

HELIX™ T55 Weld Head and Track Ring

Processes

TIG

Product Number

K52002-1

See back for complete specs

Input Power

25V DC

Clearance

Radial - 5.5 in. (139.7 mm)

Axial - 11.5 in. (292.1 mm)

Net Weight

57 lb. (25.9 kg)

Track to Rear

3.41 in (86.6 mm)

Electrode to Front

1.93 in (49 mm)

Track to Electrode (Min-Max)

Minimum: 5.03 in (128 mm)

Maximum: 10.64 in (270.3 mm)

with standard 6 in. (152.4 mm)

OSC plate [16.14 in (410 mm)

maximum with optional

12 in (305 mm) OSC plate]

HELIX™ T55 Weld Head and Track Ring

The HELIX™ T55 weld head and the patent-pending gear-driven track ring system are designed to work as a complete solution for orbital TIG welding. Designed to be lightweight and durable, the HELIX™ T55 is rugged, portable, and easy to install and position on pipes. Its sleek and low-profile design allows the HELIX™ T55 to weld in confined spaces. Engineered for diverse applications in demanding environments, the weld head and track ring are easy to operate, maintain and service.

FEATURES

▶ Industrial Construction

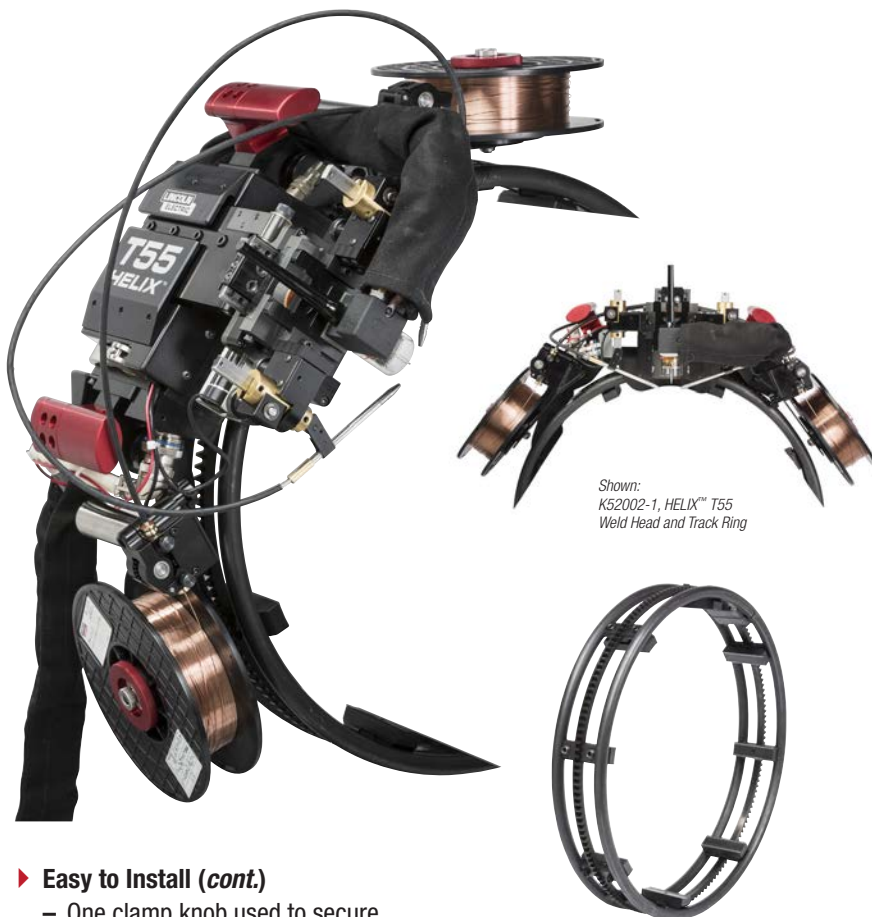
- Heavy-duty construction and robust design of both the track ring and tractor allow for reliable operation in harsh environments.

▶ Gear-Driven Precision

- Provides stable, consistent travel of the weld held to the track.
- Mounted shoes on the track ring contain spring-loaded cushions to allow for work surface heat expansion to eliminate binding and ring distortion.
- Spring-loaded travel mechanism drives over debris in the gear system for smoother travel.

