

Our partner



EBARA CORPORATION

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EBARA

Ahead Beyond

# Point of use abatement systems

## Combustion type Model TND, G5, G6

## High performance wet trap Model FST, ETRAP, FTRAP

### Precision machinery company Overseas office

**USA:**  
Ebara Technologies Inc  
H Q: Sacramento(CA)  
F S C: Sacramento(CA)  
Hillsboro(OR)  
S S: San Jose(CA)  
Albany (NY)  
Newburyport  
Boise(ID)

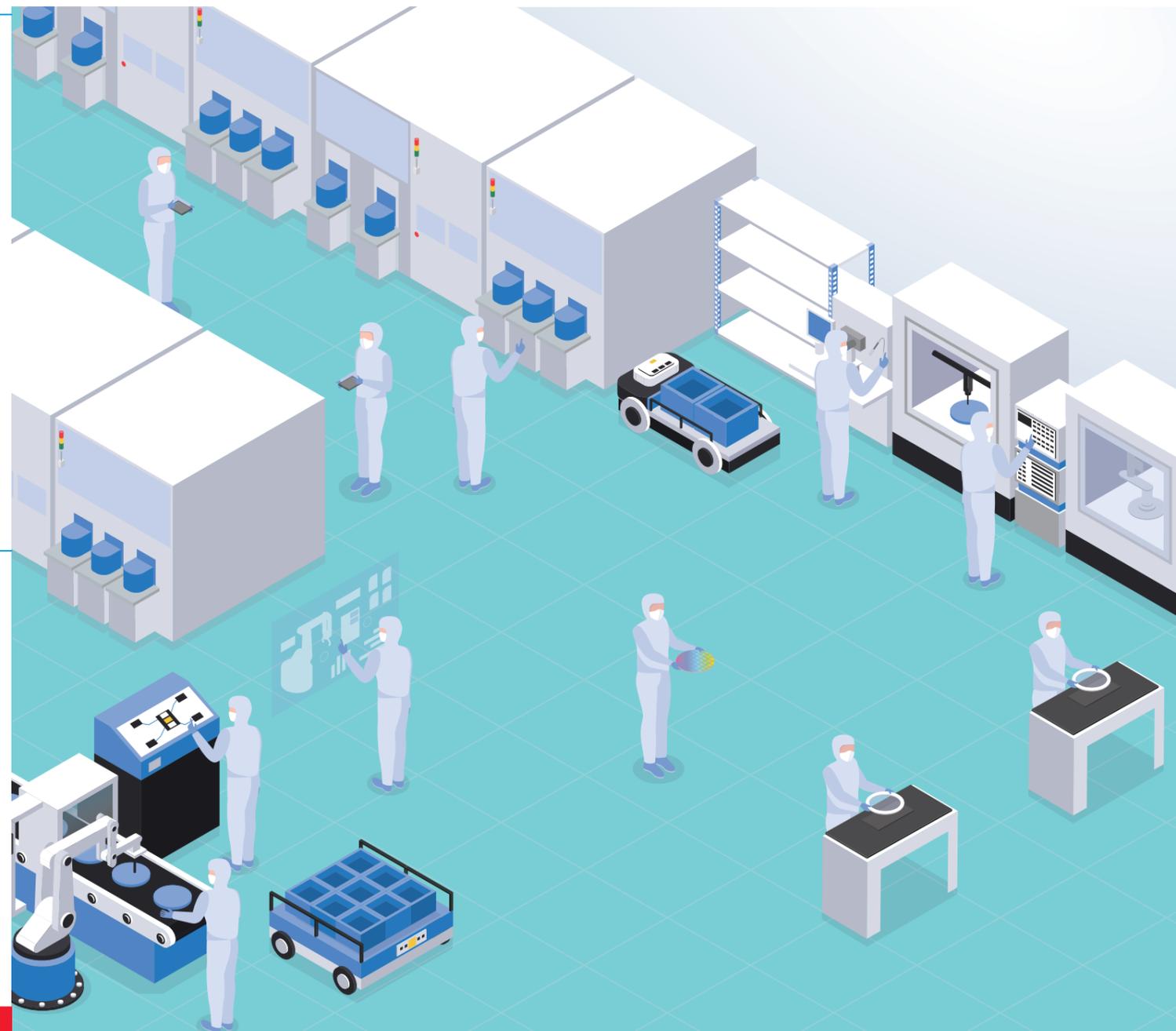
**EUROPE:**  
Ebara Precision Machinery Europe GmbH  
H Q: Sauerlach, Germany  
F S C: Livingston, UK  
Dresden, Germany  
S S: Graz, Austria

**KOREA:**  
Ebara Precision Machinery Korea Inc  
H Q: Pyeongtaek  
F S C: Pyeongtaek  
S S: Seongnam  
Hwasung  
Cheonan  
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**CHINA:**  
Shanghai Ebara Precision Machinery Co.,LTD  
H Q: Shanghai  
F S C: Shanghai  
S S: Wuxi  
Dalian  
Beijing  
Wuhan

