



SIQUAL 5860 Steel

Designation by Standards

Brand Name	Ravne	Mat. No.	DIN	EN	AISI/SAE
SIQUAL 5860	ECN45	1.5860	14NiCr18	-	-

Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
0.14	0.25	0.55	1.10	-	4.50	-	-	-

Description

Alloyed carbon steel.

Applications

Gears, driving shafts, shafts and wheels.

Physical properties (average values) at ambient temperature

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

Density [g/cm^3]: 7.85

Soft Annealing

Heat to 610-650°C, cool slowly. This will produce a maximum Brinell hardness of 245.

Intermediate Annealing

Temperature: 600-630°C.

Carburizing

Temperature 850-900°C, case hardening box, air, water, oil, hot quenching 160-250°C.

Core Hardening

Temperature: 830-860°C.

Surface Hardening

Temperature: 780-810°C.

Tempering

Tempering temperature: 170-200°C.

Forging

Hot forming temperature: 1150-850°C.

Machinability

No data.

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

Disclaimer

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