# 255 PTC

## SPECIFICATIONS

STANDARD RIG

Engine – Gas, air cooled, 25 HP @ 3600 RPM
Key start
Fuel tank capacity 8 Gal.

Rotary – Hydraulic drill head 1 ?" hex box output shaft
Standard Head – for use with 2"-12" core barrels.
0-1,250 RPM/75 ft.lbs. max torque
Optional 2-Speed Head – for use with larger diameter core barrels
0-425 RPM/235 ft.lbs.
0-210 RPM/470 ft.lbs.

Optional 2-speed head – for use for coring with Smaller barrels and limited sub grade augering (3-4" diameter, 3-5')
0-1000 RPM/97 ft.lbs.
0-500 RPM/194 ft.lbs.

Bit Guide – swing away, adjustable 2" – 12" dia.
Or adjustable 6"-18" dia.

Pulldown – bit pressure (adj.) 0 – 5,460 lbs.
(max) 10,175 lbs.

Pullup - (max) 14,675 lbs.

Stroke – Hyd. Cyl. – Main mast 42 in.
Mast slide/foot 20 in.

Feed Rate – (max) Up 43 FPM
Down 62 FPM

Mast Swivel – Hydraulic, total movement 16 in.
(8" either side of center)

Mast Pivot – Manual – up to 180° either side of center

Mast Tilt – Hydraulic – horizontal to vertical

Slide Base – Hydraulic, in/out 12 in.

Water Pump – progressing cavity pump 0 – 7.5 gpm
75 PSI max

Hydraulic System
Pump – Variable volume, pressure compensated piston pump
Max. Flow 13 GPM
Max. Pressure 3000 PSI
Hyd. Reservoir 12 GAL
Hyd. Oil Cooler 18,000 BTU/HR

Dimensions (base rig)
Max. mast height – from ground 7'11"
(can be raised in 8' ceiling)
Min. height – from base 34"
(mast folded for transit)
Width – in transit position 34.5"
Length – in transit position 95"

Weight – 255 PTC 1,700 lbs.
- 255 PTC, steel tank & trailer 4,400 lbs.

Trailer – 255 PTC Model Trailer tandem axle 11,000 lbs. GVW, 2 5/16" ball or 3" lunette eye adjustable hitch, 6' tool box, 200 gal. stainless steel tank, electric brakes, three hydraulic jacks, dolly wheel

Diesel Engine – 25 H.P. liquid cooled with electric start

Specifications are based on engineering and are subject to change without notice.

SIMCO Drilling Equipment, Inc.
802 Furnas Dr., P.O. Box 448
Osceola, IA 50213
(641) 342-2166 (800) 338-9925
FAX: 641-342-6764
www.simcodrill.com

## UNDERSTAND NOT ONLY WHAT YOU DO BUT HOW YOU DO IT!

# CORE DRILLING

As there are more variables in core drilling than in any other type of cutting, being competent in core drilling is the foundation of a good cutter.

**Factors that affect bit performance and company profit:**

**Speed** - (RPM) - If the speed is too high, the bit will polish. If the speed is too low, the job will take too long.

**Power** is necessary to maintain the proper cutting speed. Efficient cutting means keeping the bit at the right speed.

**Water** - Not too little and not too much - the right amount removes slurry and keeps the cut clean.

**Aggregate** - You can=t see it until you=re done, but a good driller can feel the right speed and pressure to cut varying types.

**Steel** - slows the cutting process. Maintaining drill motor speed is important.

**DON=T PUSH THE BIT TOO HARD!**

**MAINTAIN SPEED!**

**Bond Specs** - Too hard and it takes too long. Too soft and it costs too much.

**Proper Alignment** is necessary for good bit life. This means the rig must be properly anchored. A rig can be anchored with concrete anchors, vacuum or a post jack.

**STANDING ON THE RIG IS DANGEROUS AND NOT ACCEPTABLE!**

**Core Rig Maintenance** - performance, speed and bit life will mean little if your rig has bad shims, bearings and hold down devices.

**RECOMMENDED**
**CORE DRILLING SPEEDS**

| Bit Diameter | Minimum RPM | IDEAL RPM | Maximum RPM |
|---|---|---|---|
| 2" | 1200 | 1600 | 2000 |
| 3" | 600 | 1050 | 1300 |
| 4" | 600 | 800 | 1000 |
| 5" | 475 | 640 | 800 |
| 6" | 400 | 530 | 665 |
| 7" | 340 | 450 | 600 |
| 8" | 300 | 400 | 500 |
| 10" | 240 | 320 | 400 |
| 12" | 200 | 265 | 330 |
| 14" | 170 | 225 | 285 |
| 16" | 150 | 200 | 250 |
| 18" | 130 | 175 | 220 |
| 20" | 120 | 160 | 200 |