## **Equipment Data Sheet**



## **MORS with S2 Centrifuge**

PHB's Two Phase Mobile Oil Separation System (MORS.S2) is developed and constructed by PHB especially for the separation of Hydrocarbon sludge and slop oil.

The MORS.S2 uses a high-speed Two Phase centrifuge for the separation of the liquids and the solids.

The MORS.S2 is PHB's Two Phase version of the Mobile Oil Separation Systems; making it ideally suitable for the separation of liquid and solids during tank cleaning.

The liquids are collected in the tank below the centrifuge.

The correct adjustment of the centrifuge requires PHB's skilled and experience operator's full attention due to the often-continuous changing conditions of the sludge. In most cases the viscosity, density and even nature of the sludge will change as the job progresses. This will require fine-tuning of the bowl and scroll speed. The centrifuge is fully Hydraulic Operated and intrinsically safe.



## **TECHNICAL SPECIFICATIONS**

**Centrifuge:** Two Phase Humboldt S-2 Centrifuge. (MORS.S2) Max Bowl Speed: 2950 Rpm G-Force: approx. 2500 Bowl diameter / Length: 450 /1350mm Oil Sludge: 4 M3/Hr

**Centrifuge Drive:** Full hydraulic drive, Viscotherm, for both the scroll and the bowl. This allows the operator to adjust bowl and scroll speed individually.

**Electrical power:** 3 phase , 380-460V, 50/60 Hz Centrifuge: 22 KW + 8 KW Viscodrive

Pumps: 15 KW Total power requirement: 45 KW

**Pre-conditioning Tank:** Need to be separately installed, to pre-condition the feed flow. Unit is usually installed on top of the liquid collection tank.

**Injection of Chemicals:** Tanks are made of carbon steel and not chemical resistant.

**Grounding:** After installation the system needs to be grounded. If hoses are connected then they usually need to be "continuous".

**Lifting arrangements:** All equipment is fitted with certified lifting lugs and clearly marked (Size & weight).

Weight: MORS skid approx. 4.5 Ton.

## **SPECIAL FEATURES**

This unit allows the separation of oil, water and sediments as individual components. Capacity depends on viscosity, density and the actual solid loading. Approx 3-4 M<sub>3</sub>/hr

The unit is fully Ex-Proof.

The Bowl and parts in contact with the product are constructed from Stainless steel S-316. Other parts carbon steel

The unit comes together with its own liquid collection tank and pumps. Both skids are standard 20 ft equipment frames.

The process tank is equipped with steam coils and agitator. This will allow the breaking of the emulsions and the reduction of viscosity.

PHB can provide a coated pre-processing tank and stainless heating coils if products are corrosive.

The adjustable weir allows the efficient separation of the liquids from the sediments. The skilled operator will be able to adjust the process so that the sediments are sufficient dry.

PHB has a well-developed Routine Maintenance and Inspection system. A pre-job inspection check-list has to be completed before the system can be started.

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