

AI-1785

Description and Applications

AI-1785 is a Chromium, Tungsten, Molybdenum gas shielded hardfacing wire giving a heat treatable and forgeable martensitic deposit with a hardness of 52-55 HRc.

The alloy is designed to resist low stress abrasion with impact and high compressive stresses.

Applications include: Cable Sheaves, plastics screws, animal feed extruder screws, conveyer rolls, rock drills, earthmoving pins, screw conveyors, cutting edges etc.

Typical Weldmetal Analysis

| C | Mn | Si | Cr | Fe | W | Ti | Mo |
|------|------|------|------|-----|------|------|------|
| 0.41 | 1.55 | 0.80 | 5.60 | Bal | 1.50 | 1.30 | 1.40 |

Mechanical Properties of Weldmetal

| | As Welded |
|----------------------|-----------------------------------|
| Wear Index | 35% |
| Microstructure | Martensite |
| Machinability | Grinding |
| Hardness | 52-55HRc (Undiluted Weldmetal) |
| Shielding Gas | Ar + 20-25% CO₂ |

Welding Parameters

| Diameter (mm) | Current type | Amps |
|---------------|--------------|---------|
| 1.2 | DC(+) | 150-220 |
| 1.6 | DC(+) | 180-300 |

Welding Positions

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position

Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy.

All figures subject to change without notice. Batch analysis is available for all products sold. Should you require any further information, please contact us at sales@alloysint.com.au

