

Quality E335(Fe 590 - Fe60 - St 60-2 - C40E - C45E)



According to Standard EN 10025 - 2 : 2004

Number 1.0060

Comparable Standards	German DIN	France AFNOR	Spain UNE	China GB	U.K. B.S.	Russia GOST	USA AISI - SAE	Japan JIS
	St60-2	A60 - 2	A 590	HRB335		St6ps. CT6nc		SM 570

Chemical Analysis	C% max	Si% max	Mn% max	P% max	S% max	N% max	Cast Analysis Product Analysis
					0.055	0.055	

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
1100 - 850	natural	690 air	820 furnace cooling to 660 then air	870 air	840 water	50° under the temperature of tempering
				550 - 650 air	550 - 650 air	

Mechanical Properties at Room Temperature

Minimum Yield Strength R^{eH}

Mpa

Nominal Thickness mm

≤ 16	> 16	> 40	> 63	> 80	> 100	> 150	> 200
	≤ 40	≤ 63	≤ 80	≤ 100	≤ 150	≤ 200	≤ 250
335	325	315	305	295	275	265	255

Tensile Strength R

Mpa

Nominal Thickness mm

< 3	> 3	> 100	> 150
	≤ 100	≤ 150	≤ 250

590 to 770 570 to 710 550 to 710 540 to 710

Minimum percentage elongation after fracture %

L = 80 mm. Normal thickness mm

L = 5.65 √S₀ Nominal thickness mm

	≤ 1	> 1	> 1.5	> 2	> 2.5	> 3	> 40	> 63	> 100	> 150
		≤ 1.5	≤ 2	≤ 2.5	< 3	≤ 40	≤ 63	≤ 100	≤ 150	≤ 250
l	8	9	10	11	12	16	15	14	12	11
t	6	7	8	9	10	14	13	12	11	10

