

Liquid & Solid Successive Centrifuge

Vertical dual continuous
Manual/automatic
Centrifugation type filter



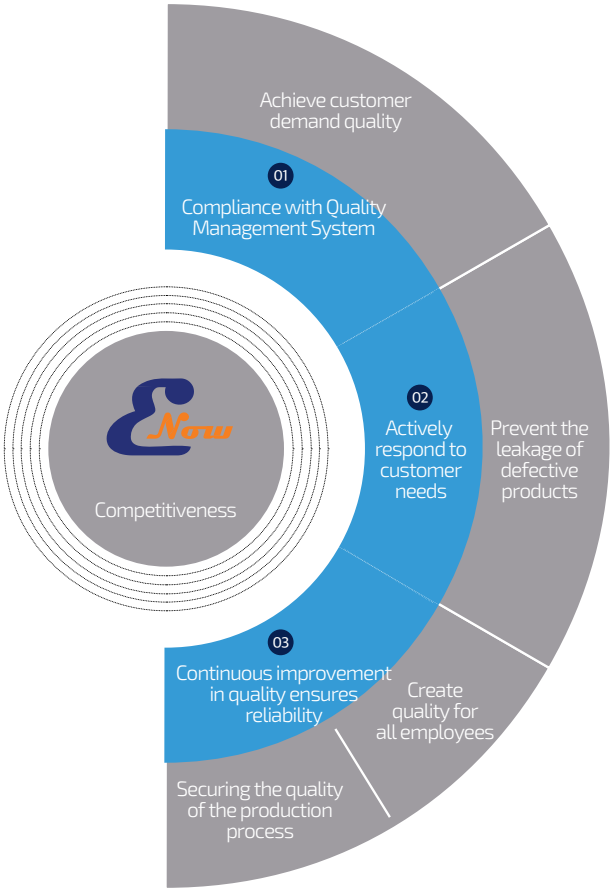
Venture for
Tomorrow
Korean Venture Entrepreneurship



Now E&S Co., Ltd.



Challenge, Creativity, Efficiency!



Established in 2001, NOW E&S Co., Ltd. has manufactured a variety of products for industrial areas of Electricity and electronics, such as the automated control systems of large construction machines, PLANT equipment, and switchboard. With the development of a semi-permanent centrifugal-type cleaning system for an industrial purpose, our company has also developed products and technologies in general industries and environmental industries. By expanding product items, our company contributes to the growth and development of domestic Electrical and mechanical industries.

These days, based on the experiences and technologies having been accumulated in the areas of Electricity, machine, and construction since the establishment, our company has developed the automated equipment and products for making GFRP Rebar and CFRP Rebar. Such developed products serve their roles in the development projects of high-strength and low-weight structures without corrosion in order to improve the quality and lifespan of building concrete structures in the domestic construction and civil engineering market. To grow as one of main enterprises in the 4th industry, our company continues to develop products and conduct R&D for new products.

In order to achieve the quality improvement goal for the development of national industries and customer impression, all executives and employees of NOW E&S Co., Ltd. promise to make ceaseless efforts to serve society and grow as a reliable enterprise by performing ESG management.

