

PIPEFAB™

Welding System

LINCOLN ELECTRIC



The Ideal Setup for Pipe & Vessel Fabrication

From concept to reality, the PIPEFAB™ welding system was developed for one purpose – to deliver the ideal setup for pipe and vessel fabrication. From machine design to arc performance, no detail was overlooked in delivering a complete, customer-driven system that lets your shop focus on what matters most – making high-quality root-to-cap welds, faster and easier.



Game-Changing Performance and Simplicity

Breakthrough Arc Performance

» From root, to cap, to final fit – the PIPEFAB system has you covered with weld modes that have been fine-tuned to deliver breakthrough arc performance specifically for pipe and vessel fabrication.

Industry-Driven Design

» Like the name says, the PIPEFAB system was developed specifically for pipe and vessel fabrication. With its Ready-to-Run™ design, every detail was considered in creating the ultimate setup for the pipe and vessel industry.

Straightforward & Simple

» Developed to be the fastest, smartest, and easiest solution on the market, the PIPEFAB system delivers straightforward and simple digital control with one-click process selection.

Trusted Expertise & Support

» Whatever challenge you may have, wherever in the world it may be, Lincoln Electric is here to help with proven industry knowledge and support.

Processes »
Stick, TIG (HF & TouchStart® TIG), MIG, STT® MIG, Pulsed MIG, Flux-Cored

Applications »
Pipe & Vessel
Process Pipe

Output »

Input »

Product Number »
K3734-1 PIPEFAB Ready-Pak®
K5753-1 Hyperfill® Water-Cooled PIPEFAB Ready-Pak
K3731-1 PIPEFAB Power Source
K3732-1 PIPEFAB CE Power Source
K3737-1 PIPEFAB Water Cooler
K3735-1 PIPEFAB Feeder

Fine-Tuned Performance for Pipe & Vessel

STT – Better Than Ever.

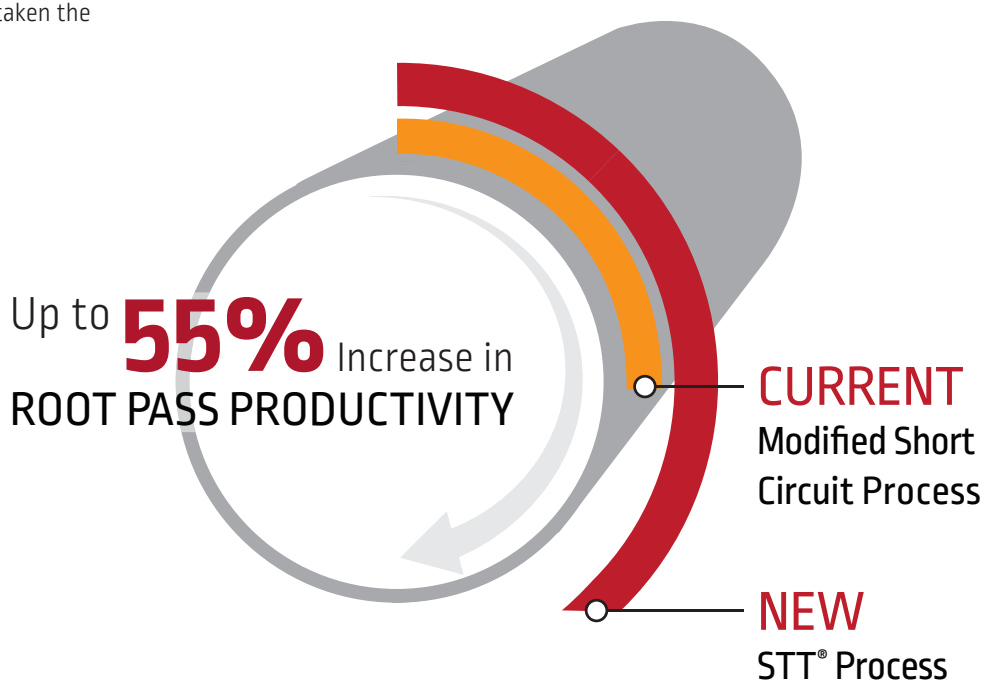
Our patented STT® (Surface Tension Transfer®) process was the original open-root MIG (modified short-circuit) solution to hit the market. After decades of leading the industry, we've taken the performance of this iconic process to the next level – making it better than ever.

