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WATSON

INCORPORATED

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CABLE: WAMCO

SUBJECT: GENERAL INFORMATION ON THE WATSON MODEL 1000

The Watson Model 1000 is a totally self-contained drill unit which can be mounted on a truck or crawlers. The truck can be provided by Watson or the unit can be mounted on the customer's truck of suitable capacity. The standard Model 1000 drills shafts up to 30 feet deep with an optional 35 feet drill depth available. The drill can process holes ranging up to 7 feet in diameter with the economical range being from 1 to 5 feet in diameter.

The Model 1000 contains all of the functions necessary for setting up and processing a shaft, including: four hydraulic outriggers for stability, a hydraulic slide for positioning, a hydraulic swing for positioning and for swinging off of the shaft when unloading the soils from the tool, two hydraulic mast cylinders for raising, lowering and positioning the mast, a hydraulic kelly cylinder for raising and lowering the kelly, and a hydraulic winch for handling tools and casings. The kelly rotation is through a mechanical power train which is powered by a diesel engine and a torque converter driven "powershift" transmission.

A truck mounted drill is recommended when jobs are not large and when the unit has to travel to and from jobs often. A crawler mounted drill is recommended when the jobs are large and can absorb the costs of transporting the equipment, or when mobility on the job site is of significant importance, or when the surface soil has extremely poor bearing capacity. The crawlers on a crawler mounted drill serve as a working platform, thus no outriggers are required.

The kelly on the Model 1000 is contained within the mast, and all Watson tools will fit the kelly "foot". Thus the Model 1000 can be used under all varieties of drilling conditions. All of the functions of the drill are controlled by one operator from the operator's console.

MODEL 1000 SPECIFICATIONS

POWER UNIT: '

- Diesel 130 bhp @ 2800 rpm (rated) 271 ft-lbs torque
- Gas 135 bhp @ 2800 rpm (rated)
 261 ft-lbs torque

TRANSMISSION:

- Torque converter driven powershift
- Constant mesh planetary gearing
- Three speeds forward and reverse

SWING:

• 360° continuous rotation

KELLY PERFORMANCE:

- Raising and lowering speed 180 fpm
- Crowd and retract force 12000 lbs

ROTARY PERFORMANCE:

- Max. speed 172 rpm
- Max. torque 67000 ft-lbs (diesel)

DRILL DEPTH:

30 ft. nominal. Variations available on request

WEIGHT:

• 31,000 lbs. (approx)