2001 04	Established NOW Electrical Power	2011 01	Acquired Certificate of R&D Dept. (Korea Industrial Technology Association)	2013 01	Acquired New Renewable Energy Equipment Installation Business'	2019	Applied for the patent 'Apparatus and Method for Manufacturing Glass Fiber Reinforced Polymer (GFRP) Rebar
2003 03	Applied for the patent 'Excavator operation method and control system'	2011 02	Applied for the patent 'Centrifugation type filter with lower drain structure' and six others	2013 02	Registered the patent 'Vertical screw type centrifuge'	2020	Registered the patent 'Method and Apparatus for Manufacturing Glass Fiber Reinforced Polymer (GFRP) Rebar
2006 01	Registered the patent 'Excavator operation method and control system'	2011 05	Acquired 05ISO 9001	2013 07	Registered the patent 'Vertical screw type centrifugal separator'		Registered the patent 'Apparatus for Manufacturing Glass Fiber Reinforced Polymer (GFRP) Rebar and GFRP Rebar
2007 04	Registered as Electrical Construction Business (construction license no. 01218)	2011 06	Established the joint corporation of NOW Electricity and E&S (NOW E&S Co., Ltd.)	2014 04	Registered the patent 'Centrifugation type filter'		Applied for the patent 'Apparatus for Manufacturing Glass Fiber Reinforced Polymer (GFRP) Rebar Rib and the Rebar Generating Ribs
2007 05	Changed the business name of Now Electricity	2011 06	Expanded factory (Hallim-myeon, Gimhae)	2014 09	Relocated factory (Jochon-myeon, Gimhae-si)		Applied for the patent 'Drilling Automation System and Method of Trench Cutter'
2009 04	Registered factory (Ugye-ri, Sangdong-myeon, Gimhae-si)	2011 09	Acquired Venture Business	2014 11	Applied for the patent 'Interworking method of plural centrifuges' and one another		
2009 05	Registered in Public Procurement Service (switchboard and automatic control panel)	2011 10	Registered the patent 'Vertical screw type centrifugal separator'	2016 08	Registered the patent 'Interworking method of Plural Centrifuges' Registered the patent 'Vertical Type Centrifuge'	2021	Acquired Centrifuge CE
2010 12	Established NOW E&S Co., Ltd	2012 02	Developed manual centrifugation-type cleaning system	2018 03	Newly constructed a factory (in the Gimhae Techno Valley Industrial Complex)		
		2012 05	Developed automatic centrifugation-type cleaning system				



Now Electronics and Solutions

Successive Centrifuge



- ▶ The centrifugal separator has a manual model with lower drainage structure (domestically patented), an automatic model based on high-speed and strong centrifugation mechanism, a solid-liquid model helping to improve the livestock environment, and a dual model supporting 24-hour continuous operation.
- ▶ For user convenience, the equipment drains down the cleaning liquid in its sludge bucket in order to reduce the bucket weight and easily attach and detach the tank.
- ▶ By shortening a sludge cleaning time, the next-generation centrifuge helps to improve customer productivity. Based on high speed and strong centrifugation mechanism, the equipment is applicable to highly-viscous oil separation.
- ▶ Like an expensive centrifuge, it is easily capable of treating fine types of sludge, including whetstone powder, carbon, glass dust, quartz, and ceramics.



Improvement in user convenience through the domestically patented lower drainage structure

After centrifugation, the residual cleaning oil in the sludge bucket is drained. So, the weight of the sludge bucket can be reduced. It is easy to attach and detach the bucket.



Maximization of the lifespan expansion of grinding machine and the improvement in product



Unnecessary expensive consumables used by conventional filters



Minimum vortex-vibration through streamlined frame structure

Vortex-vibration suspension through streamlines frame structure, minimization of the product size and installation area for an equal treatment capacity



Maximized particulate filtration performance through high speed and strong centrifugation mechanism

Easy filtration of particulate matters, such as whetstone powder, carbon, lens and mobile phone liquid crystal, glass, aluminum, and stainless silicone sludge



No separation of expensive chemical additives for special purpose; low solution consumption; excellent deterioration prevention



Excellent as a filter press replacement



Effective for lowering the temperature of water-soluble liquid and preventing decomposition

▶ Product Specification

Model	Spec	Max. flow (ℓ/min)	Internal capacity of rotor(ℓ)	Filtration performance (μm)	Rotation count(RPM)		Driving motor (kW)	Installation area (WxDxH)	Weight (kg)
					50Hz	60Hz			
Manual	SCM-H50	50	4	10	2,500	3,000	0.75	355x620x590	60
	SCM-H80	80	7	10	2,500	3,000	1.5	380x650x581	80
	SCM-H150	150	15	10	2,100	2,500	3.7	500x800x676	150
Automatic	SCA-R70	70	10	10	1,800	2,200	3.7	630x1000x1830	700
	SCA-R150	150	15	10	1,800	2,200	5.5	730x1200x2040	800
	SCA-R300	300	25	10	1,800	2,200	7.5	800x1250x2140	1,000
	SCA-R500	500	40	10	1,650	2,000	15	885x1420x2300	1,200