**SINGAPORE:**  
Ebara Engineering Singapore Pte.Ltd  
H Q: Tuas Link  
F S C: Tuas Link

**TAIWAN:**  
Ebara Precision Machinery Taiwan Inc  
H Q: Taipei  
F S C: Hukou  
S S: Linkou  
Hsinchu  
Taichung  
Tainan



### Precision machinery company Japan office

- HQ**  
Fujisawa(Kanagawa Pre.)
- Factory**  
Fujisawa(Component product, Overhaul)  
Chubu(Overhaul)  
Suzuka(Overhaul)  
Kumamoto(CMP,Plating,Bevel,Overhaul)
- Sales and support office**  
Kitakami,Tohoku,Yamagata,  
Fujisawa,Chubu,Osaka,  
Hiroshima,Oita,Nagasaki,Kumamoto



Fujisawa(Component product, Overhaul)

● The product(s) described herein fall under "the goods listed in row 16 of the appended table 1 of the Export Trade Control Order of Japan", so in cases of export of such product(s), you need to confirm "use" and "purchaser and/or end-user" and, as case may be, obtain the approval of the Minister of Economy, Trade and Industry. (Please confirm these conditions on your own.) Furthermore, some of the product(s) fall under row 1-15 of the appended table 1 (listed items). In case of export of these listed items, you are required to obtain the export license from the Minister of Economy, Trade and Industry. For more information, please contact our sales office located near you.

● All specifications are subject to change without notice.  
● Model ○○○ in this catalogue is our model code.

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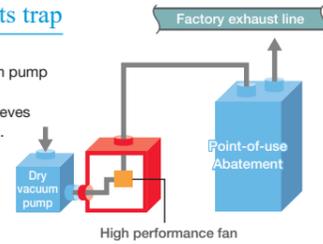
# High performance wet trap Model FST, ETRAP, FTRAP

High performance wet trap installed behind a dry vacuum pump for extending the maintenance intervals of abatement system. Simple structure helps maintaining process uptime. Integrated with EBARA combustion type abatement, wet trap model can be applied for the wide range of semiconductor process.

## Image

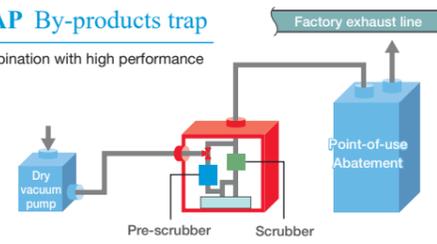
### Model FST By-products trap

Equipped with Fan  
Directly connected with a dry vacuum pump to remove by-products.  
EBARA's design and technology achieves high destruction rate efficiency (DRE).



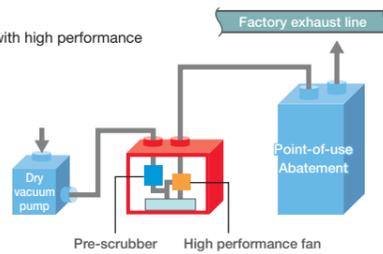
### Model ETRAP By-products trap

Pre-scrubber in combination with high performance wet trap



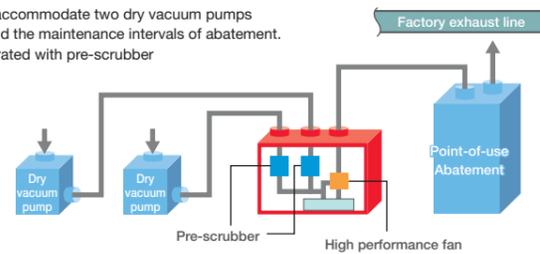
### Model FTRAP-1 By-products trap

Reduced Footprint  
Pre-scrubber in combination with high performance fan unit

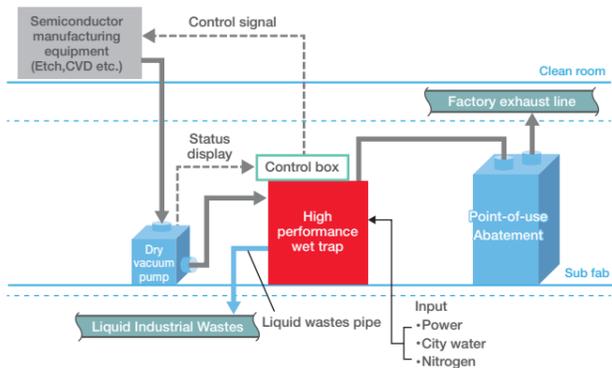


### Model FTRAP-2 By-products trap

Can accommodate two dry vacuum pumps  
Extend the maintenance intervals of abatement.  
Integrated with pre-scrubber



## Image



\* Integrated with products from EBARA make it possible to output control signal to equipment side in batch.

