



**KINECTRICS**

# High Current Test Lab

Meeting Industry Needs With Specialized  
Expertise And Experience



## ESTABLISHED EXPERTISE

- Kinectrics' HC Lab testing capabilities assist our clients in improving and certifying the safety, quality and reliability of their PPE products and materials.
- Cost-effective testing to meet your needs and your schedule
- Confidentiality ensured by reputable, experienced, independent lab
- Flexible customer-focused service for testing both large and small products
- "One-stop" shop with additional support services available from other Kinectrics laboratories (i.e. High Voltage Testing)



## ENSURING OPTIMUM PERFORMANCE

Kinectrics offers an expanded, specialized High Current (HC) facility staffed by professional personnel with the expertise and ability to meet a complete range of testing needs for utilities and manufacturers. Our comprehensive HC Lab capabilities ensure your equipment, components and products meet or exceed industry standards and deliver maximum performance.

### **OUR HC LAB RENOVATIONS ENABLE US TO SERVE YOU EVEN BETTER WITH EXPANDED TEST CELL CAPACITY, STATE-OF-THE-ART MONITORING TECHNOLOGY AND FASTER TURNAROUND.**

From transmission class disconnect switches to small connectors, we offer a full range of independent confidential services to provide quality testing for certification or product development requirements. If your needs are for short circuit, power arc or temperature rise testing, Kinectrics has the ability and experience to provide the solution.

## ESTABLISHED EXPERTISE

Kinectrics' High Current lab is well established in the industry, providing advanced technical services for over 30 years. The High Current Test Facility is used to support utility transmission and distribution research programs, and by manufacturers for product development and certification testing.

Our expertise and capabilities have evolved in providing specialized testing and problem-solving services to various engineering groups in Ontario's utilities and the electrical industry across Canada and the United States.

Engineering consultation and other support technologies and services from Kinectrics provide clients with a "one-stop shopping" concept. From interpreting technical standards to basic equipment administration, our fully qualified staff can help meet your specific testing needs.



## ESTABLISHED TEST FACILITIES SPECIFICATIONS

Kinectrics High Current test facility is supplied by Hydro One's power distribution grid with a maximum fault limit of 200 MVA, allowing for stable long-duration faults. Test areas include a reinforced concrete test cell for destructive type testing, a 60 m (200 ft.) outdoor test span with reinforced towers for line hardware or temporary working grounds, and an indoor area for temperature rise tests. Modern multi-channel recording systems and professional video or highspeed photography provide a comprehensive record of test programs and procedures. Clients and inspectors are welcome during testing and may view procedures from our observation room, or from overhead monitors in the control room.

### Testing Capabilities



#### Momentary High Current Source

Precision Synchronous Make-Switch, point on wave control to  $\pm 0.1$  msec

##### Single Phase Testing

- 50-4000 V rms, currents up to 100 kA rms, 250 kA Asym. Peak
- 4 kV-20 kV rms, currents up to 12 kA rms, 30 kA Asym. Peak

##### Three Phase Testing

- 300-3000 V rms, currents up to 50 kA rms

#### Continuous High Current Source

##### Single Phase Testing

- 150-2500 V rms, currents up to 8 kA rms
- Up to 75 V rms, currents up to 16 kA rms

##### Three Phase Testing

- 150-2000 V rms, currents up to 4 kA rms

### Kinectrics tests to CSA, ASTM, ANSI, IEEE and other standards, for:

- Type tests on distribution class transformers
- Short circuit capacity on temporary working grounds
- Electric arc thermal performance of materials and safety equipment
- Electric arc hazard assessment
- Complete connector test series
- Peak withstand and thermal test on switchgear
- Temperature rise test on electrical equipment
- Power arc test on distribution class insulators
- Short circuit on overhead lines, OPGW and line hardware





[www.kinectrics.com](http://www.kinectrics.com)

**Head Office**

800 Kipling Ave., Unit 2  
Toronto, ON M8Z 5G5  
Canada  
416-207-6000

**Canada**

393 University Ave. 4th Floor  
Toronto, ON M5G 1E6

**USA**

2135 City Gate Lane, Suite 100  
Naperville, IL 60563

**United Kingdom**

17 Frederick Sanger Road  
Surrey Research Park  
Guildford, Surrey GU2 7YD

**Germany**

Hertha-Lindner-Strasse 10-12  
01067 Dresden

**Romania**

59 Grigore Alexandrescu Street.,  
2nd Floor Bucharest 010623

**India**

Sy No. 125,  
Bandan Mailaram Village  
Mulugu Mandal, Siddipet District  
Medchal, Telangana – 502336