

## Multi-Purpose ATEX Cat. 3 Pilot System



### Incorporating:

- **ATEX Cat. 3 Multi-phase extraction system (MPE);**  
*Integrated steel inlet separator with progressive cavity discharge pump;*  
*In-line Infra-red LEL Detection System;*  
*In-line air sample conditioning system to reduce RH, temperature and flow and pressure to LEL detection system optimum parameters (enhances detection response time, accuracy and duration of calibration.)*
- **ATEX Cat. 3 Soil vapour extraction / low pressure air sparging system;**  
*Inlet separator and LEL detection / conditioning system as above.*
- **High pressure air sparging system /** compressed air supply for pneumatic pumps;
- **Integrated oil/water separator and buffer tank;**
- **On-board aqueous and vapour phase carbon drums;**
- **On-board loading/unloading winch for carbon drums;**
- **Durham Geo MVP 4" total fluids pump;**
- **Durham Geo Evacuator 2" total fluids pump;**
- **Durham Geo FAP Plus skimmer pump;**
- **Grundfos 2 ½" electric submersible pump.**
- **On-board hose and fittings stowage;**
- **On-board clean water jet cleaning system for OWS.**
- **"Air-Flow" electronic air flow measuring device**
- **Multi-scale differential pressure gauge set**



**Specifications:**

**Multi-Phase Extraction System**

*V Max: 78m<sup>3</sup>/hr (air) (68m<sup>3</sup>/hr @ -700mbar)  
P Max: -940mbar (60mbar abs.)  
kW: 1.5  
dB(A): Pending*

**Soil Vapour Extraction System / Low Pressure Sparging System**

*V Max: 210m<sup>3</sup>/hr (135m<sup>3</sup>/hr @ -100mbar)  
P Max: -220 mbar (780mbar abs)  
kW: 1.85  
dB(A): Pending*

**High Pressure Sparging System / Compressed Air for Pneumatic Pumps**

*V Max: 240 litres/min (8 cfm)  
P Max: 10 7 Bar  
kW: 2.2  
dB(A): Pending*

**Oil/Water Separator**

*V Max = 1 m<sup>3</sup>/hr  
Treated water Quality =  
Coalescing filter (Stainless Steel / Polypropylene)  
Product interface skimming*

**DurhamGeo 4" MVP Top (or bottom) Filling Total Fluids Pump**

*V Max: 30 l/min (48 l/min bottom filling)  
Max Depth: 60 metres  
Air Consumption: 3.4 litres air/ litre water (at 10m depth)  
Diameter: 87.5mm  
Min. depth of water required from base of well to inlet = 102cm  
Cycle volume: 1.5 litres*

**DurhamGeo 2" Evacuator Top (or bottom) Filling Total Fluids**

*V Max: 9 l/min (18 l/min bottom filling)  
Max Depth: 60 metres  
Air Consumption: 6 to 9 litres air/ litre water (at <15m depth)  
Diameter = 43.8mm  
Min. depth of water required from base of well to inlet: 105cm (top filling)/84cm (bottom filling)  
Cycle volume: 0.675 litres*

**DurhamGeo FAP Plus Skimmer Pump**

*V Max: 56 to 75 l/hr (petrol/gasoline)  
Max Depth: 60 metres  
Air Consumption: 14 l/min @ 7 Bar  
Length: Pump = 148mm, skimmer = 168mm (Total length = 316cm)  
Diameter: 43.8mm  
Suction: -630mbar*

**Grundfos 2 1/2" Submersible Pump**

*V Max: 150 l/min (9m<sup>3</sup>/hr)  
Max Depth: 60 metres  
Length: 860mm  
Diameter: 74mm  
kW: 1.68  
Weight: 6.1Kg*