

# **AFC Oil/ Water Separator Specifications and Operation & Maintenance Schedule**

## **1) Model of AFC Oil/ Water Separator:**

### **a) Model 1601 - 600 Gallon (2725 litre) oil/ water separator**

#### **i) Specifications:**

Treatment flow rate in G.P.M.: 50 G.P.M (230 litres per minute)  
Operating temperature range: 5 degrees Celsius >  
Influent oil specific gravity: < .90  
Influent hydrocarbon concentration: < 80,000 PPM  
Effluent quality: < 15 mg./litre TEH and < 15mg./litre TSS in one day composite  
Maximum oil storage volume: 1550 litres (340 gallons)  
Recommended oil storage volume: 910 litres (200 gallons)  
Sludge storage capacity: .36 cubic metres (12.75 cubic feet)  
Scour at recommended oil storage volume: < 15 mg/litre  
Maintenance schedule: as shown (typical)

### **b) Model 1605 - 600 Gallon (2725 litre) oil/ water separator**

#### **i) Specifications:**

Same as Model 1601 except  
Live load: up to 250 lb. sq. ft.

### **c) Model 1601 E - 600 Gallon (2725 litre) oil/ water separator**

#### **i) Specifications:**

Treatment flow rate in G.P.M. : 150 G.P.M. (680 litres per minute)  
Operating temperature range: 5 degrees Celsius >  
Influent oil specific gravity: < .90  
Influent hydrocarbon concentration: < 30,000 PPM  
Effluent quality: < 15mg./litre TEH and < 20mg./litre TSS in one day composite  
Maximum oil storage volume: 908 litres (200 gallons)  
Recommended oil storage volume: 530 litres (117 gallons)  
Sludge storage capacity: 0.28 cubic metres (10.0 cubic feet)  
Scour at recommended oil storage volume: < 15mg/litre

### **d) Model 1605 E - 600 Gallon (2725 litre) oil/ water separator**

#### **i) Specifications:**

Same as Model 1601 E except  
Live load: up to 250 lb. sq. ft.

## **2) Operation:**

a) After oil/ water separator has been set up as per details and specifications (see installation guidelines), fill oil/ water separator with fresh water until invert of outlet tee is reached.

### **b) Follow maintenance schedule:**

i) oil skimming: as per Provincial and Local codes (minimum recommended - when accumulated thickness reaches 50mm)

- ii) sludge removal: as per Provincial and Local codes (minimum recommended - when sludge thickness exceeds 150mm or when operation of oil interceptor is impaired)
- iii) check sludge and oil levels: as per Provincial and Local codes (minimum recommended - once per month)
- c) Check sludge with measuring stick by placing stick through inlet tee until stick touches top of sludge. Remove stick and measure distance for sludge depth reading. After obtaining the above reading the measuring stick should be pushed through the sludge to the bottom of the oil separator tank and then re-measured. The difference is the depth of the sludge. Should a satisfactory reading not be obtained in this manner, please skim off all floating oil and take a second reading using visual help.
- d) Check "AFC Coalescing Package" as per engineers schedule (minimum recommended - once per month as the oil and sludge levels are checked). Usually the coalescing package will only need cleaning when the separator is completely pumped out, once per year. If cleaning is required see paragraph (e). Should the coalescing package need to be removed, remove handle from secure spot, pull "AFC Coalescing Package" vertically upwards in channel frame and remove. The handle may have to be unbolted from the coalescing pack if it is to be removed from the tank. Place in an area upstream of the AFC Oil Interceptor and wash off. Replace "AFC Coalescing Package" into AFC Oil/ Water Separator, align guides with channel frame and slide into place until the edge touches the partition. Re-secure the handle. Wash all contaminants into upstream catch basin and into the AFC Oil Interceptor. Replace cast iron lids and cover on oil/ water separator.
- e) We recommend that the AFC Oil/ Water Separator be pumped a minimum of once per year. Your local oil recycler should be able to be contracted for this work. Start by removing the manhole covers on each end and the center manhole cover. Using a sucker hose and truck pump out all liquid in separator, using the center manhole for access to the first and second chambers. Access the third clearwell chamber through the outlet end manhole opening, taking care that the sucker hose doesn't displace the outlet tee. Thoroughly wash inlet and outlet tees, connecting elbow and sides of separator with a pressure hose. Thoroughly wash the coalescing package, ensuring that there isn't any debris trapped between the plates. You shouldn't have to remove the coalescing package. Pump any remaining debris, sludge and liquid from the separator. Refill the separator with clean potable water, replace cast iron lids and covers and unit is again ready for operation.
- f) Manual **outlet flow shut off gates** are available, if required.
- g) Please note that American Forcecrete provides a separate Installation Guideline and sample Maintenance Schedule for each customer.

### 3) Limitations of liability:

- a) Please note that the AFC Oil Interceptor specifications as stated by American Forcecrete of Canada Inc. are subject to the following conditions:
  - i) The customer or installation owner must follow the maintenance schedule as provided by AFC Inc.
  - ii) The oil interceptor and all its components must be properly installed and maintained as per direction by site engineer and AFC Inc. directions.
  - iii) The influent flow rates, specific gravity and minimum operating temperature must not be exceeded.
  - iv) The influent hydrocarbon and suspended solid concentrations, in mg./ litre, must be reviewed on a site-specific basis and the maximum concentrations must be within the specifications as provided by American Forcecrete of Canada Incorporated.
  - v) Any variation in AFC Oil Interceptor use, maintenance or installation must be reported to American Forcecrete of Canada Inc. immediately.
  - vi) American Forcecrete of Canada Inc. limits its liability to replacement of defective material only. All labor, installation and other costs are the responsibility of the customer. It is the absolute responsibility of the customer to be familiar with all local, provincial, state and federal environmental regulations and to ensure that the specifications of the purchased AFC Oil Interceptor fully satisfy those regulations. The customers receipt of sales invoice and/or

quotation signifies agreement to accept all liability in regard to possible environmental contamination of his property and surrounding property, including groundwater, lakes and streams, and any lawsuits or fines resulting there from.

- vii) The presence of any surfactants in the influent are to be analyzed by the customers engineer and the customer must be aware that the presence of certain surfactants may significantly alter the ability of the AFC Oil Interceptor to separate hydrocarbons from the influent water. The specifications of the AFC Oil Interceptor are not valid when surfactants are present in certain quantities and types. Please contact American Forcecrete for further information.

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U.S. PATENT No. 6,079,571  
Canadian Patent No. 2,252,307