

Terra Sonic Universal Gantry (TUG) Sonic Drilling Tool Tripping System

TSi Part #: 180500

About the TUG

The TUG System allows safe and efficient loading/unloading of all sizes of Terra Sonic tooling to and from the Sonic Head. Its use eliminates manual lifting and manipulation of heavy drill pipes.

The TUG functions via an air hoist mechanism and connects to a TSi Rig's air tank. TSi-engineered pipe tongs glides on a gantry front to back and side to side and lifts and lowers to deploy tooling. Once raised, the tooling can be moved into position to be threaded in place or vice versa and placed back onto the stack.

Easily set up with a forklift, the TUG can be staged anywhere behind the rig. The system includes a removable rod-and-casing rack with an adjustable divider and fork channels (additional pipe racks sold separately), a retractable hoisting system for transport, and a trolley-mounted air hoist, all mounted on a base with fork channels and adjustable support pads.

Benefits of the TUG:

- **Easy Operation:** Elegant design allows easy operation and maintenance.
- **Double trolley system:** Allows for efficient tooling movement.
- **More Efficient:** Improves operational speed of installation and tripping times.
- **Two-Man Crew:** Enables two-person operation of Sonic Drilling.
- **Less Fatigue:** The TUG literally does the heavy lifting, keeping workers sharp.
- **Safer Work Site:** Manual handling of tooling eliminated, improving safety on the work site.
- **Fewer Injuries:** Helps prevent injuries, such as twists, strains, and sprains.
- **Flexible Site Setup:** Portability allows positioning for maximum productivity.
- **On The Level:** Leveling feet on base allows adjustability on uneven terrain.
- **One Size Fits All:** Adjustable rod-and-casing rack accommodates all tooling sizes.
- **Adjustable Height:** Allows optimal pipe handling for the job at hand.
- **Compatibility:** Works with all sizes of TSi tooling (3"-12")
- **Rig-Ready Compressor:** Utilizes compressed air from the compressor already on the TSi Sonic.

Technical Specifications:

• Base Width	47-1/2" (1,207 mm)
• Hoist Beam Width	58" (1,473 mm)
• Bottom Length	118-1/2" (3010 mm)
• Top Length	158" (4,013 mm)
• Collapsed Height	92-1/2" (2,350 mm)
• Fully Extended Height	131-1/2" (3,340 mm)
• Weight	1,600 lbs. (726 kg)
• Material	A500 Carbon Steel
• Air Hoist Type	AH500M
• Air Hoist Air Pressure Required	60-90 psi
• Air Host Maximum Lift Capacity	500 lbs (227 kg)

TSi Tongs

Tongs are designed to handle specific tooling and, therefore, are sold separately based on your tooling needs. Their individual designs match each diameter of TSi sonic casing.

The Tongs are engineered to allow tooling to spin inside of the tongs rather than the tongs spinning when a thread connection is made.

TSi Rod Tongs	
Diameter	Part Number
3-1/2"	#24-35000
4-1/4"	#24-42500
4-3/4"	#24-47500

TSi Casing Tongs	
Diameter	Part Number
6"	#24-60000
7"	#24-70000
8"	#24-80000
9-1/4"	#24-92500
10-1/4"	#24-10500
12"	#24-12000

