



AEROSPACE & SEMICONDUCTOR FLOW

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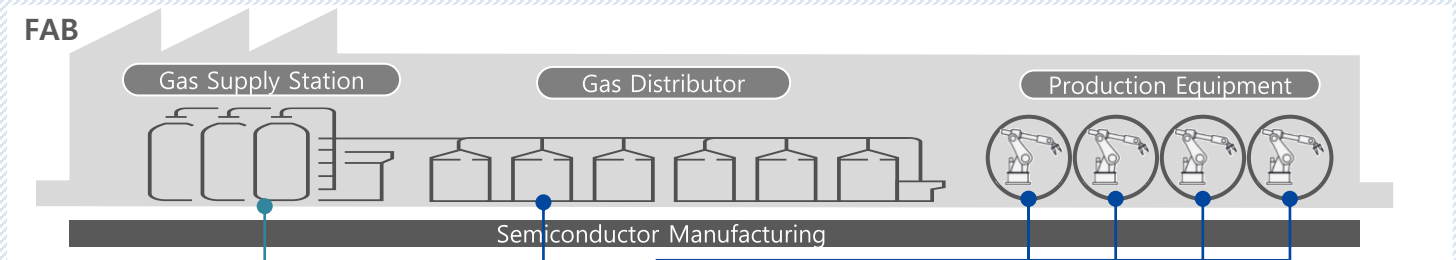


Batch development of semiconductor process gas supply and control components

Production Capability

Key area

Expansion(in progress)



Construction Parts



- Tube / Pipe
- Bend Fitting / Metal Seal Fitting
- Bellows Valve / Regulator
- Filter

Gas Delivery



- VIMVAR Tube
- Micro Fitting
- Diaphragm Valve, Regulator
- Filter

Module (TGS, IGS, OLED)



- Valve Manifold Panel
- Valve Manifold Board
- Gas Box Panel
- OLED Module

Main Products

Ultra-high precision and clean process components that convey gases from the supply station to process equipment in semiconductor processes

Tube, Pipe & Fitting

- Components for semiconductor process gas supply
- Mirror-like ultra-clean and ultra-high precision parts with excellent straightness
- Connecting tubes and pipes and adjusting angles



Valve & Regulator

- Control process gas flow and maintain pressure components
- Meet customer needs with high-precision, high-function original technology



Module

Assembled in a bundle of fittings, valves, and filters for process gas supply



Filter & Diffuser

- Components for filtering foreign substance in gas
- Parts prevent damage of wafer when vacuum is released.
- 2.5nm (smaller than 1/3,000 of hair size) particle filtration





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CHAPTER

1

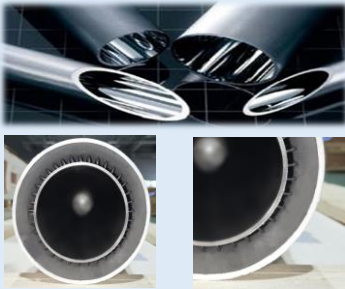
Tube / Pipe & Fitting



01-1. Tube / Pipe & Fitting Line-up

Tube / Pipe

- Tube 1/4" to 6"
- Pipe 15A to 600A
- SUS304, SUS316L
- Capacity : 500 Km/M



Tube / Pipe Fitting

- Tube 1/4" to 6"
- Pipe 8A to 600A
- SUS304, SUS316L
- Capacity : 40K EA/M



Weld Fitting

- 1/4" to 1"
- 6mm to 18mm
- SUS316L, VIM-VAR
- Capacity : 150K EA/M



Metal Seal Fitting

- 1/4" to 1"
- SUS316L, VIM-VAR
- Capacity : 500K EA/M



- Supplying Samsung & SK Hynix with stable quality for more than 15 years. (VIM/VAR Tube approved)
- 8 EP machines for Tube & Pipe, 6 Flowing EP machines for Fitting and 5 Dipping machines are up and running
- Tube & Pipe **6-Step Automatic DI Water Cleaning Machine** / Eddy Current Test machine for Defect Inspection



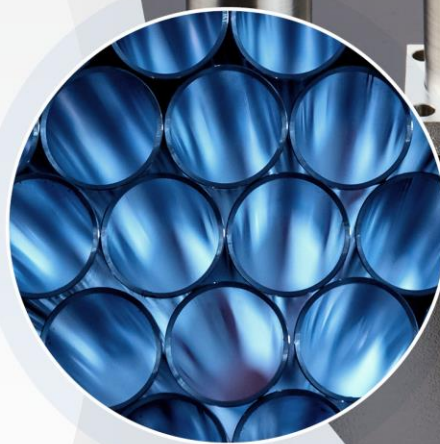
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CHAPTER

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Valve & Regulator

- 01. Product Line-up
- 02. Sales Performance
- 03. Key Products
- 04. Manufacturing Process
- 05. Strength of ASFLOW's Valve
- 06. Inspection Standards
- 07. 1/4" Manual Diaphragm Valve Comparison
- *ref) 1/4" Manual Diaphragm Valve Test Report



02-1. Valve & Regulator Product Line-up

Diaphragm Valve

- Max Working Pressure
1Mpa, 20MPa
- 1/4" to 3/4"
- **Capacity : 50K EA/M**



Regulator

- Max Working Pressure
1MPa
- 1/4" to 3/4"
- **Capacity : 10K EA/M**



Bellows Valve

- Max Working Pressure
1Mpa
- 1/4" to 100A
- **Capacity : 2K EA/M**



IGS (Block & V/V)

- Max Working Pressure
1Mpa
- 1.125" , 1.5"



- **Supplying Samsung & SK Hynix for utility line for more than 7 years**
- Supplying Diaphragm, Bellows and Check Valves to Samsung & SK Hynix
- Supplying Regulators and IGS blocks to Yutaka & CKD as OEM
- Since March 2022, have been supplying Canister Valve for chemical delivery (5gallon/19L ▷ 3Way & 1Way Valve)



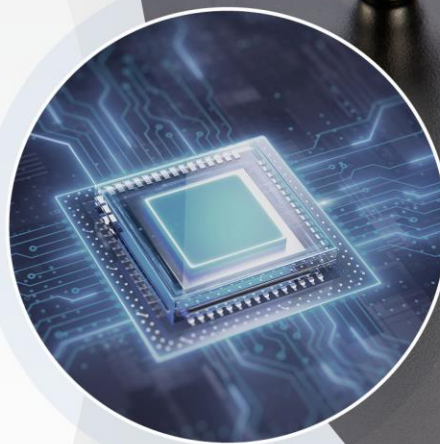
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CHAPTER

3

Filter

- 01. Product Line-up
- 02. Sales Performance
- 03. Key Product
- 04. Manufacturing Process
- 05. Filter Quality Standards



Filter / Diffuser Product Line-up

Gas Filter

- Flow Rate :
30 to 600 LPM
- Capacity : 2K EA/M



Bulk Filter

- Flow Rate :
up to 25,000 LPM
- Capacity : 1K EA/M



Gasket Filter

- 1/4" , 1/2"
- W-Seal / VCR Type
- Capacity : 3K EA/M



Diffuser

- Flow Rate :
50 to 25,000 LPM
- Capacity : 1K EA/M



- Supplying diffuser and filter for display equipment to AMAT and ULVAC for 5 years
- Top notch 2.5nm level filter inspection machine, possesses various production capability filters(MIM / CIP / Auto Press)