



# CENTRAL VACUUM FOR CAR WASH

## A NEW GENERATION OF CLEANING SYSTEM:

- more attractive for users
- maintenance-free for owners
- high-efficient and low energy



# VACUUM CLEANING REDEFINED

Nowadays all carwashes are equipped with a **vacuum cleaning section**. Most of them use a traditional single-phase vacuum cleaner controlled by a coin timer, but the result is a poor performance, low efficiency, high cost of maintenance, high rate of failures and motor substitutions.

The evolution is represented by **central vacuum systems**: they have unquestionable advantages in terms of reliability and convenience. However, in the early days, only a primitive assembly was introduced, with rough parts and high-energy consumption.

- ▶ ERGOX **central vacuum system**, after long testing and expertise, improved every detail around the car wash vacuum:
- ▶ The systems equipped have reached more than 1.000.000 cleaned cars yearly without any trouble

**An ERGOX system is absolutely reliable**

- ▶ Ideal for self-service vacuum as well as for professional operators cleaning a rental fleet or prepping cleaned cars
- An ERGOX system can be adapted to any setup**

- ▶ Particular attention is given to energy consumption and efficiency in the long time, using complex control systems
- An ERGOX system is economical & environmental friendly**

- ▶ The car wash manager is called only for few ordinary operation: just emptying the dust container after some 1.500 cleaned cars
- An ERGOX system is virtually maintenance free**

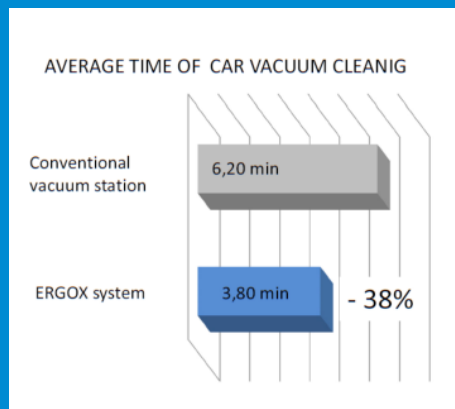




# BENEFITS

## FOR END USERS

The vacuum is really powerful and constantly strong, it is silent because motor is far away, it is convenient and quick, as the flexible hose is long and on both side of the car.



*It is verified: "some drivers use a specific carwash only for central vacuum"*



## FOR CARWASH MANAGERS

Basically, the only maintenance is to empty the dust collector after an average of 1.250 cleaned cars. Filters are cleaned automatically with a reverse pulse jet and all the system performance is controlled with a PLC and differential pressure devices.

## FOR THE ENVIRONMENT

Committed to keep our world healthier and cleaner: Ergox vacuum produces are powered by ultimate motors and inverter, reaching the Premium Efficiency Class IE3.

- Almost 97% of the cost of a motor in its life cycles is due to energy consumption and only 3% by initial cost of the motor \*

\*source Gardner Denver 2014, based on 20.000hrs lifetime and 0,13€/kWh



*Central vacuum is mostly paid back in less than 2 years*

## PIPES & FITTINGS

Ergox originates from industrial central vacuum: there is an unparalleled range and available stock for pipelines. Stainless steel or zinc coated pipes, ells, elbows, compression couplings, etc.



## PILLARS AND ROOFS

Standard or tailor-made pillars for ground or walls. Available for stand-alone or for connection with a stable roof. Covers and tents available in many fabrics.



## VACUUM VALVES

The gates are activated automatically, opening/closing airflow at each stall. Operate perfectly on every season condition or weathering.



## MOTORS

Side channel blowers, the motor power ramps up from minimal consumption (1.8kW) to full speed when needed, cutting energy constantly. Tower installation for space saving available, as well as cage for sound suppression or external mounting.



## FREQUENCY CONVERTER

The Siemens control for variable speed is the most reliable and with unparalleled I/O options. It is guaranteed for industrial continuous applications.



## CONTROL BOX

The brain of the system is equipped with a programmable PLC for data elaboration and storage. In the 8" touch screen display all parameters of system can be easily read.