Corrosion resistant technology derived from EBARA's abatement systems

Unique water wall technology for preventing by-products adhere on all gas flow paths



## Specifications

Model	Maximum flow rate (L/min)	Inlet port numbers	Dimensions (mm)	Technology		Process						Feature		
				Washing Tower	High performance fan	CVD			Etching		Asher		Epitaxial	
						SiO <sub>2</sub> (HCD/DCS)	TiO <sub>2</sub> (TiCl <sub>4</sub> )	WO <sub>3</sub> (WF <sub>6</sub> )	SiO <sub>2</sub> (SiF <sub>4</sub> )	B <sub>2</sub> O <sub>3</sub> (BCl <sub>3</sub> )				NH <sub>3</sub>
FST	400	1	W400 × D390 × H1,026		○	○	○	○	○	○	○	○	○	Directly connected with a dry vacuum pump
ETRAP	400	1	W640 × D640 × H1,980	○	○	○	○	○	○	○	○	○	○	Low cost type
FTRAP-1	180	1	W900 × D700 × H1,980		○	○	○	○	○	○	○	○	○	High DRE
FTRAP-2	360	2	W900 × D700 × H1,980		○	○	○	○	○	○	○	○	○	High DRE

\*Install an appropriate abatement after the high performance wet trap  
\*Please contact us for details.

\*If you are considering other than semiconductor manufacturing process, please contact us.

# Combustion type Model TND, G5, G6

EBARA combustion type Model provides environmental abatement solutions for harmful and greenhouse gases such as perfluorocarbon gases which are generated in semiconductor manufacturing process.

Effective combustion technologies and heat exchanger offers water-saving function to achieve significant reduction to the cost of ownership.

Excellent life-span based on the wide experience of EBARA from the most advanced semiconductor manufacturing process.

Unique combustion technologies of EBARA provides Sustainable Development Goal solutions for the abatement of greenhouse gases from semiconductor manufacturing processes.

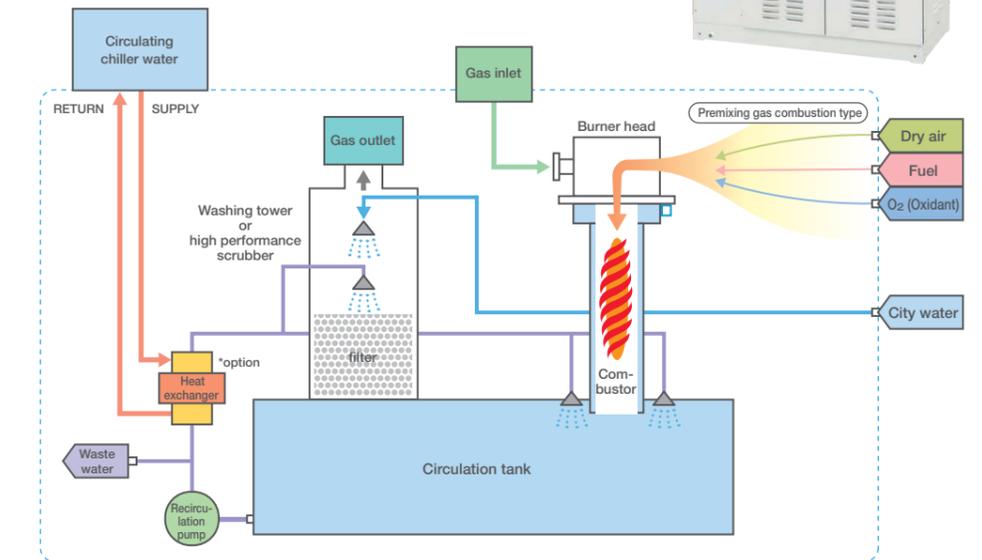
## Model TND



## Model G5



## Model TND image flow



## Specifications

Model	Maximum flow rate (L/min)	Inlet port numbers	Dimensions (mm)	By-product solutions			Process					
				Pre-scrubber	Burner water flushing	Scrapper	CVD	Etching	Asher	Epitaxial	PV	
G5-A4	G5-350	350	~4			○	○	○	○	○		
	G5-500	500	~4			○	○	○	○	○		
	G5-600	600	~4			○	○	○	○	○		
G5-A6	G5-1200	1200	~6			○	○	○	○			
G6-E-A4	400	~4	W1,260 × D910 × H1,930			○	○	○	○		○	
G6-PV-A4	1200	~4	W1,200 × D1,880 × H2,300			○	○	○	○			○
TND-Single	400	~4	W1,200 × D650 × H1,980		○	○	○	○	○	○	○	○
TND-Single Plus	-A2	400	~2	W1,200 × D650 × H1,980	○	○	○	○	○	○	○	○
	-A8	400	~8	W1,200 × D1,150 × H1,980	○	○	○	○	○	○	○	○
	-A4	800	~4	W1,600 × D850 × H1,980	○	○	○	○	○	○	○	○
TND-Double	800	~4+4	W1,800 × D650 × H1,980		○	○	○	○	○	○	○	○
TND-Dual	800	~6+6	W1,860 × D750 × H1,980		○	○	○	○	○	○	○	○