The background of the slide is a photograph of an industrial facility. On the right, a large blue Dustcontrol vacuum system is mounted on a wall, featuring a vertical pipe and a collection hopper. To the left, a blue industrial machine sits on a metal frame. In the foreground, a yellow industrial cart with wheels is partially visible. The overall scene is a factory or warehouse environment with various pipes and structural elements.

Healthy Business

**Dustcontrol**®

# Control Systems

Motor starters and System Control Panels control the operation of the system, both operation of the vacuum producers and cleaning of the filter. A variety of other control functions can be installed as required. Even with a rather basic control system, intelligent features can be included to clear coarse material in the main tubing runs or control vacuum production and therefore energy consumption according to actual requirements.

# About Control Systems

The control system is used for the starting and stopping of the vacuum producer, turbo pump or high pressure fan. They also control filter cleaning and give condition indications. In the system control cabinets, additional functions can be built in by selecting options.

All Control systems must be installed by a certified electrician. The control panels conform to electrical protection class IP 54 (IC529). Manufacturing standards conform to EN 60204 (IEC204-1), VDE0113A2/381, DIN 57113A2.

Main fuses and working disconnects are not included in the control cabinets.

## System Control Cabinets



### System control cabinets are always delivered with

- Main switch
- All condition indications and manoeuvres on display
- PLC-control
- Motor circuit breaker
- Function for start and stop of pump/fan with soft start
- Pulse control for filter cleaning
- Start from external signal, prepared for intermittent run (10 min stop delay)
- Manual start on display
- Timers for filter cleaning and intermittent run can be altered on display
- Connection of thermal protection (pumps of 11 kW and more)
- Condition indications and alarms on display
- Start on demand for lag pumps/fans (panels for 2 and 3 vacuum producers)
- Signal for shutter valve shutting at start (fans)
- 5.5 kW and above



### Dimensions (base configurations)

Measure	Height	Width	Depth
1 pump/fan 2.2–11 kW	600	380	210
1 pump/fan 15–22 kW	700	500	250
1 pump/fan 30–37 kW	800	600	250
2 pump/fan 2.2–11 kW	800	600	250
2 pump/fan 15–22 kW	760	760	300
2 pump/fan 30–37 kW	1000	800	300
3 pump/fan 2.2–11 kW	1000	800	300
3 pump/fan 15–22 kW	1200	800	300
3 pump/fan 30–37 kW	1200	1000	300



# Control Systems

## DC Green System

Dustcontrol's patented DC Green System is a system for the control of vacuum producers that helps to save energy. The DC Green System together with our vacuum producers (turbo pumps), can offer you an energy saving with existing or new Dustcontrol vacuum producers of between 40 and 90 percent.

Depending on the number of open outlets, the rpm of the vacuum producer is optimised by the DC Green System, generating just as much vacuum as needed. By using an on-demand control with a frequency converter, the maximum performance is also increased compared to a normal system. When no outlets are open, the vacuum producer automatically switches to a saving mode. This eliminates the need for electrical microswitches at each work station.

Depending on individual cases and the current market price of electricity; payback time for the purchase of the DC Green System is generally between 1-5 years. In summary, lower energy consumption contributes to economic savings, less environmental impact and an increased life span of the equipment.

Your Dustcontrol representative can calculate the estimated saving in your case.



- ✓ Lower power consumption
- ✓ No micro-switches
- ✓ Higher peak performance
- ✓ Optimum suction performance at all times
- ✓ Increased lifetime of the vacuum system
- ✓ Efficient filter cleaning during running
- ✓ Decreased sound level



