

# Smart Drum

## Product Description

The Smart Drum HAC was developed by AbTech Industries for hydrocarbon removal applications. The Smart Drum HAC is ideally suited for free phase and mechanically emulsified hydrocarbon removal for industrial wastewater process streams, hazardous waste remediation, produced water and many other hydrocarbon removal applications.

## Frequent Applications

- General manufacturing
- Groundwater remediation
- Mining
- Nuclear plant decommissioning
- Parts machining operations
- Produced water treatment
- Petrochemical and refineries

## Product Specifications

|                                   |  |
|-----------------------------------|--|
| Pallet                            | 43.5" L x 43.5" W x 40" H  |
| Inlet Connection Fitting          | NPT 3/4"   |
| Outlet Connection Fitting         | NPT 2"   |
| External Coating                  | Baked Enamel   |
| Internal Coating                  | Phenolic Epoxy   |
| Maximum Flow Rate                 | 10 Gallons Per Minute (38 Lpm)   |
| Maximum Operating Pressure        | 10psi (68.9 kPa)   |
| Maximum Operating Temperature     | 130 °F (54.44 °C)  |
| Maximum Pressure Loss             | <2psi at 10 gpm  |
| Oil and Grease Removal Capability | >90%   |
| Hydrocarbon Holding Capacity      | Aproximately 100 lbs   |
| Hydrocarbon Absorbed              | Crude Oil<br>Diesel Range Oranics<br>Petroleum Fuels<br>Machine Oils<br>Select Food Grade Oils |



## Smart Drum Oil Removal

Results from testing based on a 95.1 ppm to 112 ppm reading range confirm the Smart Drum's ability to remove up to 96% of hydrocarbon oil, with the lowest oil removal rate being 62%.

| Applicable Technology | Targeted Contaminant  |
|-----------------------|---|
| Smart Sponge          | Hydrocarbons  |
| Smart Sponge HM       | Heavy Metals, Phosphorus, and Hydrocarbons                      |
| Smart Sponge Plus     | Bacteria  |
| Smart Sponge AC       | Heavy Metals, phosphorus, and souluable/insoluable Hydrocarbons |
| Smart Sponge BC       | Heavy Metals, Phosphorus, and Hydrocarbons                      |



## Installation

Upon receipt of the Smart Drum HAC Treatment System, inspect the unit and the Startup Kit (sold separately) for any damage. Any damage caused during shipment must be reported to the shipping company immediately upon receipt. Minor damage that goes no deeper than the paint will be acceptable for adequate performance, however deep gouging should be inspected prior to the vessel being placed into service. When in doubt, please contact your AbTech Sales Representative or call (480) 874-4000 for assistance. Unload or move the Smart Drum HAC Treatment System, using a forklift or pallet jack. Do not use the lid or the fittings to lift the unit, they are not designed for holding the weight of the unit and will damage the Smart Drum HAC.

## Maintenance

The Smart Drum HAC is designed for minimal maintenance. The following items must be inspected regularly to ensure proper continuous operation and unit performance:

- Inlet Pressure Gage – Pressure drop is not to exceed 10psi
- Pressure Relief Valve – Inspect and remove any debris that prevents air release
- Inlet/Outlet Piping, Valves, and pumps – Inspect and repair any leaks
- Standpipe – Perpendicular to level base
- Vent Air – Release entrained air

The Smart Drum HAC is designed to operate continuously and does not need to be regularly drained. Draining of the Smart Drum HAC is to occur during replacement of an exhausted unit or when movement of the unit is required.



## Safety and Disposal

Operators must know and understand the potential hazards of the hydrocarbon contaminants being removed by the unit. Special handling procedures, as established by the designated operator or the local/state regulatory agency, are required to be followed. AbTech Industries Inc. assumes no liability for improperly assembling, installing, or operating the Smart Drum HAC unit. AbTech Smart Sponge products must be used properly and in accordance with all manufacturer instructions. AbTech Industries does not take responsibility for any product misuse or misapplication. Upon exhaustion, the Smart Drum HAC shall be disposed of according to State/Local and Federal regulation. AbTech Industries does not take any responsibility for handling, transport, disposal, or recycling of spent Smart Sponge products. Upon exhaustion the Smart Drum needs to be disposed of properly:

- TCLP (EPA Method 1311)
- Dispose of within 30 days