

Standard Trunnion Line

HAWK TECHNOLOGY LTD.

Going Beyond Everyday

Hawk Technology Ltd has evolved with today's manufacturing requirements by planning, designing, building and installing state-of -the-art robotic integration and tooling solutions around the world. Whether it is one piece of tooling or an entire manufacturing facility, our highly knowledgeable and experienced staff works with our clients to exceed industry standards by providing the best in design, program management, and manufacturing services. Our entire team is committed to forming strategic partnerships with clients requiring total technical and manufacturing services. With access to everything we need under one roof - design, fabrication, engineering, service and more - we can respond to our clients' needs every day.

We challenge ourselves to go beyond the minimum and add value to our solutions, our process and our deliverables. Hawk Technology Ltd is the One Source for Integrated Manufacturing Solutions.



8080 Centennial Expressway Rock Island, IL 61201-7316

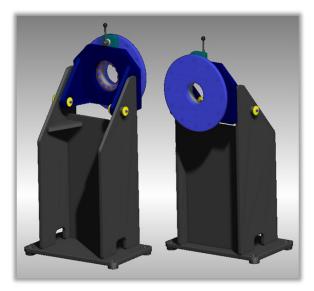
www.hawktechnology.com

MANUAL TRUNNION SET - LOCK PIN INDEXING

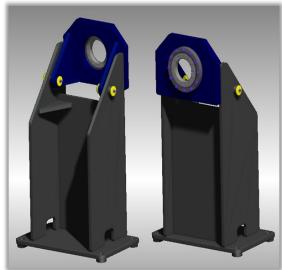
<u>Description</u>	Part Number	<u>Style</u>	<u>Support</u> <u>Type</u>	Max Radial Load	<u>Center</u> <u>Thru Hole</u>
Manual Head Stock	HT-TRLP-XX ¹	Manual Lock Pin-Pivot Head	Mounted Bearing	3000 lb (6000 lb w/tail stock)	Yes
Tail Stock	HT-TRT-XX ¹	Pivot Head	Mounted Bearing	3000 lb (6000 lb w/ head stock)	Yes
¹ XX = Specify floor to centerline height. Standard Sizes: 34" or 40"					

We manufacture and export a comprehensive range of trunnions that are produced using the latest technology. Our trunnions are globally accepted for their exceptional quality, sophisticated engineering and high efficiency.

Our manual trunnion comes standard with a base frame, tilt head stock, slewing ring and lock pin.







TAIL STOCK

CANTILEVER TRUNNIONS

<u>Description</u>	Part Number	<u>Style</u>	Support Type	<u>Max Radial</u> <u>Load / Moment</u> <u>Load</u>	<u>Center</u> <u>Thru</u> <u>Hole</u>
Powered Head Stock	HT-TRCPO-XX ¹	Offset Motor- Cantilever	Planetary Gearbox ²	3000 lb / 1800 ft-lb	Yes
Manual Head Stock	HT-TRCLP-XX ¹	Manual Lock Pin-Cantilever	Mounted Bearing	3000 lb / 4400 ft-lb	Yes
				Max Pressure Rating	
Supply Assembly	HT-TR-HS ³	Hydraulic - Dual Feed		3000 psi	
	HT-TR-PS ³	Pneumatic - Single Feed		1000 psi	

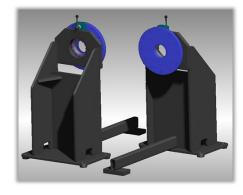
¹XX = Specify floor to centerline height. Standard Sizes: 34" or 40"

We manufacture and export a comprehensive range of trunnions that are produced using the latest technology. Our trunnions are globally accepted for their exceptional quality, sophisticated engineering and high efficiency.

Our Manual Cantilever Trunnion comes standard with a base frame, slewing ring and lock pin. Our Powered Cantilever Trunnion with offset motor comes standard with a base frame, offset gearbox, motor, control panel and a 2 push button operator control unit. It can also be ordered with an optional wireless pendant or with PLC/HMI controls. In addition, it can be ordered with optional Hydraulic - Dual Feed or Pneumatic - Single Feed.



OFFSET POWERED CANTILEVER
HEAD STOCK



MANUAL LOCK PIN CANTILEVER
HEAD STOCK

²<1 Arc-Min Backlash; Rotational Torque: 700 ft-lbs w/ 1 hp motor 60 Hz w/ 460VAC -- Motor = 1800 RPM -- Output at 258:1 gearbox = 7 RPM 50 Hz w/ 400VAC -- Motor = 1500 RPM -- Output at 258:1 gearbox = 5.8 RPM

³Designed for mounting to motor plate of offset powered trunnion styles

POWERED TRUNNION SET - OFFSET MOTOR

<u>Description</u>	<u>Part Number</u>	<u>Style</u>	<u>Support</u> <u>Type</u>	<u>Max Radial</u> <u>Load</u>	<u>Center</u> <u>Thru</u> <u>Hole</u>
Powered Head Stock	HT-TRPO-XX ¹	Offset Motor -Pivot Head	Planetary Gearbox ²	3000 lb (6000 lb w/tail stock)	Yes
Tail Stock	HT-TRT-XX ¹	Pivot Head	Mounted Bearing	3000 lb (6000 lb w/head stock)	Yes
				Max Pressure Rating	
Supply Assambly	HT-TR-HS ³	Hydraulic - Dual Feed		3000 psi	
Supply Assembly	HT-TR-PS ³	Pneumatic - Single Feed		1000 psi	

