

NMV (1.2842)

stock sizes [mm]

sheets and plates

from 8 mm to 60 mm thickness

round bars

from Φ 12 mm to Φ 252 mm diameter

Description:

cold work tool steel with high hardenability and hardness; good ductility and shape stability after hardening, good cutting properties

Application:

gauges, measuring tools, long taps, threading dies, reamers, blanking dies, circular knives for paper and leather, milling cutters, punches, shear blades, work-rest blades

Chemical composition [%]

| C | Mn | Si | P | S | Cr | Ni | Mo | W | V | Co | Cu |
|-----------|---------|----------|----------|----------|----------|----------|---------|---------|----------|----|----------|
| 0,85-0,95 | 1,8-2,1 | 0,15-0,4 | max 0,03 | max 0,03 | max 0,35 | max 0,35 | max 0,2 | max 0,2 | 0,1-0,25 | - | max 0,35 |

Equivalents

| PN | W. nr | EN | AISI | Russia (GOST) | Other |
|-----|--------|--------|------|---------------|-------|
| NMV | 1.2842 | 90MnV8 | O2 | 9G2F | K720 |

Processes

| | | |
|-----------|-----|--------------------------|
| welding | NO | |
| forging | YES | |
| rolling | YES | |
| nitriding | NO | |
| hardening | YES | temp. 780 - 820 [°C] oil |
| tempering | YES | temp. 200 - 280 [°C] |

Hardness

| | |
|------------------|--------|
| after toughening | 61 HRC |
| after softening | 230 HB |