- Breakthrough travel speeds
- Industry-leading arc stability
- No sense lead

Smart Pulse - Pulse Tailored For Pipe

Smart Pulse™ delivers an innovative solution for pulse welding simplicity and performance. Utilizing Waveform Control Technology®, Smart Pulse monitors your machine settings and automatically tailors the pulse to deliver the ideal arc for your pipe welding needs.

- Set a low WFS for out-of-position pipe welding – Smart Pulse auto-adjusts for a narrow, focused arc
- Set a high WFS for 1G pipe welding – Smart Pulse auto-adjusts for a wide, soft arc
- Less time adjusting means more time welding



Processes Optimized For Your Needs

The PIPEFAB system comes fully loaded with weld modes optimized specifically for pipe and vessel fabrication. All processes - Stick, MIG, TIG and FCAW - have been fine-tuned for maximum performance with the industry's common, filler metal, wire diameters and gas mixtures.

- Stick modes optimized for cellulosic and low hydrogen electrodes
- MIG modes optimized for 0.035 in. & 0.045 in. steel, stainless steel and metal-cored
- MIG modes optimized for simplicity (Smart Pulse) and fume management (Low Fume Pulse™)
- Flux-cored modes optimized for 0.045 in., 0.052 in., 1/16 in.

*Results based on root pass comparison with 0.035 in. wire and Argon shielding gas mix.

The Next Generation of Simplicity & Control

Display Designed with Purpose

The PIPEFAB system's display was designed, evaluated, and tested to deliver one thing - machine interaction that is as simple as possible.

Weld More, Worry Less

The PIPEFAB system helps maximize arc time and allow operators of all skill levels to focus more on making great welds.

- One-button process changes
- Straightforward, easy-to-understand navigation
- Memory buttons for preferred settings
- ArcFX® Technology for visual arc settings feedback
- Single point of use – all controls in one location on the feeder
- Multilingual options for true global compatibility.

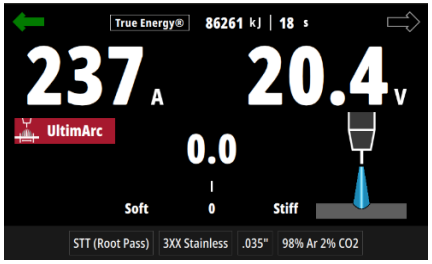
Intelligence Built In

All PIPEFAB systems come ready to connect to powerful, yet simple-to-use software for configuration, updates and weld data monitoring.

- Remote diagnostics & configuration
- Free and easy software updates – never worry about swapping or storing memory cards.
- CheckPoint® Production Monitoring



PIPEFAB system navigation home screen



PIPEFAB process configuration screen with ArcFX® Technology



PIPEFAB language select screen

Industry-Driven Design for Industry Demands

Always Ready-To-Run

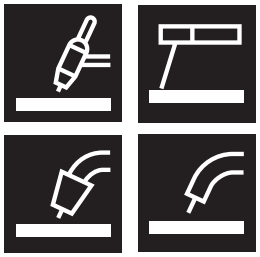
The PIPEFAB system's Ready-to-Run™ design keeps all process outputs electrically isolated and ready to weld when needed – meaning you'll never have to swap cables to change processes again.

Flexibility to Tackle any Challenge

Dedicated process outputs and remote pendant connections give the PIPEFAB system a wide range of application flexibility. Embedded PowerConnect® Technology allows for input power flexibility from 200V – 600V.

- PowerConnect Technology – 200v-600v input, just power it up and weld
- Reliable and consistent arc performance no matter what input voltage is used

Processes



Capabilities



Mechanized
Remote / Pendant



Input Voltage
200V

POWERCONNECT® TECHNOLOGY

600V

Attention to Detail

From packaging to gun organization, The PIPEFAB system's Ready-to-Run design was developed with complete focus on the operator and the shop floor environment for ultimate simplicity.

