

## I Buderus Hot Work Tool Steel 2606 ISO-B

	C	Si	Mn	P	S	Cr	Mo	V	W
Typical analysis	0.35	1.00	0.50	0.025	0.003	5.20	1.50	0.30	1.30
Chemical composition as per SEL	0.32–0.40	0.90–1.20	0.30–0.60	≤ 0.035	≤ 0.035	5.00–5.60	1.30–1.60	0.15–0.40	1.20–1.40

Figures in % by mass

Register of European Steels (SEL)	X 37 CrMoW 5-1
AFNOR	Z 35 CDW 5
AISI	H 12
BS	BH 12

### Characteristics

More wear-resistant than grade 2343. Very good tempering properties, good toughness, good hardness at high temperatures, very good compressive strength. Good machinability in the annealed state.

### Applications

Similar to grades 2343 and 2344, but at higher levels of stress: extruder tools including pipe extruders, highly stressed mould inserts, dummy blocks, extrusion stems, die holders, stem heads, insert and bridge type tools, liners and liner holders, outer mantles, hot shearing blades.

For forging dies and inserts subject to high levels of wear.

### Delivered condition

Annealed to max. 225 HB

Hardened and tempered to customer specification on request

### Physical properties (reference values)

Thermal expansion coefficient ( $10^{-6}/K$ )	20–100 °C	20–250 °C	20–500 °C
	11.7	12.4	12.9
Thermal conductivity (W/mK)	20 °C	250 °C	500 °C
	24.2	25.6	28.0
Young's modulus (GPa)	20 °C	250 °C	500 °C
	210	195	172

### High-temperature yield strength

Hardened and tempered state	0.2 % yield strength in MPa at temperature			
	450 °C	500 °C	550 °C	600 °C
~ 1570 MPa	1080	1000	780	470
~ 1370 MPa	930	780	640	390
~ 1230 MPa	780	690	510	340

