

Material Grade: **1.2379**
 Material Condition(s): **Annealed**
 Surface Finish: **Rough peeled**

Associated Standard: **Werkstoff**

Description:

1.2379 is a cold work, high carbon high chromium steel that is resistant to wear and offers exceptional toughness. 1.2379 hardens in air to its high hardenability with very low degree of distortion

Typical applications: **Deep drawing dies, cupping dies, forming dies, sheet metal forming rolls, trimmer dies, thread rolling dies, blanking tools, crushes, cut moulds of plastic.**

1. STEELMAKING

| | <u>C</u> | <u>Si</u> | <u>Mn</u> | <u>S</u> | <u>P</u> | <u>Cr</u> | <u>V</u> | <u>Mo</u> |
|-----|----------|-----------|-----------|----------|----------|-----------|----------|-----------|
| Min | 1.45 | 0.10 | 0.20 | | | 11.00 | 0.70 | 0.70 |
| Max | 1.60 | 0.60 | 0.60 | 0.030 | 0.030 | 13.00 | 1.00 | 1.00 |

2. TYPICAL MECHANICAL PROPERTIES

| Test type | Tensile and hardness test (at room temperature) | | | | | | |
|---------------------------------|---|-------------------|-------------------|-----------|------------|----------|-----|
| | Yield (Re) | 0.2 % proof | UTS (Rm) | Elong (A) | R of A (Z) | Hardness | |
| Unit | N/mm ² | N/mm ² | N/mm ² | % | % | HB | HV |
| Annealed | Min | | | | | | |
| | Max | | | | | 255 | |
| Quench and tempered ≤ 250mm dia | Min | | | | | | 735 |
| | Max | | | | | | |