

ROLLED PRODUCTS FOR BRIDGE CONSTRUCTION

Rolled plates for manufacturing bridge structures are made of steel grades 10HSND and 15HSND according to GOST 6713-91. Weldability is provided through a proper steel manufacturing technology and by meeting the requirements for chemical composition and mechanical properties.

Range of products

Steel grade	Rolled product dimensions, mm		
	Thickness	Width	Length
10HSND, 15HSND	10-60	1500-3200	4500-12000

Chemical composition

Steel Grade	Fraction of total mass, %							
	C	Si	Mn	Cr	Ni	Cu	P max	S max
10HSND	Up to 0.12	0.8-1.1	0.5-0.8	0.6-0.9	0.5-0.8	0.4-0.6	0.035	0.035
15HSND	0.12-0.18	0.4-0.7	0.4-0.7	0.6-0.9	0.3-0.6	0.2-0.4	0.035	0.035

Mechanical properties

Steel Grade	Thickness , mm	Ultimate strength σ_B , N/cm ² (kgf/mm ²), not less than	Yield strength σ_T , N/cm ² (kgf/mm ²), not less than	Relative elongation δ_5 , %, N/cm ² (kgf/mm ²), not less than
10 HSND	8-15	530-685 (54-70)	390 (40)	19
	16-32	530-670 (54-68)	390 (40)	19
	33-60	510-670 (52-68)	390 (40)	19
15HSND	8-32	490-685 (50-70)	345 (35)	21
	33-60	470-670 (48-68)	335 (34)	19