COLD WORKING TOOL STEEL

120WV4+S (1.2516)

Excellence in Specialty Steel

Typical Composition Mass-%

	C	Si	Mn	P	S	Cr	V	W
Min.	1,12	0,15	0,45	-	0,07	0,25	0,07	1,00
Max.	1,20	0,30	0,60	0,030	0,10	0,35	0,12	1,10

Properties

Grade 120WV4+S is a wear-resistant cold working tool steel with good toughness. Its high edge retention is achieved by alloying with the carbide formers tungsten and vanadium.
The defined sulphur content enables excellent machinability.

Application Area

For cutting tools without high thermal stress.

Typical Applications

- Tapping tools
- Twist and Center Drills, Countersinks
- Ejector pins
- Cutting and punching tools

Delivery Condition

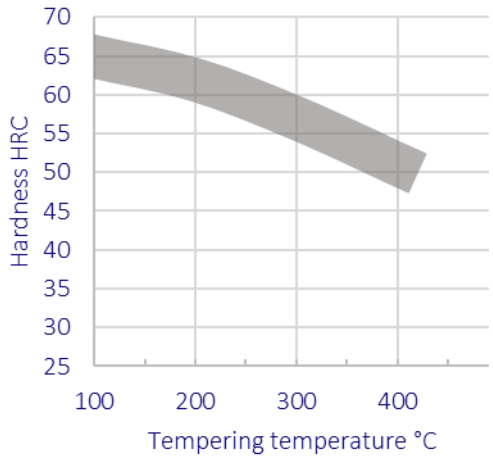
- annealed (+A) max. 230 HBW

Mechanical Properties

Tensile strength [N/mm²]	Elongation [%]
≤ 740	≥ 25

Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium
Annealing (+A)	700 - 720	Air (furnace)
Quenching and tempering (+QT)	790 - 830 (Hardening) Tempering: see below	Oil, polymer, water Air



Tempering graph

Quality

- ISO 9001
- ISO 14001
- ISO 50001
- Approvals acc. to standards like ABS, BV, DNV ...
- Customer specific approval certificates

Innovation

- Fully automated ultrasonic testing up to dia. 1000 mm
- CO_2-reduction by innovative heat treatment solutions

Flexibility

- Product range from fine wire to forging
- Directly from stock close at hand

Individuality

- Dimensions
- Tolerances
- Surface qualities
- Delivery conditions

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