Lincore® 50

TOP FEATURES

- Can be used on low carbon, medium carbon, low alloy, manganese and stainless steels
- Limited to 4 layers
- Delivers an abrasion resistant deposit, even under conditions of moderate impact
- Larger wire diameter sizes may be used for the submerged arc process

CURRENT TYPE

DC+

WELDING POSITIONS

Flat/Horizontal

TYPICAL APPLICATIONS

- Auger, Bar, Blade, Bucket, Bulldozer, Coal Mining
- Concrete, Crush, Cut/Teeth, Drag, Dredge, Hammer/Crush
- Hoist, Kiln, Mine Car/Wheel, Mix, Pipe Bend, Pipeline, Plate
- Power Generation, Pulverize, Pump, Roll/Hammer, Scrape/Cut, Screen
- Shovel, Shred/Hammer, Slag, Tamper, Teeth, Tractor

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

C	Mn	Si	Cr	Al	Mo
2.2	1.2	1.0	11.0	0.6	0.5

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Layer	Typical hardness values
1	34-41 HRc (320-380 HB)
2	44-53 HRc (415-530 HB)
3	48-56 HRc (460-584 HB)

Welded on Mild Steel Plate (12mm)

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.1	SPOOL SPOOL	4.5 11.3	ED037270 ED031123
1.6	SPOOL SPOOL COIL	4.5 11.3 22.7	ED037261 ED031124 ED020829
2.0	SPOOL COIL	11.3 22.7	ED031125 ED017825
2.8	COIL DRUM	22.7 56.0	ED011275 ED011274

ADDITIONAL INFORMATION

- All work-hardened base material and previously deposited hardfacing material should be removed prior to applying a new deposit, since such areas are prone to embrittlement and possible cracking.
- Areas that contain irregularaties such as cracks and deep gouges can be repaired locally using Wearshield BU30 or Wearshield 15CrMn prior to hardfacing with Lincore 50.
- Preheat is not necessary when surfacing austenitic substrates such as stainless steels and manganese steels, although the interpass temperature should be limited to about 260°C for manganese steels.
- For low alloy and carbon carbon steels a preheat of 200°C is usually sufficient, but is dependent on material thickness and chemistry.
- The weld metal is not machinable by conventional methods although the deposit can be shaped by grinding. Lincore 50 cannot be cut by the oxy-fuel processes. Plasma arc and air-carbon arc processes can be used to both cut an gouge the weld deposit.
- Preheat temperatures similar to those for welding may be necessary to prevent cracking along the cut edge.
- Lincore 50 may also be used in corrosive, cavitation and erosion situations such as the chemical, paper mill, food processing industry, glass manufacturing, power generation and tool manufacturing.

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:

Subject to Change – The information is accurate to the best of our knowledge at the time of printing.
Please refer to www.lincolnelectric.eu for any updated information.