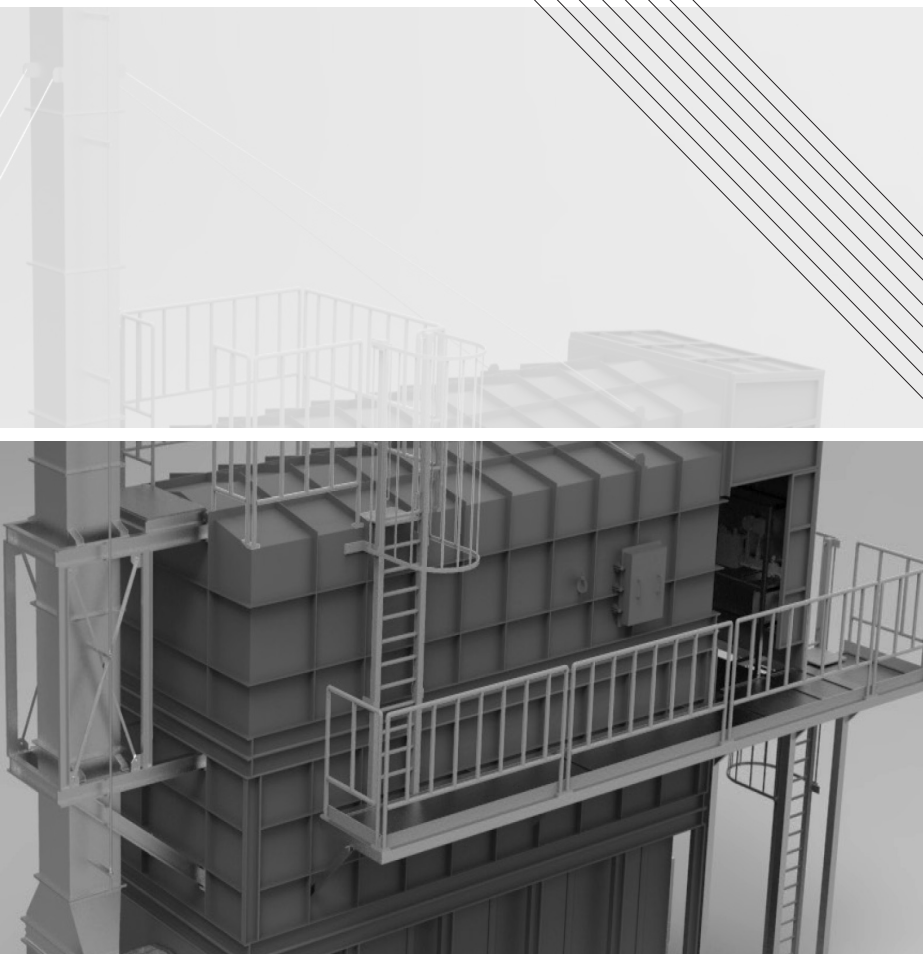
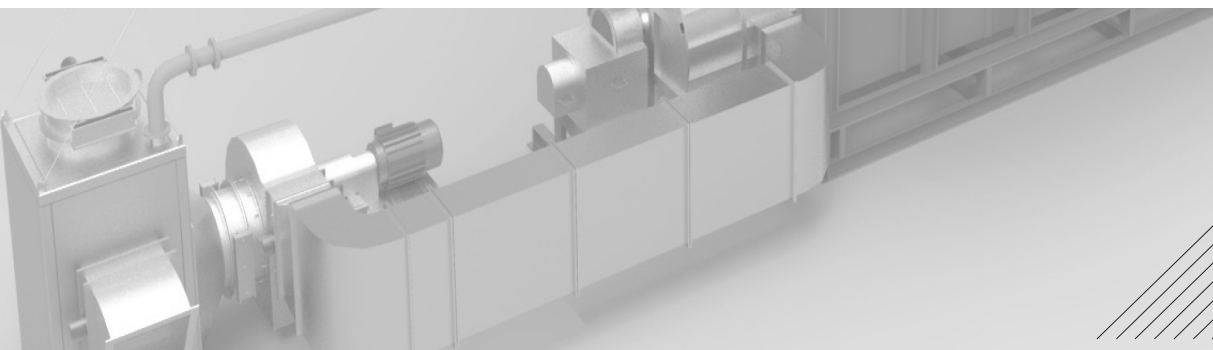




