

Chemical analysis

C%	Si%	Mn%	P%	S%	Cr%	Mo%	Ni%
0.57 - 0.65	max 0.40	0.60 - 0.90	max 0.030	max 0.035	max 0.40	max 0.10	max 0.40

Mechanical Properties (delivery condition - N)

\neq mm	Tensile Strength R_m N/mm ²	Yield Point $R_{p0.2}$ N/mm ²	Elong. A5%
$\neq \leq 16$	min. 720	min. 390	min. 11
$116 < \neq \leq 40$	min. 700	min. 350	min. 12
$40 < \neq \leq 80$	min. 670	min. 340	min. 12

\neq - nominal thickness in mm

Corresponding standards

A-LINE	EN	DIN 17212	BS	AFNOR	ASTM
A-LINE WH	C60	C60	60HS	1C60	1060

Surface Roughness

The surface roughness (Ra) is maximum 0.20 µm.

Diameter tolerance

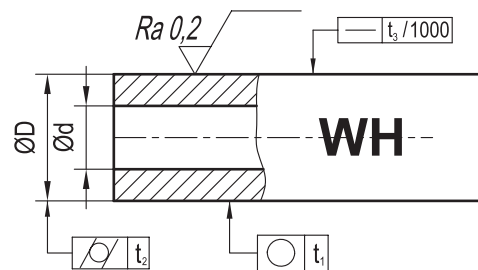
ISO h6 is standard; other tolerances can be supplied upon request.

Tolerance Range according to ISO 286-2

Table for ISO h6 in µm

OD x ID (mm)	upper	lower
12 x 4	0	-11
16 x 7	0	-11
20 x 14	0	-13
25 x 15.6	0	-13
30 x 18.3	0	-13
40 x 28	0	-16
50 x 29.7	0	-16
60 x 36	0	-19





Hardness depth, roundness, parallelism, straightness

Shaft Diameter Outer D (+/- 10%) mm	Shaft Diameter Inner d (+/- 10%) mm	Weight per metre kg	Shaft part number	Standard length mm	Hardening depth Rht (max) DIN6773 mm	Standard tolerance ISO h6 µm	Roundness (circular) t1 µm	Parallelism (cylindric) t2 µm	Straightness t3 mm/m
12	4.0	0.79	WH 12	6000	0.6 - 1.3	0/-11	5	8	0.12
14	7.0	0.91	WH 14	6000	0.6 - 1.3	0/-11	5	8	0.12
16	7.0	1.28	WH 16	6000	0.6 - 1.6	0/-11	5	8	0.12
20	14.0	1.25	WH 20	6000	0.9 - 1.6	0/-13	6	9	0.1
25	15.6	2.35	WH 25	6000	0.9 - 1.8	0/-13	6	9	0.1
30	18.3	3.50	WH 30	6000	0.9 - 2.0	0/-13	6	9	0.1
40	28.0	4.99	WH 40	6000	1.5 - 2.5	0/-16	7	11	0.1
50	29.7	9.91	WH 50	6000	1.5 - 3.0	0/-16	7	11	0.1
60	36.0	14.20	WH 60	6000	2.2 - 3.0	0/-19	8	13	0.1

Surface Hardness

Steel grade Cf53: 62±2 HRC

Packaging

Bars are degreased and oiled, placed in bundles that are wrapped in wax paper and raffia.

On request with additional cost

- Wooden boxes



Our products packaging is recyclable

Marking

Each batch has a label showing: manufacturing date, product name, diameter, tolerance range, number of bars, heat No. to facilitate full traceability.

Certifications

ISO 9001	ISO 14001	OHSAS 18001
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