## CYCLONIC PRIMARY SEPARATOR

In stainless steel, available in 3 different standards sizes or tailor made, can be placed even outside. With a true cyclonic filter detains 95% of vacuumed debris, wet or dry. This is the only part to be emptied on regular basis (from 1.200 to 2.500 cars)



## FINE DUST SEPARATOR

It is basically for motor protection and to avoid contaminated air vented out. The industrial conceived filter is made of special treated polyester fibers and cleaned automatically by reverse pulse jet system. These cartridge filters are to be changed not sooner than 10 years.



## COIN / TOKEN / BILL / CREDIT CARD ACCEPTORS

Ergox systems can be optimized for self-cleaning, both with free access or with toll. Mechanical or electronic coin/token counters are available with different standards and can be customized.



## HEAVY DUTY TOOL HOLDERS

Metal made with photocell to control the blast valves and airflow. A security check acts closing the valve after set time (default 8 minutes) of continuous use, to prevent accessory not restored in tool holder and limit reasonable service time.



## ACCESSORIES

The flexible hoses are available in different colors, with 360° swivels cuffs, reinforced and crush proof, smooth inside and non-kinking.



# FLEXIBLE AND ECONOMICAL

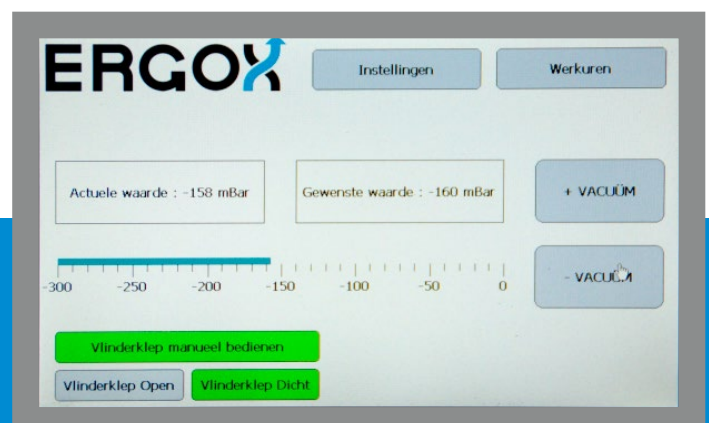
Whatever is the rate of occupancy of vacuum bays, there is always a controlled energy consumption, with optimal values of suction power and airflow. The electronic control is connected with filters and accessories with automatic differential pressure detectors keep filters cleaned and efficient.

If no station is activated, there is no energy consumption. With first user, there is less than 2 kW, that approximately is multiplied to every further user. For this reason, the maximal consumption when for instance 16 users are vacuuming simultaneously, is about 24 kW.

	Mini	Small	Medium	Large	Special
Station - Users	1-2	3-5	6-10	11-15	>15
Cyclonic Separator	-	VOR145	VOR190	VOR240	VOR240
Fine Dust Separator	COM369	SEP020	SEP020	SEP040	SEP080
Motor power*	1,8-4,3kW + FC	1,8-11kW + FC	1,8-21kW + FC	1,8-35kW + FC	>1,8 kW + FC
Pipes mm	50;63	50;63;80;100	50;63;80;100;125	50;63;80;100;125	50;63;80;100;125; 150
Display; Plc	-	Yes	Yes	Yes	Yes

\* Indicative values, depending by overall system's pressure drop

All system parameters: power per user, cycles, working hours, dust level and other can be monitored and stored by a touch screen display even mounted in a remote control room.





# SOME TECHNICAL SOLUTIONS

Ergox best referenties are the ones that already use it



Carwash Weck in **COLOGNE**  
4 users - 7.5kW+FC



Carwash Grand Prix in **LILLE**  
4 users - 7.5kW+FC



Carwash Geuens in **LOMMEL**  
16 users - 5.5kW+FC+2x7.5kW



Carwash de  
Zuiderring in **GENK**  
9 users - 5.5kW+FC+7.5kW



Carwash de Walvis  
in **DORDRECHT**  
9 users - 5.5kW+FC+7.5kW



Carwash Royal 55  
in **SINT TRUIDEN**  
7 users - 5.5kW+FC+7.5kW



Carwash Burgers  
in **GOES**  
11 users - 7.5kW+FC+7.5kW



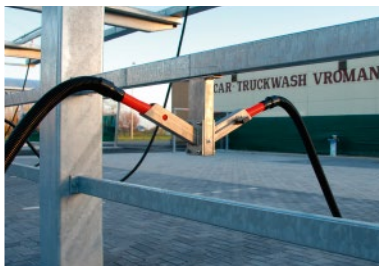
Carwash IZI in **OOSTERHOUD**  
16 users - 5.5kW+FC+2x7.5kW



