



# RenoNix Leak Detect Bellows

2019.09.19



# Contents



**Company Compendium**



**Leak Detect Bellows**



**RenoNix Major Customer**

# 1. Company Profile

Established 04<sup>th</sup> November 2010

Business Semiconductor tools marketing, Refurbishment, Installation, Relocation, Conversion & Modification, Parts outsourcing, Technical Service, On call service & Technical Development & manufacturing

Capital 330K USD

Employee 16 Persons

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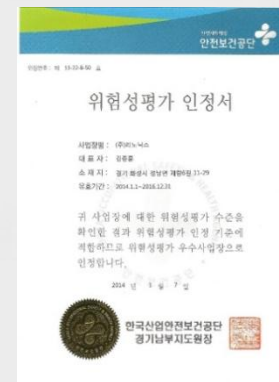
✓ISO9001  
QAIC/KR/4291-B



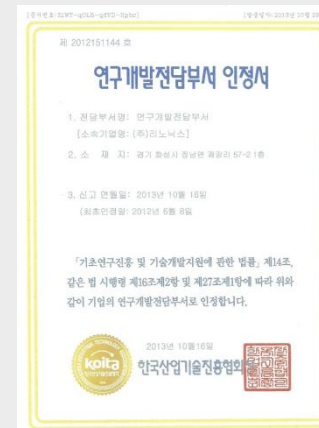
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QAIC/KR/4292-B



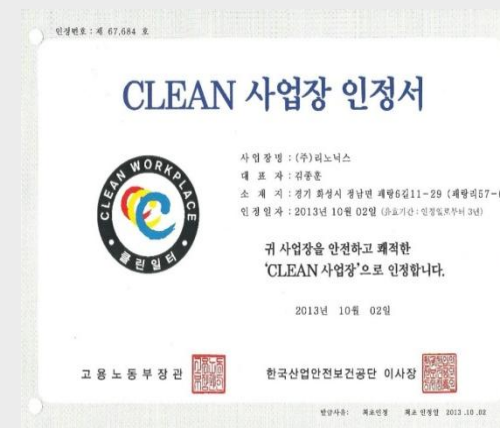
✓Enterprise Risk Management  
13-22-B-50



