



T685i

REVERSE CIRCULATION RIG

The Schramm T685i is a heavy duty drill rig equipped with the latest Electric over Hydraulic technology, allowing operators to control the rig from a safe distance using a rugged, portable operator console.

The T685i is ideal for down-the-hole hammer, air rotary, mud rotary and dual tube drilling operations.

A separate drill rig subframe design permits stable mounting on standard trucks, crawler undercarriage and other special purpose vehicles. Dual motor, high capacity, single reduction top head drive rotation and efficient pipe handling systems make this series a match for the toughest drilling projects.

Any climate, any terrain, built your way, delivering maximum performance and reliability in the most extreme environments.

HIGHLIGHT FEATURES

74,000 lb (33,566 kg) pullback (90,000lb optional)

45° - 90° sliding angle mast

Hands free power breakout and pipe handling

12" hands-free table opening as standard

Programmable Logic Controller (PLC) controlled drilling system

ELECTRIC OVER HYDRAULIC

Electric over Hydraulic enables remote control of rig.

ROD RETENTION

Integrated rod retention grippers for operator safety.

MAST LOCKING

Mast mechanically locks at five degree increments (45°-90°) for increased safety and stability.



GRADE CONTROL | RC EXPLORATION | WATER WELL

T685RIG
SERIES

T685i REVERSE CIRCULATION RIG

SPECIFICATIONS

DECK ENGINE

- CAT C27 (Tier 2): 950 bhp (708 kW)
- Engine canopy fire suppression system
- 950 litre fuel tank (steel or aluminium)

COOLING

- Aluminium V-Pack, 55°C ambient design temperature

MOUNTING

- Truck

COMPRESSOR

- Sullair 20/12 STR - 2 stage, 1350 cfm @ 350 psi, 1150 cfm @ 500 psi

TOP HEAD ROTATION

- Schramm dual motor rotary head
- OMVW 500 motors (other options available)
- Heavy duty nylon head slides

MAST & FEED SYSTEM

- Operating angle, 45-90°
- Mechanically locks in 5° increments
- Mast slide travel: 2,243 mm
- Head travel: 9,144 mm
- Feed cylinder: (2) 5 1/2" bore x 2 3/4" rod x 180" stroke
- Top head driven by two hydraulic cylinders though HD roller chain
- Pullback capacity: 74,000 lbs. (33,566 kg)
- Pulldown capacity: 35,270 lbs. (16,000 kg)
- Fixed or adjustable mast foot of 595-895mm

BREAKOUT & SPANNERS

- Metzke compact MB550 dual breakout (other options available)
- Top & bottom pneumatic spanners (other options available)

SLIPS TABLE

- 12" dual acting hydraulic slips table (other options available)
- Supplied with inserts

ROD HANDLING & STORAGE

- KL DA554 rod handler
- Rod Retention system
- Radio remote
- Tilting rod bin: 5x9 (45 rods, 4.5") Max. 10t capacity

WALKWAYS & SAFETY

- Hydraulically operated passenger side walkway
- Sequenced rotation guard
- Service bulkhead for remote greasing and fluid drain
- Fire suppression 105L loss in pressure system
- 9kg dry chemical extinguisher (2)
- Mast access platform

JIB BOOM/SURVEY WINCH

- Exploration Jib Boom, 500 kg WLL with survey winch

HYDRAULIC SYSTEM

- Seven (7) hydraulic pumps: six (6) variable volume and one (1) fixed displacement
- Hydraulic circuits filtered and protected by relief valves

AIR & MUD LINES

- 1.5" air/mud lines rated to 1000 psi
- Full length hose socks
- Engineered whip checks
- Auxiliary air & booster lines
- Actuated hands free

WATER INJECTION SYSTEM

- FMC E0143C water pump (optional under-deck Dynaset)
- 3-way diverting valve for wash down, water injection, and dust suppression

TOOL LUBRICATOR

- Positive displacement, air operated piston type pump
- Oil flow: 0-5 gal/hr (0-19 l/hr) 68.5 litre capacity

OPERATOR CONSOLE

- Portable operator console connected via umbilical cord
- All drilling functions are electronically controlled

LIGHTING & ELECTRICAL SYSTEM

- 24 volt DC electrical system
- LED lighting
- 3 emergency stops

RIG WEIGHT & DIMENSIONS

Note: Approximate only; varies with rig configuration.

- OA length - transport: 12,000 mm
- OA width: 2,800 mm
- OA height - transport: 4,590 mm
- Approximate weight - 43,000 kg (truck dependent)

ADDITIONAL FEATURES

- Rod bin walkway
- 750 kg Jib Boom
- Energy Chain (E-Chain) hose management system

