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|-----------------------|---------------|
| Quality | 35NiCrMoV12-5 |
| According to Standard | PD 970:2005 |
| Number | 1.6959 |



| Comparable Standards | GOST | AISI |
|----------------------|-----------|------|
| | 38ChN3MFA | - |

| Chemical Analysis | C % | Mn % | Si % | Cr % | Ni % | Mo % | S % |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| | 0.30 - 0.40 | 0.40 - 0.70 | 0.15 - 0.35 | 1.00 - 1.40 | 2.50 - 3.50 | 0.35 - 0.60 | 0.015 max. |
| | P % | V % | | | | | |
| | 0.015 max. | 0.08 - 0.20 | | | | | |

Hot Work and Heat Treatment Temperatures

| Stress-relieving (+SR) | Hot Forming | Quenching (+Q) | Tempering (+T) | Soft Annealing (+A) | Flame and Induction hardening | Nitriding |
|--|-------------|---|--|--|-------------------------------|-----------|
| 680 furnace cooling to 300, then air. It must be done after machining & before quenching. 50° under the temperature of tempering, furnace cooling max 20°/h to 300, then air | 1100 - 900 | heating up to 650, pause, then 850 oil, polymer, forced air | immediately after quenching minimum 2 cycles | 750 furnace cooling max 20°/h to 600, pause, then air (HB max 240) | 850 - 870 water, oil | 500 - 530 |
| | | Pre - Heating Welding | | +SR after Welding | | |
| | | 300 | Ac1 | Ac3 | Ms | Mf |
| | | | 710 | 800 | 320 | 100 |