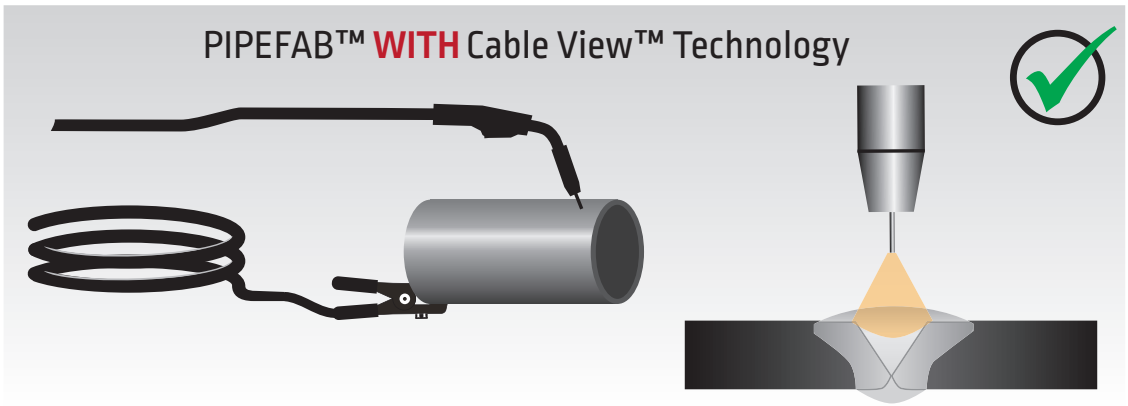
- Cable hooks for organized gun and cable management
- Tilting gas bottle tray
- Quick access side panels
- Ready-Pak comes assembled and ready to weld in minutes

Cable View Technology

Powered by patented Cable View™ Technology, the PIPEFAB system continually monitors cable inductance and adjusts the waveform to maintain consistent arc performance with long or coiled cable runs up to 65ft (or inductance levels up to 45 µH).

- Consistent arc performance with no sense lead, even in long or coiled cable runs
- Warning notification if inductance is outside of performance threshold





Trusted Industry Support

Industry Pioneers Who Know Pipe

High-quality products and great customer service are important aspects of the Lincoln Electric story, but it's our unmatched welding expertise, from the pipeshop to the field, that truly sets us apart. If there's a better way for you to weld, we'll help you find it.

Pipe Diameter Inches per Day

Lincoln Electric knows it's all about maximizing the amount of pipe diameter inches you can weld per day, per welder. That's why we are here as a trusted partner, working together to help take your welding productivity and quality to the next level.

Global Support

With a worldwide network of distributor and sales offices reaching over 160 countries, and 36 global technical application facilities, Lincoln Electric can provide trusted global support you can count on.