✓Research Institute  
2012151144

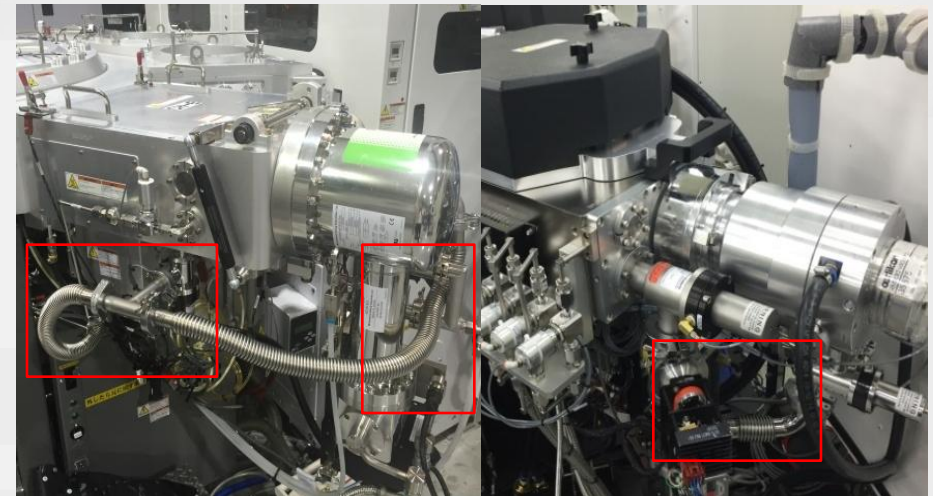
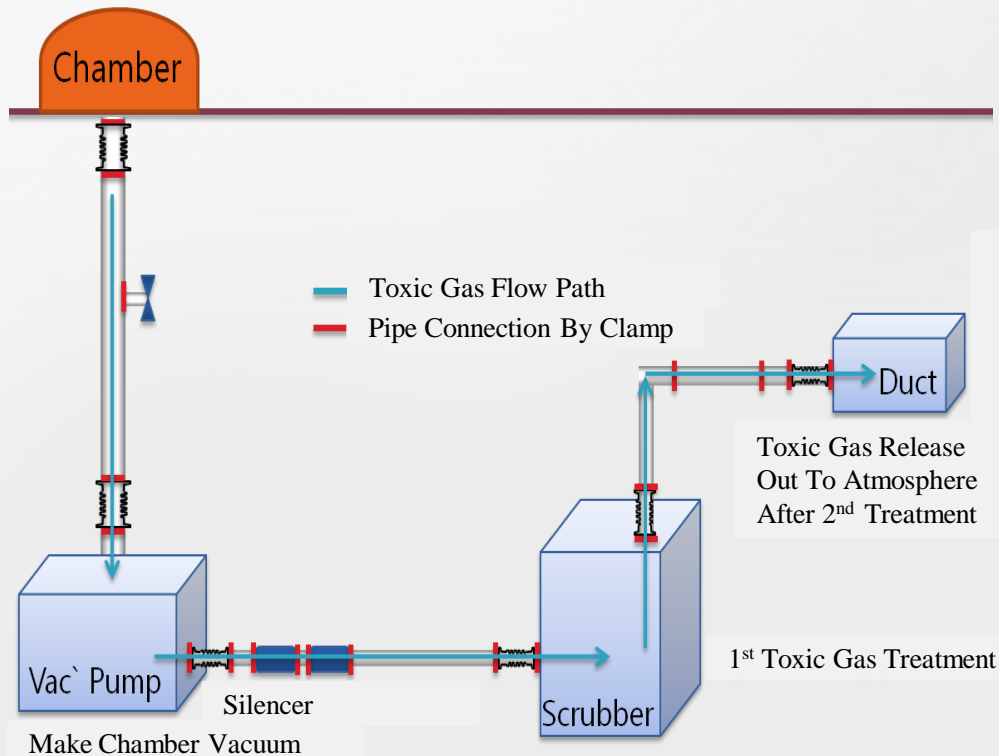