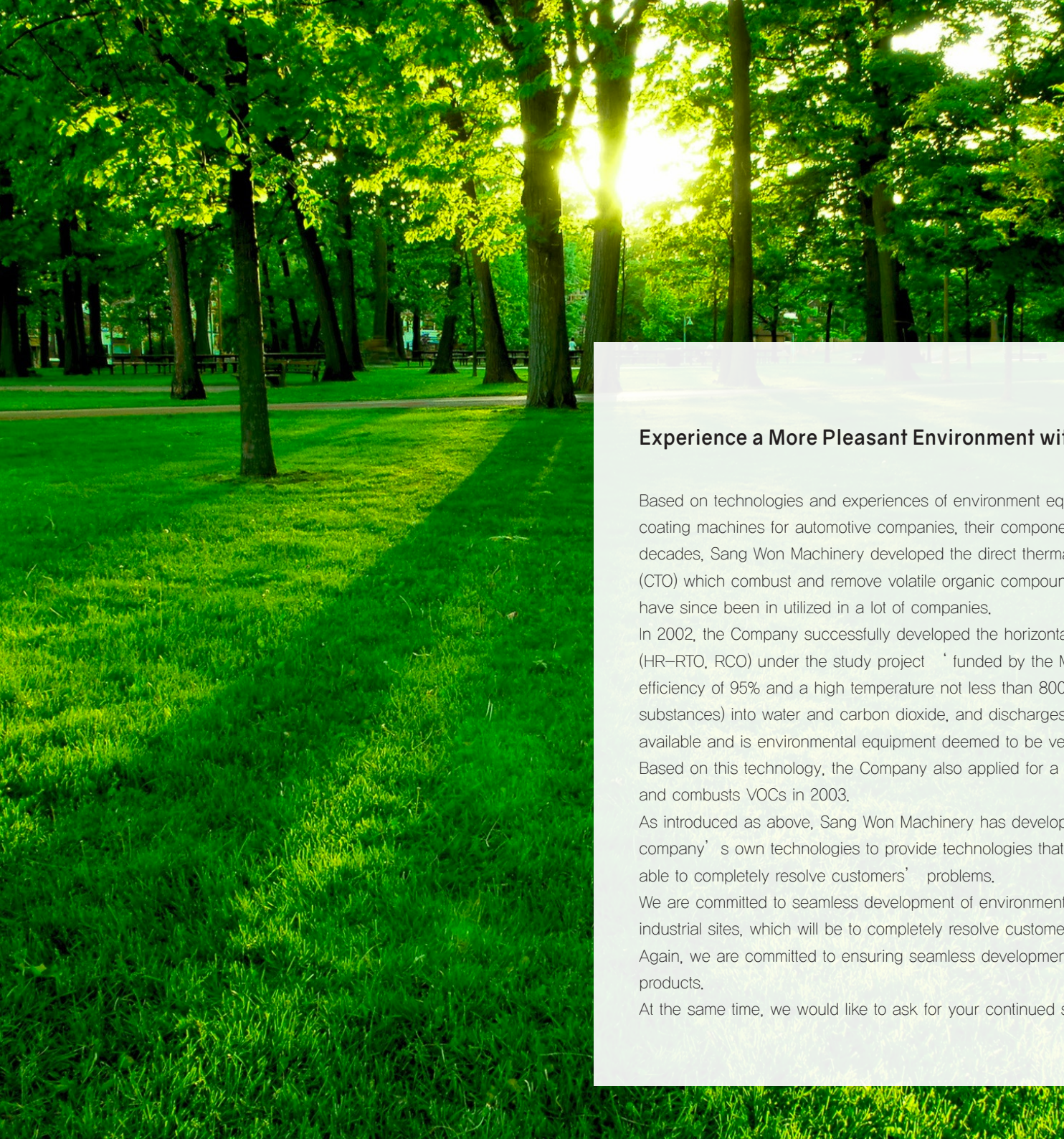
SANGWON

Korea representative leader in providing environmentally friendly + energy saving plant equipments for automotive plant & machine parts industries.