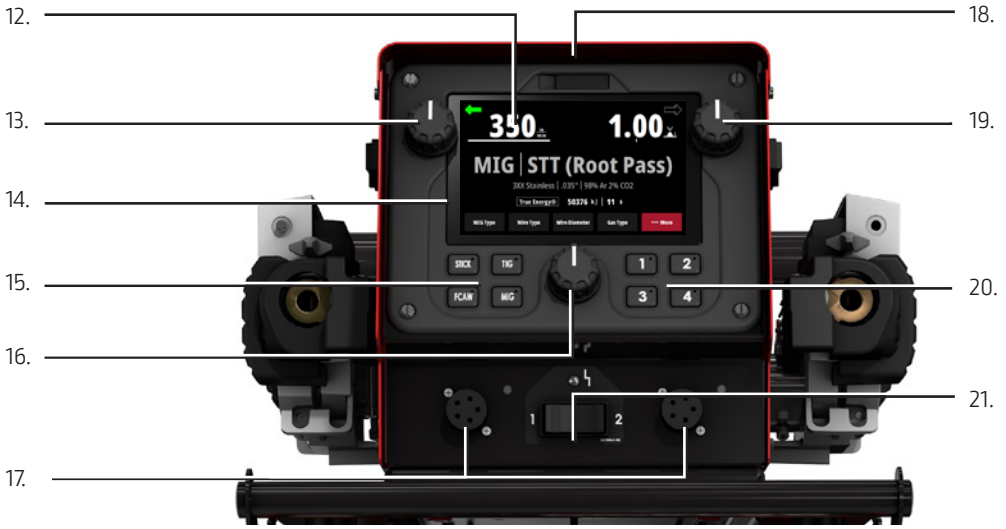
KEY CONTROLS

1. PIPEFAB Feeder – Dual-Head Feeder
2. User Interface / Controls
3. Power Source ON/OFF & Connection Status
4. TIG Remote, 12-Pin Connection and Sense Lead Connection (if required)
5. Dedicated TIG Torch Connection (Twist Mate™)
6. Work Lead Connection
7. Stick Connection
8. Cable / Torch Hanger
9. Heavy-Duty Wire Reel Stand
10. Tilting Bottle Rack
11. Optional Water Cooler (K3737-1)



KEY CONTROLS (UI)

12. Large, Easy-to-Read Text
13. Wire Feed Speed
14. 7 in. IP67 High-Resolution Display
15. One-Click Process Selection
16. Navigation / Select
17. Gun Trigger Connection
18. USB Port
19. Volts/Trim
20. Memory Selection
21. Feed Head Toggle



READY-PAK PACKAGES - WHAT'S INCLUDED

The PIPEFAB Ready-Pak packages come assembled, shipped on a pallet and ready to weld. Welding wire and shielding gas must be ordered separately.

Description	Part Number	PIPEFAB Ready-Pak (K3734-1)	Hyperfill Water-Cooled PIPEFAB Ready-Pak (K5753-1)
Main System Components			
PIPEFAB Power Source	K3731-1	•	•
PIPEFAB Feeder	K3735-1	•	•
PIPEFAB Water Cooler	K3737-1		•
PIPEFAB Cart & Dual Bottle Rack	K3736-1	•	•
Guns/Torches			
Magnum® PRO Curve™ HDE™ 250 Ready-Pak 0.045 in, 15 ft	K4531-2-10-45	•	
Magnum PRO Curve HDE 350 Ready-Pak 0.045 in, 15 ft	K4532-2-10-45	•	
Magnum PRO 500 Water Cooled 5/64 in, 15 ft	K4522-2-10-564		•
Magnum PRO Curve HDE 250 HyperFill STT Ready-Pak 0.035 in, 15 ft	K4531-2-10-035H		•
Gun/Torch Accessories			
Magnum PRO Nozzle - 350A, Thread-on, Flush, 3/8 in (9.5 mm) ID	KP2742-1-38F	•	•
Magnum PRO Nozzle - 350A, Thread-on, Flush, 1/2 in (12.7 mm) ID	KP2742-1-50F	•	•
Copper Plus® Contact Tip - 350A, Tapered, 0.045 in (1.2 mm) [1 tip only]	KP2744-045T	•	
Copper Plus Contact Tip - 350A, Tapered, 0.035 in (0.9 mm) [1 tip only]	KP2744-035T	•	
Cable Liner 0.035-0.045 in (0.9-1.2 mm) 15 ft (4.6 m)	KP45-40-15		•
HyperFill HD Water Cooled Diffuser	KP4481-2-HD		•
HyperFill HD Contact Tip - 0.035 in (0.9 mm) - 10/pack [Qty 1]	KP4482-035-HD		•
HyperFill STT Contact Tip - 0.035 in (0.9 mm) - 10/pack [Qty 1]	KP5368-035T		•
Feeder Accessories			
Drive Roll Kit 0.040-0.045 in (1.0-1.1 mm), Cored Wire	KP1505-045C	•	•
HyperFill Drive Roll Kit (0.035 - 0.040 in) (0.9 -1.0 mm) [Qty 2]	KP4388-1		•
PIPEFAB Hyperfill Wire Reel Stand	K4793-2		•
Other Accessories			
15 ft 4/0 Work Lead & Clamp	K2149-1	•	•
Harris® Flowmeter & Hoses [Qty 2]	3100856	•	•
Intert Gas Y Fitting	KP4773-1	•	•
PIPEFAB Cable Bracket Kit	KP4867-1	•	•
PIPEFAB & 300C Screen Protector	KP4735-1	•	•
Gateway Pendant	K4997-1		•
M-F Quick Disconnect Water Hose Kit (7 ft)	K4544-7		•
Low Conductivity Coolant (1 Gallon) [Qty 2]	KP4159-1		•



