



TH100A Angle Drill

INGERSOLL-RAND
ROTARY DRILLS

TH100A—Gold medal performance

Exploring for gold is a business that requires speed, reliability and precise drilling performance. That's why the Ingersoll-Rand TH100A is used by more successful contractors. Since the mid-1970s the TH100A has been the state-of-the-art for vertical or angle, dual wall sampling. It is a rig designed only for exploration drilling ... not a converted water well rig. The TH100A has brought home the gold for the world's leading exploration contractors.

Dump angle derrick

Two hydraulic cylinders position the derrick at the required angle. A hydraulic motor slides the derrick down until the base is firmly on the ground.

Conveyor style carousel

Set up for dual wall or conventional drill pipe, the TH100A carousel holds 500' of 3½" pipe or 400' of 4½" drill pipe. Hydraulic indexing positions each pipe for the change at any angle.

Gimbled control console

Drilling controls are on a gimbled console that moves with the derrick. The operator is always by the hole with the controls at his fingertips.

Safe, simple pipe handling

The TH100A rotary head retracts over the carousel. Top and bottom wrenches secure the pipe and a hydraulic breakout wrench loosens the joints. A pipe flipper positions the pipe at any angle. A safe, simple one-man pipe change.



Twin cylinder cable feed

Pullback power for deep holes and precise slow feed for accurate sampling. Regenerative fast feed for rapid pipe handling. High strength cables are strong and easy to maintain.



High ambient cooling

Hydraulic, compressor and engine cooling systems are rated for 125 deg. ambient temperatures. This means lower maintenance costs and longer component life.

High productivity

An Ingersoll-Rand HR2 air compressor provides 750 cfm /350 psi air. A proven leader for reliability and performance. A lifetime of service and parts close at hand.

High torque top head

A two motor spur gear top head drive with a 3" id. swivel easily handles dual-wall or conventional drilling applications.

Available options

- Hydraulic Powered Sand Reel
- Injection Line Oiler
- Water injection systems
- Twin Front Leveling Jacks
- Two and Three part hoisting line
- Hydraulic Powered Mud Pumps



TH100A Specifications

Dimensions		Carousel capacity	
Length (derrick down)	36'0" (11 m)	20 pieces of 4½" x 20' (114 mm x 6 m) or	
Height (derrick down)	12'6" (3.8 m)	25 pieces of 3½" x 20' (89 mm x 6 m) pipe.	
Height (derrick up)	42'0" (12.7 m)	Hoist	
Width	8' (2.4 m)	Capacity (bare drum)	16,000 lb. (7260 kg)
Shipping weight (approx.)		Speed (bare drum)	94 fpm (23.5 m/min.)
Air rig	57,500 lb. (26,100 kg)	Engine (Truck)	
Air/mud rig	64,300 lb. (29,200 kg)	Diesel Drive	
Derrick		Air compressor	
Size	29' x 66' x 41'0" (74 cm x 168 cm x 12.5 m)	1-R HR2	750 cfm @ 350 psi (213 m³/min. @ 24.6 kg/cm²)
Rated capacity	65,000 lb. (29,500 kg)	Mud pump options	
Feed system		3 x 4 centrifugal	300 gpm @ 110 psi (1136 L/min. @ 7.7 kg/cm²)
Pulldown	30,000 lb. (13,600 kg)	5 x 6 piston	150 gpm @ 310 psi (568 L/min. @ 21.8 kg/cm²)
Pullback	59,000 lb. (26,760 kg)	5½ x 8 piston	222 gpm @ 338 psi (840 L/min. @ 23.8 kg/cm²)
Drilling feed rate	27 fpm (8.2 m/min.)	Water injection options	
Fast feed rate	232 fpm (70.7 m/min.)	Hydraulic-driven pump; capacities from zero to 8, 12 or 25 gpm (30, 45 or 94 L/min.). The two larger sizes have pulse pumps for foam.	
Rotation		107,000 inch-lb. (1233 kg-m) @ 0-130 rpm	
Swivel and piping			
Swivel ID	3" (76 mm)		
Piping ID	2½" (64 mm) std., 3" (76 mm) optional		

A drill rig and a company you can depend on

Ask your IR representative to provide you with a list of recommended spare parts. For a small additional investment IR will provide you with frequently used maintenance and service items at the time of delivery. One more reason to buy a TH100A from Ingersoll-Rand.



When you select the TH100A for your next rig you are investing in a drill rig and a company. Ingersoll-Rand has been in the drilling business for over 80 years. It's a company that designs, manufactures and services drills, compressors, DHD's and bits and a line of tools and accessories. Worldwide service and parts support and state-of-the-art equipment are the IR combination—the winning combination!

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