ENGLISH

www.sw-mc.co.kr



Experience a More Pleasant Environment with Sang Won Machinery.

Based on technologies and experiences of environment equipment acquired from development and delivery of various coating machines for automotive companies, their component suppliers and home appliance manufacturers for two decades, Sang Won Machinery developed the direct thermal oxidation system (DTO) and catalyst thermal oxidation system (CTO) which combust and remove volatile organic compounds (VOC) and odor substances quite some time ago. These have since been utilized in a lot of companies.

In 2002, the Company successfully developed the horizontal rotary distribution type regenerative thermal oxidation system (HR-RTO, RCO) under the study project funded by the Ministry of Environment of Korea. With a high-energy recovery efficiency of 95% and a high temperature not less than 800°C, it oxidizes and dissolves harmful gases (VOCs and odor substances) into water and carbon dioxide, and discharges them to the atmosphere. It is one of the most perfect systems available and is environmental equipment deemed to be very suitable for industrial sites.

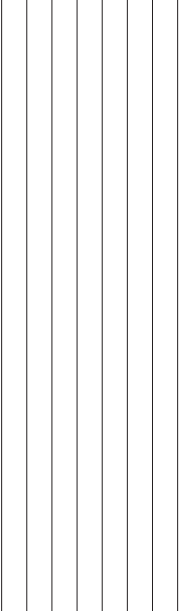
Based on this technology, the Company also applied for a patent on the processing technology that intakes, concentrates and combusts VOCs in 2003.

As introduced as above, Sang Won Machinery has developed every combustion processing technology based on the company's own technologies to provide technologies that are most suitable for various industrial sites, which have been able to completely resolve customers' problems.

We are committed to seamless development of environmental technologies to further provide the most suitable for various industrial sites, which will be to completely resolve customers' problems.

Again, we are committed to ensuring seamless development of environmental technologies to further provide excellent products.

At the same time, we would like to ask for your continued support.



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Advanced RTO System

'Energy Conserving' Horizontal Rotary Distribution Type Regenerative Thermal Oxidation System
Proprietary Horizontal Rotatory Type RTO Design patented in Korea, USA, Japan and China



