



**AISI O1 O1 DIN 2510**

**(100MnCrW4)**

**C 0.95 Si 0.20 Mn 1.10 Cr 0.50 V 0.20 W 0.60**

O1 is equivalent of DIN 2510 Tool Steel is the oil-hardening, "non-shrinking" tool steel, good cutting edge retention; high harden ability and dimensional stability during heat treatment.

**Steel properties**

**Standards**

**AISI O1 AFNOR 90MnWCV5**

**Physical properties**

<b>Thermal conductivity at °C</b>	20	350	700
<b>W/(m · K)</b>	33.4	32.1	31.1

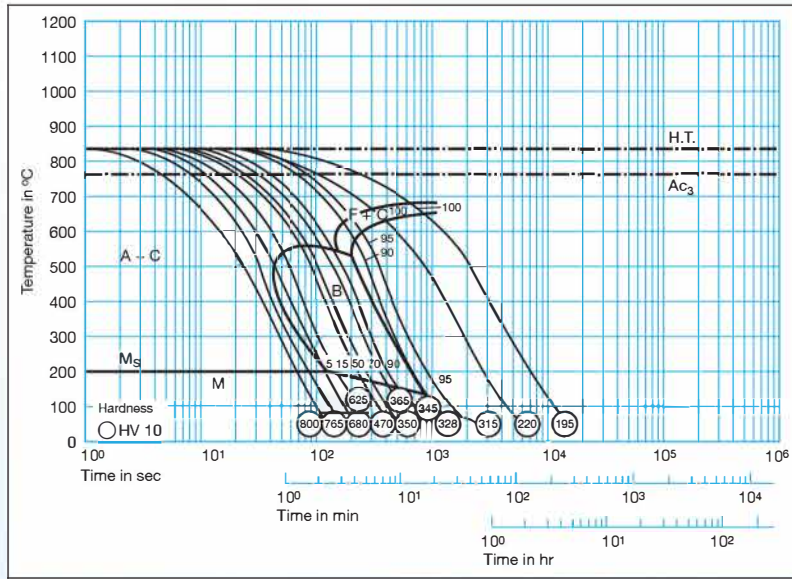
**Applications**

Blanking and stamping dies for cutting sheets up to 6 mm thickness, threading tools, drills, broaches, gauges, measuring tools, plastic moulds, shear blades, guide rails.

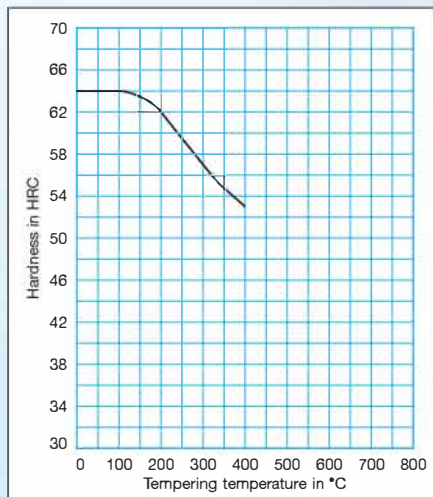
**Heat treatment**

<b>Soft annealing °C</b> 750 – 780	<b>Cooling</b> Furnace	<b>Hardness HB</b> max. 230		
<b>Stress-relief annealing °C</b> approx. 650	<b>Cooling</b> Furnace			
<b>Hardening °C</b> 780 – 820	<b>Quenching</b> Oil or saltbath, 180 – 220 °C	<b>Hardness after quenching HRC</b> 65		
<b>Tempering °C</b>	100	200	300	400
<b>HRC</b>	63	62	58	53.5

**Time-temperature-transformation diagram**



**Tempering diagram**



Reference numbers in brackets are not standardized in EN ISO 4957.