Lincore[®] 15CrMn

Key Features

- · Self-shielded open arc cored wire
- Provides an austenitic manganese deposit which exhibits very good crack resistance
- Unlimited layers with proper preheat and interpass temperatures and procedures

Conformances

AS/NZS 2576: 1720 B7* (nearest equivalent)

Typical Applications

- Spreader cones
- Crusher hammers
- Austenitic manganese parts
- Work-hardens for overlay or joining austenitic manganese steel to itself or to carbon steel
- Can be used as a build-up layer before capping with abrasion resistant alloys

Welding Positions



Diameter / Packaging

| Diameter mm | Part Number | Packaging |
|-------------|-------------|--------------------|
| 2.0 | ED031126 | Steel Spool 11.3kg |
| 2.8 | ED022061 | Coil 22.7kg |

Mechanical Properties

| Rockwell - HRc | | | | |
|----------------|---------------|--|--|--|
| As Welded | Work Hardened | | | |
| 18-22 | 40-50 | | | |

Deposit Composition

| | %С | %Mn | %Si | %Cr |
|-------------------|-----|------|-----|------|
| 6 Layers Open Arc | 0.4 | 15.0 | 0.2 | 16.0 |

Typical Operating Procedures

| Diameter, Polarity, ESO | Wire Feed Speed in/min | Voltage volts | Current amps | Deposition Rate kg/hr |
|-------------------------|---------------------------|------------------|-----------------|--------------------------|
| 2.0 mm, DC+, 32 mm | 125 | 26 | 210 | 3.3 |
| | 200 | 29 | 280 | 5.3 |
| | 250 | 30 | 320 | 6.8 |
| | 350 | 32 | 380 | 9.7 |
| 2.8 mm, DC+, 45 mm | 75 | 26 | 250 | 2.5 |
| | 125 | 28 | 320 | 5.1 |
| | 150 | 29 | 350 | 6.6 |
| | 175 | 30 | 380 | 7.5 |
| 2.8 mm, DC+, 64 mm | 150 | 30 | 320 | 6.7 |
| | 200 | 33 | 390 | 8.7 |
| | 225 | 34 | 410 | 9.8 |
| | 250 | 35 | 425 | 11.4 |

NOTE: As with all austenitic manganese welding products, interpass temperatures should be limited to 260°C maximum. A stringer bead, or at most, a slight weave is recommended to limit heat build-up. Excessive heat build-up causes manganese carbide precipitation which damages the toughness of austenitic manganese.