▶ Certificates

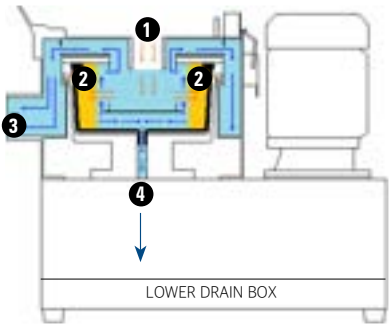


Flow process

Manual filtration process

- 1
Supply of polluted solution (inlet)
- 2
Sludge separation and deposition (inside wall of rubber bucket)
- 3
Ejection of cleaning oil (ejection hole)
- 4
Release of residual cleaning oil (outlet)

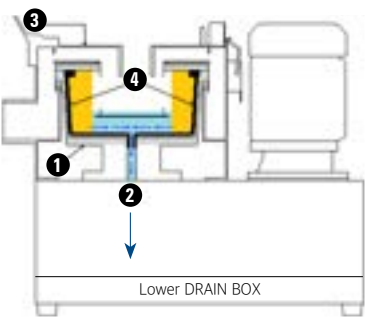
When the polluted solution supplied by a processing machine is fed to the centrifugal separator as a cleaning device through the inlet, the polluted solution is separated into cleaning oil and sludge by the centrifugal force of the rotor. The separated sludge is deposited in the inside wall of the rubber bucket. The separated cleaning oil is fed to the processing oil supplier through the outlet in a circulation type.



Manual sludge discharge process

- 1
Rotor stops (rotor)
- 2
Residual cleaning oil is discharged (outlet)
- 3
The cover of the centrifugal separator is opened (cover)
- 4
Sludge is automatically separated and cleaned (rubber bucket)

When the centrifugal separator stops to remove sludge, the rotor also stops and several liters of residual cleaning oil are discharged through the patented lower outlet. Once discharge is completed, it is possible to open the cover of the centrifugal separator, and separate and clean the rubber bucket as a sludge bucket.

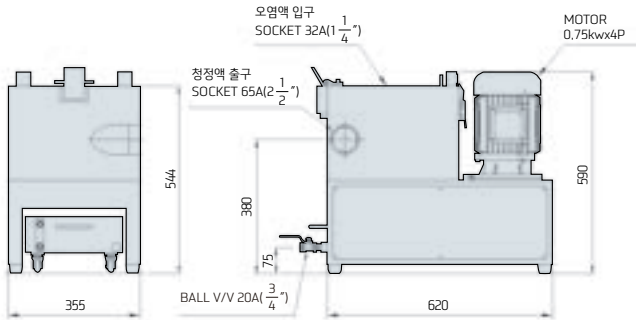


Manual sludge discharge process



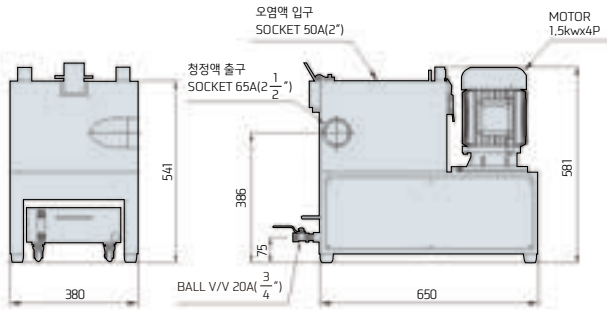
SCM-H50

Model	Spec	Max. flow (l/min)	Filtration performance (μm)	Rotation count(RPM)		Installation area(mm) WxDxH
				50Hz	60Hz	
SCM-H50		50	10	2,500	3,000	355x620x590



