

Quality C60E  
 According to standards EN 10083-2: 2006  
 Number 1.1221



**Chemical composition**

<b>C%</b> <b>max</b> 0.57-0.65	<b>Si%</b>  0.4	<b>Mn%</b>  0.60-0.90	<b>P%</b> <b>max</b> 0.03	<b>S%</b> <b>max</b> 0.035	<b>Cr%</b> <b>max</b> 0.4
	<b>Mo%</b> <b>max</b> 0.1	<b>Ni%</b> <b>max</b> 0.1	<b>Cu%</b> <b>max</b> -		

**Temperature ▲°C**

Hot-forming	Quenching	Tempering	Stress-relieving	Soft Annealing
1050-850	830-850 water, oil or polymer	550-650	50°C under the temperature	700 air
		air		(HB max 241)

**Mechanical properties**

**Table of tempering values obtained at room temperature after quenching at 850°C in oil**

<b>HB</b>	697	688	634	560	468	371
<b>HRC</b>	62.5	62	59	55	49	40
<b>R N/mm<sup>2</sup></b>			2420	2070	1700	1250
<b>Tempering at °C</b>	50	100	200	300	400	500
<b>Thermal Expansion</b>	10 <sup>-6</sup> . K <sup>-1</sup>		11.1	12.1		19.9
<b>Modulus of elasticity long.</b>	GP a	210			197	
<b>Modulus of elasticity tang.</b>	GP a	80			76	
<b>Specific heat capacity</b>	J/(kg.K)	460				
<b>Density</b>	kg/dm <sup>3</sup>	7.85				
<b>Thermal Conductivity</b>	W/(m.K)	46				
<b>Specific electric resistivity</b>	ohm.mm <sup>2</sup> /m	0.13				
<b>Electrical conductivity</b>	Siemens.m/mm <sup>2</sup>	7.69				
<b>°C</b>		20	100	200	250	300