



**TITAN**  
**Grade 2**  
**non-ferrous alloys**  
**Titanium**

Material No.	DIN Abbreviation	AFNOR	AISI/SAE/ASTM	ISO	Euro Standard EN	Others
3.7035	Ti2 (former Ti 99,7)	T40	AISI F67	5832-2	Ti2	

Distinctive feature & main attribute: a pure titanium according to the standards ISO 5832-2 and ASTM F-67, offering an excellent balance of strength and ductility, immune to corrosive attacks, with a good workability. A major industrial application for titanium is in heat transfer applications for which the cooling medium are seawater, brackish water or polluted water.

Use & application range: this material is covers the requirement of the aerospace and the watch making, dental and surgical instruments, weight-saving component parts or condensers.

REFERENCE ANALYSIS %	C	Fe	O	N	H	Ti
	<b>max.</b> <b>0.10</b>	<b>max.</b> <b>0.30</b>	<b>max.</b> <b>0.25</b>	<b>max.</b> <b>0.03</b>	<b>max.</b> <b>0.015</b>	<b>balance</b>

<b>EXECUTION DELIVERY FORM STANDARD SIZES AVAILABILITY</b>	<ul style="list-style-type: none"> <li>• Execution in 3 m (2 m) round bars as well as in reels (coils)</li> <li>• Standard size in stock: see <a href="#">Programme range</a></li> <li>• Other sizes on request</li> </ul>
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<b>TOLERANCES</b>	<ul style="list-style-type: none"> <li>• High precision cold drawn, ground, polished; ISO <b>h6 (h7)</b></li> <li>• <math>\varnothing \geq 1.00</math> mm; pointed &amp; chamfered</li> <li>• Tighter tolerances on request</li> </ul>
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<b>MECHANICAL PROPERTIES</b>	At delivery status according to ISO & ASTM standard: <ul style="list-style-type: none"> <li>• Tensile strength (<math>R_m</math>): <math>\geq 500</math> MPa</li> <li>• Proof stress (<math>R_p 0.2</math>): <math>\geq 400</math> MPa</li> <li>• Elongation A (<math>\epsilon</math>): <math>\geq 14</math> %</li> </ul>
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<b>CUTTING RATES</b>	<ul style="list-style-type: none"> <li>• Speed (<math>v</math>): <math>v_c \sim 20 - 40</math> m/min</li> <li>• Feed (<math>f</math>): <math>0.08 - 0.15</math> mm/revolution</li> </ul> Value depending on the lubrication oil, cutting tools and shape of parts. Use only tools of well polished cutting surface. <ul style="list-style-type: none"> <li>• Cutting rate: e.g. ORTHO NFX of Motorex</li> </ul>
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