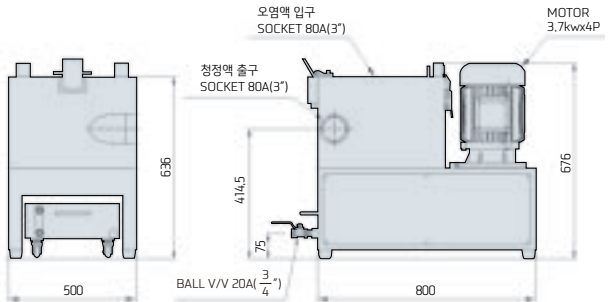
SCM-H80

Model	Spec	Max. flow (l/min)	Filtration performance (μm)	Rotation count(RPM)		Installation area(mm) WxDxH
				50Hz	60Hz	
SCM-H80		80	10	2,500	3,000	380x650x581

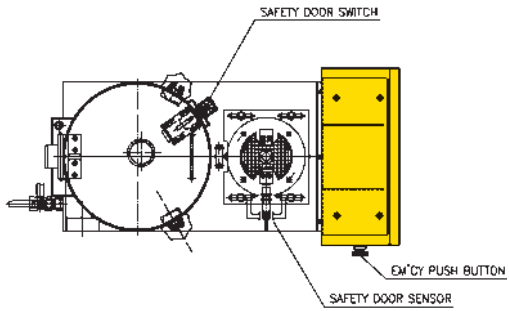
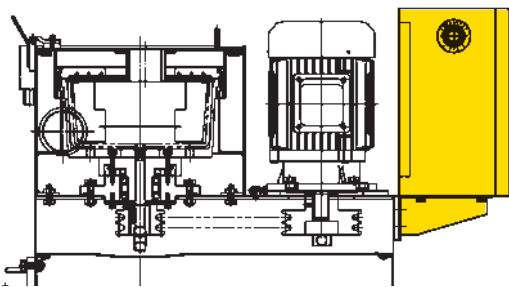


SCM-H150

Model	Spec	Max. flow (l/min)	Filtration performance (μm)	Rotation count(RPM)		Installation area(mm) WxDxH
				50Hz	60Hz	
SCM-H150		150	10	2,100	2,500	500x800x676



CE (CE product has a safety device additionally) (Control PANEL, DOOR LOCK S/W, EPB)



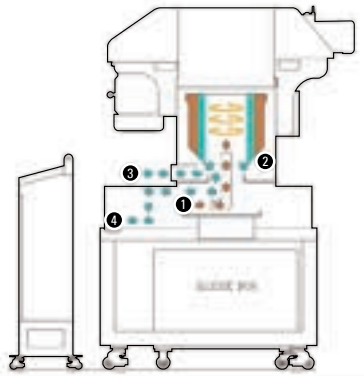
※ The above specifications are changeable for product performance improvement. Filtration performance is based on experimental values, and is changeable depending on solution viscosity and specific gravity of particulate matter.

Flow process

Automatic filtration process

- 1
Supply of polluted solution (inlet)
- 2
Sludge separation and deposition (rotor)
- 3
Ejection of cleaning oil (ejection hole)
- 4
Release of residual cleaning oil (outlet)

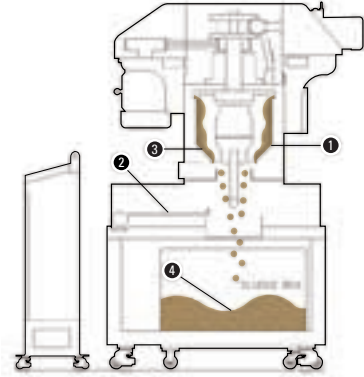
When the equipment starts to run after the centrifugation time and sludge cleaning time are set up through the operation panel, the polluted solution supplied by a processing machine is fed to the centrifugal separator through the inlet, and then is separated into cleaning oil and sludge by the centrifugal force of the rotor. The separated sludge is deposited in the inside of the rotor, and the separated sludge is fed again to the processing machine through the outlet. When the centrifugal separator stops, the residual cleaning oil is discharged through the lower outlet, and is fed again to the storage tank or processing machine.