150 Nm³/min



530 Nm³/min



900 Nm³/min

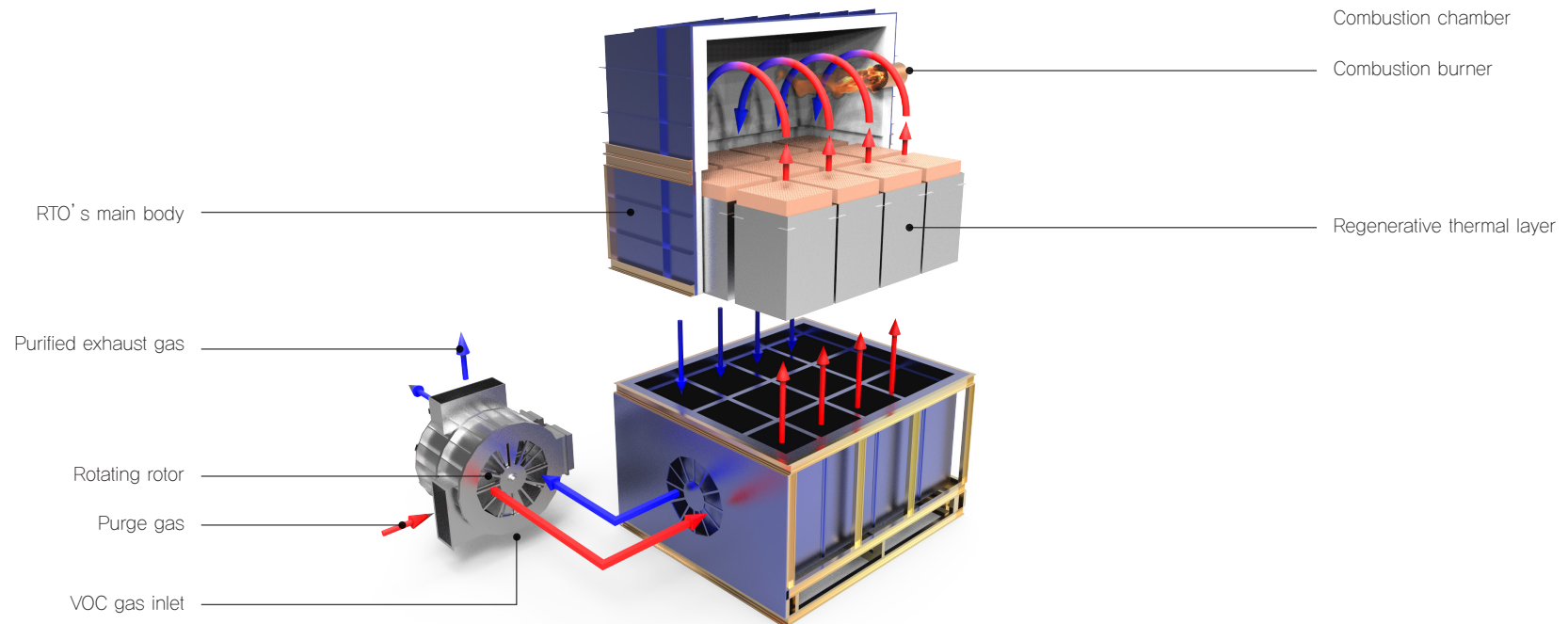


2,500 Nm³/min

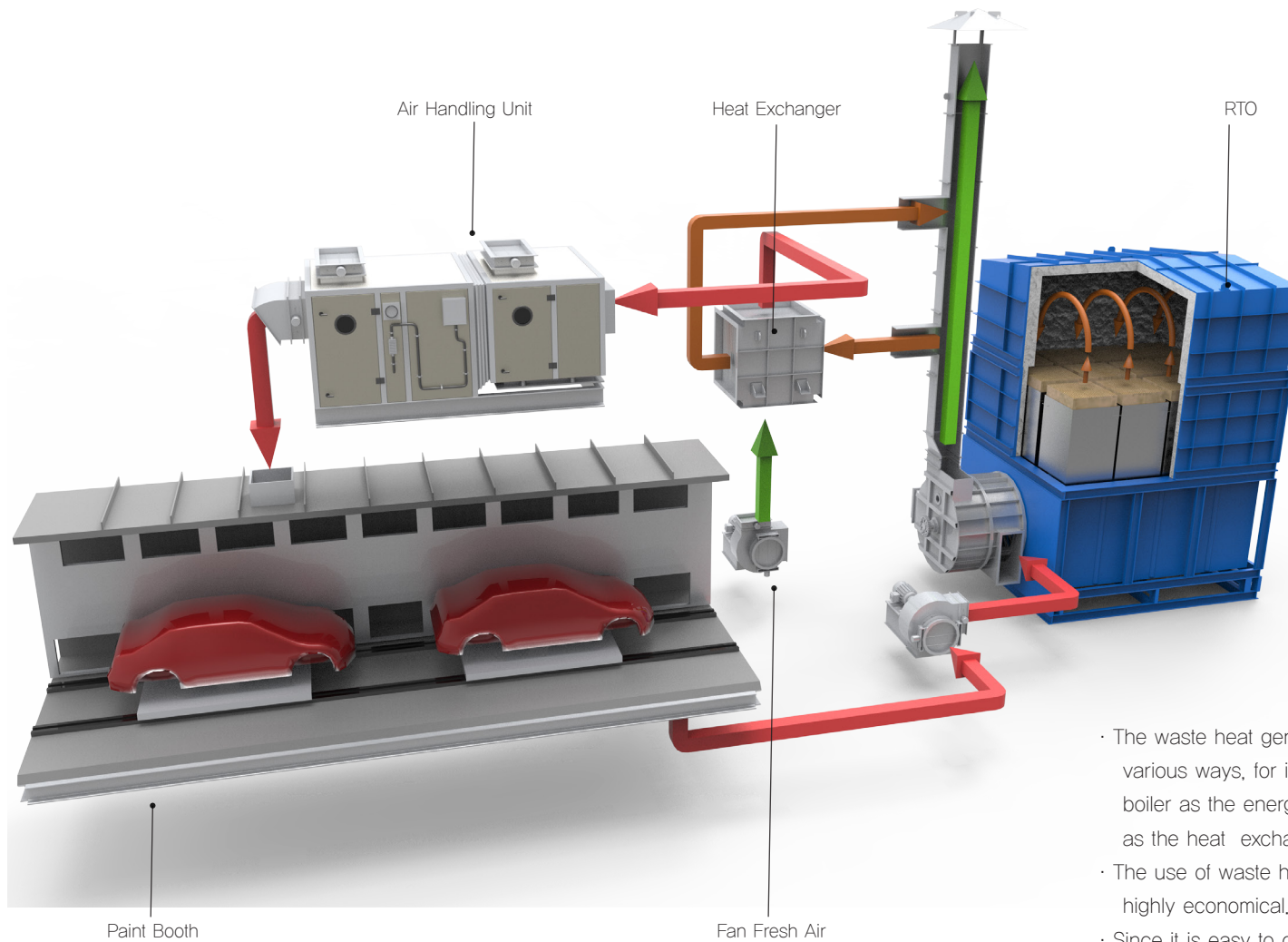
The company led the development of the advanced RTO (horizontal rotary distribution type regenerative thermal oxidation system) under the support of the Ministry of Environment (MOE) of Korea, which started in 2002 and successfully finished in 2004. It is the Company's proprietary technology certified by MOE as a new environmental technology (NeT mark certified).