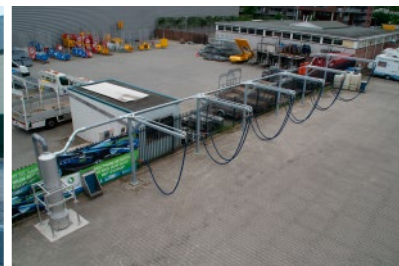
Carwash Waterword  
in **SCHOTEN**  
11 users - 7.5kW+FC+7.5kW



Carwash de Waldas  
in **DRACHTEN**  
11 users - 7.5kW+FC+7.5kW



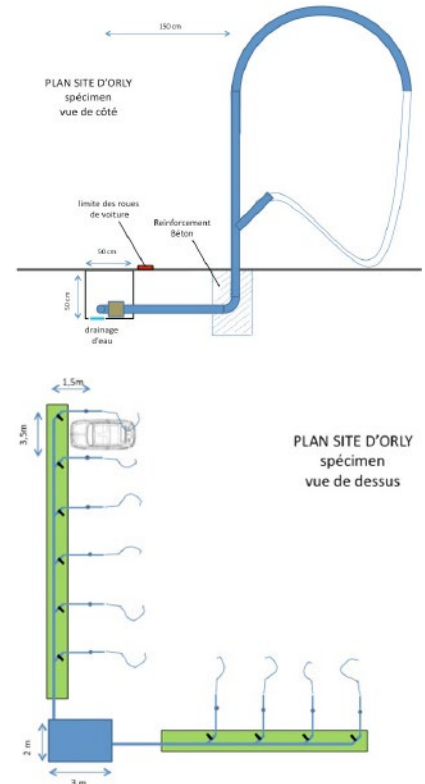
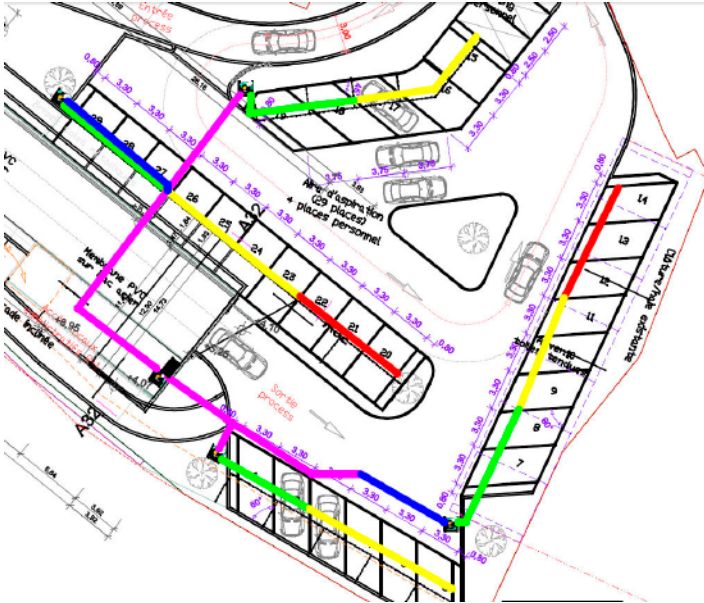
Carwash Vroman in **SINT-ELOOIS**  
14 users - 5.5kW+FC+2x7.5kW



Carwash Klaphek in **EDE**  
11 users - 5.5kW+FC+7.5kW

# ERGOX SYSTEM DESIGN

No matter the size, Ergox delivers optimal solutions from 2 to 50 drops.  
Free conceptual rendering and system layout, turnkey installations,  
turnover attendance and break even forecast.



## ON-SITE CONSULTING

Ergox can install directly or through its distributors all over Europe.  
As alternative, only material can be supplied and supervised by local installers, providing them with illustrated manuals and accurate installation procedures.

