

Quality

S275JR

According to Standard

EN 10025 - 2 : 2004

Number

1.0044



Comparable Standards

German  
DINFrance  
AFNORSpain  
UNEChina  
GBU.K.  
B.S.Russia  
GOSTUSA  
AISI - SAEJapan  
JIS

St44-2

E28-2

AE275B

Q255A

43B

St4sp

A283 grd

E 275 B

Chemical Analysis

C%  
maxSi%  
maxMn%  
maxP%  
maxS%  
maxN%  
maxCu%  
max

0.21 - 0.24

1.50 - 1.60

0.035 - 0.045

0.035 - 0.045

0.012 - 0.014

0.40 - 0.45

## Hot Work and Heat Treatment Temperatures

## Temperature °C

Hot - Forming	Supply State +U	Soft Annealing +A	Isothermal Annealing +I	Normalising & Tempering	Quenching & Tempering QT	Stress-relieving +SR
1150 - 850	natural state	650 - 700 air		880 - 920 air	860 - 900 water	50° under the temperature of tempering
				550 - 660 air	550 - 660 air	

## Mechanical Properties at Room Temperature

## Hot Rolled EN 10025 - 2 : 2004 S 275JR

Testing at room temperature , Kv +20° C

Size mm		R	ReH	A% L	A% T	Kv L +20°C	HB
Dia	Thick	N/mm2	N/mm2 min	min	min	J min	for inf.
	3	430 - 580	275				
3	16	410 - 560	275	23	21	27	122 - 162
16	40	410 - 560	265	23	21	27	122 - 162
40	63	410 - 560	255	22	20	27	122 - 162
63	80	410 - 560	245	21	19	27	122 - 162
80	100	410 - 560	235	21	19	27	122 - 162
100	150	400 - 540	225	19	19	27	119 - 158
150	200	380 - 540	215	18	18	27	110 - 158
200	250	380 - 540	205	18	18	27	110 - 158