



JSC "Metallurgical Plant named after A.K. Serov"



Aglomeratchikov street, 6, 624992, Serov, Russia, E-mail: postmaster@serovmet.ru

DECLARATION OF PERFORMANCE

№ 06-00186387-2014

1. Unique identification code of the product-type: **hot-rolled constructional steel according to EN 10025-2:2005.**
2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4): **S355J2 (1.0577) according to EN 10025-2:2005.**
3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer: **for use in metal structures or composite constructions made of metal and reinforced concrete.**
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

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5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):

Not applicable

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V: **System 2+**
7. In case of the declaration of performance concerning a construction product covered by a harmonised standard: **The Notified Body TÜV SÜD Industrie Service GmbH №0036** performed the initial inspection of the manufacturing plant and of factory production control as well as continuous surveillance, assessment and evaluation of factory production control and issued Certificate of Conformity of Factory Production Control with No. **0036-CPR-M-075-2014.**



8. Declared performance

S355J2, EN 10025-2:2005

Essential characteristics	Performance							
	Weldability (CEV)	Nominal thickness (t) (mm)				Values (% , max)		
40 < t ≤ 150				0,47				
150 < t ≤ 250				0,49				
250 < t ≤ 400				0,49				
Yield strength	Nominal thickness (t) (mm)				Values (R _{eH} MPa ^e , min)			
	100 < t ≤ 150				295			
	150 < t ≤ 200				285			
	200 < t ≤ 250				275			
	250 < t ≤ 400				265			
Tensile strength	Nominal thickness (t) (mm)				Values (R _m MPa ^e)			
	100 < t ≤ 150				450 – 600			
	150 < t ≤ 250				450 – 600			
	250 < t ≤ 400				450 – 600			
Relative elongation	Nominal thickness (t) (mm)				Values (% , min)			
					$L_0 = 5,65 \sqrt{S_0}$			
	100 < t ≤ 150				18			
	150 < t ≤ 250				17			
Impact strength	Nominal thickness (t) (mm)				Values (J, min)			
	t ≤ 150				t = -20 ⁰ C			
	150 < t ≤ 250				27			
	250 < t ≤ 400				27			
Heat chemistry for t ≥ 40c	C (%) max.	Si (%) max.	Mn (%) max.	P (%) max. ^a	S (%) max. ^{a,b}	N (%) max. ^c	Cu (%) max.	Other (%) max. ^d
	0,22	0,55	1,60	0,025	0,025	-	0,55	-

^a For rolled steel bars the content of P and S may be higher up by 0.005%.

^b For rolled steel bars with the purpose to better suitability for processing, the maximum sulphur content increases by 0,015%, if steel is processed with the purpose to change the formation of sulfide and chemical composition has at least 0,0020% of Ca.

^c The maximum nitrogen content is invalid if steel contains the total percent of aluminum not less than 0,020%, or the content of soluble in acid aluminum is at least 0,015%, or there is a sufficient quantity of other substances that bind nitrogen. The elements binding nitrogen should be indicated in the certificate of passing tests.

^d If other elements can be added, they should be indicated in the certificate of passing test.

^e 1MPa = 1H/mm²

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Chief engineer

A.V. Fomin

Serov, 29.05.2014