≤40				N, TMCP		
	≥40 - ≤50	N, TMCP	-	-	-	-	-
E32, EH32	6 - ≤20	N, TMCP	N, TMCP	TMCP	N, TMCP	N	N, TMCP
	≥20 - ≤25						
	≥25 - ≤40						
	≥40 - ≤50	TMCP	-	-	-	-	N
A36, AH36	6 - ≤20	CR, NR, TMCP	CR, TMCP	TMCP	CR, TMCP	CR	N, TMCP
	≥20 - ≤25				N, TMCP		
	≥25 - ≤40	N, TMCP	-	-	-	-	N, TMCP
	≥40 - ≤50	N, TMCP	-	-	-	-	-
	≥50 - ≤100	-	-	-	-	-	-
E36, EH36	6 - ≤20	N, TMCP	N, TMCP	TMCP	N, TMCP	N	N, TMCP
	≥20 - ≤25						
	≥25 - ≤40						
	≥40 - ≤50	-	-	-	-	-	N
	≥50 - ≤62						
D36, DH36	6 - ≤20	CR, TMCP	CR, TMCP	TMCP	CR, TMCP	CR	N, TMCP
	≥20 - ≤25				N, TMCP		
	≥25 - ≤40	N, TMCP	-	-	-	-	N, TMCP
	≥40 - ≤50	N, TMCP	-	-	-	-	-
	≥50 - ≤62	-	-	-	-	-	-
A40, D40, E40, AH40, EH40, DH40	6 - ≤42	-	-	-	NR, TMCP	-	-
	≥42 - ≤50				NR, TMCP		-
F40	6 - ≤42	-	-	-	-	-	-

AR – as rolled, CR – control rolled,  
N – normalized, NR – normalized rolling,  
QT – quenched and tempered,  
TMCP – termomechanically rolled

# CONTACTS

## WESTERN EUROPE

### HEAD OFFICE

Via XII Ottobre 3  
16121 Genova, Italy  
Tel: +39 010 576 29 11  
Fax: +39 010 576 29 90  
e-mail: sales@metinvest-westerneurope.com

### ITALY REPRESENTATIVE OFFICE

Via Antonio Salieri 36  
37050 Vallese di Oppeano (VR), Italy  
Tel: +39 045 713 33 11  
Fax: +39 045 713 33 94

### UK REPRESENTATIVE OFFICE

Ropery Road, Teams, Gateshead  
Tyne and Wear, NE8 2RD, UK  
Tel: +44 0 191 460 42 45  
Fax: +44 0 191 460 05 67

### BELGIUM REPRESENTATIVE OFFICE

Trametal Europe S.p.r.l  
105 Rue Colonel Bourg  
1030 Brussels, Belgium  
Tel: +32 2 726 53 71  
Fax: +32 2 726 47 79

## METINVEST INTERNATIONAL SA

### HEAD OFFICE

2 Rue Vallin, Geneva 1201, Switzerland  
Tel: +41 22 906 18 28  
Fax: +41 22 906 18 29  
e-mail: switzerlandoffice@metinvest-international.com

## SOUTH-EAST EUROPE

### HEAD OFFICE

Dobrudzha Str., 1  
1000 Sofia, Bulgaria  
Tel: +359 2 981 29 10  
e-mail: office.sofia@promet.bg

### GERMANY REPRESENTATIVE OFFICE

Trametal Deutschland GmbH  
Carl-von-Linde Str. 40  
85716 Unterschleißheim, Germany  
Tel: +49 0 89 309 079 0  
Fax: +49 0 89 309 079 79

Trametal Deutschland GmbH  
Vertriebsbüro Nord Almastr. 10  
45130 Essen, Germany  
Tel: +49 0 201 177 89 70  
Fax: +49 0 201 177 89 797

### IBERIAN PENINSULA REPRESENTATIVE OFFICE

Metinvest Iberica S.L.  
Calle Rodriguez Arias 6, 2° pl. el. 202-D  
48008 Bilbao, Spain  
Tel: +34 94 640 00 41

### POLAND REPRESENTATIVE OFFICE

33 Ul. Warszawska, Katowice  
40-010 Poland  
Tel: +48 032 888 58 41  
e-mail: vladimir.zadolinnyy@metinvestholding.com

### ROMANIA REPRESENTATIVE OFFICE

Metinvest Carpathia SRL  
11A Turtureleloa Street,  
Phoenicia Business Center, 2nd Floor  
3rd District Bucharest, Romania  
Tel: + 40 314 378 372  
e-mail: romania@metinvest-international.com

## CIS

### METINVEST EURASIA HEAD OFFICE

Office 8, Block I  
1/1, Vasilisy Kozhinoy St.  
Moscow, Russia, 121096  
Tel.: +7 495 739 26 26  
Fax: +7 800 555 59 57 (7700)  
e-mail: sales@metinvest-eurasia.com

## UKRAINE

### METINVEST-SMC HEAD OFFICE

15A Leiptsyzka Street, Kyiv  
01015, Ukraine  
Tel: +380 80 030 30 70  
Tel: +380 44 581 44 37  
Fax: +380 44 581 44 88  
e-mail: sales@metinvest-smc.com

## MENA

### TURKEY REPRESENTATIVE OFFICE

Atasehir Residence, Sedef Caddesi, No 2 A Blok Daire: 4  
34758 Atasehir – Istanbul, Turkey  
Tel: +90 216 456 56 80  
Fax: +90 216 456 56 81  
e-mail: aydin.turker@metinvest-international.com

### LEBANON REPRESENTATIVE OFFICE

New Jdeideh, Sagesse Street, 10th Floor  
Montelibano Building, Beirut, Lebanon  
Tel: +961 90 08 72  
Fax: +961 89 30 83  
e-mail: vladimir.shakhovoy@metinvest-international.com

## AMERICA

### NORTH AMERICA & CANADA REPRESENTATIVE OFFICE

1100 Burloak Drive, Suite 300  
Burlington, ON, L7L 6B2  
Canada  
Tel: +1 905 332 2759  
Fax: +1 905 332 3007  
e-mail: yuri.shvetsov@metinvest-international.com

### METINVEST DISTRIBUTION

2 Tolbukhina Street, Room 29, Office 9  
Minsk 220012, Belarus  
Tel/fax: +375 1733 6 55 56

## ASIA

### CHINA REPRESENTATIVE OFFICE

No.602, Building 5, Wanda Plaza,93# Jianguo Road  
Chaoyang District, Beijing, China  
Tel: +86 10 58208124  
e-mail: vivian.zhou@metinvest-international.com.cn

### METINVEST INTERNATIONAL SA

GULF BRANCH  
Jebel Ali Free Zone, Building LOB17, Floor 3  
PO Box 263027, Dubai, United Arab Emirates  
Tel: +971 4 881 19 40  
Fax: +971 4 881 19 57  
e-mail: viktor.vukusic@metinvest-international.com

### NORTH AFRICA REPRESENTATIVE OFFICE

Tunisia: Immeuble de Carthage, Rue du Lac de Constance  
Les Berges du Lac, 1053, Tunis  
Tel: +216 26 156 900  
Egypt: 5th Settlement, 90th Street, New Cairo  
Tel: +201 10 0070700  
e-mail: ghazi.maherzi@metinvest-international.com

### LATIN AMERICA REPRESENTATIVE OFFICE

100 Enriquillo Avenue, Residencial Alkhou IV  
Apt 403, Santo Domingo, Dominican Republic  
Tel: +1 809 482 74 56  
Fax: +1 809 482 76 34  
e-mail: sasha.vukusic@metinvest-international.com



[metinvestholding.com](http://metinvestholding.com)