



Gas measurement technology

Vakumobil

New findings for the pinpointing of gas leakages



E.ON Ruhrgas AG Essen had a study carried out, entitled:

"Studies on improving the localisation of leakages in cohesive grounds under closed surfaces"

Two points are highlighted in the summary of the report:

- The Esders Vakumobil has a markedly improved suction power compared to conventional technology.
- The low pressure in the surface generated by one suction probe has an impact over several metres. This creates only a movement or distortion of the gas accumulation but not there elimination.

Technical data	
High-performance vacuum pump	
Maximum lower pressure	900 mbar
Maximum volume flow	266 I/min
Electrical data	220-240 Volts 50 Hz, 5.5 A
Feeder 230 Volt	10 metres
Suction hose DN 25	10 metres
Coarse filter in transparent casing	optional
Grobfilter im Klarsichtgehäuse	
Fine filter to vacuum pump	
Low pressure gauge	- 1 to 0 bar



Vakumobil

We would like to use these new findings in order to make our well-rated suction system more effective for you.

We have developed new probes for this, which can be fed deeper into the ground and absorb gas with a better tightness to the surrounding and greater vacuum.

With a suitable distribution hose and adapter, three or more suction probes can be connected to the Vakumobil in order to get the required simultaneous and steady evacuation.

Thus, a symmetrical connection is important in order to get the same low pressures in all locations.

The probes themselves are made out of strong high-grade steel pipes. The tip has a multitude of intake holes. Removal of permeated ground is fast and simple with a head fastener that can be detached without using a tool.

A measuring adapter which is adaptable with a bayonet coupling guarantees fast concentration measurement at every suction pipe. The measuring adapter is available for all current device systems with quick couplers.

A further conclusion of the E.ON Ruhrgas report is that increasing the throughput of the applied suction system will lead to even better results.



However we see limits here in both the costs for the vacuum system and also for handling because the costs and the weight of larger pumps increase disproportionably in relation to performance.

The advantage of the Vakumobil, however, is its work capability both from out of the vehicle (in the portable version) and also the possibility of quickly moving the compact system or operating it at exposed locations.

Furthermore, even smaller vehicles with limited space

and tolerably low vehicle payload are used when looking for gas leaks.

Therefore, our plan is to keep the existing sizes. Should situations then occur which require even more capacity; two Vakumobil can be used effortlessly at the same time. Depending on the size of the gas diffusion, three or six suction pumps are then connected to every Vakumobil. Equal number of connected suction probes ensue the same vacuum for every probe and therefore, optimal suction. There is also double suction performance for doubled costs.

This variety of uses offers a flexible solution and very good cost effectiveness.

The new suction probes and accessory parts are available immediately and they can naturally be used with existing systems.

Portable system	
Height	41.0 cm
Depth	32.0 cm
Width	63.0 cm
Width	37.5 kg

Technical specifications subject to change! 07/2017

