

## 67 SiCr 5

### Spring Steel

### Collet Steel

Material No.	DIN Abbreviation	AFNOR	AISI/SAE/ASTM	ISO	Euro Standard EN	Others
~ 1.7103	67SiCr5		AISI ~ 9254		67SiCr5	

Distinctive feature & main attribute: a temperable spring steel, combining good resiliency, enormous tenacity and wear resistance.

Use & application range: this quality is suitable for coil springs, torsion bar suspensions, valve and circular springs, collet chucks and shear blade amongst others.

SPECIAL REFERENCE ANALYSIS FOR COLLET CHUCKS %	C	Si	Mn	P	S	Cr	Fe
	<b>0.68</b> <b>0.77</b>	<b>0.90</b> <b>1.10</b>	<b>0.40</b> <b>0.60</b>	<b>max.</b> <b>0.025</b>	<b>0.01</b> <b>0.03</b>	<b>0.60</b> <b>0.80</b>	<b>balance</b>

EXECUTION DELIVERY FORM STANDARD SIZES AVAILABILITY	
	<ul style="list-style-type: none"> <li>• Execution in 3 m round bars</li> <li>• Standard size in stock: see <a href="#">Product range</a></li> <li>• Other sizes on request</li> </ul>

TOLERANCES	
	<ul style="list-style-type: none"> <li>• High precision cold drawn, ground, polished; ISO <b>h8 (h7)</b>; surface finish N5/N6</li> <li>• <math>\varnothing \geq 4.00</math> mm, sharpened &amp; chamfered</li> <li>• <math>\varnothing \geq 5.00</math> mm; eddy current checked for fissures</li> <li>• Tighter tolerances (up to +/- 0.002 mm) on request</li> </ul>

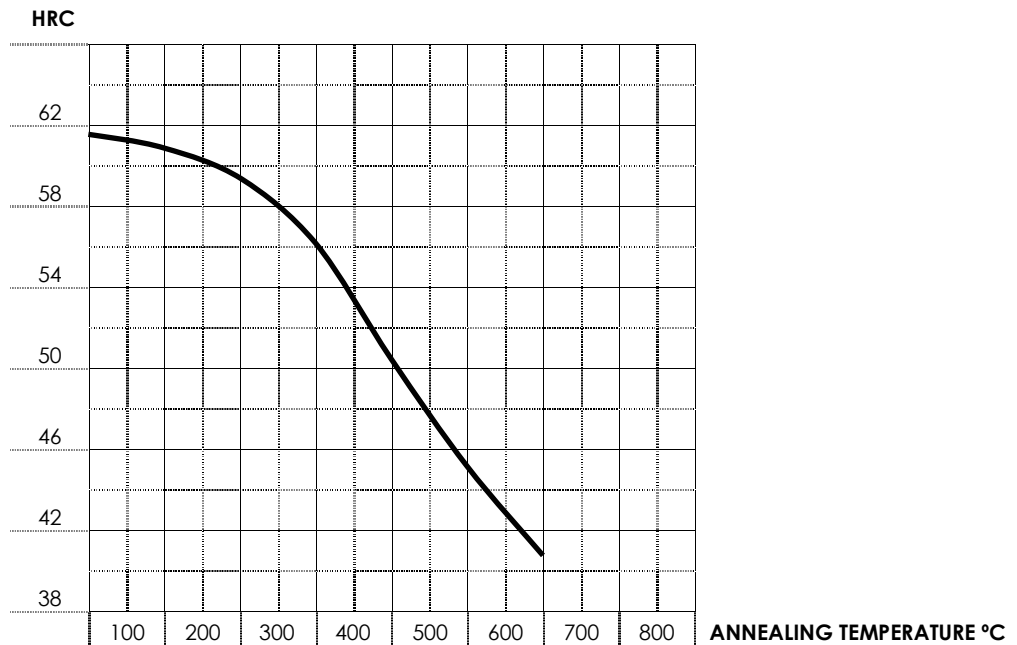
MECHANICAL PROPERTIES	
	At delivery status: <ul style="list-style-type: none"> <li>• Tensile strength (<math>R_m</math>): <b>~ 740 MPa (~ 255 HB)</b></li> <li>• Hardness after tempering: <b>40 – 61 HRC, as required</b></li> </ul>

HEAT TREATMENT	
	<ul style="list-style-type: none"> <li>• Tempering in oil: <b>830 – 860 °C</b> (Annealing as required see chart)</li> </ul>

CUTTING RATES	
	$v_c \sim 20 - 30$ m/min, value depending on the lubrication oil, cutting tools and shape of parts. <ul style="list-style-type: none"> <li>• Cutting oil: e.g. ORTHO of Motorex</li> </ul>

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## ANNEALING CURVE



The above curve indicates the results of determinate section of a curtain size of 5 mm. The result after heat treatment can be slightly different than shown on this curve, depending on the shape and size of the part.

Modifications will not be adjusted automatically

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