

STRENGTH CLASS 450 MPA

BASIC STEEL GRADE

St3Gsp (Ст3Гсп) as per GOST 380

MECHANICAL PROPERTIES

Steel grade	Standard	Thickness, mm	Ultimate strength, MPa (N/mm ²)	Yield strength, MPa (N/mm ²)	Relative elongation, %, min	Mandrel diameter at 180° bending	Impact energy, J, min
St3Gsp (Ст3Гсп)	GOST 380*	2.0-3.9	/	/	/	/	/
	GOST 14637	4.0-14.0	390-570	255	23	1.5a	/
45	ASTM A 1011	1.80-2.49	≥ 410	≥ 310	18	2.0a	/
		2.50-6.00			19		
P310NB	EN 10120	1.80-2.49	460-550	≥ 310	21	/	/

* only chemical composition
/ – parameter is not regulated by the standard
a – rolled product thickness

At the customer's request, hot-rolled steel with drawing can be supplied with agreed mechanical properties.

TOLERANCES FOR DIMENSIONS AND SHAPE OF ROLLED PRODUCTS

Standard for specification	GOST 380 GOST 14637	ASTM A 1011
Standard for product mix, geometrical dimensions and tolerances	GOST 19903	ASTM A 568

THICKNESS/WIDTH RATIO FOR ROLLED PRODUCTS

Thickness, mm	Strip width, mm														
	900	1,000	1,100	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650	1,700	1,850
1.50-1.79															
1.80-2.99															
3.00-3.99															
4.00-4.99															
5.00-5.99															
> 6.00															

Rolled products with customized properties, including thickness/width ratio, are available upon request.