Hot work tool steel with Chromium 5% has high strength and toughness, best thermal physical phenomenon and in susceptibility to hot cracking. This provides the essential necessities for long tool life in die-casting, Press Forging, extrusion processes etc.

Besides applications typical for the area of hot-work steels, this grade is especially used for ejector pins, tool holders, bridge kind tools, liner holders, Forging Dies, Hot work punches, and shrink work chucks.

**Steel properties**

- Coefficient of thermal expansion at 10°C: 11.7, 12.3, 12.5, 12.7, 12.75, 12.9, 12.9
- Thermal conductivity at °C: 20 - 100: 20, 200: 350, 300: 700
- W/(m • K) Annealed: 29.7, 30.0, 33.5
- W/(m • K) Quenched and tempered: 26.7, 27.4, 30.4

**Applications**

- Soft annealing °C: 750 – 800
- Cooling: Furnace
- Hardness HB max. 230

- Stress-relief annealing °C approx. 600 – 650
- Cooling: Furnace

- Hardening °C 1000 – 1030
- Quenching: Air, oil or saltbath, 500 – 550 °C
- Hardness after quenching HRC 54

- Tempering °C: 100, 200, 300, 400, 500, 550, 600, 650, 700
- HRC: 52, 52, 52, 52, 54, 53, 48, 37, 31

[Diagram of time-temperature-transformation and tempering]