Automatic sludge discharge process

- 1
Rotor stops (rotor)
- 2
The cover of the centrifugal separator is opened (cover)
- 3
Sludge is cleaned (scraper)
- 4
Sludge is stored (sludge box)

When the equipment reaches the centrifugation time set in the operation panel, it automatically switches to cleaning mode. At this time, the rotor stops. After the rotor stops and the cover on the bottom of the device is open automatically, the scraper rotates clockwise/ counterclockwise. The sludge deposited in the inside of the rotor is discharged and stored in the sludge box.



High-Value Model

- Livestock manure treatment only
- It is a registered model for agricultural machinery catalogue and can be purchased with government loan support.

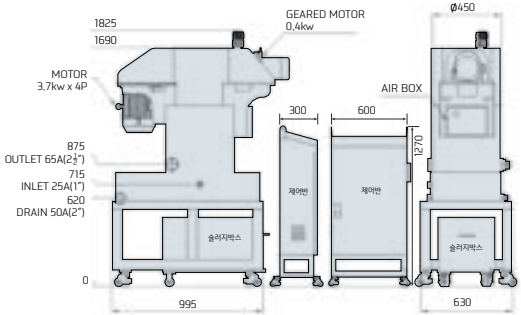
Products 02
Automatic
Filtering System
SCA-R000



※ The above specifications are changeable for product performance improvement. Filtration performance is based on experimental values, and is changeable depending on solution viscosity and specific gravity of particulate matter.

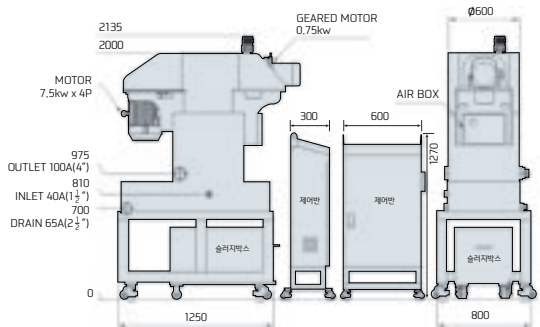
SCA-R70

Model	Spec	Max. flow (l/min)	Filtration performance (μm)	Rotation count(RPM)		Installation area(mm) WxDxH
				50Hz	60Hz	
SCA-R70		70	10	1,800	2,200	630x1000x1830



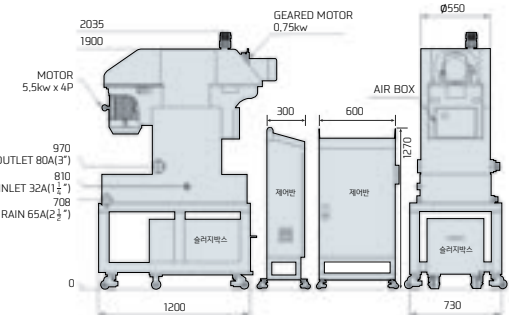
SCA-R300

Model	Spec	Max. flow (l/min)	Filtration performance (μm)	Rotation count(RPM)		Installation area(mm) WxDxH
				50Hz	60Hz	
SCA-R300		300	10	1,800	2,200	800x1250x2140



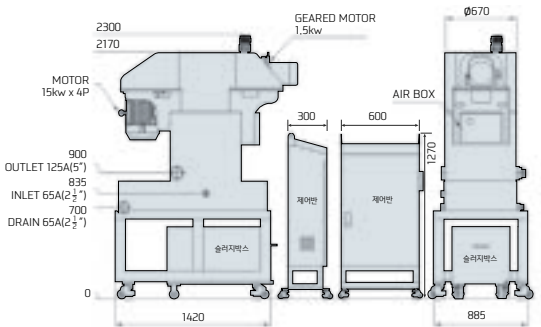
SCA-R150

Model	Spec	Max. flow (l/min)	Filtration performance (μm)	Rotation count(RPM)		Installation area(mm) WxDxH
				50Hz	60Hz	
SCA-R150		150	10	1,800	2,200	730x1200x2040



