

### SCM-OFFSHORE RIG VAC™ CONTAINERIZED VACUUM SYSTEM



Midgard has over twenty years experience in the containment and handling of drilling waste using vacuum type equipment. Now, through continued research and development, we are able to bring you a simple solution to your drilling fluid and sludge reclamation problems with the Offshore Rig-Vac™ containerized vacuum system.

#### CONCEPT

The Offshore Rig-Vac™ containerized vacuum system is a robust skid-mounted vacuum device designed to be centrally located for the reclamation, containment and handling of waste liquids and sludges from both onshore and offshore operations.

A range of two different Offshore Rig-Vac™ containerized vacuum systems is offered – the electrically operated RV-50 HP and RV-100 HP.

The RV-50 HP and RV-100 HP are two component modular vacuum systems. The first component is a power plant which incorporates a positive displacement blower, muffler, valve manifold and electric motor. The second is a tank skid which is fitted with a tank, suction, discharge and inspection connections.

The RV-100 HP is larger and more powerful than the RV-50 HP. It features a 100 hp electric motor and has a tank capacity of 750 gallon. The RV-50 HP has a 50 hp electric motor and 500 gallon capacity tank.

#### APPLICATION

The Offshore Rig-Vac™ containerized vacuum system is designed to reclaim drilling fluid spillages caused by tripping, pulling wet strings or accidental spillage. It can also be used for other waste stream spillages such as waste water or drill cuttings. The cleaning of ditches, cellars and sumps plus the skimming of pits and cuttings boxes is also possible.

#### FEATURES & BENEFITS

- Rotary Lobe Blower with direct drive and helical timing gear for quieter and stronger operation
- Discharge – Universal Silencer 6" SDY (RV-50 HP) / 10" SDY (RV-100 HP) for quiet environment
- 10 ft / 20 ft DNV 2.7.1 approved Container with doors on both ends and 500 / 750 gal Cone bottom holding tank for the RV-50 HP and RV-100 HP respectively
- Versatile – the Offshore Rig-Vac™ containerized vacuum system has the ability to switch from vacuum loading to discharge for tank emptying
- Both systems have pressure relief valves, vacuum relief valve, and compound pressure / vacuum gauge (30" Hg to 15 psig)

## CONTAINMENT AND HANDLING

### FEATURES & BENEFITS

- Maintenance and operation – units have performed years of reliable service with minimal maintenance
- Flexible – due to their two component modular design, the layout of the 50 HP and 100 HP systems can be arranged to suit any environment
- Safety – improves workplace safety by allowing quick and easy removal of spillages
- Maintenance – all systems have an 18” man way for easy clean-out
- Capacity – more powerful than a regular vacuum truck
- Easy to operate – both electric motors feature an on-off switch with reset and the diesel-powered motor is self-contained

### SPECIFICATIONS

Performance		
Model	Offshore RV Containerized System, 50 HP Vacuum	Offshore RV Containerized System, 100 HP Vacuum
Flow (ICFM)	925.8	1600
Atmospheric Pressure (psiA)	14.7	14.7
Inlet Temperature (°F)	100	100
Gas	Air	Air
Specific Gravity	1.0	1.0
K (Cp/Cv)	1.395	1.395
Inlet Pressure (in. Hg vac)	15	16
Ambient Temperature (°F)	100	100
R. V. setting (in Hg vac)	16	16.5
R.V. setting (psig)	8	8
Speed (rpm)	1775	2711
BHP at operating	46.6	87
BHP at Relief Valve setting	48.7	90
Discharge Temperature (°F)	340	312
Noise with enclosure (dba)	85	85
Rotary Lobe Blower	Tuthill – MD Pneumatics Model 6016-46 L2	Tuthill – MD Pneumatics Model 7021-46 PD
Tank Capacity	500 Gallon (1,893 Liters)	750 Gallon (2,839 Liters)
Dimensions (DNV Container)		
Length	120” (3,048 mm)	240” (6,096 mm)
Width	96” (2,438 mm)	96” (2,438 mm)
Height	102” (2,591 mm)	102” (2,591 mm)
Utility Requirements		
ELECTRIC MOTOR		
Power	50 hp (37.3 kW)	100 hp (74.6 kW)
Voltage	460 V	460 V
Phase	3	3
Frequency	60 Hz	60 Hz
Safety	TEXP Explosion Proof Induction Motor	TEXP Explosion Proof Induction Motor