



## Features

- ❶ Employs anti-corrosive molded FRP components.
- ❷ Employs a spiral nozzle that resists clogging.
- ❸ The time for on-site assembly work may be reduced (by installing the pre-assembled unit so that the work at the site may be limited to making connections)

## TRS-F 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 <sub>2</sub> O	90 % or more
Hydrogen fluoride	HF	H <sub>2</sub> O	90 % or more
Ammonia	NH <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	95 % or more
Chlorine gas	Cl <sub>2</sub>	NaOH	90 % or more
Hydrogen sulfide	H <sub>2</sub> S	NaOH	95 % or more
Sulfuric acid mist	H <sub>2</sub> SO <sub>4</sub>	H <sub>2</sub> O	90 % or more
Chromic acid mist	CrO <sub>3</sub>	H <sub>2</sub> O	90 % or more

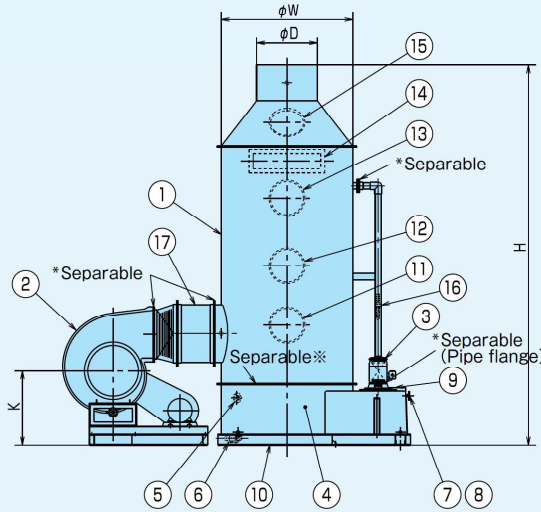
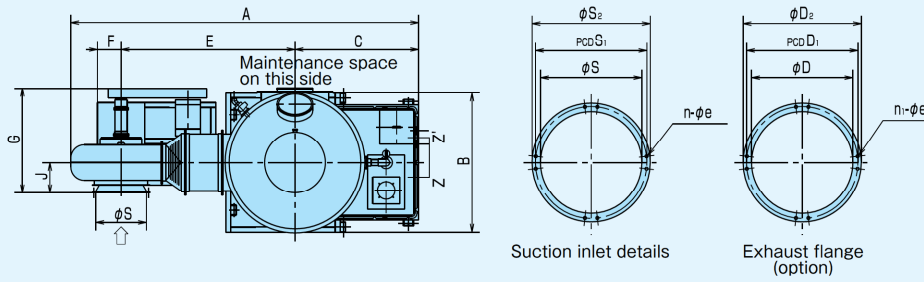
(Note 1) The removal ratios in the table are given assuming an original concentration of 100 ppm (max.) for each given gas.

(Note 2) The removal ratio may vary with the fresh water supply rate when scrubbing is done with water or with the NaOH concentration when scrubbing is done with NaOH.

(Note 3) A portion of HCl gas still remaining after the treatment may produce white smoke at the exhaust outlet under certain conditions depending on factors such as the gas concentration, outside temperature and humidity.

# TRS-F large series (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	50A JIS10K (Note 1)
6	Drain fitting	FRP	1	50A with PVC valve (Note 1)
7	Ball tap at the water inlet	FRP	1	20A JIS10K
8	Water inlet	FRP	1	25A JIS10K
9	Circulation tank inspection door	FRP	1	500 x 500 (Note 2)
10	Base	SS400	1	Hot-dip galvanized
11	Scrubbing column entrance inspection door	FRP	1	With PVC lid
12	Filler removal door	FRP	1	With PVC lid
13	Sprinkler pipe inspection door/filler loading door	FRP	1	With PVC lid
14	Mist catcher removal door	FRP	1	1000 x 230
15	Mist catcher inspection door	FRP	1	With PVC lid
16	Pressure gauge	-	1	
17	Connecting duct	PVC	1	

(Note 1) 65A in the case of TRS-F600 - F800

(Note 2) 400 x 450 in the case of TRS-F200 and F250

## Dimensions (unit: mm) of TRS-F200 - F800

Model	A	B	C	E	F	G	H	J	K	φD	φW	φS	PCDS1	φS2	n-φe	φD	PCDD1	φD2	n1-φe1
TRS-F200	4210	1500	1390	2110	290	1230	4955	380	975	650	1400	600	660	700	28-14	650	730	770	32-12
TRS-F250	4340	1650	1445	2185	290	1230	5055	380	1010	750	1550	600	660	700	28-14	750	830	870	36-12
TRS-F300	4485	1800	1515	2260	290	1230	5335	380	1175	800	1700	600	660	700	28-14	800	880	920	40-12
TRS-F400	5150	2050	1830	2575	350	1490	5595	450	1075	900	1950	750	810	850	32-12	900	980	1020	44-12
TRS-F500	5720	2300	1955	2875	425	1600	5835	500	1100	1000	2200	900	980	1020	40-14	1000	1080	1120	48-12
TRS-F600	5920	2500	2055	2975	425	1600	6070	500	1100	1100	2400	900	980	1020	44-14	1100	1180	1220	52-12
TRS-F700	6410	2700	2155	3225	475	1860	6300	580	1150	1200	2600	1050	1130	1170	44-14	1200	1280	1320	56-12
TRS-F800	6610	2900	2255	3325	475	1860	6450	580	1150	1300	2800	1050	1130	1170	44-14	1300	1380	1420	60-12

(Note) Values inside the dashed frame give dimensions of the optional exhaust flange.

## TRS-F200 - F800 standard specifications

Model	Airflow rate (m <sup>3</sup> /min)	Water sprinkling rate (ℓ/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 <sup>3</sup> /min)	Static pressure (kPa)	Motor (kW) 50Hz/60Hz			Product only (kg)	In operation (kg)
TRS-F200	160~210	320	VEM-0501/0502	50	340	8	1.5/2.2	FTF403-LL	200	1.5	11/11	1100	16.0	1210	2810
TRS-F250	211~263	400	VEM-0503/0502	50	420	8	2.2/2.2	FTF403-LL	250	1.5	11/11	1240	19.0	1320	3120
TRS-F300	264~315	480	VEM-0651/0652	65	500	8	2.2/3.7	FTF403-LL	300	1.5	15/15	1800	23.0	1540	3990
TRS-F400	316~420	640	VEM-0803/0802	80	690	8	5.5/5.5	FTF503-LL	400	1.5	18.5/18.5	2300	31.0	2050	5230
TRS-F500	421~525	800	VEM-0803/0802	80	840	8	5.5/5.5	FTF603-LL	500	1.5	18.5/22	2760	39.0	2420	6300
TRS-F600	526~630	960	VEM-1001/1002	100	1000	8	5.5/7.5	FTF603-LL	600	1.5	30/30	3110	47.0	2630	7500
TRS-F700	631~735	1120	VEM-1001/1002	100	1180	8	5.5/7.5	FTF703-LL	700	1.5	30/30	3490	54.0	3150	8300
TRS-F800	736~840	1280	VEM-1003/1002	100	1340	8	7.5/7.5	FTF703-LL	800	1.5	37/37	3900	62.0	3390	9000