

Lincore® 55

TOP FEATURES

- To be used on carbon steel, low alloy steel and manganese steel
- Unlimited layers with proper preheat and interpass temperatures and procedures
- Delivers a deposit which resists metal-to-metal rolling or sliding wear as well as mild abrasion

TYPICAL APPLICATIONS

- Bark removing, Blade, Blower, Brake, Crane, Crush
- Drag, Drive, Drum, Excavate, Extrusion, Hammer
- Ingot, Kiln, Loader, Logging, Mill, Mine Car
- Mix, Open Hearth, Plate, Power Generation, Rail, Roll
- Shovel, Sinter, Teeth, Tractor, Wheel

CLASSIFICATION

EN ISO T Fe2

CURRENT TYPE

DC+

WELDING POSITIONS

Flat/Horizontal

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

C	Mn	Si	Cr	Al	Mo
0.45	1.4	0.55	5.3	1.4	0.8

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Layer	Typical hardness values
1	50-59 HRc
2	50-59 HRc

Welded on Mild Steel Plate (12mm)

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.1	SPOOL	4.5	ED037254
	SPOOL	11.3	ED031120
1.6	SPOOL	11.3	ED031121
	COIL	6.4	ED011277
2.0	SPOOL	11.3	ED031122
	COIL	22.7	ED011278
2.8	COIL	22.7	ED011280
	DRUM	227.0	ED037695

ADDITIONAL INFORMATION

- All work-hardened base material and previously deposited material should be removed prior to applying a new deposit, since such areas are prone to embrittlement and possible cracking.
- A preheat of up to 250°C is necessary to prevent cracking in situations of high restraint and/or heavy thicknesses. Interpass temperatures between 150 - 300°C do not adversely effect deposit hardness.
- The deposit thickness is usually limited to 2 layers on high carbon or alloy steels and/or situations of high restraint and heavy sections due to the risk of cracking. Higher preheat and interpass temperatures coupled with slow cooling will minimise the risk of cracking.
- The deposited weld metal is not machinable by conventional methods although the deposit can be shaped by grinding.
- The deposit can be softened by annealing at 875°C for one hour and slow cooling (air cool 22- 43HRc, furnace cool 15-17HRc). The hardness can be restored by heating at 875°C followed by water quenching (50-59HRc).
- The component should then be tempered at 150-200°C for one hour (54-59HRc) to retain some toughness.

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.