

DIN - Material - No. 1.2360
Code X48CrMoV8-1-1
Comparable standards Chipper

| Chemical composition | C | Si | Mn | Cr | Mo | V |
|----------------------|------|------|------|------|------|------|
| (Typical analysis %) | 0.47 | 1.80 | 0.40 | 7.50 | 1.35 | 1.35 |

Steel properties Cold work tool steel, good wear resistance, medium toughness

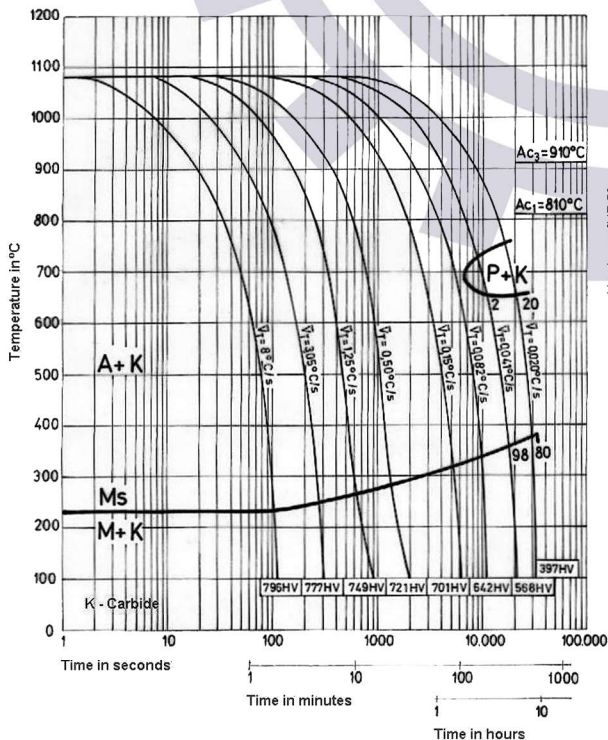
| Physical properties | Thermal conductivity W/(m K) | | | | | | | |
|---|-----------------------------------|--------|--------|--------|--------|--------|--------|----------|
| | 20°C 26 | | | | | | | |
| Coefficient of linear thermal expansion | 10 ⁻⁶ °C ⁻¹ | | | | | | | |
| | 20-100 | 20-200 | 20-300 | 20-400 | 20-500 | 20-600 | 20-700 | 20-800°C |
| | 13.1 | 13.9 | 13.8 | 13.8 | 14.1 | 14.3 | 14.6 | 14.7 |

Applications Severely stressed machine blades for cellulose and paper ind., woodworking milling cutters, flat and circular blades for cutting 5 to 15 mm thick sheet/plate.

Stress Relieving Holding at approx 650°C for one hour.

| Heat treatment | Soft annealing °C | Cooling | Hardness HB |
|----------------|-------------------|----------|------------------------------|
| | 820 - 860 | furnace | max. 250 |
| | Hardening from °C | in | Hardness after quenching HRC |
| | 1000 - 1040 | oil, air | 57 |
| | Tempering | C | HRC |
| | | 100 | 57 |
| | | 200 | 56 |
| | | 300 | 56 |
| | | 400 | 57 |
| | | 500 | 58 |
| | | 600 | 42 |

Time - Temperature - Transformation - Diagram



Tempering Diagram

