

# PCL – Halton ProClean



## Specification

Halton has developed a unique module based design of central vacuum cleaning system together with the Technical University of Tampere, Finland.

Every Halton ProClean vacuum unit serves multiple simultaneous users. The module design minimizes investment and maintenance. A single fire zone can be operated even with only one central vacuum cleaning unit. A module contains a central unit (complete unit with two stage filtration: cyclone and a fine filter, dust container, control cabinet, automatic filter cleaning), piping, inlet valves, pipe cleaning valves and vacuum cleaning equipment. When a cleaning hose is plugged into an inlet valve, central unit starts. Sensors optimize vacuum power and minimizes power consumption continuously. When unplugged, the system is inactive. The Halton central vacuum cleaning requires minimum maintenance which results in less maintenance costs. Central unit, inlet valves and cleaning valves are all made of robust materials. Pipelines are designed to withstand vibrations, heavy use and high suction pressure.

## Overview

### Top ten advantages of Halton ProClean

1. **Ecological:** Halton ProClean central vacuum cleaning system is designed to last as long as the vessel. In addition Central Vacuum Cleaning system has proven to be up to 55% faster

than traditional systems.

2. **Healthier:** Usage of Halton ProClean promotes healthier environment by removing hazardous micro dust and not creating dust raising swirls.
3. **Image:** Represents sustainable development and green values.
4. **Minimized disturbance:** Silent and odor free operation. No need for isolating spaces due to cleaning.
5. **Efficient:** Lightweight, fast and easy to use.
6. **Safer:** No need to make illegal electric wire extensions, where conventional hoover's standard cord is too short.
7. **Space saving:** Unties space for cabin and public area design.
8. **Low maintenance:** Less technical service needed, extremely low maintenance costs.
9. **Saves A/C:** Allows more cleaner indoor air and reduces the need of A/C filter cleaning and change.
10. **An easy choice:** Available from components to whole scope including design services and installation.

## Features

- 1 to 12 users per vacuum system. Normally 1-2 vacuum system per fire zone.
- Piping size is from Ø50 mm up to Ø160 mm
- Vacuum pressure up to -300 mbar
- Robust, industrial quality materials & components
- Demand based, energy efficient power control with frequency controller and pressure transmitter
- Minimal maintenance need, even on continuous operation
- No pipe blockages, thanks to automated pipe flushing function
- Potential free status information available to vessel automation system
- Restraint of use, system can only be started and operated by vessel/platform personnel
- Long lifetime, lasts for vessel's lifetime

## Product Options

Halton ProClean central units are available with following options:

- Supply power: 3AC 380...480 V / 690 V
- Supply frequency: 50 Hz / 60 Hz
- 3,0 – 29,0 kW motor power per unit
- Fieldbus connection
- System start from inlet valve, start timer or from external signal
- Tailored logic program
- Tailored additional features

A wide range of accessories available.

# Materials

PART	MATERIAL	FINISHING
Frame	Carbon steel	Powder coating
Pipeline options	Stainless steel EN 1.4301 (AISI304), EN 1.4404 (AISI316L), PVC-U	–
Flushing valve	Steel	Galvanized
Inlet valve	Stainless steel EN 1.4301 (AISI304)	–

## Operation Principle

Halton ProClean central vacuum cleaning system is user friendly as it is automated to control vacuum level, filter and pipeline cleaning. System starts by plugging in the vacuuming hose or from start timer. Power level is adjusted to maintain constant suction pressure, regardless of number of connected users.

Maintenance need is minimal, thanks to automated functions and robust components. 80-liter dust container has a plastic bag to be replaced around once per month. Fine filter cartridge is very long lasting thanks to cyclone pre-separation and automatic filter cleaning. Side channel turbine and other components are of industrial quality and require no annual maintenance.

System can be monitored by and controlled from vessel's central automation system. Bulkhead and other piping penetrations are done same as for drainage piping.

## Service and Spares

We have delivered hundreds of central vacuum cleaning and other suction systems around the world since 1990. We were known as Puzair Ltd until 2010, when the whole business became part of Halton Oy.

Regular maintenance helps ensure the complete operational functionality for even to the oldest of our systems.

The need for servicing our systems is very small and already once a year executed system service will ensure high system lifetime and user satisfaction. Please contact your local Halton sales office or Timo Kohtaniemi ([timo.kohtaniemi@halton.com](mailto:timo.kohtaniemi@halton.com)) for service availability in your area.

Our cleaning equipment spares are also compatible with other central vacuum systems.

Please find the quotation form for spare parts on *DOWNLOAD* tab.