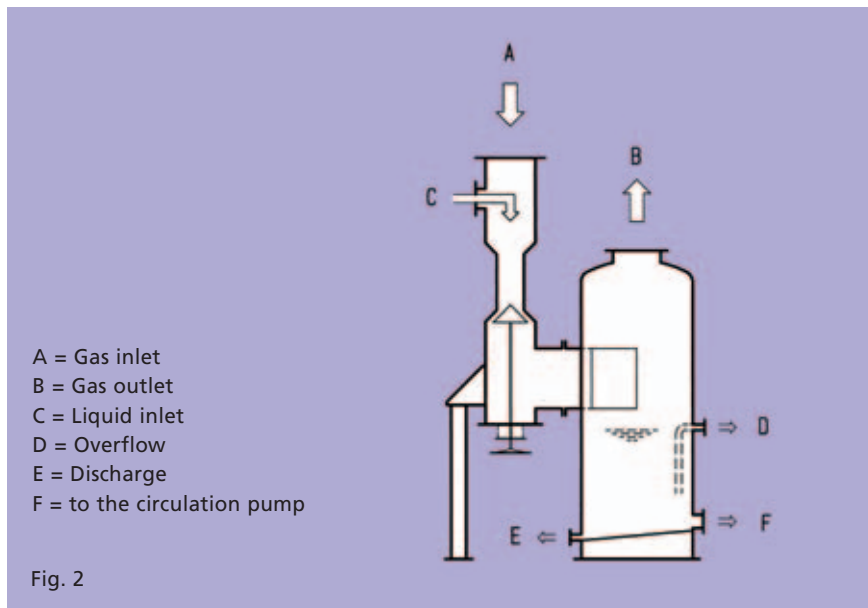


# Venturi Scrubber Type U



## Function

The high separation capacity of Venturi scrubbers is due to the high relative velocity between the dust-laden gas flow and the scrubbing liquid in the Venturi throat.

In order to accelerate the gas flow, and thereby also the scrubbing liquid, it is necessary to generate energy. This causes the gas flow to suffer a drop in pressure which is an approximate first gauge for the separation capacity.

Latest tests show that it is also possible to achieve good levels of separation with low pressure losses if the gas flow is saturated or, even better, super-saturated with water vapour prior to the scrubbing zone.

The relative velocity between gas and scrubbing liquid must be kept constant when the quantities of gas fluctuate.

Both of these things can be achieved in an excellent fashion with a Venturi scrubber, type U. The Venturi scrubber and the diffuser gap can be changed using an adjustable cone and can thus be suited to the corresponding quantities of gas. This can be done manually or automatically. The extent of the adjustment is generally the pressure loss on the gas side of the Venturi scrubber.

The control spindle is fixed below the Venturi throat. This means that the desired level of gas saturation can be achieved in the gas inlet chamber situated above by feeding in scrubbing liquid. If necessary Venturi scrubbers can also be supplied with drive from above.

## Materials

Type U Venturi scrubbers are available in suitable materials to meet every need.

### Plastics

thermoplastic with or without GRP reinforcement, as e. g. PP, PE, PVC/GRP, PVDF/GRP.

### Steel

with or without corrosion protection, stainless steel and special materials such as titanium, Hastelloy etc.

## Application

Venturi scrubbers are high performance separators for fine dusts and aerosols. Fine dusts and aerosols are classified as solid particles or liquid droplets of a size of 2.5  $\mu\text{m}$  or smaller.



Fig. 1  
Manually adjustable Venturi scrubber Type U DN 1000 with centrifugal separator

## Venturi Scrubber Type U Standard version

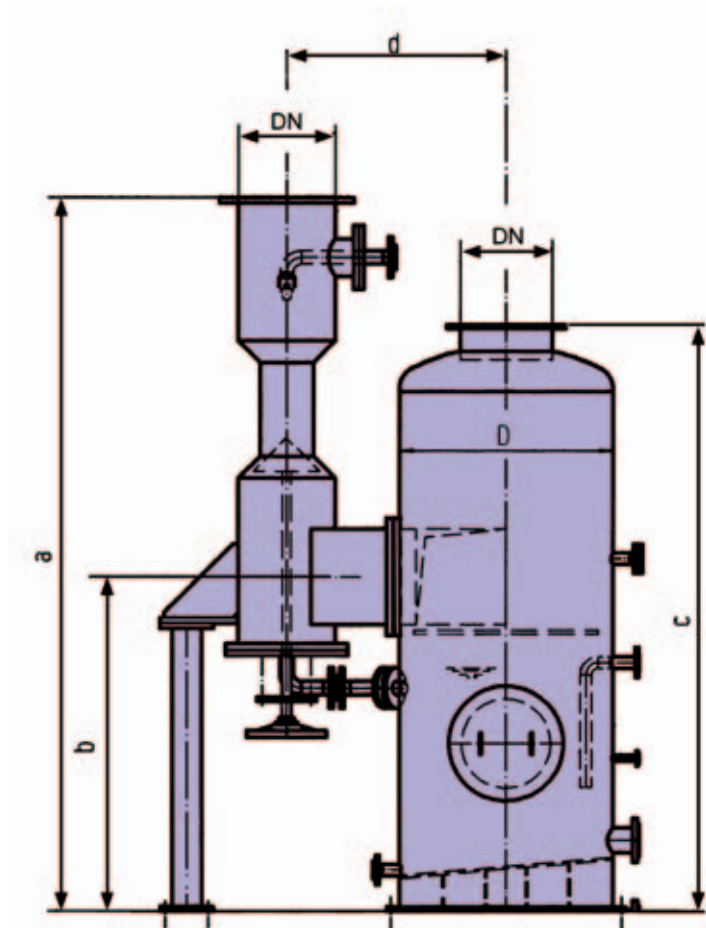


Fig. 3

### Areas of application

Aerosol and fine dust separation

### Advantages

- o Adjustable pressure difference (manual or automatic)
- o Constant pressure difference despite load fluctuations
- o Resistant to fouling
- o Can be combined with other components

### Gas flow rate, connection and installation dimensions

Connecting nominal width DN	Gas flow rate in m <sup>3</sup> /h	Main dimensions in mm				
		D	a	b	c	d
100	100 - 300	200	1600	1050	1500	300
150	300 - 600	300	1850	1100	1650	450
200	600 - 1200	400	2100	1150	1900	550
250	1200 - 1800	500	2400	1325	2200	650
300	1800 - 2500	600	2550	1350	2400	750
350	2500 - 3500	700	2800	1375	2500	800
400	3500 - 4500	800	3000	1400	2700	950
500	5000 - 7000	1000	2800	1800	3300	1150
600	7000 - 10000	1200	4200	1900	3750	1300
700	10000 - 14000	1400	4450	2000	4100	1550
800	13000 - 18000	1600	4800	2100	4450	1800
900	16000 - 23000	1800	5250	2250	4800	1900
1000	20000 - 28000	2000	5700	2300	5250	2200

Larger plants on enquiry

Dimensions not binding

For all inquiries please use our questionnaire.