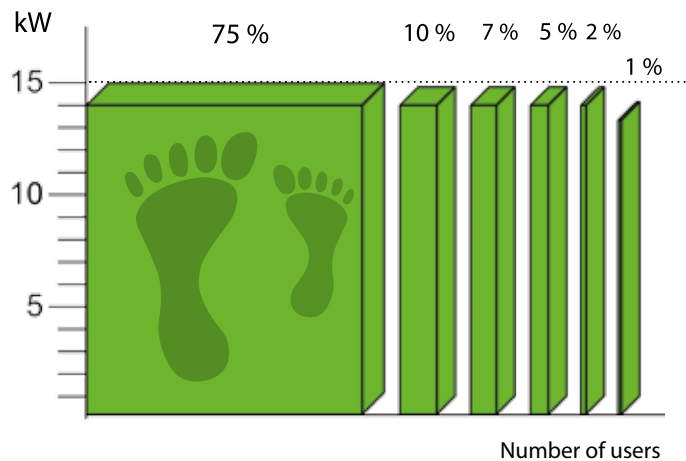
# Control Systems

## DC Green System

Why not reduce your carbon footprint and at the same time cut your costs by choosing the **DC Green System™**

### Traditional Vacuum System

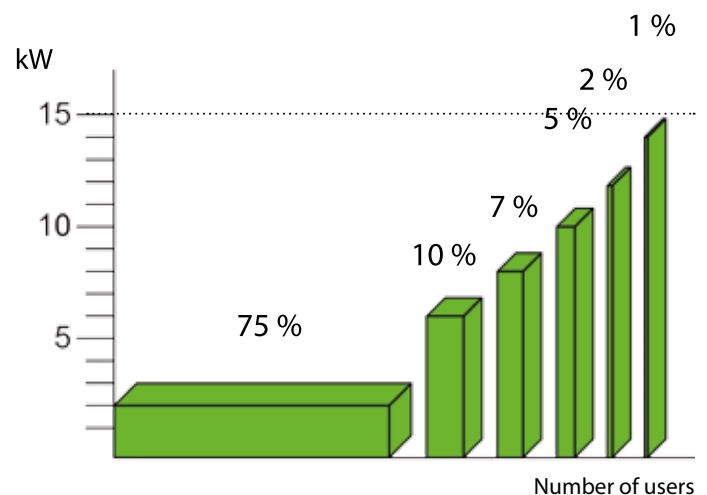
Part of total working hours



With a 15 kW vacuum producer and a traditional vacuum system, the rpm is almost constant, no matter if the entire plant is using the system or if one employee is using the system.

### Dustcontrol Green System™

Part of total working hours

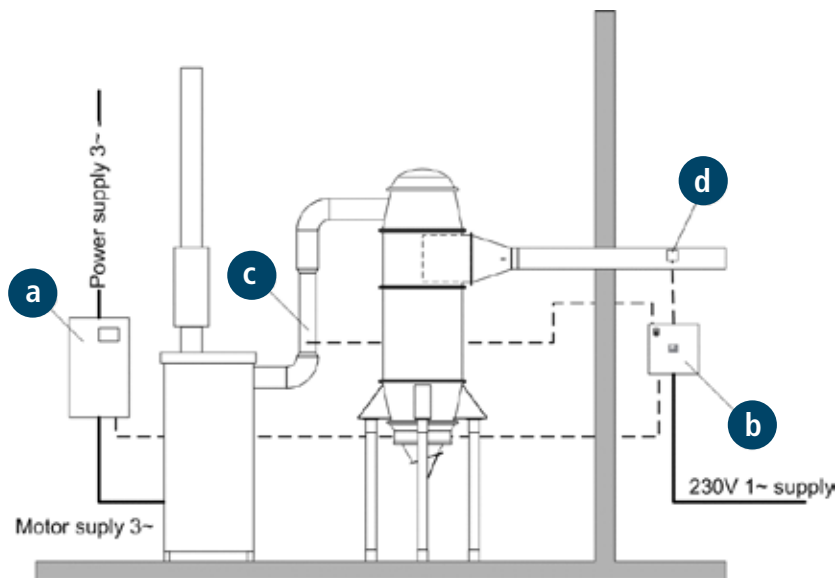


With a 15 kW vacuum producer with DC Green System the rpm and energy use is matched with the number of people using the system at the same time.

Visit [www.dustcontrol.com](http://www.dustcontrol.com) search **DC Green System** – for further info regarding your energy savings.

# DC Green System

DC Green System



**DC Green System =**  
Package consisting of

- a** 3 phase frequency converter for the pump
- b** 230V control panel with operator's display, PLC and necessary control connections
- c** flow sensor
- d** pressure sensor

## Your Energy Savings with the DC Green System

