

STT[®]-10 WIRE FEEDER



For Surface Tension Transfer[™] Process

STT®-10 WIRE FEEDER

ADVANTAGE LINCOLN



The STT-10 does a lot more than just feed wire. This new generation microprocessor controlled wire feeder will take the Surface Tension Transfer™ process to a new level.

Today, Lincoln wire feeders play an active roll in controlling the power source and much more. With the STT-10, it is easy to develop optimal procedures and set the range of operator adjustments. It even controls the “Background” current automatically when striking an arc for soft, consistent starts, every time.

Dual procedure control on the STT-10 makes it easy to increase or decrease the energy in the arc without changing the wire feed speed. It can also be used to change procedures for different applications or even different materials.

Due to the modular design of the STT-10, it can be configured for either bench mounting, or the wire drive, wire reel stand, and control box can be separated for boom or automatic applications. A robotic interface option is also available.

- Optimum starting performance with preprogrammed automatic “Background” current settings.
- Two knob control for easy procedure settings.
- Peak and Background controls change the heat in the arc without changing wire feed speed.
- Range control keeps procedures in the “sweet spot”.
- Four step trigger for “cruise control” on long welds and hard automation.
- Forward and reverse cold wire feed for automatic applications.
- Four gear driven rolls. No tools needed to snap rolls on or off. Each roll has two grooves of the same size to double feed life.
- Revolutionary Split Wire Guide precisely aligns and supports wire through the entire system. Maximizes support and minimizes problems.
- Feed head assembly can rotate to minimize gun cable kinks and bends. Reduces gun stresses and improves feedability.
- Incoming bushings are available to accept guide bushings and conduits often used with larger pay-off wire packages.
- Gun receiver bushing provides low cost adapters for Magnum or competitive guns, along with easy interchangeability, better mechanical support and reliable electrical current transfer.
- 3-Year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9002 requirements.

A CLOSER LOOK

STT-10 Control Box



TECHNICAL SPECIFICATIONS

STT-10	Ordering Info.	Wire Speed Range IPM (m/min)	Wire Size Range in. (mm)		Input	Net Weight	Dimensions H x W x D in. (mm)
			Solid	Cored			
BENCH MODEL ⁽¹⁾	K1560-1	35-500 (0.9-12.7)	.023-3/32 (0.6-2.4)	.035-.120 (0.9-3.0)	42 VAC 50/60 Hz 4 Amps	65 lbs. (29.5 kg)	16 x 15 x 31 ⁽¹⁾ (406 x 381 x 787)
Control Box Only ^(2,3)	K1565-1					18 lbs. (8.2 kg)	15 x 14 x 4 (381 x 356 x 102)
Wire Drive Only ⁽³⁾	K1563-1					25 lbs. (11.3 kg)	8x 15 x 13 (203 x 381 x 330)

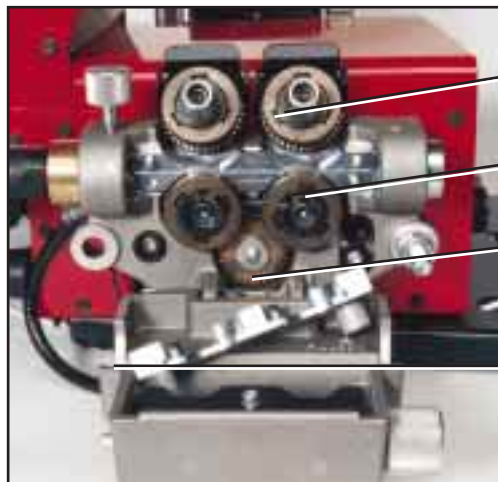
(1) Includes wire drive, control box and wire reel stand.

(2) May be used with Synergic 7 feed head (K679-1, -2).

(3) Requires control box to feed head cable.

NOTE: For robotic models, contact the Automation Division of The Lincoln Electric Company.

