SIHARD K560 Steel

Designation by Standards

Brand Name	Ravne	Mat. No.	DIN	EN	AISI/SAE
SIHARD K560	OH236	1.2360 mod.	-	-	A8 mod.

Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
0.50	1.15	0.35	7.30	1.40	-	0.55	-	-

Description
Cold work tool steels, good wear resistance, medium toughness.

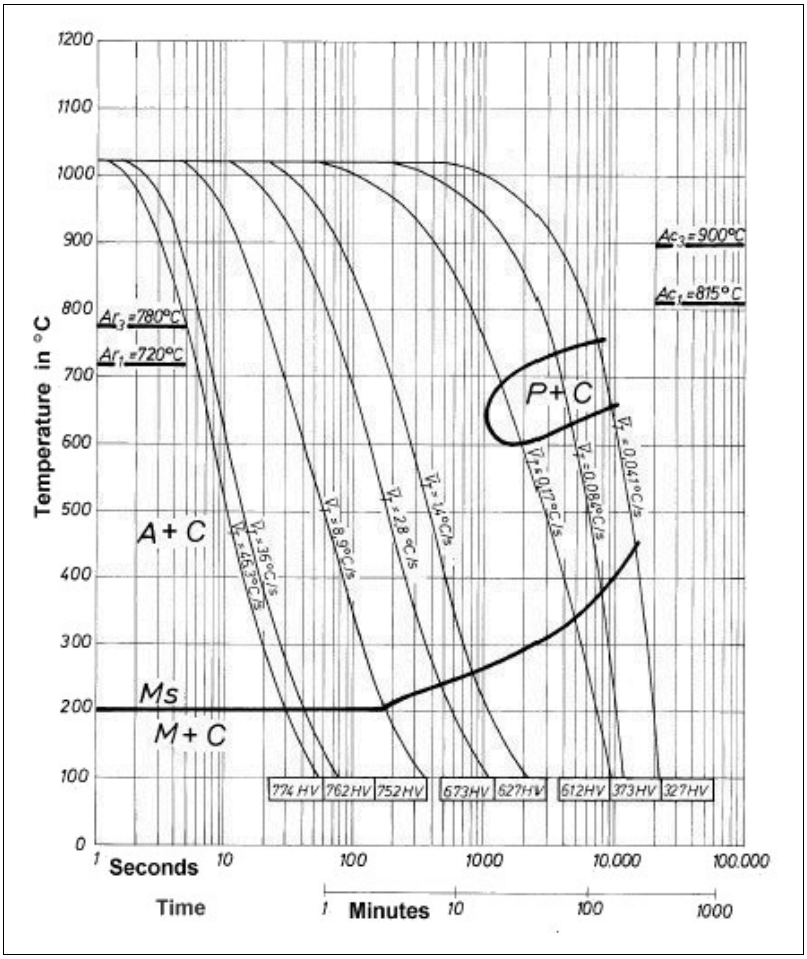
Applications
Severely stressed machine blades for cellulose and paper ind., woodworking milling cutters, flat and circular blades for cutting 5 to 15 mm thick sheet/plate.

Physical properties (average values) at ambient temperature
Density [g/cm^3]: 7.74
Thermal conductivity [W/m.K]: 26.0

Coefficient of Linear Thermal Expansion 10^{-6} $^oC^{-1}$

20-100^{o}C	20-200^{o}C	20-300^{o}C	20-400^{o}C	20-500^{o}C	20-600^{o}C	20-700^{o}C	20-800^{o}C
13.1	13.9	13.8	13.8	14.1	14.3	14.6	14.7

Continuous Cooling Transformation (CCT) Diagram



Soft Annealing

Heat to 820-860^{o}C, cool slowly in furnace. This will produce a maximum Brinell hardness of 250.

Stress Relieving

Stress relieving to remove machining stresses should be carried out by heating to 650^{o}C, holding for one hour at heat, followed by air cooling. This operation is performed to reduce distortion during heat treatment.

Hardening

Harden from a temperature of 1000-1040^{o}C followed by oil or air quenching. Hardness after quenching is 57 HRC.

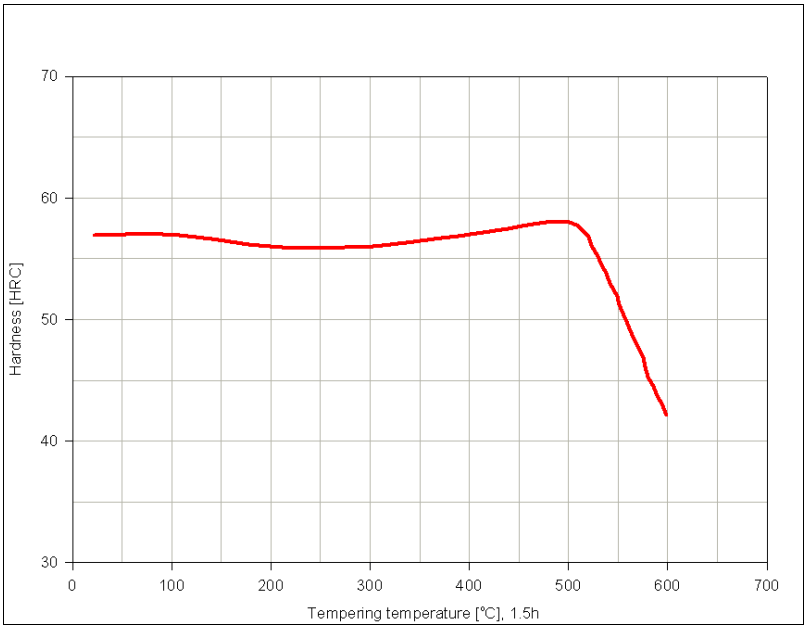
Tempering

Tempering temperature: See the table bellow.

Tempering Temperature (^{o}C) vs. Hardness (HRC)

100^{o}C	200^{o}C	300^{o}C	400^{o}C	500^{o}C	600^{o}C
57	56	56	57	58	42

Tempering Diagram



Forging
Hot forming temperature: No data.

Machinability
No data.

Forms manufactured: Please see the Dimensional Sales Program.

Disclaimer
The information and data presented herein are typical or average values and are not a guarantee of maximum or minimum values. Applications specifically suggested for material described herein are made solely for the purpose of illustration to enable the reader to make his own evaluation and are not intended as warranties, either express or implied, of fitness for these or other purposes. There is no representation that the recipient of this literature will receive updated editions as the become available.