

IDC DRILLING COMPANY

AUSTEX Exploration Drilling

X300 AC **AIRCORE**



DEEPLY INVOLVED

AUSTEX X300 AC PERFORMANCE SPECIFICATIONS

Mast

- Compact box section mast structure, 5.2 metres overall length (plus winch and table foot).
- Heavy-duty dump mast plate with single hydraulic cylinder providing 1.8 metre dump stroke.
- Twin hydraulic mast raise cylinders.
- 3.5" bore x 2" rod x 75" stroke feed cylinder actuating 2:1 ratio travelling sheave system providing 3.8 metres of rotation head stroke.
- Rapid head traverse speed (2.8 seconds top to bottom, 4.6 seconds bottom to top).
- Variable pull-back and pull-down fine feed control.
- 7,500 kg pull-back capacity with dual heavy duty pull-back and single pull-down leaf chains.
- Slips table assembly with air actuated upper and lower Bisalloy rod spanners and hydraulic cylinder mounted to suit breakout wrench.

Rotation Head

- AustEx 4000 drive head with heavy-duty hardened and ground gears.
- Travelling head plate mounted to mast via 4 heavy-duty large diameter adjustable vee rollers.
- Twin hydraulic rotation motors providing 4000 Nm of rotation torque at 85 rpm.
- 0 to 170 rpm speed range.
- 70mm diameter hollow bore spindle.

Base

- 4.3 metre long rig base x 2.3 metres wide to fit inside standard sea container.
 - Design to suit crawler track frame and/or truck fitment.
 - Rear hydraulic stabilising jack legs fixed into rig base.
 - Front hydraulic stabilising jack legs, each side incorporated into hydraulically extendable frame.
 - Independent tilting, dumping & sliding rod bin - 30 x 3 metre (3½") rods = 90 metre capacity.
- Power Unit
- Caterpillar 3406 diesel engine producing 440 horsepower at 1800 rpm or.
 - Atlas Copco 2-stage ORV10 compressor air-end providing 600 cfm at 250 psi or
 - Hydraulic pump group direct coupled to front of Caterpillar engine consisting of:
1 x Rexroth A10V100 piston pump (171 litres/minute @ 3500 psi)

- 1 x Rexroth A10V71 piston pump (121 litres/minute @ 1500 psi)
- 1 x Parker triple gear pump (2 x 39 litres/minute @ 2500psi, Pilot 27 litres/ minute @ 700psi)

Control Cabinet

- Pressed steel drillers control consol with hinged opening doors on both sides.
- 4 spool Rexroth 4M15 directional control valve bank:
Section 1 - Rotation
Section 2 - Fast Feed
Section 3 - Survey Winch
Section 4 - Spare
- 6 spool directional control valve bank # 1:
Section 1 - Left Hand Rear Jack Leg
Section 2 - Right Hand Rear Jack Leg
Section 3 - Left Hand Front Jack Leg
Section 4 - Right Hand Front Jack Leg
Section 5 - Front Jacks Extension
Section 6 - Spare
- Infinitely variable fine feed flow control valve.
- Infinitely variable pull down pressure control.
- Infinitely variable hold back pressure control.
- Pneumatic foot pedal for air actuated upper spanner.
- Pneumatic directional control valve for air actuated lower spanner.
- Engine and compressor controls.
- Gauges:
Engine - RPM Tachometer, Oil Pressure, Water Temperature.
Compressor - Discharge Temperature, Interstage Pressure, Receiver Air Pressure,
Down Hole Air Pressure.
Hydraulic - Main System Pressure, Pull Down Pressure, Hold Back Pressure, Cooler Fan Pressure, Auxiliary Pressure.

Miscellaneous

- Double element filtration for engine and compressor air inlets.
- 450 litre capacity hydraulic oil tank with level sight glass and return & case drain filtration.
- Hydraulic pressure filtration.
- FMC A0413C vertical piston water pump.
- Top of mast mounted survey winch with brake.
- 24 volt electrical system including heavy-duty battery box and emergency stop buttons.
- Safety guarding to moving components.