



## Features

- ① Achieves a high removal ratio with small installation space requirements.
- ② Incorporates new design features for easier maintenance.
- ③ Allows cross connection at the water inlet.
- ④ A standards-compliant drain pan is available as an option.
- ⑤ Features special filler material and a spray nozzle.
- ⑥ The performance is improved by seven to ten percent from earlier models (※depending on the gas type).
- ⑦ The circulation tank is leak-free thanks to the bottom-integrated design.

## TRS-HS type standard 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	450Pa	
Machine noise level	78 to 81 dB(A) (a reference noise level at 1 m from the machine with a sirocco fan)	
Allowable inlet temperature	40°Cmax. with standard design (80°Cmax. 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	97% or more
Ammonia	NH <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	97% or more

\* The scrubber may take care of gases and mists of other types as well.

(Note 1) The removal ratio for hydrogen chloride gas and ammonia gas is given assuming an original concentration of 100 ppm (max.) for each gas.

(Note 2) Achieving the intended removal ratio requires the satisfaction of the specified fresh water supply rate and scrubbing chemical liquid concentration.

(Note 3) For information about the removal of gas or mist of any other type, please contact us with specific information about the gas.



## Option for TRS-HS type scrubber: drain pan

- The FRP drain pan is lightweight and cost-efficient thanks to the tank base integrated design
- The stainless steel drain pan (with FRP flake lining on the internal surface) comes with an inclined bottom plate.
- The drain pan can be made HF-resistant.
- The FRP drain pan has the smooth internal surface of an FRP molded product.
- The size can be changed upon request.
- Complies with the Water Pollution Control Law!



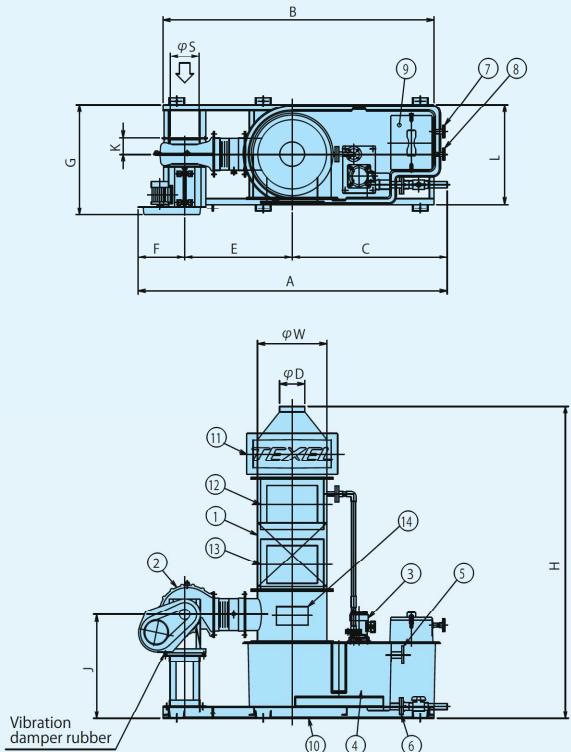
FRP model



Stainless steel model  
(with an inclined bottom plate)

# TRS-HType (Vertical packed column)

## Dimensions



**Table of materials**

No.	Part name	Material	Quantity	Remarks
1	Column unit	FRP	1	
2	Blower	FRPP (Note 1)	1	
3	Circulation pump	G-PP (Note 2)	1	
4	Circulation tank	FRP	1	
5	Overflow fitting	FRP	1	40A, JIS10K flange
6	Drain fitting	FRP	1	40A with PVC valve
7	Ball tap at the water inlet	PVC	1	20A, JIS10K flange
8	Water inlet	PVC	1	20A, JIS10K flange
9	Circulation tank inspection door	FRP	1	300 (W) x 400 (L) (Note 3)
10	Common base	SS400	1	Hot-dip galvanized
11	Mist catcher removal door	FRP	1	
12	Filler loading door	FRP	1	300W x 400H
13	Filler removal door	FRP	1	300W x 400H
14	Name plate	Acryl	1	

(Note 1) In the case of the model with a turbo fan, the fan casing is made of FRP and the impeller is made of G-PP (or FRP upon request).

