DIN - Material - No. 1.2367  
Code X38CrMoV5-3  

Comparable standards

Chemical composition  
(Typical analysis %) | C | Si | Mn | Cr | Mo | V  
---------------------|---|---|---|---|---|---  
                      | 0.38 | 0.40 | 0.45 | 5.0 | 2.95 | 0.50

Steel properties  
Excellent high temperature strength and wear resistance. Good tempering resistance. High hardenability and toughness. Tools can be water cooled.

Physical properties  
- Thermal conductivity W/(m.K)  
  - 20°C: 20 W/mK, 500°C: 28.5 W/mK, 600°C: 29.3 W/mK  
- Density g/cm³  
  - 7.83 g/cm³  
- Coefficient of linear thermal expansion  

Applications  
Wear resisting tools, forging dies, pressure die casting dies, pressing tools and extrusion dies for light and heavy metals, mandrels. For the highest requirements we recommend UTOPMO7 ESR EFS.

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

Heat treatment  
Soft annealing C 800 - 840°C in furnace  
Hardening from C 1030 - 1080°C in oil, air, thermal bath  

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<th>Tempering Temperature (°C)</th>
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Tempering Diagram  
- Tempering Temperature in °C, Time 1.5 h

Usbco Steels Pvt Ltd
**Mechanical properties at elevated temperature**

hardened and tempered on 1420 - 1440 N/mm²

![Graph showing mechanical properties at elevated temperature](image)

hardened and tempered on 1220 - 1240 N/mm²

![Graph showing mechanical properties at elevated temperature](image)
**DIN - Material - No.** 1.2367

**Code** X38CrMoV5-3

**Comparable standards**

**Mechanical properties at elevated temperature**

Hardened and tempered on 1570 N/mm²