While supplying to treat exhaust gas of painting/coating lines of automotive manufacturers in Korea, the company exported the advanced RTO and VOC concentrator integrated system to TOKKA Co., Ltd. in Saitama, Japan for the gravure printing drying line under the partnership with SWC Japan. Starting with this initial export, the company has increased exports all over the world including Japan, Russia, India, Canada, Mexico and China.

Advanced RTO System Configuration and Process



Horizontal RTO System Configuration and Process



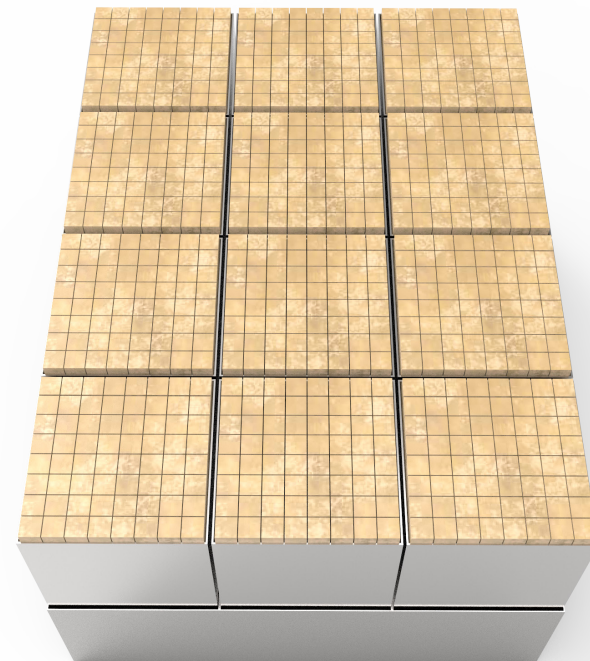
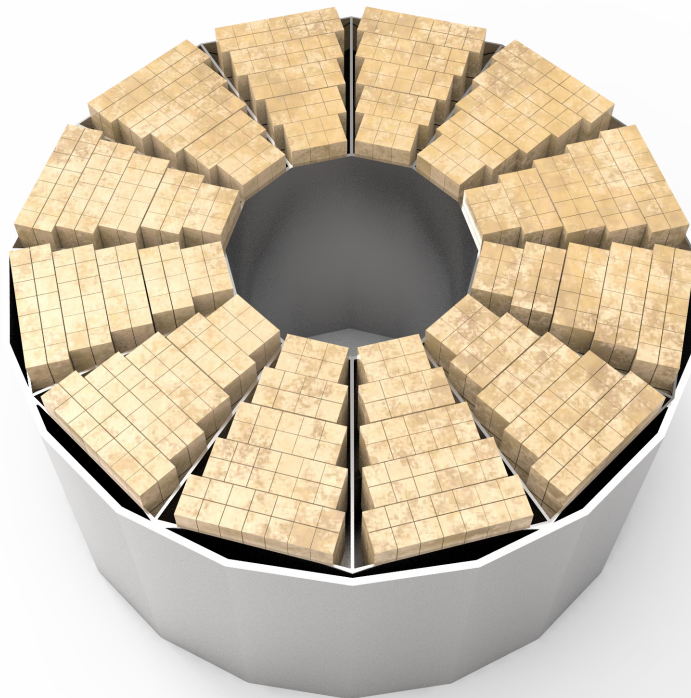
- The waste heat generated from the RTO combustion process can be utilized in various ways, for instance, supplying to the heating medium boiler or the steam boiler as the energy source required for the product production process, as well as the heat exchanger utilized dried hot air or the air conditioning heating air.
- The use of waste heat greatly reduces energy consumption and thus makes it highly economical.
- Since it is easy to operate the system and it is operated automatically, it is easy to maintain and the operating cost is low.
- Few secondary environmental pollution factors.
- Small installation space, long service life and stable.

