


TECHNICAL GUIDE

635M15 / EN351

Steel Description


635M15 / EN351 is a 3/4% Nickel Chromium Casehardening Steel that is supplied in the bright peeled or hot rolled condition. 635M15 / EN351 can be carburised and hardened to produce a hard wear resistant case with a core strength of 770N/mm², suitable for the manufacture of gears, camshafts, pinions, tappets, valve rockers, collets, track pins, steering parts & other transmission components.

| BS970: 1955 | BS970: 1991 | COLOUR CODE | DESCRIPTION |
|-------------|-------------|---|--|
| EN351 | 635M15 |  | Bright / black 3/4% nickel chromium case hardening steel |

| CHEMICAL ANALYSIS | |
|-------------------|-------------|
| Car | 0.12 / 0.18 |
| Sil | 0.10 / 0.40 |
| Mang | 0.60 / 0.90 |
| Chr | 0.40 / 0.80 |
| Nick | 0.70 / 1.10 |

| INTERNATIONAL SPECIFICATION COMPARISON | |
|--|-----------|
| BRITISH BS 970:1991 | 635M15 |
| BRITISH BS 970:1955 | EN351 |
| GERMAN DIN | |
| FRENCH AFNOR | |
| SWEDISH SS | |
| AMERICAN SAE | |
| EUROPEAN STEEL NO. | |
| EUROPEAN STEEL NAME | 16NiCrS4 |
| EUROPEAN STANDARD | EN10277-4 |

| QUICK VIEW SYSTEM | |
|------------------------------------|---|
| MACHINEABILITY | 80 |
| WELDABILITY | Pre / post heat precaution required |
| HARDENABILITY | Low alloy case hardening |
| SELECTION GUIDE AND USAGE EXAMPLES | After hardening produces a hard wear resistant core & case strength around 50 t/sq". Levers & shafts. |

| SIZE RANGE SUMMARY | | | |
|---|--------|-----|-----------------|
|  | Rounds | IMP | 2.1/4" dia |
| | | MM | 26mm - 75mm dia |

SEE STOCK RANGE FOR SPECIFIC SIZES.