



## SIHARD S152 Steel

### Designation by Standards

Brand Name	Ravne	Mat. No.	DIN	EN	AISI/SAE
SIHARD S152	OH250V	1.2746	45NiCrMoV16-6	-	-

### Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
0.45	0.25	0.70	1.50	0.79	4.00	0.50	-	-

### Description

Special cold work tool steel, air or oil hardenable with highest toughness.

### Applications

Forging tools, dies of all sorts, shapes and sizes, hot forging and pressing tools for steel and metal. Moulds, bushings, piercers, etc.

### Physical properties (average values) at ambient temperature

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

Density [ $\text{g/cm}^3$ ]: 7.86

### Soft Annealing

Heat to 610-850°C, cool slowly in furnace. This will produce a maximum Brinell hardness of 295.

### Stress Relieving

Stress relieving to remove machining stresses should be carried out by heating to approx. 650°C, holding for 1-2 hours at heat, followed by air cooling. This operation is performed to reduce distortion during heat treatment.

### Hardening

Harden from a temperature of 880-910°C followed by air or oil quenching or warm bath quenching 180-220°C. Hardness after quenching is 56 HRC.

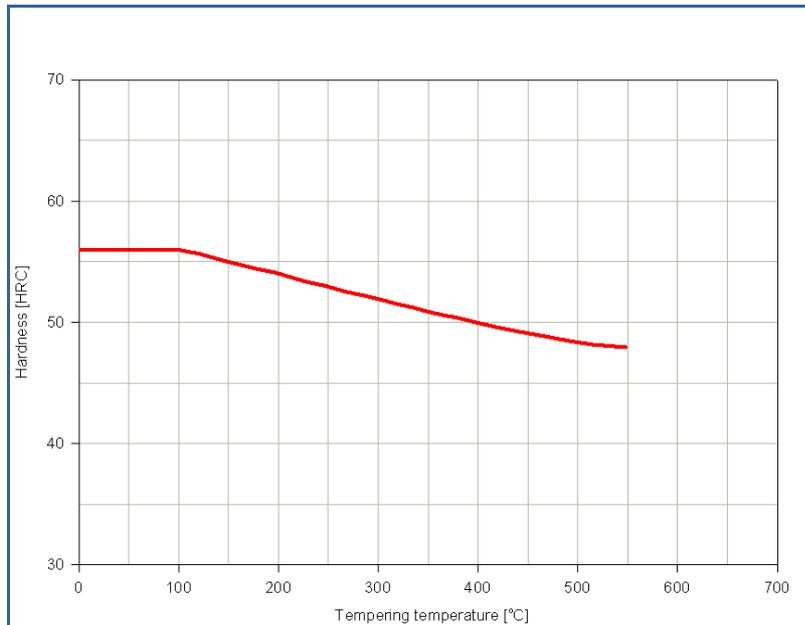
### Tempering

Tempering temperature: See the data bellow.

### Tempering Temperature (°C) vs. Hardness (HRC)

100°C	200°C	300°C	400°C	500°C	550°C
56	54	52	50	49	48

## Tempering Diagram



### Forging

Hot forming temperature: 1100-900°C.

### Machinability

No data.

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

### Disclaimer

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