



*Siphon and
vacuum hand-pump*

*For overhead evacuation
of chemical liquids
from storage tanks*



The safe evacuation of hazardous liquid chemicals

The safest way to take hazardous liquids from storage tanks is done from the top by using a siphon system. The siphon device and the vacuum hand-pump are the basic equipment for the installation of a siphon system for filling chemicals into smaller bins.

This procedure provides the safe evacuation as well as a dependable aeration of the aspiration pipe system when the daily operation is being finished or in case of emergency. This item will considerably increase the safety of your plant.

The siphon device

The body consists of transparent chemical resistant PVC with sealings of EPDM or FPM matching the medium. The screw joint at the bottom and the ventilation valve at the top are installed centrally. A bumper plate at the bottom of the siphon will prevent medium from spraying. The aeration valve is installed at an angle of 90° and fitted with a hose spout to be connected to the vacuum hand-pump.

The vacuum hand-pump

This hand-operated pump is made of PVC grey and as being of chemical resistant material it can be used universally, too. It is equipped with a spout for being connected to the siphon device. For safe operation a non-returning valve inside the pump prevents the aspirated air from flowing back.

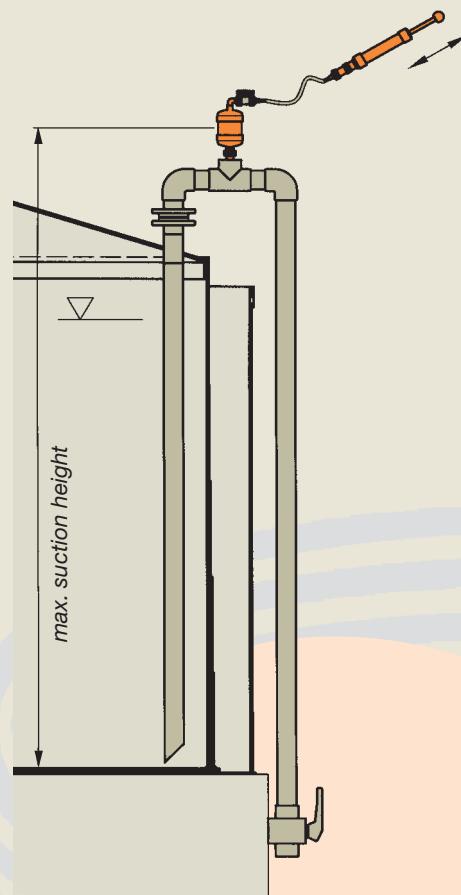
Option

If highly aggressive media are used as e.g. concentrated sulphuric acid, it is mandatory to use a siphon device with cylinder made of DURAN glass.

Design and operation of the siphon system:

The siphon system consists of submersion pipe, evacuation piping and siphon device. The submersion pipe is fixed inside the tank and connected to the evacuation pipe at the outside.

The siphon must be mounted at the very top of the evacuation pipe. At the very lowest point of the evacuation pipe (minimum filling level of storage tank) a stop valve must be fitted.



Siphon process:

- Close the stop valve in the evacuation pipe
- Connect aspiration hose between siphon and vacuum pump
- Open aeration valve at the siphon device
- Evacuate pipe system by vacuum hand-pump
- Close aeration valve as soon as the siphon device is filled with medium up to ²/₃ of its capacity
- Cut off hose connection
- The siphon system is ready for operation. Cut off of the siphon system
- Open ventilation valve when the filling operation is ended or in case of emergency

Subject to technical alterations

The siphon device	
Dimensions:	Total height 300 mm Outside diameter 120 mm
Space required for installation:	230 mm with ball valve
Connection to pipe system	Screw joint d 25 / G 1 1/4"
Schlauchanschluss:	Hose spout d 16
The vacuum hand-pump	
Connection:	Hose spout d 16
Aspiration hose	Standard length 1,5 m
Max. underpressure	850 mbar relative (△ 8,5 m water column)

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