✓Clean Industry  
67,684



## 2. Leak Detect Bellows

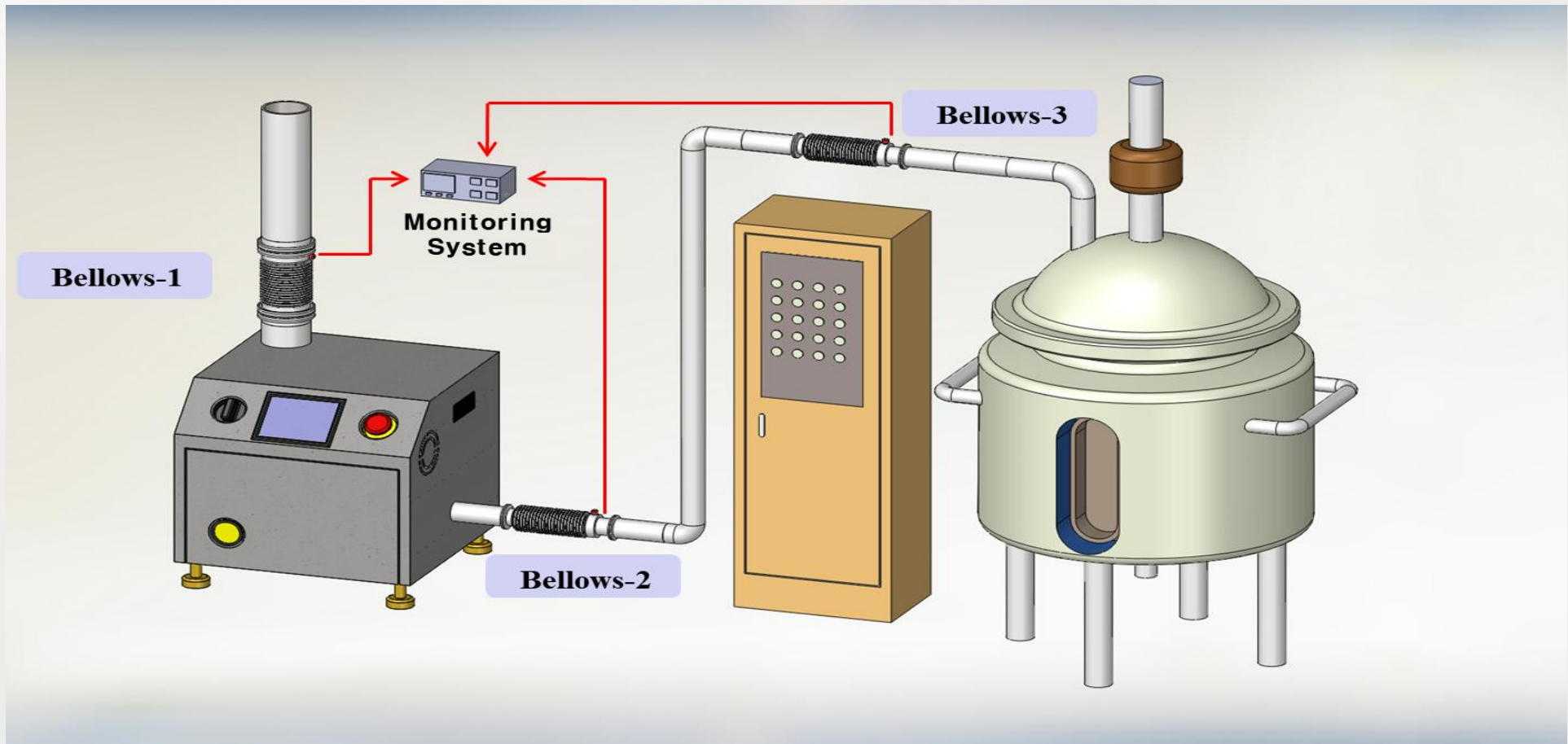
### ➤ Bellows Leak Monitoring System



- Semiconductor FAB uses various toxic and corrosive gases, So pipe leak management is very important for safety and productivity.
- Bellows is **prone to gas leakage** due to it's **structural characteristics** and **using environment**.
- But it impossible to monitor a lot of pipe lines everyday, That why we need bellows leak monitoring system.

## 2. Leak Detect Bellows

### ➤ Bellows Leak Monitoring System



Monitor the bellows status configured on the vacuum line using the sensors mounted on each bellows.



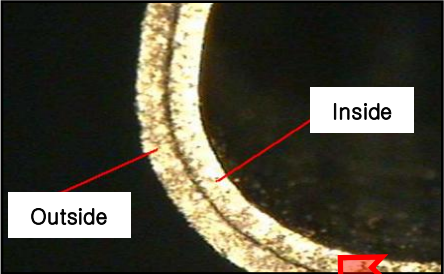
# 2. Leak Detect Bellows

## ➤ Bellows Leak Monitoring System

- 1. Double Poly Bellows.
- 2. Argon Gas Charged Inside Of Bellows Poly.

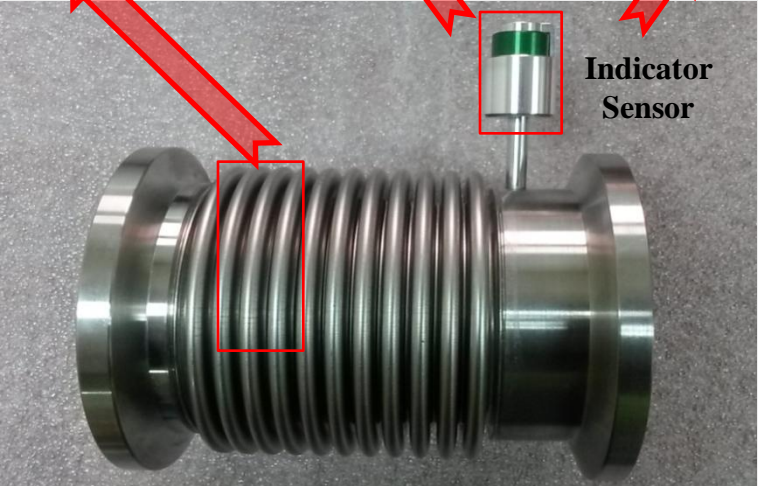


Sensor operates when internal argon gas pressure is reduced due to bellows breakage. Visual observation through the indicator sensor or it can be checked by an electrical Signal (Sensor type).



