

# GROUND TEST

## TECHNICAL SPECIFICATIONS COMACCHIO GEO405



### OVERVIEW

The rubber-track crawler mounted Comacchio GEO405 is a compact, yet relatively high capacity rig. It is capable of carrying out a wide range of testing and sampling in deep geotechnical investigations. The rig is well suited to poor access conditions, including restricted width and softer subgrades.

### CAPABILITIES

#### Drilling

- Solid flight augering to 15 m
- Hollow flight augering to 20 m
- 100mm Ø wash boring to 100 m
- ODEX (HW size) to 15 m
- NMLC coring to 70 m
- NQ wireline coring to 350 m.
- HQ wireline coring to 250 m

#### Sampling

- Undisturbed ( $U_{50}$ ,  $U_{63}$ ,  $U_{75}$ )
- Piston
- Well installation

#### In-situ testing

- Standard penetration (SPT)
- Packer (Lugeon)
- Shear vane
- Pressuremeter
- Cone Penetration (CPT) to 4.5 t thrust

### OTHER FEATURES

- Relatively narrow width
- Low height
- 300 m wireline winch
- Dump mast for angle drilling up to 45°
- Integral slinging points for craneage purposes
- Triplex pump (120L/min @30 bar) and progressive cavity pump (200L/min @12 bar)
- Double hydraulic “make and break” clamps

### SAFETY

- Remote control tramming
- Safety cage with rotation isolation
- Dual pole battery isolation
- Rig engine “watchdog” auto-shutdown
- Control panel and side mounted emergency stops
- Guarded automatic SPT
- Spill kit, first aid kit and fire extinguishers

### BENEFITS

- High capacity and versatile rig, suitable for deep geotechnical investigations in poor access conditions.
- Rubber tracks allow use on pavements or weak subgrades.
- Modern and powerful beaver-tail truck allows for efficient mobilisation to regional areas.
- 4x4 support truck allows equipment to be transported close to rig.



## RIG SUMMARY

### DIMENSIONS

Width:	1.5 m to 1.7 m
Length, mast down:	6.2 m
length, mast up:	4.5 m
Weight:	7 t
Height, full mast, (w/foot):	6.2 m (6 m pull)
Height, standard mast, (w/foot):	6.5 m (3 m pull)
Height, mast down:	2.9 m
Work area length:	12 m (minimum)

### RIG SPECIFICATIONS

Engine:	4 cyl Kubota
Rotary drive:	Comacchio 8 sp 40 to 980 rpm
Winch lines:	1 main @ 2000 kg 2 w/line @ 500 kg
Pull down:	4500 kg
Pull back:	6500 kg
Head stroke:	3.5 m
Mast dump stroke:	0.7 m
Casing clamp:	Double make and break
Breakout spanner:	Double make and break
Jack legs:	Four (0.6 m stroke)

### CARRIER TRUCK SPECIFICATIONS

Make/Model:	Isuzu FVY 1400 6x4
Wheels:	Steel, tubeless tyres

### SUPPORT TRUCK SPECIFICATIONS

Make/Model:	Isuzu/NPS75 4x4
Wheels:	Steel, tubeless tyres

