

Knife8V®

COLD WORK TOOL STEEL

Knife8V is a special Cr-Mo-V alloy steel with very good wear resistance at high temperatures. The secondary hardenable Knife8V shows very high toughness and good compressive strength. The most important feature that distinguishes this quality from other steels is its ability to maintain its mechanical properties even at high temperatures.

APPLICATION AREAS OF KNIFE8V

- Hot and Cold Cutting Knives
- Over 7mm Sheet Metal Cutting Dies
- High Wear Resistance Dies
- Bolt Rolling Comps
- Cold Forging Dies
- Cold Extrusion Dies



C%	Cr%	V%	Mo%	Others
0,50	7,80	1,50	1,50	+



ADVANTAGES OF KNIFE8V

- **High toughness combined with excellent wear resistance.**

Knife8V shows high wear resistance and toughness with hardness values that can reach up to 58HRC. In addition, this secondary hardenable steel can maintain its mechanical properties even at high temperatures.

- **High dimensional stability during heat treatment.**

Thanks to its high dimensional stability during heat treatment, Knife8V greatly reduces labor after heat treatment.

- **Good workability.**

Thanks to its good machinability, Knife8V greatly reduces milling and grinding times.

- **Compatibility with CVD and PVD coating.**

Knife8V is one of the most suitable steels for CVD and PVD coating, thanks to its high temper resistance.



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HEAT TREATMENT PROCESS OF KNIFE8V

	Temperature (°C)	Cooling	Hardness
Soft Annealing	820 - 850	Furnace	Max. 250 HB
Stress Relief Annealing	600 - 650	Furnace	
Hardening	1050 - 1090	Oil, pressure gas, air or hot bath 550°C	See tempering diagram

TEMPERING DIAGRAM

