



*Exhaust gas
neutralizer HJ 2000*

*Increased effectiveness by two scrubbing
stages for the safe scrubbing of gases and
vapours which occur when handling and
filling liquid chemicals*



The exhaust gas neutralizer HJ 2000 - increased effectiveness by two scrubbing stages:

During the storage of gassing liquid chemicals, particularly when storage tanks are being filled from tank trucks as well as during batching these chemicals, corrosive gases and vapours will occur. These must be conveyed to a gas scrubber to avoid dangers to persons or objects.

The exhaust gas neutralizer HJ 2000 is the ingenious successor of the reliable HJ 90 series. The elimination of hazardous vapours is achieved in stage one by a co-current and in phase two by a counter-current process. The HJ 2000 can be used universally because all components coming into contact with chemical vapours or with scrubbing liquid are made of chemical resistant materials.

Construction and performance

The scrubbing liquid tank of opaque PE and the centrifugal pump are mounted on a common base plate serving also as catch sump for drippings from the pump. All further components are fitted onto the lid of the scrubbing liquid tank: the venturi-tube with spray nozzle, the pressure-pipe with compensating vessel, as well as the exhaust tower with integrated tower-

packing column, spray nozzle and demister. The spray nozzles and the demister can be removed easily for cleansing.

When the circulation pump is set in operation the scrubbing liquid is pumped via the pressure-pipe and the compensating vessel towards the spray nozzles inside the venturi tube and the tower-packing column. The decreasing liquid level in the scrubbing liquid tank opens the connection between the immersing venturi tube and the exhaust tower. The exhaust air will be transported via the aspiration nozzle to the venturi tube first. Here the exhaust air is cleaned by intense contact with the scrubbing liquid. This pre-cleansed air is now passing over the surface of the scrubbing liquid into the tower-packing column where the remaining pollutants are absorbed in the second counter-current stage. The demister installed at the top of the exhaust tower prevents droplets from being carried into the exhaust piping. The cleansed air is led via the blow-out nozzle into the open.

As soon as the pump is switched off the contents of the compensating vessel will drain into the scrubbing liquid tank and the venturi tube will submerge in the liquid level again. Thus the exhaust gas neutralizer will be performing as a water seal.

Notes

- The exhaust gas neutralizer HJ 2000 is constructed for permanent operation.
- The pump must not run dry!
- In order to avoid damages caused by over- or under-pressure, the HJ 2000 must be installed into aeration piping systems protected by a safety system against dangerous pressures. This safety system may also be integrated into the gas neutralizer.
- The standard installation is indoor, protected from frost.
- The exhaust pipe for cleansed air must be led into the open.
- Regular checks of pH-value and level of the scrubbing liquid are required.

Technical Data:

Dimensions:	
Space required:	680 x 915 mm
Total height approx:	ca. 2.210 mm
Max. flow rate (air):	max. 150 m ³ /h
Underpressure:	max. 2 mbar
Aspiration nozzle:	d 110/DN 100*
Exhaust nozzle:	d 110/DN 100*
Tower-packing column:	Ø 200 mm
Height of tower-packing:	ca. 600 mm

Scrubbing liquid tank:

Diameter:	630 mm
Height:	950 mm
Nominal capacity:	240 l

Magnetic centrifugal pump:

Power:	0,37 kW
Voltage:	230/400 V
Protection class:	IP 55

* socket for glue joint PVC

Subject to technical alterations

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