Intrafor is a leading ground investigation and engineering specialist with over a hundred years of working history. Our team carries out technically challenging projects in both public and private sectors, providing sophisticated and cost-effective solutions to meet the client’s needs. We specialise in geotechnical engineering and foundation works and perform a wide range of activities – including ground investigation, ground improvement and construction of special foundations for buildings and infrastructures.

Our capabilities include:

- Cone Penetration Testing
- Pressure testing
- Horizontal testing
- Sonic CPT testing
- Pressure meter tests

Intrafor offers a complete range of CPT services, from setting-out to reporting. We have both the equipment and the know-how to satisfy and exceed the project requirements whilst delivering a cost-effective solution. We are able to perform tests in almost any environment, including:

ON SLOPES

- Intrafor’s CPT services are led by our flagship rig, CPT-A10. Thanks to its four hydraulic jacking legs, this steel-tracked crawler rig is able to traverse boggy ground and to test on slopes.

INSIDE CONFINED SPACES

- Our portable ram and power pack set, CPT-B20, is capable of testing anywhere – from basements to inside tunnels – and of performing horizontal CPTs.

OVER WATER

- Thems tools unconditionally CPT-820 can also perform marine CPT, on jack-up barges and cantilever platforms. It can also deploy CPT casing to help support CPT rodes between the deck and the seabed.

Intrafor’s CPT-A10 rig has been used to:

- Pre-drilling and casing of impenetrable made ground
- Calculation of geotechnical parameters
- Factual reporting

Intrafor undertakes CPTs to prove vibro compaction met requirements

- Marine CPTs conducted with seabed system
- Definition of the boundaries of soft soil layers

Intrafor is a government approved Group II contractor, allowing us to undertake GI works of unlimited value in the public sector. Operating through the VSL International network, we are able to provide our services worldwide. Our ground investigation techniques include but are not limited to Horizontal Directional Drilling (HDD), conventional and inclined drilling, land and marine Cone Penetration Tests (CPT), downhole in-situ testing, including impression packer, water inflow, water absorption and Goodman jack, Standard Penetration Tests (SPT), vibro coring and installations of geotechnical instrumentation.

Also present around the world through VSL local offices. See website for details.

www.intrafor.com

A Subsidiary of VSL International
CPT data in Asia and the Middle East. CPT a popular ground investigation technique across Europe and the USA, with use increasing. Correlations between CPT data and geotechnical parameters have been well proven, making CPT an ideal way to delineate potentially problematic or target soil functions as part of a ground investigation programme.

**High-Resolution Data Capture**

CPT acquires data points every 10mm of advance and with far greater sensitivity than other GI methods, this helps to delineate the smallest changes in soil properties over wide-centimetre-boundaries.

**Adaptability to Different Ground Conditions**

The recent acquisition of CPT data makes testing programmes reactive and adaptable. On-site engineers are able to report on site-ground conditions and update the programme accordingly.

**Speed and Accuracy**

The lack of an extracted sample means that reporting is quick. Data is processed and factual reports are produced in days, removing the lengthy wait for laboratory testing of samples. In-situ testing also minimises the disadvantage of being a more accurate representation of the trial ground conditions ever “standardised” samples.

**Efficient in Every Kind of Job Site**

CPT is a time-efficient technique and is easily adaptable to the job site configuration. When used on projects with good soil access and pre-cut or pre-slab excavation, testing positions such as Intrafor’s CPT-A10 – can achieve up to 150m of testing in a single shift. On sites where access is restricted or work is to be carried out in confined and cramped spaces, such as Intrafor’s CPT-B20 – can perform the tests with minimal drop-off efficiency or testing capability.

**Slope Testing**

For projects with hills to be excavated and dynamic loading to be applied, CPT can be used to evaluate and support the hillside.

**Site Investigation**

Efficient and adaptable, CPT can be used to support a wide range of site investigation scenarios, from the fresh ground to previously made ground. Intrafor’s range of CPT rigs are fit for almost any site investigation requirement. Intrafor has performed testing in the following different ground conditions:

- **Soil**
  - Clay
  - Silt
  - Sand
  - Gravel
- **Concrete**
  - Made ground
  - Made concrete
  - Concrete floor.
- **Dynamic Loading**
  - Vibratory compaction
  - Vibro compaction
  - vibro compaction.
- **Ground Improvement**
  - Ground improvement types such as vibro stone.

**CONCLUSIONS**

The lack of an extracted sample means that reporting is quick. Data is processed and factual reports are produced in days, removing the lengthy wait for laboratory testing of samples. In-situ testing also minimises the disadvantage of being a more accurate representation of the trial ground conditions ever “standardised” samples.