Horizontal RTO System Features and Benefits

'The horizontal distributing RTO with the rectangular structure' was developed to improve and complement drawbacks of the conventional foreign technology-based 'vertically rotating & distributing RTO with the cylinder structure', which is dead space by the nature of its basic structure; bulky; high operating cost (including the energy/subsidiary fuel and power); installation space limitation; and difficulty with maintenance since the core component rotor is vertically placed at the bottom center. The core component horizontal rotor was developed and placed at the bottom of the equipment outside for easy assembly, disassembly as well as easy maintenance. With excellent heat resistance, durability and sealing property ensured, the semi-permanent service life was ensured. Ensuring the no-load baking function, it was possible to clean the heat exchanging media, i.e. the regenerative honeycomb ceramic materials clogged with foreign substances using hot air for enhanced system reliability.

Moreover, the company is developing the high-temperature rotor for the 200–300°C temperature range to extend the applicable industries such as the high-temperature coating industry which discharges high-temperature exhaust gas. Consequently, the company is able to provide every type of RTO such as the low/high-temperature type, the cylindrical/rectangular type, the horizontal/vertical type and the low horizontal rectangular type according to various customer requirements.

Cross-sectional Comparison of Regenerative Chamber



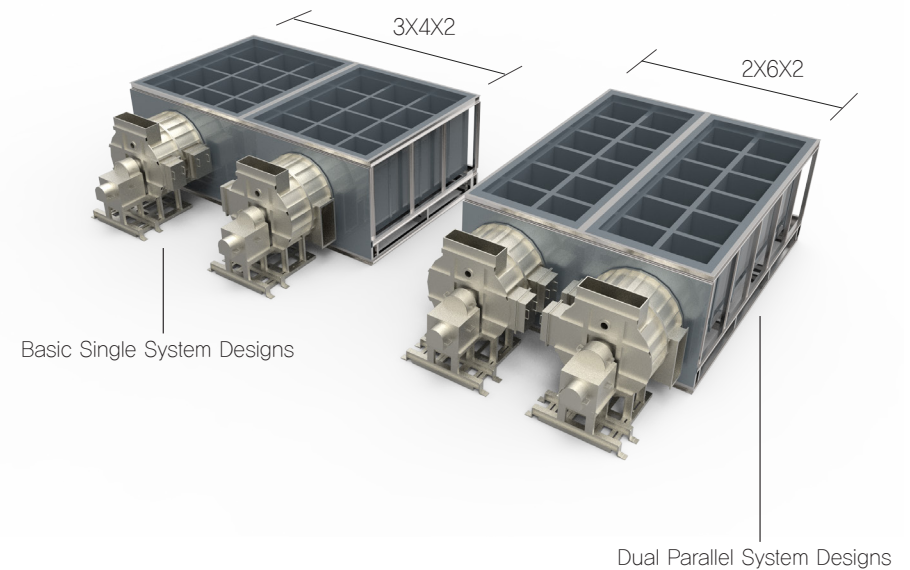
Design Flexibility (Adaptability) of Vertical Rotary Distribution Type RTO System Installable in Various Spaces

Related Patents: 7 in Korea, 1 in US, 1 in Japan and 1 in China

- Highly efficient VOCs/odor removal of 95–99% and 94% or more thermal energy recovery
- Flexible in the installation area, height and direction adjustment, it provides excellent capability in field space utilization and adaptation.
- The smaller system size ensured by the minimized dead space makes it more economical and saves installation space and operating energy by 30% or more.
- Highly durable rotor and excellently sealing metal seal ensures system reliability and saves maintenance costs.
- Easy to access core components for easier maintenance and low maintenance cost.
- Waste heat recovery enables fuel cost reduction.
- Possible to operate the system without fuel if the VOC concentration is in the range of 1.5–2g/Nm³
- The HMI/touch screen system saves data such as temperature, pressure and equipment failure in real time and provides the management system that is easy to search data at any time.

