



## LEADING INNOVATIONS BY ADVANCED TECHNOLOGY

This revolutionary welding system is designed for the ultimate in welding performance. The STT II combines high frequency inverter technology with advanced Waveform Control Technology in place of traditional short arc MIG welding. Lincoln's STT process is easy to control and suitable for use on a wide variety of materials from Mild Steel to Duplex Stainless Steel. Under automated conditions STT produces high-speed fillet welds with thin materials. The STT process has enormous advantages particularly when welding on thin gauge materials and open root pass for pipe. STT has constantly proven to be exceptionally reliable with minimal defect rates producing a superior performance, clean and high quality welds time after time.

The STT II's precise control of the electrode current throughout the welding cycle significantly reduces smoke, spatter and grinding time,



simplifying the job and increasing productivity. Together with a LF30 wire feeder this package is a formidable combination. The unit offers independent control of wire feed speed and current, presettable with wire feed speed and a digital volt & amperes meter. Additionally the welder is supported with Lincoln's rugged four-roll drive system guaranteeing you trouble free feeding.

## ADVANTAGES

- ✓ Superb welding behavior with mild and stainless steel.
- ✓ The premium process for open root pipe applications.
- ✓ High travel speed under automated conditions.
- ✓ Accurate control of heat input reduces distortion and burnthrough.
- ✓ Minimal spatter reduces cleaning time of parts and weld.
- ✓ "Hot start" control to provide arc starting precision.
- ✓ Fully controlled arc supporting clean Xray's and low defect rates.
- ✓ Peak and background current.
- ✓ Adjustable LED meters for accurate procedure setting.
- ✓ LF30 with digital meters showing WFS preset, actual voltage and amperage.
- ✓ Factory mounted on a 4-wheel undercarriage for maximum shopfloor flexibility.
- ✓ STT II 3 year warranty Plus on Parts and Labor.
- ✓ Designed to meet EN60974-1 and CE standards for safety and reliability
- ✓ Built the Lincoln way 'RUGGED & RELIABLE'

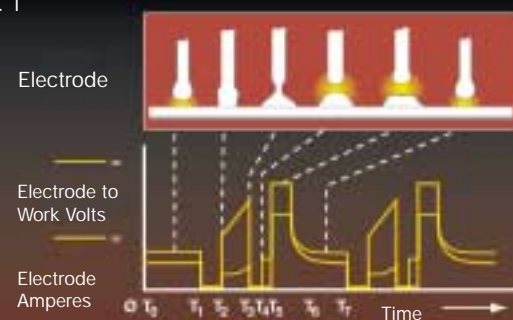
**LINCOLN**®  
**ELECTRIC**

## Technical Details

Surface Tension Transfer (STT®) is a controlled short-circuiting transfer process that adapts its waveform (shown in Fig. 1) to the physics of the welding arc and metal transfer. It reduces spatter by cutting back the pinch force (current) when the liquid bridge of a short is about to break into an arc. The bridge is broken by surface tension and fluid

mechanical inertia at low current. By utilizing Lincoln Waveform Control Technology, STT II has the capability to deliver and change electrode current within microseconds. Precise control of the electrode current during the entire welding cycle minimizes or eliminates the main disadvantages of conventional GMAW short arc welding.

Fig. 1



### TECHNICAL SPECIFICATIONS

#### STT II POWER SOURCE

Product Name	Item Number	Standard Voltage	Output range	Rated DC output	Weight	Dimensions H x W x L	Compliance
STT II	K1527-1	200/220/380/400/440V 3ph	5-450A (peak) 5-125A (background)	225A/29V @ 60% 200A/28V @ 100%	59KG	589x336x620	EN 60974-1 / EN 50199 CE

#### STT II ON UNDERCARRIAGE

Product Name	Item number	Primary cable	Work cable + clamp	Undercarriage	Miscellaneous
INVERTEC STT II package air-cooled	PSTT2-1-A	5 m	35 mm <sup>2</sup> / I : 5m	yes	Swivel Platform for wire feeder

#### ACCESSORIES

Ordering number	Description
K10370-PG	STT/LF30 wire feeder cable (5, 10, 15, 20, 25 & 30 m)

#### LINC FEED 30

Name	Ordering number	Input voltage	Weight KG	Dimensions LxHxW (mm)	Wire diameter	WFS M/Min
LINC FEED 30 air*	K10340-30-1-A	42V AC	21.3	753x470x295	0.8-1.6 mm	2-20

\*Drive rolls 1.0 - 1.2 mm are included

Hot Start control

Tailout control

Peak current  
LCD meters

Peak current control

10 pin Remote  
control for Peak and  
Background current

14 pin wire feeder  
control with 42 volts  
auxiliary power

Output connectors

Wire mode switches

Background current  
LCD meters

Background  
current control

Power switch

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