PIPEFAB Ready-Pak (K3734-1)



Hyperfill Water-Cooled PIPEFAB Ready-Pak (K5753-1)

RECOMMENDED ACCESSORIES

GENERAL OPTIONS



PTA-17F – Air Cooled TIG Ready-PAK
Flexible head and Ultra-Flex™ cables provide ultimate comfort and maneuverability. Pre-configured package with K1622-1 Twist-Mate adapter, cable cover. Includes: #7 nozzle, 1/16 in. (1.6 mm) and 3/32 in. (2.4 mm) collets ,collet bodies and E3® Tungsten
Order: K1782-14 (12.5FT 3.8 M)
Order K1782-18 (25FT, 7.6 M)



Foot Amptrol™
Provides 25 ft. (7.6 m) of remote output control for TIG welding.
(12-pin plug connection).
Order K870-2



PIPEFAB Water Cooler
Order K3737-1



Hand Amptrol Rotary Track Style, 12-pin Amphenol (25 ft)
Remote current control for TIG welding
Order K963-4



PIPEFAB Feeder Lfit Bail
Insulated Lift Bail
Order K1555-1



PIPEFAB Feeder Caster Kit
Convert wire reel base to feeder undercarriage.
Order K4728-1



Arc Start Switch
Attached to TIG torch for convenient finger control. Comes equipped with 12-pin connector.
Order K814-2



Remote Gun Trigger Switch
Allows for initialization of the arc in wire fed hard automation applications
Order K4716-1



PIPEFAB Feeder Gas Flow Sensor
Order K4731-1



PIPEFAB Feeder Screen Protector
Order KP4735-1



Spool Cover
Protective wire spool cover
Order K1634-4 for use with 30-40 lb. (13.6-18.1 kg) spools



SMAW Remote Output Control, 12-pin
Order K857-2 – 25 ft (7.6 m)
Order K857-3 – 100 ft (30.5 m)



PIPEFAB Feeder HyperFill Reel Stand
Wire reel stand for PIPEFAB Feeder providing dual spool holders for HyperFill
.
Order K4793-2

PRODUCT SPECIFICATIONS – PIPEFAB

Description	Product Number	Input Voltage / Phase / Hertz	Output Range	Rated Output / Voltage/ Duty Cycle	Input Current @ Rated Output	Dimensions H x W x D in (mm)	Weight lb (kg)
PIPEFAB Ready-Pak	K3734-1	200-208/220-230/380-415/460/575	5-400A	STICK: 55 – 400A / 36V @ 100% MIG: 40 – 400A / 34V @ 100% FLUX-CORE: 40 – 400A / 34V @ 100% TIG: 5 – 400A / 26 V @ 100%	53/46/26/24/19	43.5 x 30.9 x 48.5 (1104 x 784 x 1231)	340 (154)
HyperFill Water-Cooled PIPEFAB Ready-Pak	K5753-1					66.06 x 31 x 50 (1677 x 787 x 1270)	780 (354)
PIPEFAB™ Power Source	K3731-1					22.1 x 17.5 x 34.8 (561 x 444 x 883)	207 (93)
PIPEFAB Power Source (CE)	K3732-1						
PIPEFAB Feeder	K3735-1	40v DC				14.5 x 22 x 30.2 (368 x 558 x 767)	80 (36)

TEST Results Disclaimer:

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 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.

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 information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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