Application Areas

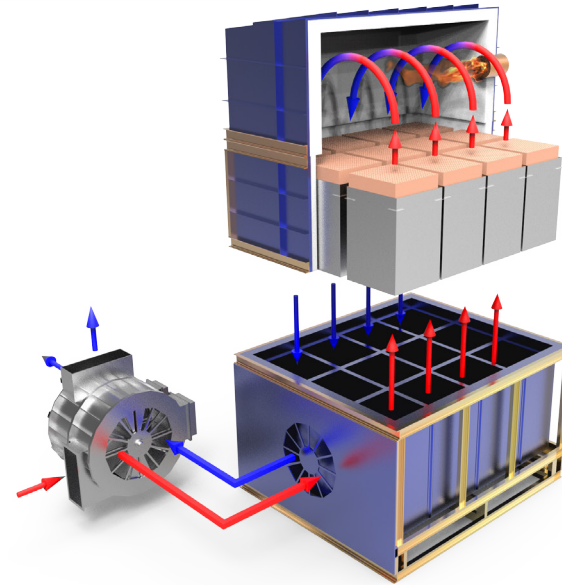
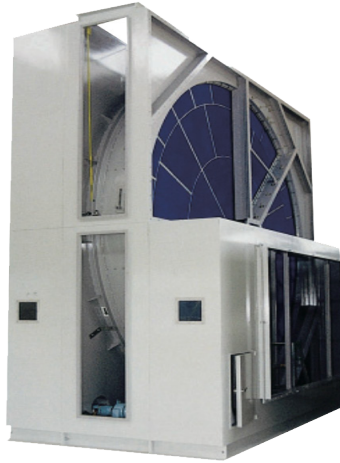
- Painting industry
- Coating industry
- Coating industry
- Chemical industry
- Pharmaceutical industry
- Paper/wallpaper industry
- Textile industry
- Food industry
- Waste treatment industry
- Printing industry (gravure, dry laminator and offset printing)
- Every place of business that handles or generates volatile organic compounds



VOC concentrator + Advanced RTO System

The Energy Conserving VOC Concentrator Integrated Horizontal RTO System Utilizes Concentrated VOC Gas as Alternative Energy!

Concentrator System



RTO System

Features and Benefits

The VOC concentrator absorbs, detaches and recycles the low concentration VOC gas/odor below 50°C into the concentrated VOC gas and the Company's proprietary 'horizontal rotary distribution type advance RTO' and combusts removes concentrated VOC gas, which makes the system the most economical.

