

GEOTECHNICAL ACTIVITIES



SOTRAVIC
water • environment • energy

SOTRAVIC GEOTECHNICAL

Over the last three decades, Sotravac has created employment, developed skills, applied technology and delivered infrastructure throughout Mauritius and Indian Ocean Islands. Careful step-by-step expansion in both resources and experience has enabled us to become the market leader in sewer and water infrastructure, waste and landfill management, geotechnical investigation and renewable energy solutions for both public and private clients. Today our Group's operations are focused on the following in 3 areas: Water, Waste & Energy, Equipment & Logistics.

Our Geotechnical Department was established 15 years ago and has a strong track record of delivering high-quality engineered drilling, coring, investigation and geo-environmental assessments. We have the ability to cope with difficult and restricted site access across all ground conditions when executing various types of investigation or drilling works. Our drilling teams are trained to the highest standards to form boreholes for sampling, testing, gas and water extraction for geotechnical and geo-environmental assessments.

Geotechnical Activities

Our comprehensive service can be integrated with any project's environmental engineering requirements and includes:



GEOTECHNICAL INVESTIGATIONS



FOUNDATION INVESTIGATIONS



MICRO/SMALL PILING WORKS



DRILLING OF GAS WELLS/BOREHOLES



MARINE/LAND GEOPHYSICAL SURVEYS

We are committed to innovation in drilling techniques and this is evident in the range and versatility of our rigs.



PILING AND ANCHORING APPLICATIONS

Sotravac is a leading engineering, contracting and services company in Mauritius. We are introducing a broad range of construction piling and anchoring applications designed to address situations where conventional methods of foundation stabilization or repair would not be feasible.

Our fast and effective solutions include:

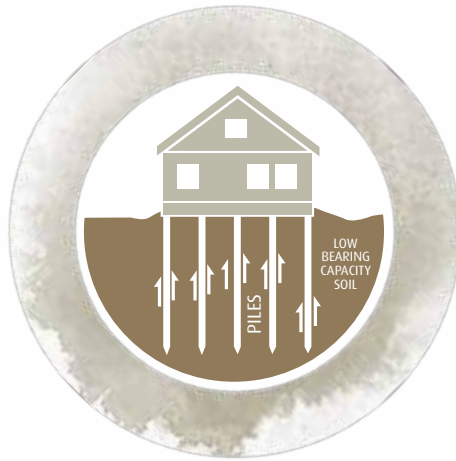
- Drilled Piles/Micro Piling
- Foundation Underpinning
- Soil Stabilization/Retaining Structures
- Anchor Stressing

OUR SOLUTIONS



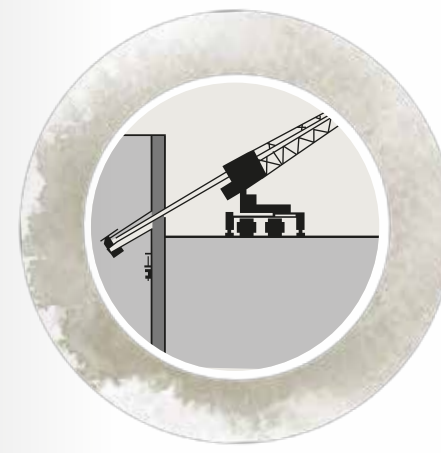
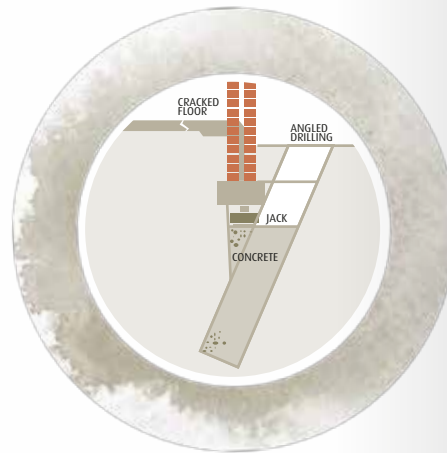
Drilled Piles/Micro Piling

Our drilled in-situ concrete piles are particularly well suited in cases where the heavy vibrations caused by pile driving machinery could result in surrounding damage. Potential applications include the construction of foundations for a wide range of civil engineering and building structures.



Foundation Underpinning

Solid foundations are critical to the structural integrity of your building or structure. To prevent your foundations from sinking or settling due to such issues as inadequate drainage, plumbing leaks, extreme dry soil, or poor soil conditions, we provide reliable underpinning services to permanently strengthen and stabilize your structure, thus preventing any further vertical settlement.



Soil Stabilization/Retaining Structures

We can improve virtually any soil for bulk filling and construction of roads, pavements, embankments, reinforced earth structures, railways, housings and industrial units. By means of horizontal, vertical or angled drilling, sides can be stabilized and securely anchored with cast-in reinforcing that is tensioned to the specified capacity.



Anchor Stressing

The use of pre-stressed ground anchors is a common practice in a wide range of civil engineering applications such as tower foundations, tie-back walls, slope and dam stability, and tunnel bolting. We apply the preferred and most accurate way to pre-stress an anchor, i.e. using a hollow ram hydraulic jack which couples directly to the end of the anchor with a pull rod assembly.



PILING AND ANCHORING EQUIPMENT

Our Equipment

We leverage the expertise of our geotechnical engineering team to offer our clients a full foundations package from design to completion, including piling, anchoring and grouting. We have also given careful consideration to the choice of equipment to ensure its suitability. In addition to a new multi-purpose mini piling rig and Italswis grout batching plant, we have opted for Casagrande and Schramm drilling rigs, which offered us the best multi-disciplined equipment with full backup service as required.



Casagrande C6 XP Drilling Rig

The Casagrande C6 XP drilling rig has the following capabilities: mini piling, soil nails, soil/rock anchors, DTHH, symmetric piling, jet grouting and small CFA.



Schramm T660 (700HP) Drilling Rig

The Schramm T660 (700HP) drilling rig is mounted on a Mercedes Actros 8x8 unit with a 900 CFM on-board compressor at 25 bars. It can drill water boreholes with 400mm casing down to 150m and geothermal exploration wells of diameter 200mm down to 1,500m.



Pile Testing Equipment

To ensure compliance with structural integrity standards, Sotravic also has cutting edge pile testing equipment using new computer-controlled data loggers and requiring NO lone working with a pre-programmed testing cycle.

Our testing capabilities include:

- Integrity Testing PIT/TDR
- Static Load Testing
- Tension Testing
- PDA Testing
- Vibration Monitoring

Description of Equipment

Equipment & Description	Number
Casagrande C6XP – Crawler Piling Rig	1 No.
Schramm T660 – Truck Mounted Drilling Rig with attached Air Compressor	1 No.
Schramm T 60B – Truck Mounted Drilling Rig	1 No.
Volvo EC 210 with Drilling Attachment	1 No.
Apageo Apafor 38 – Geotechnical Drilling Rig	1 No.
Watermaster – Classic III	1 No.
Warman Dredging Booster Pumps	2 Nos.
Air Compressor 800 CFM – 1070 CFM – 20 to 25 bars	3 No.
Italiss – Minigrout II – Grouting Mixer / Pump	1 No.
Tractor – Massey Ferguson	1 No.
Bowser for water	1 No.
Submersible Pump	2 No.
Olympian Electric Generator EP 110 – 110 kVA	1 No.



CONTACT US

Please feel free to contact us with any of your requirements and we will be pleased to offer alternative suggestions and smart design alternatives for more economical and cost effective works using our in-house capabilities.

Vincent Puran
Project Manager

Sotraviv Ltée
Industrial Zone, La Tour Koenig