Leak Occurred

Normal Operation



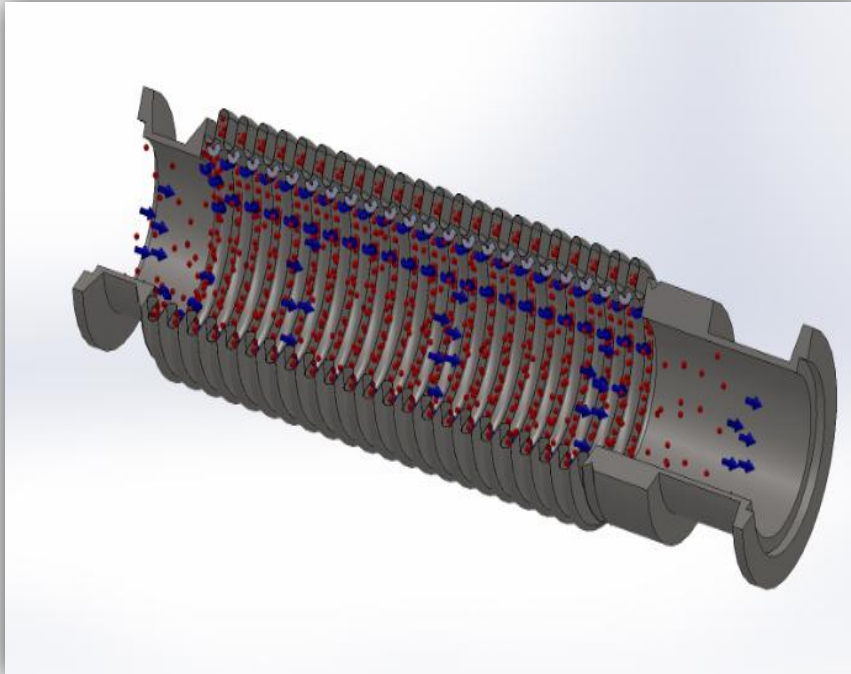
DC 24V- Normal Open Switch

Leak Detected - Switch On  
Normal Operation - Switch Off  
\* Requires Optional Monitoring System

## 2. Leak Detect Bellows

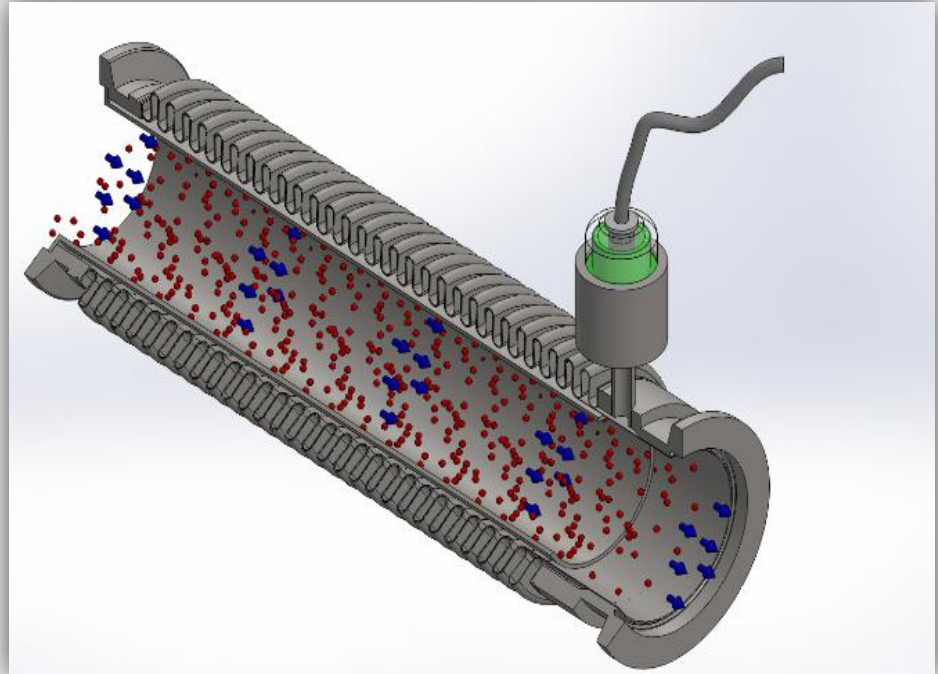
### ➤ Preventing Pipe Line Blockage

**Normal Bellows**



Powder can be deposited inside of bellows interferes with gas flow and cause process troubles.

