

**Enter the CPT Business  
with Confidence**  
Solution Brief





### Enter the CPT Business with Confidence

### Cone Penetration Testing Drives Productivity and Extends Capabilities

We find that many people are exposed to CPT (Cone Penetration Testing) in the course of doing their jobs or running their business. Often, professionals on construction job sites such as drillers, site engineers and foundation contractors have seen a CPT rig or have spoken with a CPT technician. CPT can be an attractive way to expand your business in a new, more profitable direction. Let's talk a bit about why that is, but first let's explain what CPT is in case you aren't familiar with some of the details.

CPT stands for Cone Penetration Testing. There are many reasons why engineers, construction companies, government agencies and geotechnical engineers need the information that only CPT can provide. For engineers and architects, it can be important to know the situation underground, such as what types of soils there are at different depths, where bedrock is and the depth of groundwater tables. From this information, they can determine how to design foundations for structures, drainage systems, the best ways to route underground utilities, etc.

Construction companies may need to identify sub-surface soil conditions so that they can estimate the extent of ground improvement needed, or the volumes of different types of soils that may need to be excavated and hauled away. Government agencies and consultants may request a CPT survey of a site to determine the presence of hazardous waste, the extent of the dispersion through the soil, how materials might migrate, the water table conditions, etc. With this information, they can build plans to design foundations, clean up areas and decide where to put monitoring wells for the long term.

Cone Penetration Testing is much what its name sounds like. A cone shaped tool is hydraulically pushed into the ground by an extendable rod under a great deal of pressure. The pressure can be enough to penetrate tough soils and even small rocks. The amount of pressure that it takes to drive a cone of a certain form factor (shape and size) at a standard rate of progress downward can help to determine the types of soil conditions present. One aspect of CPT that is difficult to replicate with other soil testing methods is that CPT provides a continuous report of conditions throughout the length of the push.



## Connect Data to Meaningful and Measurable Results

Since CPT is well established as a practice, tables are available which can accurately translate the push test data into meaningful results for engineers. Rather than extracting samples at different depths and sending them away to a lab for analysis, CPT can provide data quickly and right on the spot, which companies purchasing CPT services find very valuable. We've found at Vertek CPT that virtually anyone who has field machinery or rig experience can learn to do CPT.

One thing that we often hear is that the conditions for performing CPT are enjoyable compared to operating other types of field equipment. Professional CPT rigs are labs on wheels, so the testing operation for the most part is done in a clean, conditioned, enclosed space, with your favorite sports team playing on the radio if you want!

From a business perspective, because CPT is more of a niche service, and combines some technician types of skills in addition to operator skills, the hourly rates, or the rates per foot that a CPT rig can command are often higher than you can charge with other types of field equipment such as conventional drill rigs. Adding 'in-situ' (in the situation – or on site) soil testing can provide an alternative source of revenue that can balance the ups and downs of other related businesses. People can be cross-trained in CPT so that they are able to do either role as your business demands.

## Specialty Products Designed to Extend your Reach and Increase Revenue

Adding CPT can be an attractive business opportunity in the right circumstances. We do know however that it can be a bit intimidating for someone to enter a new business that requires some investment in time and resources and has a learning curve. That's why we at Vertek CPT cater to new industry entrants in their business decisions and help them to turn that business decision into years of successful and profitable growth.

Vertek CPT started out as a field CPT service provider. Many of our original engineers and technicians are still here and can operate any of our rigs. This helps us to provide you with real world advice in a number of areas. For instance, different parts of the country have





## **Milestone 1 – Preliminary Rig Selection**

different types of subsurface challenges that require specific expertise or a certain type of rig in order to build a good business.

Since we're the first rig builder to have built systems strong enough for worldwide geographies, we likely have a rig plan that works best for your needs, including rigs that make sense to start with. Since we specialize in helping our system of operators to be successful, you'll find a rig for every situation.

## **Milestone 2 – Market Evaluation**

In order to ensure you're maximizing your resources, we recommend that you undertake a market evaluation to get the best estimate on the the level of business possible in your area. We can provide you with a handy punch-list of items to consider, from how far you are willing to travel to and what types of geotechnical and environmental organizations are in your defined service area. From this evaluation, we can help you to refine your ROI calculator to give a more accurate projection of your potential business opportunity.

## **Milestone 3 – Equipment or Services Trial**

As we shared above, Vertek CPT is the only CPT rig builder to have a rig specifically designed for low-cost, low-risk entry into the business. We also provide an extensive product range that will let you grow your business as far as you want to go. As part of your purchase decision, we offer no cost machine demos and select equipment trials, financing and loaner options. It is possible for you to explore the market by using your contacts to get your first project or two, and Vertek CPT will back you throughout the effort. This will give you a chance to test price levels, your ability to learn to sell the service and to experience a real CPT operation run by seasoned professionals.

## **Milestone 4 – Training and Certification**

We know from experience that the first part of the CPT learning curve can look challenging. That's why we offer entry-level training and certification programs that are designed to ensure that you are ready to take on your first jobs and be successful. Vertek CPT offers advanced training that enables you to take on tougher jobs, perform



## Milestone 5 – Rig Supplier Evaluation

different types of tests, etc. Our goal is to ensure that you are well supported with training, service and support for the life of your business and that you get all of the knowledge that you need to be successful over the long-term.

As you are evaluating your purchase, we recommend that you explore the service offerings of your CPT equipment supplier. A successful CPT business runs on a basis of teamwork among your company and with the team that is supporting you. Vertek CPT is the only U.S. based CPT manufacturer. During this evaluation, people often find that domestic support leads to much faster answers to questions, troubleshooting of problems and quick-turn on spare parts and service. We also (at the time of this writing) are the only CPT company to offer business, technical training and materials that are designed to support your success.

We recommend that you speak with experienced operators of the various brands of equipment to determine what a day to day business relationship is like. We can put you in touch with some of the service providers that we supply.

Your goal is to be prepared to hit the ground running as a start-up and to profitably grow as far as you want to go. This is our goal too.

## Milestone 6 – Equipment Purchase or Lease

As you get ready to make your first investment in equipment, Vertek CPT is your partner in CPT success. We provide CPT service providers with the easiest and surest path into the business, the tools and training you need to get started and the product range and support to thrive as your business scales as far as you want to go.

By following this solution brief, you can maximize the profit and minimize the risk when entering the CPT business. We're proud of the fact that "There is a million+ pushed feet of experience built into every machine".

## Vertek CPT is Dedicated to Delivering High Quality Equipment and Support

You probably have questions at this point and we're here to help you the best that we can. Feel free to contact us at [sales@vertekcpt.com](mailto:sales@vertekcpt.com) or 802-728-4588.