DRIVE ROLL AND SPLIT WIRE GUIDE KITS



- Drive rolls flip up for easy access.
- Entire wire path is visible for easy access.
- Changeable external gear for quick speed range change.
- Removable outer wire guide for easy access to wire.

Wire Size Solid Steel Electrode	4-Roll DH Drive (4 Driven)
.023 - .025" (0.6 mm)	KP1505-030S
.030" (0.8 mm)	KP1505-030S
.035" (0.9 mm)	KP1505-035S
.040" (1.0 mm)	KP1505-045S
.045" (1.2 mm)	KP1505-045S
.052" (1.4 mm)	KP1505-052S

INPUT CABLE ASSEMBLIES

**FOR CONNECTION BETWEEN
POWER SOURCE AND
WIRE FEEDER**

**14 Pin Control Cable/
Twist-Mate™ Welding Cable**

K1569-(length)

Rated 300 amps 60% duty cycle:
#1 cable with Magnum Twist-Mate™ and
14-pin MS-type connector. 10, 17, 25 and
33 ft. (3.0, 5.1, 7.5 and 9.9m) lengths.
Order K1569-10, -17, -25 or -33.

**FOR CONNECTION BETWEEN
CONTROL BOX AND WIRE DRIVE -
BOOM MODELS ONLY ⁽¹⁾**

**14 Pin Control Cable/
Stud Welding Cable**

K1567-(length)

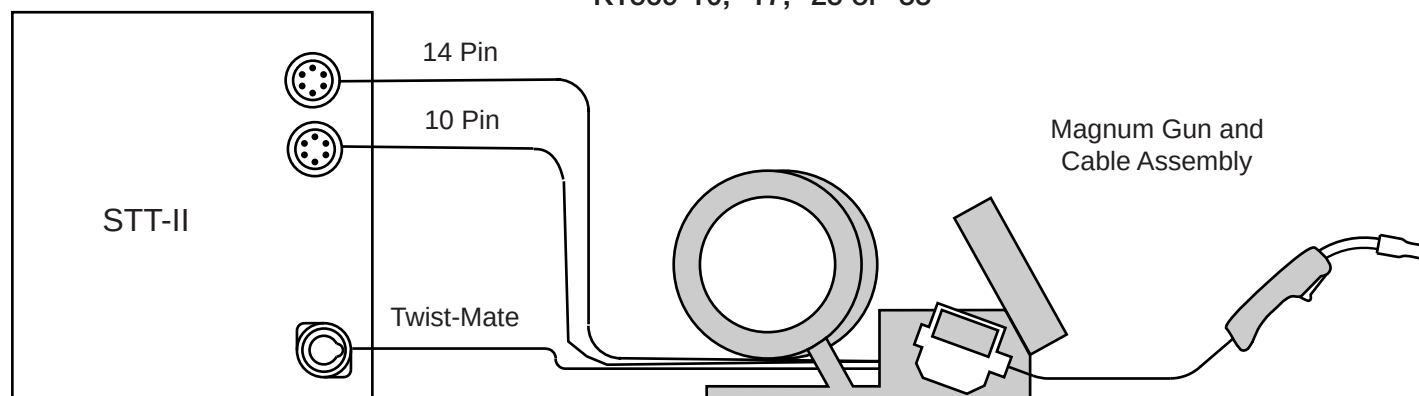
Rated 300 amps 60% duty cycle:
#1 cable with lugs and 14 pin MS-type
connector. 16, 20 and 25 ft. (4.8, 6.0 and
7.5m) lengths.
Order K1567-16, -20 or -25.

⁽¹⁾ Required when wire drive and control box are
ordered separately.

SYSTEM SET-UP

14 Pin/Twist-Mate™ Input Cable Assemblies

K1569-10, -17, -25 or -33



FEED PLATE GUN RECEIVER BUSHINGS

One of the following Gun Receiver Bushings is required for connecting gun and cable assemblies to the feed plate. The K1500-2 comes standard on the Power Feed 10 and Power Feed 10 Dual wire feeders.

