

# Cable fault detection

Is your electrical installation at a standstill due to a problem with a high-voltage or low-voltage (HV or LV) cable or with an underground or overhead communication cable? Do you need urgent intervention to detect and locate the problem quickly? Vinçotte has more than 35 years of experience in detecting cable faults and is a leader in this technique in Belgium. You can rely on our specialised team for every intervention. Call us for urgent questions on xxxx. For all your other questions, use the form.

#### Your tailor-made solution

#### Locating cable fault (urgent intervention possible)

- Precise localisation of faults on overhead and underground cables, HV and LV cables, as well as signal cables, coaxial
  cables and telephone cables, with measurement of the distance to the fault and total cable length using reflection
  images on a large PC screen
- Precise localisation of sheath faults on PE cables
- Confirmation of measured values by indication at the fault location

#### Detection, localisation, selection of underground cables.

- Precise determination of the route and depth of high-voltage, low-voltage and signalling cables using integrated and/or portable transmitter-receivers with different frequencies and modulation techniques adapted to the location of the cables
- Exact identification of a cable in a wiring harness (e.g. if a cable has been cut or moved, etc.)

#### **Dielectric tests**

At 0.1 Hz with test voltage up to 54 KV on PE and other cables according to the HD620 standard, availability of high
capacitive power for testing long cables with graphical representation showing voltage and current (fault current at time
of break) during the test on a large PC screen

### Casing tests on PE cables

- DC (direct current) tests up to 80 KV also with measurement of voltage and current curve on a large PC screen
- Additional measures
- Continuity measurements
- Determination of the exact length of a cable (also possible with a large-screen portable reflectometer)
- Insulation measurements
- Determination of the phase sequence

Vinçotte can also provide technical expertise in the event of a dispute

### Your result

### Locating cable fault (urgent intervention possible)

Our expert will pinpoint the exact location of the cable fault so you can make the necessary repairs.

# Detection, localisation, selection of underground pipes.

We determine the route and depth of the cable and, if necessary, carry out a precise identification of the cable.

#### Dielectric tests

Our expert provides you with a test report according to the applicable standards.

# Please note

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### Our equipment includes:

- The integration of the latest technologies, such as ARM PLUS (Arc Reflection Measurement), which develops a stable arc using a double pulse at the defect location, while another controlled pulse performs the measurement. The stable arc enables accurate measurement
- This patented ARM Plus method allows the precise location of the defect and reference curves to be displayed on a large PC screen
- Other integrated methods, such as pulse current reflection or oscillations in decreasing voltage (decay plus) make it possible to detect almost all types of cable faults
- The vehicle is equipped with an ARM PLUS burner that generates highly accurate reflection images on a large PC screen during the burning process
- It has a high-power pulse generator of up to 1750 J and 32 KV
- Safety: an integrated isolation transformer enables galvanic separation of the mains and earthing of the three-point system, with permanent monitoring of the measuring vehicle's potential, with alarm and triggering, which means additional safety for operators
- Own generator: the measurement vehicle is equipped with its own emergency generator and can therefore operate autonomously
- Cable connection: flexible three-phase HV cable up to 50 m long and insulated up to 80 KV

## In which situation?

This service is intended for owners of electrical installations and network operators (distribution companies) with underground or overhead cables anywhere in Belgium:

- Port companies
- · Metal processing companies
- Railways
- Installers (contractors)
- Design offices
- SMEs
- Tertiary sector
- · Petrochemical companies
- Private individuals

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