

Material data sheet

Grade: : **KFM 38 / 308**

Chemical Data

| | | | |
|-------------------|-------------|---|------|
| Co | [Weight- %] | : | 8,0 |
| WC (Incl. Doping) | [Weight- %] | : | 92,0 |

Physical Data

| | | | | | |
|-----------------------------------|-------|------------------------------|---|--------|-------|
| Density | | [g/cm ³] | : | 14,5 | ±0,15 |
| Hardness | HV 30 | | : | 1970 | ±50 |
| Transverse Rupture Strength | | [N/mm ²] | : | > 4600 | |
| Magnetic Saturation | 4ps | [μ Tm ³ /kg] | : | 12,0 | ±1,5 |
| Coercive Force | HC | [kA/m] | : | 35,0 | ±2,5 |
| K_{IC} (Palmqvist) | | [MNm ^{-3/2}] | : | 9,2 | |

Metallographic Data

| | | | |
|----------|-----------------|---|-----|
| Porosity | A (<10 μ m) | : | ≤02 |
| | B (>10 μ m) | : | - |
| | C | : | - |

Microstructure

| | | |
|---------------------------|---|---------------------|
| Tungsten Carbide α | : | Ø 0,3 μ m |
| Binding Phase β | : | uniform distributed |

etched 1000x