K1500-1 Gun Receiver Bushing (Optional)	K1500-2 Gun Receiver Bushing ⁽¹⁾ (Standard)	K1500-3 Gun Receiver Bushing (Optional)	K1500-4 Gun Receiver Bushing (Optional)	K489-7 Fast Mate Gun Receiver Bushing
- Magnum 200, 300 and 400 gun and cable assemblies with K466-1 connector kit. - Lincoln Innershield® gun and cable assembly. - Fast-Mate™ gun and cable assembly with K489-2 Fast-Mate Adapter Kit. - Magnum 550 gun and cable assembly with K613-1.	- Magnum 200 and 400 fully assembled guns (K497-2X and K471-2X). See below. - Magnum 200, 300 and 400 gun and cable assemblies with K466-10 connector kit. - Guns with Tweco® #2, #3 and #4 connectors. ⁽¹⁾ This gun receiver bushing comes standard with each feed head.	- Magnum 550 gun and cable assembly with K613-7 connection. - Guns with Tweco #5 connectors.	- Magnum 200, 300 and 400 gun and cable assemblies with K466-3 connector kit. - Guns with Miller® connectors (for new, longer connectors).	Magnum gun and cable assemblies with Fast Mate connectors.

K1500-1



K1500-2



K1500-3



K1500-4



K489-7



Connector Kit for
Magnum Guns
(K466-10 or K613-7)

Feed Plate Gun Receiver
Bushing K1500-X.

K1500-2 comes standard with
feed head (as shown).

MAGNUM® GUNS

The following guns come pre-assembled with liner and gun connector that is compatible with the Tweco® #2-#4 gun receiver bushing (K1500-2). They connect directly to the standard Power Feed 10 and 10 Dual. Gun cables are 15 ft. length:

K471-21	Magnum 400	.035-.045
K471-22	Magnum 400	.052-1/16"
K471-23	Magnum 400	1/16-5/64"
K497-20	Magnum 200	.025-.030
K497-21	Magnum 200	.035-.045

RECOMMENDED OPTIONS

SPINDLE ADAPTER

For Small Spools (10-12.5 lb.)

Permits 8" (203mm) O.D. spools to be mounted on 2" (51mm) O.D. spindles.
Order K468.

READI-REEL ADAPTERS

30 lb. (14 kg) Adapter

Adapts 22-30 lb. (10-14 kg) Lincoln Redi-Reel coils of electrode to 2" (51mm) spindle.
Order K363P.



60 lb. (27.2 kg) Adapter

Adapts 50-60 lb. (22.7-27.2 kg) Lincoln Redi-Reel coils of electrode to 2" (51mm) spindle.
Order K438.



COIL ADAPTER

60 lb. Coil Adapter

Adapts 60 lb. Lincoln coils of electrode to 2" (51mm) spindle.
Order K1504-1.



Plastic Wire Cover

Protects wire from dust and dirt and provides electrical isolation. For up to 44 lb. (20 kg) wire packages.
Order K1634-1.

For up to 60 lb. wire packages
Order K1634-2.

Gas Guard Regulator

For CO₂ and Argon blend gases. Reduces surge caused by excess pressure in supply hose. Includes adjustable flow regulator with removable adjustor key. Kit provides for one gun. **Order K659-1.**

Dual Procedure Switch

Allows the use of two welding procedures with one Lincoln Magnum gun. 15 ft. (7.6 m).
5-Pin Receptacle. Order K683-3.



Remote Switch Interface Module

Single input/output switch module for STT-10 wire drive. Allows for control of wire feeder and external devices.
Order K1558-1.

Caster Kit - Light Duty

Mounts to the wire reel stand on the STT-10. Allows for easy movement of wire feeder. **Order K1556-1.**



Insulated Lift Bail

Allows the entire wire feeder to be hung from a crane or hook.
Order K1555-1.



Customer Assistance Policy

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

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