# 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<sup>™</sup> 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

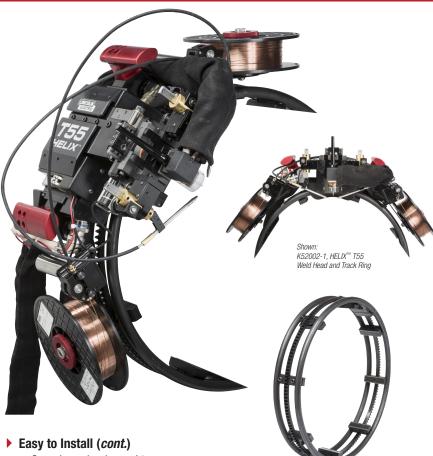
 Heavy-duty construction and robust design of both the track ring and tractor allow for reliable operation in harsh environments.

## 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 held and tractor make for easy mounting to the track ring.



- 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 WEL	D 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	Clear Radial	ance Axial	Oscillation Stroke	Arc Voltage Control (ARC) Stroke	Electrode to Front	Lead/ Lag	Torc In	h Tilt Out	Track Width	Manual Torch Height Adjustment
HELIX™ T55 Weld Head	K52002-1	25V DC	1-20 ipm (25.4-508 mm)	0.1 to 130	0.030-0.052 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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