¹ XX = Specify floor to centerline height. Standard Sizes: 34" or 40"

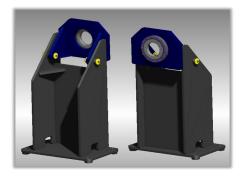
²<1 Arc-Min Backlash; Rotational Torque: 700 ft-lbs w/ 1 hp motor 60 Hz w/ 460VAC -- Motor = 1800 RPM -- Output at 258:1 gearbox = 7 RPM 50 Hz w/ 400VAC -- Motor = 1500 RPM -- Output at 258:1 gearbox = 5.8 RPM ³ Designed for mounting to motor plate of offset powered trunnion styles

We manufacture and export a comprehensive range of trunnions that are produced using the latest technology. Our trunnions are globally accepted for their exceptional quality, sophisticated engineering and high efficiency.

Our Powered Trunnion with offset motor comes standard with a base frame, tilt head stock, offset gearbox, motor, control panel and a 2 push button operator control unit. It can also be ordered with an optional second 2 push button operator control unit for the tail stock, wireless pendant or with PLC/HMI controls. In addition, it can be ordered with optional Hydraulic - Dual Feed or Pneumatic - Single Feed.



OFFSET POWERED HEAD STOCK



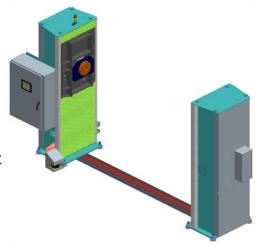
TAIL STOCK

2 AXIS POWER LIFT TRUNNION SET - PANELED

<u>Description</u>	<u>Part Number</u>	<u>Style</u>	Support Type	Max Radial Load	<u>Center</u> <u>Thru Hole</u>	
Head Stock	HT-TRLR-XX ¹ -XX ³	Offset Motor- Pivot Head	Planetary Gearbox ²	7,000 lb at 130" Maximum Length	Yes	
Tail Stock		Pivot Head	Mounted Bearing			
1 XX = Specify minimum floor to centerline height in 1" increments; Range: 32" - 48" 3 XX = Travel distance						
² <1 Arc-Min Backlash; Rotational Torque: 8600 in-lbs w/ 1 hp motor						

We manufacture and export a comprehensive range of trunnions that are produced using the latest technology. Our trunnions are globally accepted for their exceptional quality, sophisticated engineering and high efficiency.

The Power Lift Trunnion comes with a single axis head and tail set with powered elevation. It will provide a single axis of powered 360 Degrees vertical rotation. The system will also provide 36 inches (914mm) of powered elevation.



Hollow bore gear boxes are utilized to allow the use of pneumatics, electrical controls, or weld ground directly to the tool and does not inhibit rotational capability.

Rotation and elevation control on this trunnion will be by a four button push button station mounted on the head stock end of the fixture. An optional Programmable control capability (shown above) is available, which includes color touch screen interface for programming with a wireless pendant control.

In addition to the standard safety features, additional safety features have been added to protect the operator during automated movements. These include area scanners with programmable fields, and a hydraulic safety system using a hydraulic cylinder with counterbalance valve, flow controls and accumulator.

3 AXIS POWER LIFT TRUNNION SET - PANELED

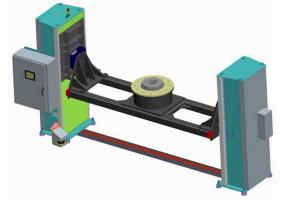
<u>Description</u>	<u>Part Number</u>	<u>Style</u>	<u>Support</u> <u>Type</u>	Max Radial Load	<u>Center</u> <u>Thru Hole</u>
Head Stock	HT-TRLR-XX ¹ -XX ³	Offset Motor- Pivot Head	Planetary Gearbox ²	7,000 lb - Drop Center Weight at 130" Maximum Length	Yes
Tail Stock		Pivot Head	Mounted Bearing		1 65
				<u>Max Moment</u> <u>Load</u>	
Drop Center	HT-TRDC-XX ⁴	Offset Motor– Fixed Head	Planetary Gearbox ²	182,200 in-lb	Yes
¹ XX = Specify minimum floor to centerline height in 1" increments; Range: 32" - 48"					

³ XX = Travel distance ⁴ XX = Length of base, head stock to tail stock ² <1 Arc-Min Backlash; Rotational Torque Head Stock: 1800 in-lbs w/ 1 hp motor

2<1 Arc-Min Backlash; Rotational Torque Head Stock: 1800 in-lbs w/ 1 hp motor Rotational Torque Drop Center: 27,700 in-lbs w/ 1 hp motor

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The Power Lift Trunnion comes with a single axis head and tail set with powered elevation. It will provide a single axis of powered 360 Degrees vertical rotation. The system will also provide 36 inches (914mm) of pow-



ered elevation. The third axis tool provides even more flexibility and control by adding powered 360 Degrees horizontal rotation. Hollow bore gear boxes are utilized to allow the use of pneumatics, electrical controls, or weld ground directly to the tool and does not inhibit rotational capability. Rotation and elevation control on this trunnion will be by a four button push button station mounted on the head stock end of the fixture. An optional Programmable control capability (shown above) is available, which includes color touch screen interface for programming with a wireless pendant control. In addition to the standard safety features, additional safety features have been added to protect the operator during automated movements. These include area scanners with programmable fields, and a hydraulic safety system using a hydraulic cylinder with counterbalance valve, flow controls and accumulator.