



Features

- ❶ Ideal for the treatment of high concentration gases.
- ❷ Accepts design customization.
- ❸ Realizes high removal ratio (95% or higher).

STP type standard common specifications

Standard material	Main unit and circulation tank - FRP; filler - PP; mist catcher - PVC	
Standard color	Scrubbing column and tank - Munsell N-7	Blower - Munsell 2.5G6/3
Standard motor	Totally enclosed fan cooled motor for outdoor installation, 200/220 V, 50/60 Hz	
Scrubbing column pressure loss	600Pa	
Machine noise level	73 to 76 dB (A) (a reference noise level at 1 m from the machine)	
Allowable inlet temperature	40°C max. with standard design (80°C max. with optional design feature)	
Scrubbing column pressure resistance	1500 Pa max.	

Removal ratio

Gas name	Molecular formula	Scrubbing liquid	Removal ratio
Hydrogen chloride	HCl	H ₂ O	95~98%
Hydrogen fluoride	HF	H ₂ O	95~98%
Ammonia	NH ₃	H ₂ SO ₄	98~99%
Chlorine gas	Cl ₂	NaOH	95~98%
Hydrogen sulfide	H ₂ S	NaOH	98~99%
Sulfuric acid mist	H ₂ SO ₄	H ₂ O	95~98%
Chromic acid mist	CrO ₃	H ₂ O	95~98%

(Note 1) As the reference conditions, it is assumed that the gas temperature is in the normal range, the airflow rate is not higher than the design flow rate, and the targeted gas concentration at inlet is 50 to 500 ppm.

(Note 2) In ammonia gas removal, it is assumed that the scrubbing liquid maintains a pH value of 2.0 or lower.
(Note 3) In chlorine gas or hydrogen sulfide removal, it is assumed that the scrubbing liquid maintains a pH value of 12.5 or higher.

(Note 4) In sulfuric acid mist and chromic acid mist removal, the target mist particle size is 20 μm or greater.
(Note 5) A portion of HCl gas still remaining after the treatment may produce white smoke at the outlet under certain conditions depending on factors such as the gas concentration, outside temperature and humidity.

STPtype (Vertical packed column)