▶ Easy to Install

- Quick release travel clutch is easily disengaged for rapid track relocation of the weld head.
- Lightweight construction of the weld head and tractor make for easy mounting to the track ring.



▶ Easy to Install (cont.)

- One clamp knob used to secure tractor to the track ring.
- Wire is fed into the drive roll and out through the exit guide to the torch, in one easy step. No disassembly required.

▶ Versatile Track Ring

- Variety of track ring diameters and shoe extensions.
- Sectional track for easy transportation and storage.

APPLICATIONS

- ▶ Nuclear Energy
- ▶ Thermal Energy
- ▶ Petroleum Processing
- ▶ Pressure Vessel
- ▶ Contractors

HELIX™ T55 WELD HEAD

Part Number	Description
K52002-1	HELIX™ T55 Weld Head w/accessories
K52061-1	HELIX™ Tool Box includes welding consumables
KP52062-1	Pyrex® Cup (short)
KP52066-1	1/8 Tungsten
KP52071-1	5/32 Tungsten
KP52063-1	1/8 Tungsten Adaptor
KP52069-1	5/32 Tungsten Adaptor
KP52064-1	Collet Body
KP52065-1	1/8 Collet
KP52070-1	5/32 Collet
KP52067-1	Back Cap Long
KP52068-1	Back Cap Medium
KP52077-1	HELIX™ T55 Wire Liner Standard Length
KP52077-2	HELIX™ T55 Wire Liner Extended Length
KP52078-035	HELIX™ T55 Guide 0.035 (0.9 mm)
KP52078-045	HELIX™ T55 Guide 0.045 (1.1 mm)
KP52079-035	HELIX™ T55 Drive Rolls 0.035 (0.9 mm)
KP52079-045	HELIX™ T55 Drive Rolls 0.045 (1.1 mm)
KP52080-035	HELIX™ T55 Inlet/Outlet Guide 0.035 (0.9 mm)
KP52080-045	HELIX™ T55 Inlet/Outlet Guide 0.045 (1.1 mm)
K52072-25	HELIX™ T55 Cable/Hose Extension 25 ft (7.6 m)
K52072-50	HELIX™ T55 Cable/Hose Extension 50 ft (15.2 m)
K52072-75	HELIX™ T55 Cable/Hose Extension 75 ft (23 m)

HELIX™ TRACK RING & SHOE EXTENSIONS

Part Number	Description
K52000-XX	Track Ring (-XX = pipe diameter)
K52060-05	Shoe Extension 0.5 in (13 mm)
K52060-10	Shoe Extension 1.0 in (25.4 mm)
K52060-20	Shoe Extension 2.0 in (50.8 mm)
K52060-30	Shoe Extension 3.0 in (76.2 mm)
KP52081-1	Single Replacement Shoe

HELIX™ TRACK RING SPECIFICATIONS

Description	# of Track Shoes	# of Sections	Increments
8 in - 22 in (203.2 mm - 559 mm)	6	2	2 in (50.8 mm)
24 in (610 mm)	8	2	2 in (50.8 mm)
26 in - 32 in (660 mm - 813 mm)	8	2	4 in (101.6 mm)
36 in - 44 in (914 mm - 1118 mm)	10	4	4 in (101.6 mm)
48 in - 52 in (1219 mm - 1321 mm)	12	4	4 in (101.6 mm)
56 in - 64 in (1422 mm - 1626 mm)	14	4	4 in (101.6 mm)

HELIX™ TRACK RING SPECIFICATIONS

Product	Product Number	Input Power	Travel Speed	Wire Feed Speed	Wire Size Range	Clearance		Oscillation Stroke	Arc Voltage Control (ARC) Stroke	Electrode to Front	Lead/Lag	Torch Tilt		Track Width	Manual Torch Height Adjustment
						Radial	Axial					In	Out		
HELIX™ T55 Weld Head	K52002-1	25V DC	1-20 ipm (25.4-508 mm)	0.1 to 130	0.030-0.0052 in (0.8-1.3 mm)	5.5 in (139.7 mm)	11.5 in (292.1 mm)	1 in (25.4 mm)	3.5 in (88.9 mm)	1.93 in (49 mm)	360°	30° max.	110° max.	3.90 in (99.1 mm)	57 lb (25.9 kg)

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