Hardened and tempered steel strip
with various microstructures

Through a combination of cold rolling and heat treatment, we can precisely adjust the martensitic, bainitic, or sorbitic microstructure of the steel strip. In this context, we create exactly those properties that our customers require in a multi-stage process via the temperature curve and the conversion time

Hardened and tempered steel strip from Waelzholz is the right choice whenever materials with extreme hardness, homogeneity, elasticity, or spring tension are required. Martensite strip, bainite strip, and SORBITEX® textured strip – each with their different microstructures – are perfect for a wide range of uses, including heavy-duty applications. The hardened and tempered material is used, for example, in spring rails for windshield wipers, retaining rings, retaining clips, and retractor springs.

Martensitic hardened and tempered steel strip: precision with high functional hardness

EN grade	SAE grade	Tensile strength [ksi]	Yield/tensile ratio [%]
C45E	1045	145 - 230	> 90
C55S	1055	160 - 250	> 90
C60S	1060	170 - 255	> 90
C67S	1070	175 - 275	> 90
C75S	1078	175 - 275	> 90
C100S	1095	175 - 305	> 90
56Si7	9255	150 - 250	> 90

Bainitic hardened and tempered steel strip: high tensile strength and good bendability

EN grade	SAE grade	Tensile strength [ksi]	Yield/tensile ratio [%]
PT90	1335	115 - 145	80 - 85
PT100	1045	130 - 160	80 - 85
PT120	1055	160 - 190	80 - 85
PT140	1078	190 - 220	80 - 85

SORBITEX® textured steel strip for maximum fatigue strength

EN grade	SAE grade	Tensile strength [ksi]	Yield/tensile ratio [%]
Sorbitex 80	Sorbitex 80	330 - 340	> 96
Sorbitex 90	Sorbitex 90	340 - 360	> 96

Retaining ring
(Martensite)

↗ **For further information visit**
waelzholz.com/martensite

Fastening clip
(Bainite)

↗ **For further information visit**
waelzholz.com/bainite
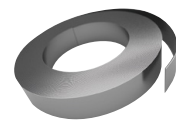
Retractor Spring
(SORBITEX®)

↗ **For further information visit**
waelzholz.com/sorbite

Contact

In case of individual requirements, please don't hesitate to contact us: info@waelzholz.com