

# Portable Filtration Cart

Effective and Economical Hydrocarbon Removal from Industrial and Process Water

## Smart Cart PC-V1



- The portable filtration cart is a simple device to perform effective hydrocarbon removal from small quantities of water collected in tanks or reservoirs as well as an efficient polishing system for low flow hydrocarbon contaminated waters.
- The cart comes completely ready to use with gear pump, motor, hose/wand assemblies, electrical cord and switch and offers multiple cartridge selection.
- The Smart Sponge® cartridges are designed for radial flow providing maximum available surface area.
- The portable cart is also suitable as a testing device for designing appropriate permanent filtration systems.

## Description

The cart is the ideal way to filter and transfer fluids from reservoirs. It is equipped with a positive displacement 0.3 l/s gear pump and a Y-Strainer w20 mesh screen on pump inlet. Two transparent polycarbonate housings in series hold the filtration cartridges. Both housings have a pressure gauge and delta pressure switch for automatic shut-off. If the cart remains unattended during operation the unit will shut down and turn on a red light when filters need changed. The portable cart with 25mm flexible hoses with inlet and discharge wands may be set up for small bags as well as filters. Its light weight makes it easy to manoeuvre by one person. Dual-purpose cart can be used for particulate or hydrocarbon removal.

## Applications

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|---|---|
| <input type="checkbox"/> Machine Tool Coolants    | <input type="checkbox"/> Industrial Discharge Water     |
| <input type="checkbox"/> Industrial Process Water | <input type="checkbox"/> Leisure/Commercial Bilge Water |
| <input type="checkbox"/> Surface Water Runoff     | <input type="checkbox"/> Gas & Oil Facility Wastewater  |
| <input type="checkbox"/> Car & Truck Wash Water   | <input type="checkbox"/> Oil/Water Separator Polishing  |

## Features and Benefits

- Increases machine tool life when installed at point of use.
- Increases working life of valuable process fluids.
- Reduces hydrocarbon levels to meet regulatory discharge standards.
- Absorbed hydrocarbons are chemically bound by the media and not leachable.
- Absorbent media is designed to maximize surface area utilisation.
- Radial flow design of cartridge allows maximum flow with minimal pressure drop.
- High integrity construction withstands harsh process environment.
- Cartridges are completely incinerable.

## Directions for Use

**Smart Sponge**<sup>®</sup> Cartridges optimal flow rates across the filter are 0.3 to 0.6 l/s and water temperatures not to exceed 60°C. Always select the appropriate housing for the working temperature. Replace the cartridge when the pressure across the filter exceeds 15 psig. Higher pressures may result in insufficient flow and/or effective filtration. Use cartridges with suitable housings.

## Available Carts

- Smart Cart PC-V1 c/w two polycarbonate vessels housing 0.3 l/s pump
- Smart Cart PCV1-ABT1 c/w two polycarbonate vessels housing 0.6 l/s pump
- Smart Cart PCV2-ABT2 c/w two polycarbonate vessels housing 1/3 HP Submersible Pump, no DP Shutoff
- Smart Cart PCV2-ABT3 c/w two polycarbonate vessels housing 1/3 HP Submersible Pump, with DB Shutoff
- Smart Cart PC-V2 c/w three polycarbonate vessels housing 0.3 l/s pump
- Smart Cart PC-V3 with four polycarbonate vessels housing 0.13-0.63 l/s pumps

## Available Cartridges for Different Applications

- ABT-A1-420A-DOA General hydrocarbon removal
- ABT-C1-420A-DOA Mineral oil removal
- ABT-X2-420A-DOA Pre-filtration
- ABT-AC1-420A-DOA General hydrocarbon removal with ? P

### Materials of Construction

- Absorbent: Proprietary Smart Sponge<sup>®</sup> polymer
- Support Construction : 100% polyolefin
- Seal Material: Gasket (Polyethylene Foam); 222 O-Ring (Buna-N)

### Cartridge Dimensions

- Lengths: 50.8 cm.
- Outside Diameter: 11.3cm
- Inside Diameter: 2.4 cm)

### Maximum Recommended Operating Conditions:

- Temperature: 54.5 °C - 71 °C
- Pressure: 30 psid @ 24 °C)
- Flow Rate: 0.4 – 0.63 l/s per cartridge
- Change-out Pressure Drop (net): 10 psi

### Bio-Safety

- The Smart Sponge<sup>®</sup> cartridge is classified as non-hazardous and can be incinerated or used as an alternative to fuel in a waste-to-energy facility. Disposal/recycling must be dictated by local regulations pertaining to the absorbed material contaminant. The generator of the spent cartridge will need to have their waste analyzed, tested, and classified to determine the generator's particular waste.



Cartridge - ABT-A1-420-DOA