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|--------------------|--|--------------------------|---------------|-------------|
| Description | Cold rolled bright annealed strip steel | En-Norm 1.1231 / C67S | AFNOR C67S | DIN Ck67 |
|--------------------|--|--------------------------|---------------|-------------|

Chemical analysis

| Fe | Co | Cr | Ni | Mo | Mn | Si | C | P | S | Be | O* |
|------|-----------|-----------|-----------|---------|-----------|--------|--------|---------|---------|---------|-------|
| Rest | 39.0-41.0 | 19.0-21.0 | 15.0-18.0 | 6.5-7.5 | 1.50-2.50 | ≤ 0.12 | ≤ 0.15 | ≤ 0.015 | ≤ 0.015 | ≤ 0.001 | ≤ 1.0 |

Chemical analysis according to the European standard EN in mass percentages. / *Other

Usage

For stamped parts (such as spring parts) with subsequent thermal treatment.

Surface Finish

- Cold rolled and bright annealed
- Crack and pore free

Diameter

| Thickness | Width |
|----------------|---------------------|
| 0.10 – 3.00 mm | 2.00 – 300 / 300 mm |

Width options depend on thickness / other widths ex works.

Diameter tolerances

Thickness tolerances (precision tolerances)

| Nominal thickness mm | Tolerance mm |
|-------------------------|-----------------|
| <0.10 | ± 0.005 |
| 0.10 – 0.24 | ± 0.010 |
| 0.25 – 0.59 | ± 0.015 |
| 0.60 – 1.49 | ± 0.020 |
| 1.50 – 2.49 | ± 0.030 |
| 2.50 – 4.00 | ± 0.035 |

Width tolerances according to DIN EN ISO 9445

Special tolerances Special thickness and width tolerances can be produced in our service center according to your specifications.

Mechanical properties cold rolled

| Cold rolled | Tensile strength | Elongation at break |
|----------------|------------------|---------------------|
| Strength level | MPa | % |
| Annealed | max. 580 | min. 20 |
| ¼ hard | 580 - 680 | By result |
| ½ hard | 630 - 730 | By result |
| ¾ hard | 660 - 780 | By result |
| hard | 710 - 830 | By result |

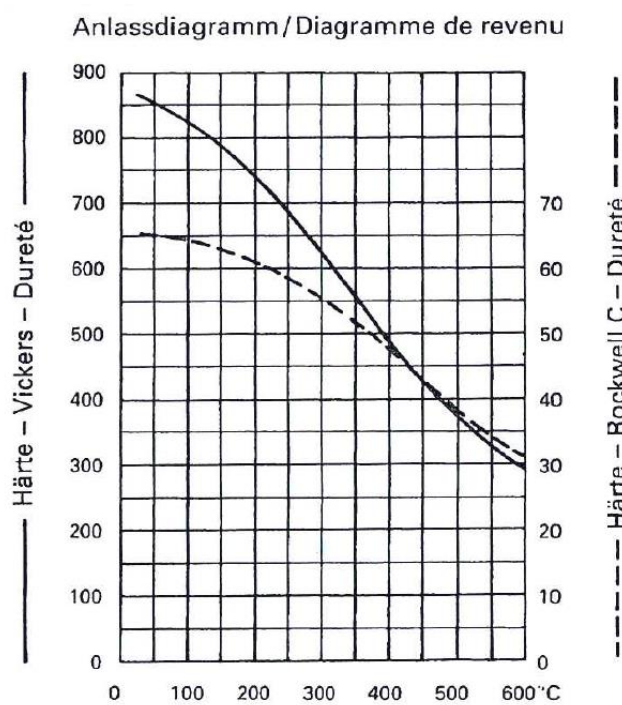
Special strength grades can be manufactured to your specifications in our service center.

Heat Treatment

Soft annealing 650°C - 690°C / 2-4 hours under protective gas (slow cooling)

Hardening Thicknesses up to approx. 1.5mm at 815 - 845°C, quenching in oil
Thicker dimensions at 795 - 825°C, quenching in water

After hardening, temper according to the tempering diagram below.



Note

All information provided in this data sheet is based on the best knowledge and the latest state of the art, but without guarantee. The use of materials should always be discussed with our [sales specialists](#) or our materials [laboratory](#) on a product- and application-specific basis.

