

## Material specification sheet

### Saarstahl - 33MnCrB5-2

Material No.: Former brand name: International steel grades:

1.7185

BS:  
AFNOR:  
SAE:

**Material group:** Steel for quenching and tempering according to DIN EN 10083

| Chemical composition:<br>(Typical analysis in %) | C    | Si    | Mn   | P      | S      | Cr   | B      |
|--|------|-------|------|--------|--------|------|--------|
|  | 0,30 | <0,40 | 1,20 | <0,035 | <0,040 | 0,30 | 0,0008 |
|  | 0,36 |       | 1,50 |        |        | 0,60 | 0,0050 |

**Application:** Boron alloyed heat treatable steel

**Hot forming and heat treatment:**

|                         |   |
|-------------------------|---|
| Forging or hot rolling: | -                                       |
| Normalising:            | -                                       |
| Soft annealing:         | -                                       |
| Hardening:              | 880°C                                   |
| Quenching:              | water max. 52 mm Ø,<br>oil max. 43 mm Ø |

**Mechanical Properties:** Core hardness for an amount of 80 % martensite: 42 HRC