(Note 2) PP is used in the case of TRS-HS50 or greater.

(Note 3) The dimensions are 400 (W) x 400 (L) in the case of TRS-HS120 or larger.

## Dimensions (unit: mm)

Model	A	B	C	$\phi D$	E	F	G	H	J	K	L	$\phi S$	$\phi W$
TRS-HS 25	2472	2150	1250	200	852	370	874	2481	825	130	790	268	550
TRS-HS 50	2815	2475	1335	300	1045	435	1121	2698	870	160	1040	320	800
TRS-HS 80	3130	2850	1425	400	1245	460	1273	2698	910	200	1240	422	1000
TRS-HS 120	3150	2870	1245	450	1445	460	1440	2698	910	200	1440	422	1200
TRS-HS 160	4125	4000	1345	550	1930	850	1710	2698	1275	330	1640	510	1400

(Note) With a sirocco fan

[Options]

Discharge flange, level meter, pH meter, chemical liquid inlet fitting, heater, damper, vibration isolated suction joint, vibration isolated blower stand, chemical liquid injection pump, chemical liquid tank, control panel, drain pan

(Note) A customized design for the change of material is required if HF gas, Cl<sub>2</sub> gas, chromic acid mist, solvent or the like has to be handled, or if the incoming gas is hot.

## Standard specifications with a sirocco fan

Model	Airflow rate (m <sup>3</sup> /min)	Circulation pump				Blower				Tank capacity (L)	Weight	
		Model 50Hz/60Hz	Discharge (L/min)	Pump head (m) 50Hz/60Hz	Motor (kW) 50Hz/60Hz	Type	Airflow (m <sup>3</sup> /min)	Static pressure (kPa)	Motor (kW) 50Hz/60Hz		Product only (kg)	In operation (kg)
TRS-HS 25	~ 25	VSP-0251/0252	50	5.0	0.2/0.2	CES101	25	0.85	1.5/1.5	350	230	680
TRS-HS 50	26 ~ 53	VHP-0401/0402	100	4.5	0.4/0.4	CES151	53	0.85	2.2/2.2	600	320	1110
TRS-HS 80	54 ~ 83	VHP-0501/0502	160	5.5	0.4/0.4	CES201	83	0.85	3.7/3.7	820	430	1490
TRS-HS 120	84 ~ 120	VHP-0651/0652	230	4.5	0.75/0.75	CES201	120	0.85	3.7/3.7	900	490	1600
TRS-HS 160	121 ~ 165	VHP-0653/0654	310	5.5	0.75/1.5	NSF302	165	0.85	5.5/5.5	1140	715	2200

## Standard specifications with a turbo fan

Model	Airflow rate (m <sup>3</sup> /min)	Circulation pump				Blower				Tank capacity (L)	Weight	
		Model 50Hz/60Hz	Discharge (L/min)	Pump head (m) 50Hz/60Hz	Motor (kW) 50Hz/60Hz	Type	Airflow (m <sup>3</sup> /min)	Static pressure (kPa)	Motor (kW) 50Hz/60Hz		Product only (kg)	In operation (kg)
TRS-HS 25	~ 25	VSP-0251/0252	50	5.0	0.2/0.2	CET151	25	1.2	1.5/1.5	350	265	720
TRS-HS 50	26 ~ 53	VHP-0401/0402	100	4.5	0.4/0.4	CET201	53	1.2	2.2/2.2	600	395	1180
TRS-HS 80	54 ~ 83	VHP-0501/0502	160	5.5	0.4/0.4	CET251	83	1.2	3.7/3.7	820	490	1555
TRS-HS 120	84 ~ 120	VHP-0651/0652	230	4.5	0.75/0.75	FTF303	120	1.2	3.7/5.5	900	615	1765
TRS-HS 160	121 ~ 165	VHP-0653/0654	310	5.5	0.75/1.5	FTF303	165	1.2	7.5/7.5	1140	770	2210