

Lincore® T&D

TOP FEATURES

- Delivers a deposit similar to H12 tool steel
- For build-up of tool steel dies and edges, or applying wear resistance surface on carbon or low alloy steels
- To be used on carbon steel, low alloy steel or tool steel

CURRENT TYPE

DC+

WELDING POSITIONS

Flat/Horizontal

TYPICAL APPLICATIONS

- Punch Dies, Rail, Mill, Brake/Drum, Bar, Pulverizer, Bucket, Crane
- Shear Blades, Teeth, Drag/Bucket/Teeth, Cut/Teeth, Drive Sprocket, Extrusion, Gears, Idlers, Kiln, Mine Car/Wheel
- Ore, Power Shovel, Pulp/paper, Pump, Scarrifier/Teeth, Auger, Power Generation, Tractor

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

C	Mn	Si	Cr	Al	Mo	W
0.65	1.5	0.8	7.0	1.8	1.4	1.6

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Layer	Typical hardness values
1	48 - 55 HRc
2	55 - 65 HRc

Welded on Mild Steel Plate (12mm)

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.6	SPOOL	11.3	ED031134

ADDITIONAL INFORMATION

- A preheat and interpass temperature of 325°C, or higher (up to 540°C), are necessary to avoid cracking. It is important to ensure that an adequate "soak" is achieved prior to the welding operation.
- After welding, the component should be covered and slow cooled down to room temperature. Once cooled, the weldment should be post weld heat treated to temper the martensite and toughen the deposit.
- Tempering at 540°C normally produces the optimum combination of hardness and toughness.
- The deposited weld metal is not machinable by conventional methods although the deposit can be shaped by grinding.
- Annealing at 850°C for several hours and slow cooling will reduce the hardness to approximately 30HRc. This deposit can be readily machined. Rehardening is achieved by heating to about 1200°C for several hours to dissolve all carbides and homogenise the steel, followed by air cooling and tempering.
- Lincore T&D cannot be cut by the oxy-fuel processes. Plasma arc and air-carbon arc processes can be used to both cut and gouge the weld deposit. Preheat temperatures similar to those for welding may be necessary to prevent cracking along the cut edge.

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.