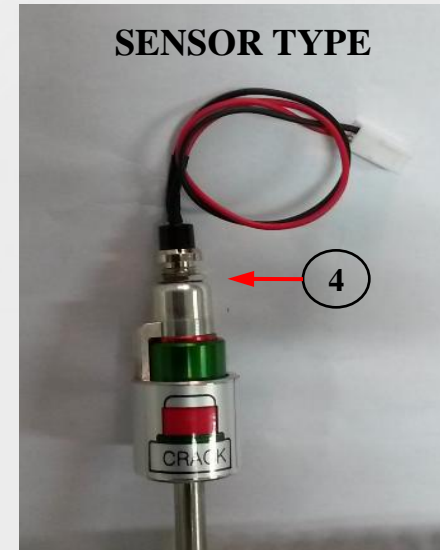
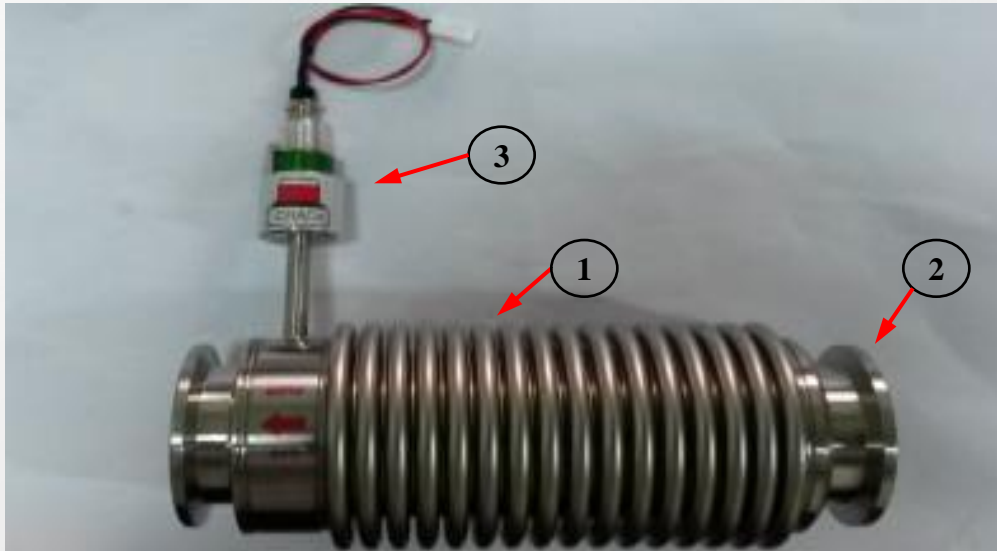
**Leak Detect Bellows**



Sleeve pipe prevents powder deposition inside of bellows to minimize pipe line blockage.

## 2. Leak Detect Bellows

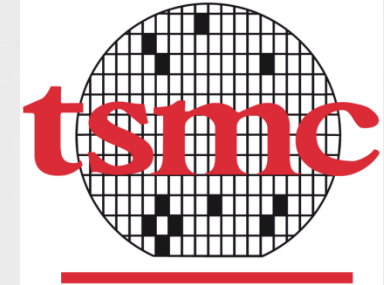
### ➤ Preventing Pipe Line Blockage



NO.	Item	SPEC	Remark
1	2 Ply Bellows	SUS304 / 316L / 316Ti, Hast-C22	Material Can Be Changed
2	Flange	NW, ISO, CF Flange	-
3	Detector	Indicator Sensor (Red, Green)	<b>Green : Normal Operation</b> <b>Red : Leak Detected</b>
4	Sensor	DC 24V Switch (Normal Open)	Optional Item



# RenoNix Major Customer



# Contact Point

**We're Capable of Most of service for PVD,CVD, ETCH areas.  
If you have any inquiry or interest , please feel free to contact us.**



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