

| | |
|-----------------------|-----------------|
| Quality | 9840 |
| According to Standard | ASTM A 29/A 29M |
| Number | - |



| | | | | | | | |
|----------------------|-----------|--------|--------|-----------|--|--|--|
| Comparable Standards | EN | W.N. | BS 970 | DIN | | | |
| | 36CrNiMo4 | 1.6511 | 816M40 | 36CrNiMo4 | | | |

| | | | | | | | |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| Chemical Analysis | C % max | Mn % | Si % | Cr % | Ni % | Mo % | S% |
| | 0.38 - 0.43 | 0.70 - 0.90 | 0.20 - 0.35 | 0.70 - 0.90 | 0.85 - 1.15 | 0.20 - 0.30 | 0.040 max. |
| | P % | | | | | | |
| 0.040 max. | | | | | | | |

Hot Work and Heat Treatment Temperatures

| Preheat Treatment °F (°C) | Austenitizing Temperature, °F (°C) | | Austenitizing Time (minutes) | Quench Medium | Tempering Temperature, °F (°C) | Minimum Hardness, RC |
|---------------------------|------------------------------------|--------------------------------|------------------------------|---------------|--------------------------------|----------------------|
| | Salt Bath | Controlled Atmosphere Furnaces | | | | |
| - | - | - | - | - | - | - |

Mechanical Properties at Room Temperature

| | | | | | | | |
|-----------|-----|------------|-------|----------|-----------|-----------------------|------------|
| Condition | Ø | Rp0,2 min. | Rm | A min. % | KV min. J | Max. Brinell Hardness | |
| | mm. | N/mm2 | N/mm2 | | | Annealed | Cold Drawn |
| | - | - | - | - | - | BHN | BHN |