

### SCM-LAND RIG VAC™ 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 Land Rig-Vac™ vacuum system.

#### CONCEPT

The Land Rig-Vac™ 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 three different Land Rig-Vac™ vacuum systems is offered – the electrically operated RV-20 HP, RV-50 HP and RV-100 HP.

The RV-20 HP, RV-50 HP and RV-100 HP units are available as one skid design or 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 and the RV-20 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. The RV-20 HP has a 20 hp electric motor and 300 gallon capacity tank.

#### APPLICATION

The Land Rig-Vac™ 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 3" SDY (RV-20 HP) / 6" SDY (RV-50 HP) / 10" SDY (RV-100 HP) for quiet environment
- Versatile – the Land Rig-Vac™ vacuum system has the ability to switch from vacuum loading to discharge for tank emptying
- All three systems have pressure relief valves, vacuum relief valve, and compound pressure / vacuum gauge (30" Hg to 15 psig)
- Maintenance and operation – units have performed years of reliable service with minimal maintenance

## CONTAINMENT AND HANDLING

### FEATURES & BENEFITS

- Flexible – with a two-component modular design, the layout of the RV-20 HP, RV-50 HP and RV-100 HP systems can be arranged to suit any environment
- Safety – improves workplace safety by allowing quick and easy removal of spillages
- Maintenance – all tanks have an 18” man way for easy clean-out
- Capacity – various (See chart below)
- Easy to operate – all three electric motors feature an on-off switch with reset and the diesel-powered motor is self-contained

### SPECIFICATIONS

<b>Performance</b>			
Model	SCM-Land RV-20 HP	SCM-Land RV-50 HP	SCM-Land RV-100 HP
Flow (ICFM)	325	925.8	1600
Atmospheric Pressure (psiA)	14.7	14.7	14.7
Inlet Temperature (°F)	100	100	100
Gas	Air	Air	Air
Specific Gravity	1.0	1.0	1.0
K (Cp/Cv)	1.395	1.395	1.395
Inlet Pressure (in. Hg vac)	15	15	16
Ambient Temperature (°F)	100	100	100
R. V. setting (in Hg vac)	15.5	16	16.5
R.V. setting (psig)	8	8	8
Speed (rpm)	2165	1775	2711
BHP at operating	18	46.6	87
BHP at Relief Valve setting	20	48.7	90
Discharge Temperature (°F)	300	340	312
Noise with enclosure (dba)	92	85	85
Rotary Lobe Blower	Tuthill – MD Pneumatics Model 4506	Tuthill – MD Pneumatics Model 6016-46 L2	Tuthill – MD Pneumatics Model 7021-46 PD
Tank Capacity	300 Gallon (1,136 Liters)	500 Gallon (1,893 Liters)	750 Gallon (2,839 Liters)
<b>Dimensions (Approximately)</b>			
Length	96” (2,438 mm)	120” (3,048 mm)	240” (6,096 mm)
Width	70” (1,778 mm)	96” (2,438 mm)	96” (2,438 mm)
Height	92” (2,337 mm)	102” (2,591 mm)	102” (2,591 mm)
<b>Utility Requirements</b>			
ELECTRIC MOTOR			
Power	20 hp (14.9 kW)	50 hp (37.3 kW)	100 hp (74.6 kW)
Voltage	460 V	460 V	460 V
Phase	3	3	3
Frequency	60 Hz	60 Hz	60 Hz
Safety	TEXP Explosion Proof Induction Motor	TEXP Explosion Proof Induction Motor	TEXP Explosion Proof Induction Motor