SCA-R500

Model	Spec	Max. flow (l/min)	Filtration performance (μm)	Rotation count(RPM)		Installation area(mm) WxDxH
				50Hz	60Hz	
SCA-R500		500	10	1,650	2,000	885x1420x2300



Liquid & Solid Successive Centrifuge

Applied Areas



Machine Tools

Honing, Gun Drill, Super Finishing, Ultrasonic Waves, Electrical Discharge Processing, Electro-polishing, Precision Grinding, Gear Grinding, Header, Washer



Primary Drainage Treatment

Painting booth, mud, sand, and deposit



Solid-liquid separator

Solid-liquid separation machines for treating waste water of livestock, etc.



Processing Machines

Ingot/Wafer silicone, Liquid crystal, Lens, Prism, Glass processing & cutting, Whetstone, Carbon, Aluminum, Stainless powder separation



Solution Reuse

Cutting oil, Drawing solution, Lubricating oil, Operating oil, Cutting oil, Heat treatment solution, Grinding solution, Washing water, Zinc, Steel, Phosphate treatment water, Barrel abrasive, Washing and Car washing, Waste water of food products, Biological waste water treatment sludge

Example Of A Test



Glass Sludge



Silicon Sludge



Ceramic Sludge



Press Sludge



Glass Sludge
Solid solution
+ Primary clean solution



Glass Sludge
Solid solution
+ Fifth clean solution



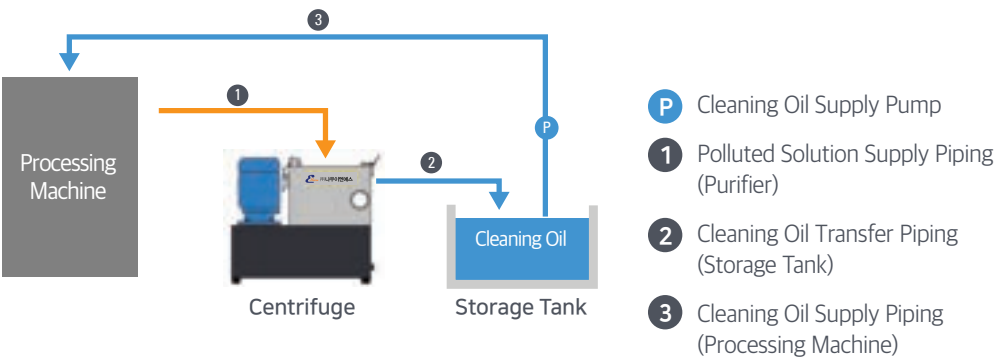
Glass Sludge
Solid solution
+ Tenth clean solution



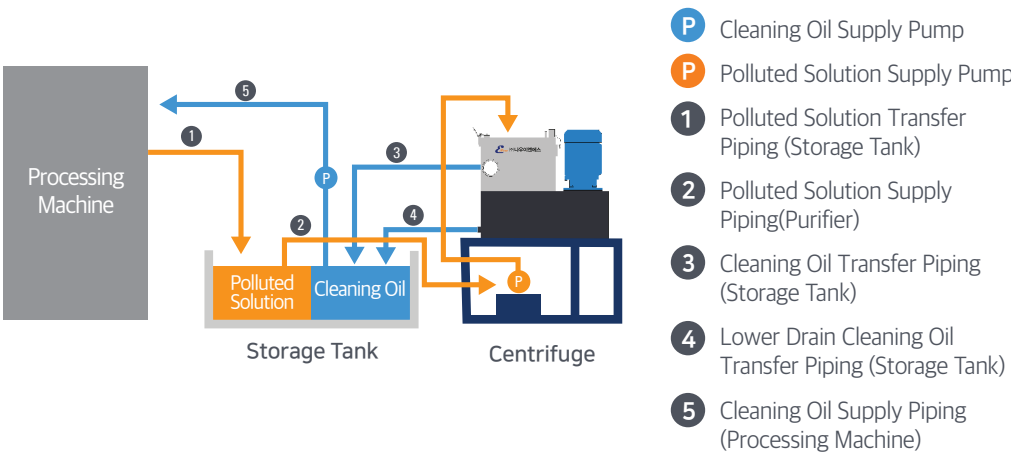
Glass Sludge
Solid solution
+ Lower Drain

