



SIQUAL 7103 Steel

Designation by Standards

Brand Name	Ravne	Mat. No.	DIN	EN	AISI/SAE
SIQUAL 7103	PER1	1.7103	67SiCr5	67SiCr5	SAE 9254

Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
0.67	1.30	0.50	0.50	-	-	-	-	-

Description

Alloyed carbon steel.

Applications

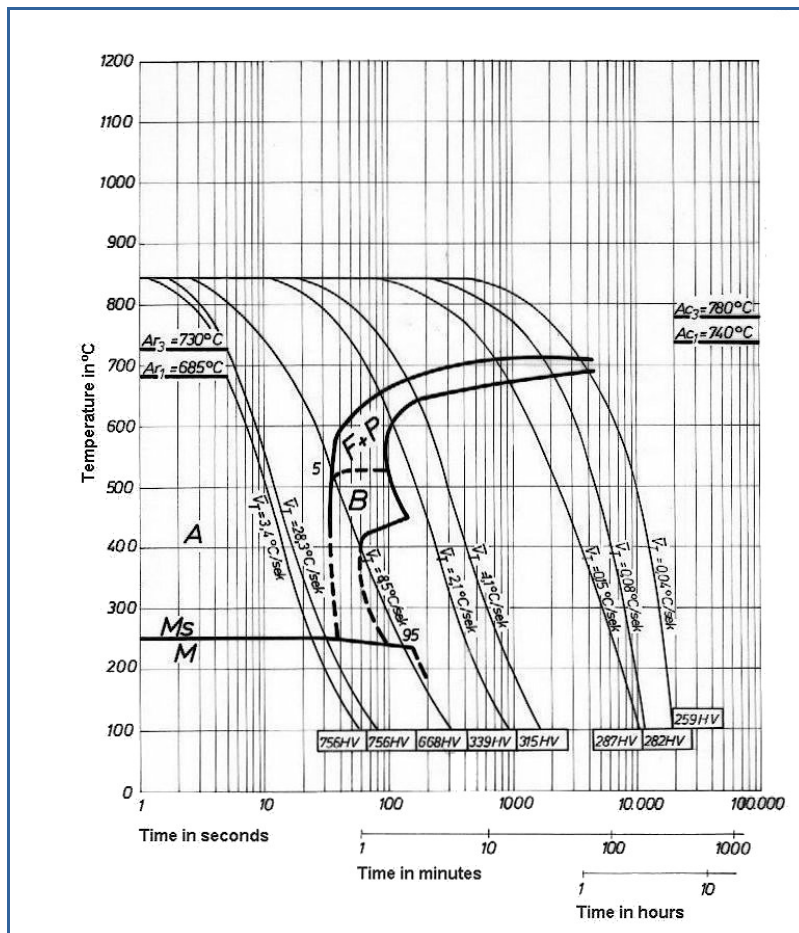
Tap springs, valve springs, ring-shape springs, heat resisting springs.

Physical properties (average values) at ambient temperature

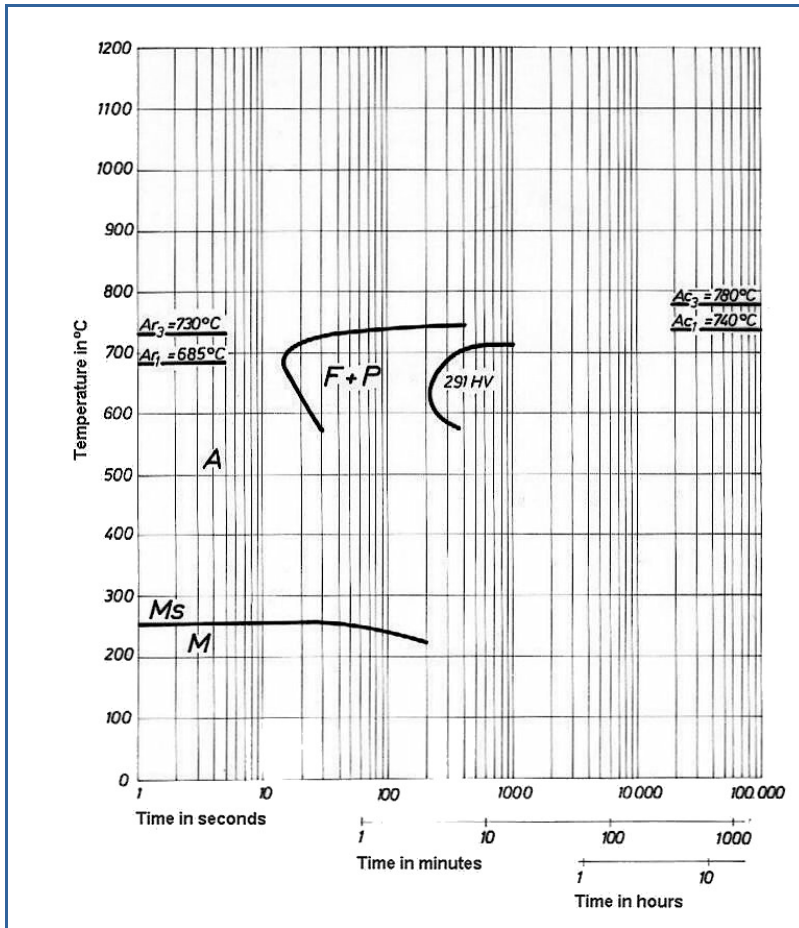
Modulus of elasticity [$10^3 \times \text{N/mm}^2$]: 210

Density [g/cm^3]: 7.82

Continuous Cooling Transformation (CCT) Diagram



Time-Temperature Transformation (TTT) Diagram



Soft Annealing

Heat to $640\text{--}680^{\circ}\text{C}$, cool slowly. This will produce a maximum Brinell hardness of 255.

Normalizing

Temperature: $850\text{--}880^{\circ}\text{C}$.

Hardening

Harden from a temperature of $830\text{--}860^{\circ}\text{C}$ followed by oil quenching. Hardness after quenching is min. 54 HRC.

Tempering

Tempering temperature: $350\text{--}550^{\circ}\text{C}$.

Forging

Hot forming temperature: $1050\text{--}850^{\circ}\text{C}$.

Machinability

No data.

Forms manufactured: Please see the [Dimensional Sales Program](#).

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