

## Electro-cleaning: cleaning of electrical equipment

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### Introduction

Vecom is internationally recognised as a manufacturer of cleaning products, for its services in the field of chemical surface treatment of metals and chemical cleaning on-site. The shipping department, too, has carved a niche for itself within the Vecom group with its high-performance vessel cleaning products and services.

That work on ships and in chemical companies is often carried out in difficult conditions and under the most stringent safety standards is a well-known fact. A fact which in the '70s set some people at Vecom to thinking. They carefully chose the appropriate cleaning chemicals and developed a safe cleaning method for cleaning live electrical equipment operating at voltages up to 15,000 V. And so it was that in 1973 the Belgian branch of Vecom, received, as the first Belgian company, an exemption on the ARAB (Algemeen Reglement voor de Arbeidsbescherming (General Labour Protection Regulations)) and AREI (Algemeen Reglement op de Elektrische Installaties (General Regulations for Electrical Installations)) from the Ministry of Economic Affairs and Labour.

### What is electro-cleaning?

Electro-cleaning is a process used to clean energised or de-energised electrical equipment and environments. Cleaning starts by first dedusting the ceilings and walls and then the electrical equipment.

For companies, the upside of cleaning energised electrical equipment is that production does not need to be stopped and that the work can simply be carried out during normal working hours. Insulating materials are used for cleaning.

### Why should electrical equipment be cleaned?

Electrical equipment can accumulate contamination such as dust (see image on the right). An electrical equipment that has received little or no cleaning is likely to malfunction as a result of such accumulation.



Contaminated equipment may lead to breakdown voltages, resulting in short circuiting, equipment failure (production stoppage), fire or even physical injury. The material or financial loss can therefore be overwhelming.

The persons who perform such cleaning services are BA4, meaning they are trained to reduce electrical hazards to a minimum. They may also perform well-defined tasks in areas where live equipment is present. They know the applicable procedures and safety instructions specific to their tasks.

If a customer opts for de-energised cleaning, this is always carried out in accordance with the "Vital 5" rules:

- 1 Disconnect the equipment (from the source of electricity)
- 2 Lock out the power source (with padlock) to ensure that the power supply is not inadvertently turned back on
- 3 Verify that no power is present (test for presence/absence of power)
- 4 Earth and short-circuit
- 5 Close off the work area.

The steps above are always carried out by the qualified personnel of the client.

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