Dimensions

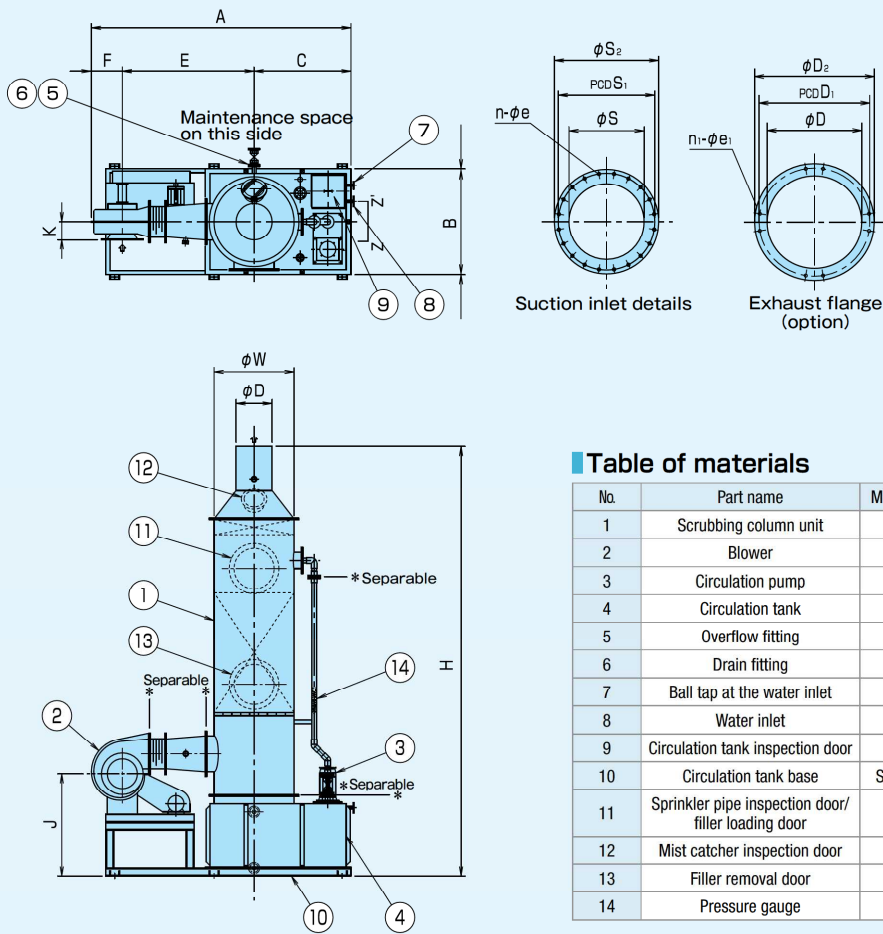


Table of materials

No.	Part name	Material	Quantity	Remarks
1	Scrubbing column unit	FRP	1	
2	Blower	FRP	1	
3	Circulation pump	PP	1	
4	Circulation tank	FRP	1	
5	Overflow fitting	FRP	1	40A JIS10kF
6	Drain fitting	FRP	1	40A with PVC valve
7	Ball tap at the water inlet	FRP	1	20A JIS10kF
8	Water inlet	FRP	1	25A JIS10kF
9	Circulation tank inspection door	FRP	1	
10	Circulation tank base	SS400	1	Hot-dip galvanized
11	Sprinkler pipe inspection door/filler loading door	FRP	1	With PVC lid
12	Mist catcher inspection door	FRP	1	With PVC lid
13	Filler removal door	FRP	1	With PVC lid
14	Pressure gauge	-	1	

Dimensions (unit: mm) of STP-20 - 120

Model	A	B	C	E	F	H	J	K	φD	φW	φS	PCDS1	φS2	n-φe	φD	PCDD1	φD2	n1-φe1
STP- 20	2475	1020	1110	1120	245	4610	1225	135	250	600	225	264	297	12-10	250	321	360	12-12
STP- 40	2904	1020	1210	1380	314	4860	1225	180	350	800	300	419	419	16-12	350	432	470	16-12
STP- 60	3241	1320	1210	1645	386	5360	1275	225	450	1000	375	521	521	20-14	450	540	590	24-12
STP- 90	3441	1420	1310	1745	386	5480	1275	225	450	1200	375	521	521	20-14	450	540	590	24-12
STP-120	3977	1620	1510	2000	467	5760	1275	326	550	1400	450	591	591	24-14	550	580	620	28-12

STP-20 - 120 standard common specifications

Model	Airflow rate (m ³ /min)	Circulation pump					Blower			Circulation tank capacity (ℓ)	Fresh water supply rate (ℓ/min)	Weight		
		Model 50Hz/60Hz	Pipe aperture (mm)	Discharge (ℓ/min)	Pump head (m)	Motor (kW) 50Hz/60Hz	Model 50Hz/60Hz	Airflow rate (m ³ /min)	Static pressure (kPa)			Motor (kW) 50Hz/60Hz	Product only (kg)	In operation (kg)
STP- 20	15~25	VEM-0403/0402	40	100	15	1.5/1.5	FTF-153LL	20	1.6	1.5/1.5	750	6.0	620	1500
STP- 40	26~45	VEM-0403/0402	40	200	15	1.5/1.5	FTF-203LL	40	1.6	2.2/2.2	850	12.0	800	1840
STP- 60	46~70	VEM-0503/0502	50	300	15	2.2/2.2	FTF-253LL	60	1.6	3.7/3.7	1200	17.0	980	2450
STP- 90	71~100	VEM-0503/0502	50	350	13	2.2/2.2	FTF-253LL	90	1.6	5.5/5.5	1400	26.0	1180	2920
STP-120	101~135	VEM-0653/0652	65	500	15	3.7/3.7	FTF-303LL	120	1.6	7.5/7.5	1900	35.0	1510	3880