



**Five reasons for you to choose Laborelec:**

- you have one-stop shopping for your energy needs;
- you get access to more than 40 years of experience;
- you get rapid service with reliable solutions;
- you increase the profitability of your installations;
- you benefit from independent and confidential advice.

When the reliability of your installations is at stake



**Your center of expertise for the quality of the electricity supply**

**Many years of industrial experience**

As the knowledge center of the electricity industry, Laborelec has built up many years of experience with Power Quality, EMC and electrical networks. In the rest of the industrial world, many companies call on our services too. Our experts are independent of all suppliers and installers, and so always advise you in all objectivity.

**Specialised service thanks to research**

Laborelec also conducts research projects in the fields of Power Quality and electrical networks. This consists principally of applied technological investigations, such as testing new devices and equipment, designing new systems for network control, or designing new monitoring equipment. To do this, we are in contact with a wide network of universities and research centers both in Belgium and abroad. Thanks to this background, we are in a position to design highly specialised services for you.



Quality of Supply

The technical Competence Center in energy processes and energy use. From innovation to operational assistance.

Laborelec: your center of expertise for the quality of the electricity supply

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## Guaranteeing reliability efficiently

*An uninterrupted electricity supply is of vital importance for your production. A reliably designed electrical network is of crucial importance. However, it's not only the continuity, but also the quality of the electrical voltage that is of great importance. Ensuring "Power Quality" is increasingly difficult in the industrial environment of today. A well thought out and pro-active approach can avoid unexpected costs in the future. Laborelec's experts will indicate to you the most efficient way to a reliable supply.*



### Maximum security for minimal cost

A power supply interruption entails an unavoidably great loss of production. A selective, not too sensitively set electrical security device is a first step towards avoiding loss of power. In addition attention also has to be paid to the quality of cables and switches. Voltage dips from the electrical network can have harmful consequences in industrial processes. In any case you want maximum security of the electricity supply for the minimum cost, without compromising on the safety.

### Power Quality and EMC: preventive measures pay handsome rewards

Power Quality disturbances like harmonics in industrial processes, are an increasing problem. On the one hand there are more and more devices on the market that affect the quality of the voltage, just think of power electronics. On the other hand there are also ever more devices that are sensitive to these disturbances. Consequences vary from poor performance, through faults, to irreparable harm. An adapted concept of the electrical installation is the solution to these problems.

Another complex area is electromagnetic compatibility (EMC). Poor EMC can affect control and driving systems and so cause a very large loss of production. Both effects require a preventive and expert approach.



**A sound approach to Power Quality today avoids expensive interventions and damage to installations in the future.**

## Specialised services on demand

*You can come to Laborelec for expertise in all aspects of Power Quality, EMC and electrical networks. Our service provision is flexible and can range from a brief recommendation to a comprehensive study. For acute problems we perform rapid, effective interventions.*

### Advice about Power Quality and EMC

Using readings, calculations and simulations we make an analysis of the problems. An advisory report is produced as a result with possible measures for optimising the electricity supply, including budgetisation of the solution. Possible themes are:

- Ensuring the Power Quality and EMC
- A preliminary study when connecting new loads
- Installing and checking a monitoring device for Power Quality
- Fitting a capacitor bank for reactive energy compensation



### Sustainable maintenance of electrical networks

Our experts can actively help with the management of your electrical networks. They give advice, test equipment, compare possible suppliers, perform control readings and themselves develop new systems. For example for:

- The security device and selectivity of electrical networks
- The selection of equipment as UPS and filters in order to improve the power quality
- The selection of equipment and cables for mid-voltage networks
- The development of "remote control" systems
- etc.