

Gear Steel

Analysis (mass%)

18CrNiMo7-6 (17CrNiMo6)

Grade 1.6587

DNV High Grade

C	Si	MN	P	S	Cr	Ni	Mo
0,15 - 0,19	max. 0,4	0,5 - 0,6	max. 0,025	max. 0,010	1,5 - 1,8	1,4 - 1,7	0,25 - 0,35

Delivered condition

Heat treatment

< 500 mm: annealed

≥ 500 mm: pre-hardened and tempered

Hardness: max. 210 HB

Quality: ISO-B, High Grade

High cleanliness:

acc. to DIN 50602, K 4: max. 2

acc. to ISO 4967:

A		B		C		D		DS
thin	thick	thin	thick	thin	thick	thin	thick	max
1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0

Sulphur content: max. 0.005 %

Phosphorous content: max. 0,015 %

Oxygene content: max. 25 ppm

Largely isotropic material properties

Hardenability HH EN 10084

Ultra sonic tested

Incl. mill.-cert. acc. to

EN 10204-3.1

High availability

Recommended heat treatment:

Softening 650 - 700 °C

Carburising 880 - 980 °C

Core hardening 830 - 870 °C

Case hardening 780 - 820 °C

Process annealing 630 - 650 °C

Stocking Program

bars available in random lengths of 3-5 m

Dia 510,560,610,660,710,760,810,860,910,960,1020mm