System Configuration Example

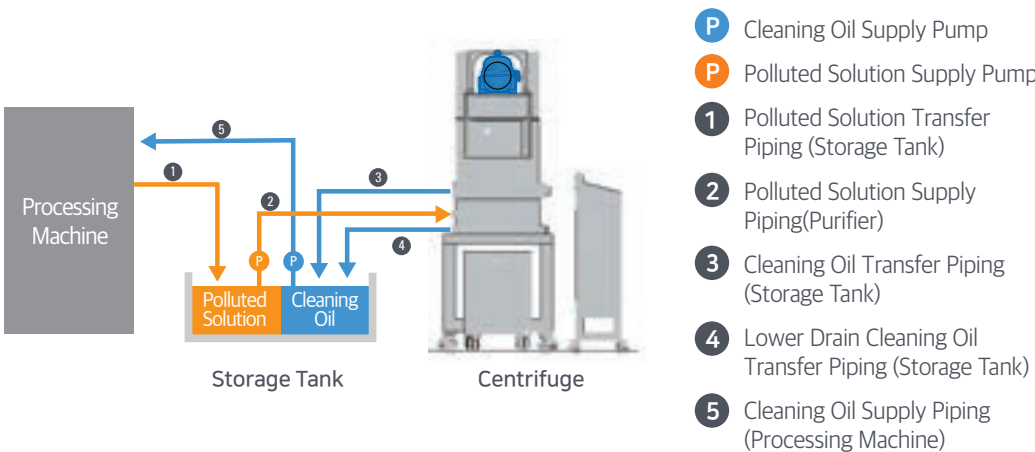
01_ Manual Filtering System SCM-H



02_ Manual Filtration system SCM-H



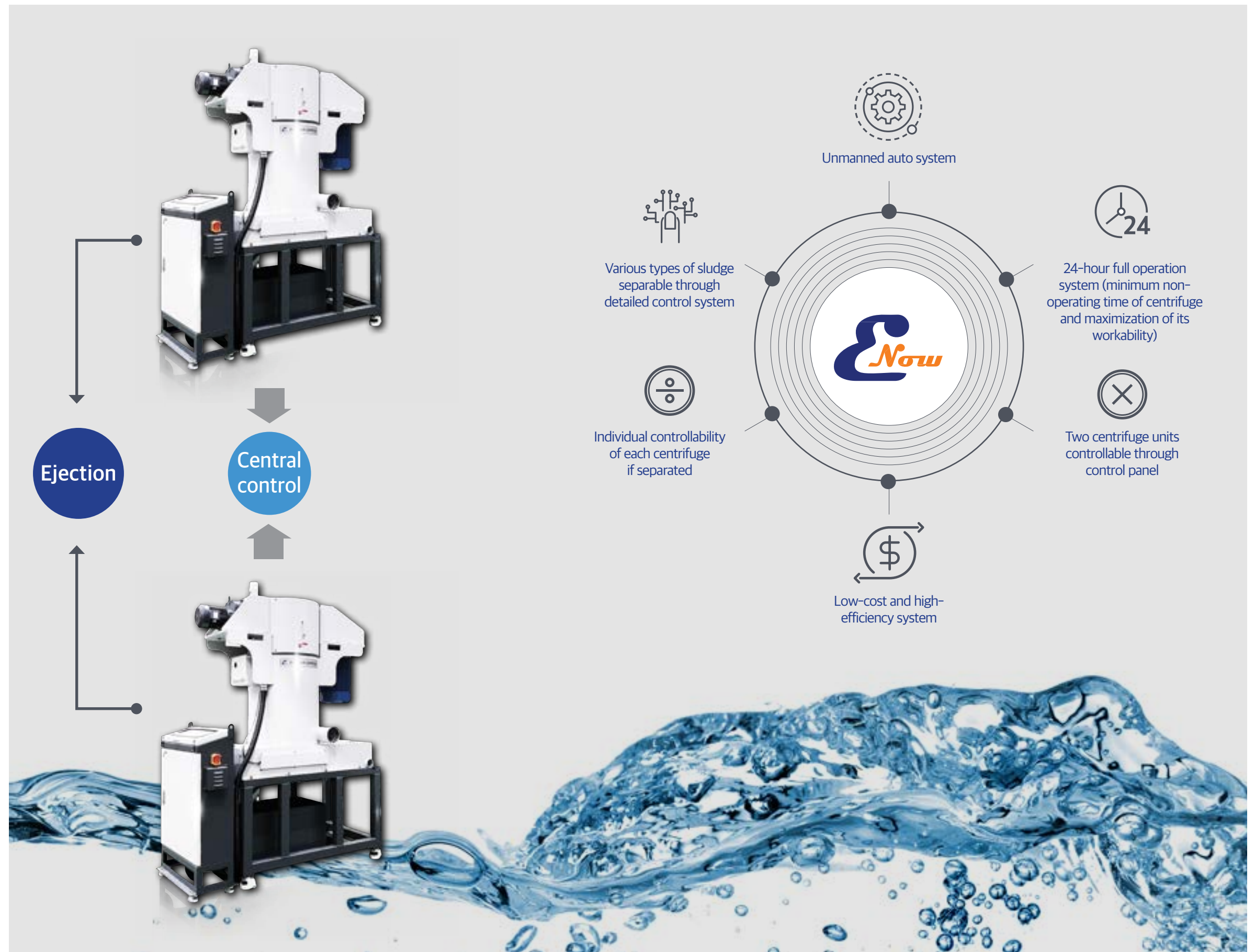
03_ Automatic Filtration system SCA-R



Products 03

Vertical Dual Continuous Filtering System

SCA-D000



Installation cases of manual model



Samsung (Vietnam factory) semiconductor processing

Samsung (Vietnam factory) semiconductor processing

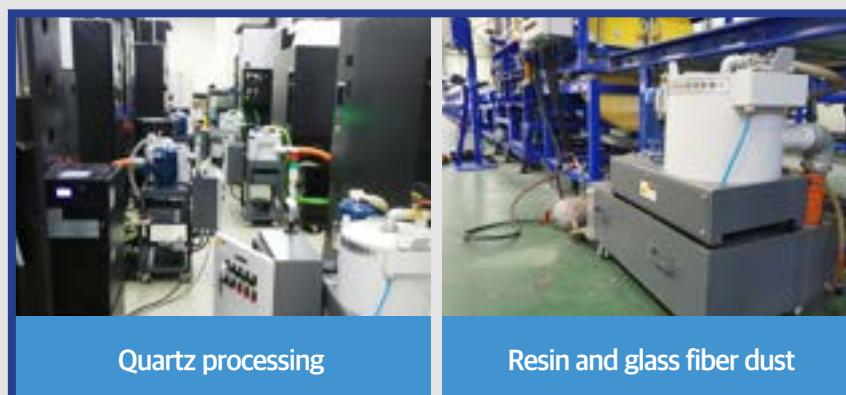
Brass processing



Ceramic processing

Grinder processing

Grinding process for automotive gear



Quartz processing

Resin and glass fiber dust

Installation cases of automatic model



MCT & Grinder processing

Optical lens processing



Silicone processing

Ceramic processing

Installation cases of Dual model



Grinder processing

Glass processing



Brass copper processing

Solid-liquid separator



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