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|--|---------------------------|---------------------|
| QUALITY | 16MnCr5 - 16MnCrS5 | W.NR. 1.7131-1.7139 |
| REFERENCE NORM HOT ROLLED STEEL PRODUCTS | | ISO 683-3 |
| REFERENCE NORM BRIGHT STEEL PRODUCTS | | UNI EN 10277 |

CHEMICAL COMPOSITION (%)

| | C | Si | Mn | P (max.) | S (max) | Cr (max) | Cu end B |
|----------|-------------|-------------|-------------|----------|---------------|-------------|----------|
| 16MnCr5 | 0,14 ÷ 0,19 | 0,15 ÷ 0,40 | 1,00 ÷ 1,30 | 0,025 | 0,035 | 0,80 ÷ 1,10 | 0,40 |
| 16MnCrS5 | | | | | 0,020 ÷ 0,040 | | |

MECHANICAL PROPERTIES HOT ROLLED STEEL PRODUCTS (ISO 683-3)

| (+A) ANNEALED | (+N) NORMALIZED | |
|----------------|-----------------|-----|
| Hardness (HBW) | | |
| Max | Min | Max |
| 207 | 138 | 187 |

MECHANICAL PROPERTIES BRIGHT STEEL PRODUCTS (UNI EN 10277)

| Size (mm) | (+A +SH) ANNEALED + PEELED | (+A +C) ANNEALED + COLD DRAWN |
|---------------------|----------------------------|-------------------------------|
| Hardness (HBW) Max. | | |
| 5 ≤ t ≤ 10 | | 260 |
| 10 < t ≤ 16 | | 250 |
| 16 < t ≤ 40 | 207 | 245 |
| 40 < t ≤ 63 | 207 | 240 |
| 63 < t ≤ 100 | 207 | 240 |

Jominy test values HRC (ISO 683-1)

| Distance from ends mm | 1,5 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 20 |
|-----------------------|-----|----|----|----|----|----|----|----|----|
| MAX | 47 | 46 | 44 | 41 | 39 | 37 | 35 | 33 | 31 |
| MIN | 39 | 36 | 31 | 28 | 24 | 21 | | | |

| Distance from ends mm | 25 | 30 | 35 | 40 |
|-----------------------|----|----|----|----|
| MAX | 30 | 29 | 28 | 27 |
| MIN | | | | |

Indicative values based on current regulations.