

Material Grade: **1.2510**  
 Material Condition(s): **Annealed (Spherodised)**  
 Surface Finish: **Rough peeled**

Associated Standard: **Werkstoff**

Description:

**1.2510 is a cold work tool steel that hardens at relatively low temperatures. It has good non-deforming characteristics and retains its original shape after hardening and tempering. It gives excellent wear resistance and is relatively easy to machine.**

Typical applications: **Cold roll forming, medium run dies, press tools, punches, broaches, measuring tools, rotary shear knives, wood working machine tools.**

**1. STEELMAKING**

|     | <u>C</u> | <u>Si</u> | <u>Mn</u> | <u>S</u> | <u>P</u> | <u>Cr</u> | <u>V</u> | <u>W</u> |
|-----|----------|-----------|-----------|----------|----------|-----------|----------|----------|
| Min | 0.90     | 0.15      | 1.00      |          |          | 0.50      | 0.05     | 0.50     |
| Max | 1.05     | 0.35      | 1.20      | 0.035    | 0.035    | 0.70      | 0.15     | 0.70     |

**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 <sup>2</sup>                               | N/mm <sup>2</sup> | N/mm <sup>2</sup> | %         | %          | HB HV    |
| Annealed                        | Min   |                   |                   |           |            |          |
|                                 | Max   |                   |                   |           |            | 229      |
| Quench and tempered ≤ 250mm dia | Min   |                   |                   |           |            | 735      |
|                                 | Max   |                   |                   |           |            |          |