

Talon Drill System Training Course



2-Day Field Training

Learn to use the Talon Drill System in several field settings, take core and install thermistors, learn what could go wrong, how to fix it, what to expect and more! We will meet in Whitehorse, YT for in the field, real-life training with drilling and permafrost expert Jim Coates of Kryotek Arctic Innovation Inc. Kryotek invented, designed, tested and has used the Talon Drill System to drill thousands of holes across the North. This invaluable course will set you up for success this field season - be your own Talon Drill System expert!



Course Outline

To register contact:

inquiries@kryotek.ca or

call 867-336-1597

Visit our website:

<https://talondrill.com>

Locations

The main training location is in Whitehorse, Yukon. Training can be arranged in Yellowknife, Old Crow, Dawson or Inuvik. The course is designed for people with no previous drilling experience to provide the skills and experience to reliably operate a Talon Drill System in remote Arctic fieldwork settings.

Itinerary

Day 1: Includes safety, maintenance, drill assembly and drill setup. We will learn how to judge what kind of drill rod and bit to use in different types of permafrost and thawed soils. We will learn how to drill with auger, core and side-smear samplers in sand, silt and clay. This will let everybody drill a hole and get confident in their ability to operate the drill. We will core fine-grained permafrost to 5 m depth using a 50 mm core system and auger-drill fine-grained permafrost to 7 m depth using the 25 mm auger. This day will be approximately 8 hours in the field.

Day 2: Includes more challenging drilling. We will core coarse-grained permafrost with gravel and cobbles. We will also drill into bedrock, boulders and permafrost gravel. We will install a thermistor in a borehole. We will also get a drill rod stuck in the hole and learn how to get it out. You will likely break some parts – this is the best place to learn what can break! At the end of the day we will go over field repair of commonly broken or damaged components including complete disassembly and rebuilding of the drill stand. This day will also be approximately 8 hours in the field.

What to bring

Warm clothes that you don't mind getting really dirty, good work gloves, personal effects, lunch, water and anything else you need.

Pricing

The course costs \$2,000.00 if there is only one participant. For each additional participant the cost is reduced by 10% for everybody! If there are 5 participants, it only costs \$1,200.00 per person. Everybody gets to operate the drill in a safe, supportive environment. Course fees include rental of the drill and tooling, safety glasses and ear protection, transportation from Whitehorse to the drill site, any equipment broken during training, bear safety supplies and the instructor. These prices are for Whitehorse. For courses in other communities there will be additional charges for instructor travel expenses, time and per diems.

About the Talon Drill System

The Talon Drill System was invented by Kryotek in 2011. Since then it has drilled over 10,000 boreholes in permafrost across the North. It is light enough to be carried by one person, can drill up to 10 m depths and make a hole through many different types of permafrost rock, ice and soil. Kryotek and Quantum Machine Works Ltd. have recently partnered to create specialized drill bits for scientific permafrost coring, instrument installation and geochemical drilling. The Talon Drill System is currently used by scientists, academics, engineers and exploration professionals across North America.