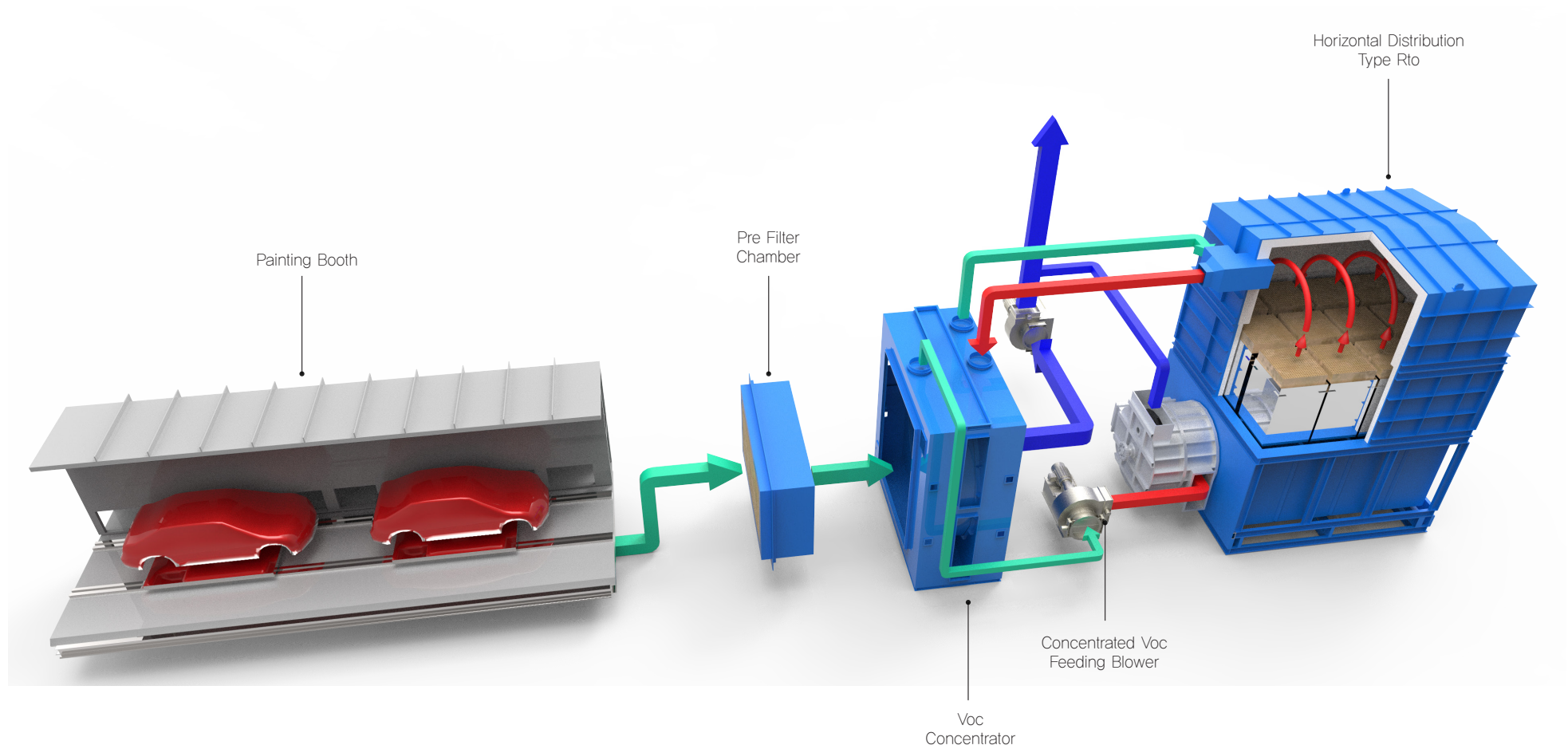
The RTO system becomes as small as 5–10 times concentrated ratio against the VOC gas flow rate. Highly concentrated VOC gas can be used as alternative subsidiary fuel and the exhaust waste gas can be recycled as energy for the dry oven or boiler.

- Along with flexibility in the installation area, height and direction adjustment, minimized installation space provides excellent field adaptability.
- Ensured system stability against variable VOC gas flow rate and concentration.
- Highly durable, heat resisting and sealing rotor and seal ensure reliability as well as save the maintenance cost.
- The RTO Rotor horizontally placed at the bottom externally enhances easy maintenance.

Application Areas

- | | | | |
|--|---------------------------|----------------------------|--------------------|
| · Painting industry | · Coating industry | · Food industry | · Textile industry |
| · Coating industry | · Chemical industry | · Waste treatment industry | |
| · Printing industry (gravure, dry laminator and offset printing) | · Pharmaceutical industry | · Paper/wallpaper industry | |

VOC Concentrator + Horizontal Distribution Type RTO System Diagram



Green Dry Oven

Energy Conserving Dry Oven without Air Pollution

For Painting, Coating, Printing, Other industries

Recently, Sang Won Machinery successfully developed the green dry oven, which is the advanced energy –conserving dry oven without air pollution, under the support of the Ministry of Environment. The Company’ s proprietary series ‘horizontal RTO’ technology, which is the highly–advanced heat recovery technology, is applied to design and development of this green dry oven. We expect positive feedback and orders from the painting, coating and printing industries.

Types

- Conveyor Green Dry Oven
- Batch Green Dry Oven

Features and Benefits

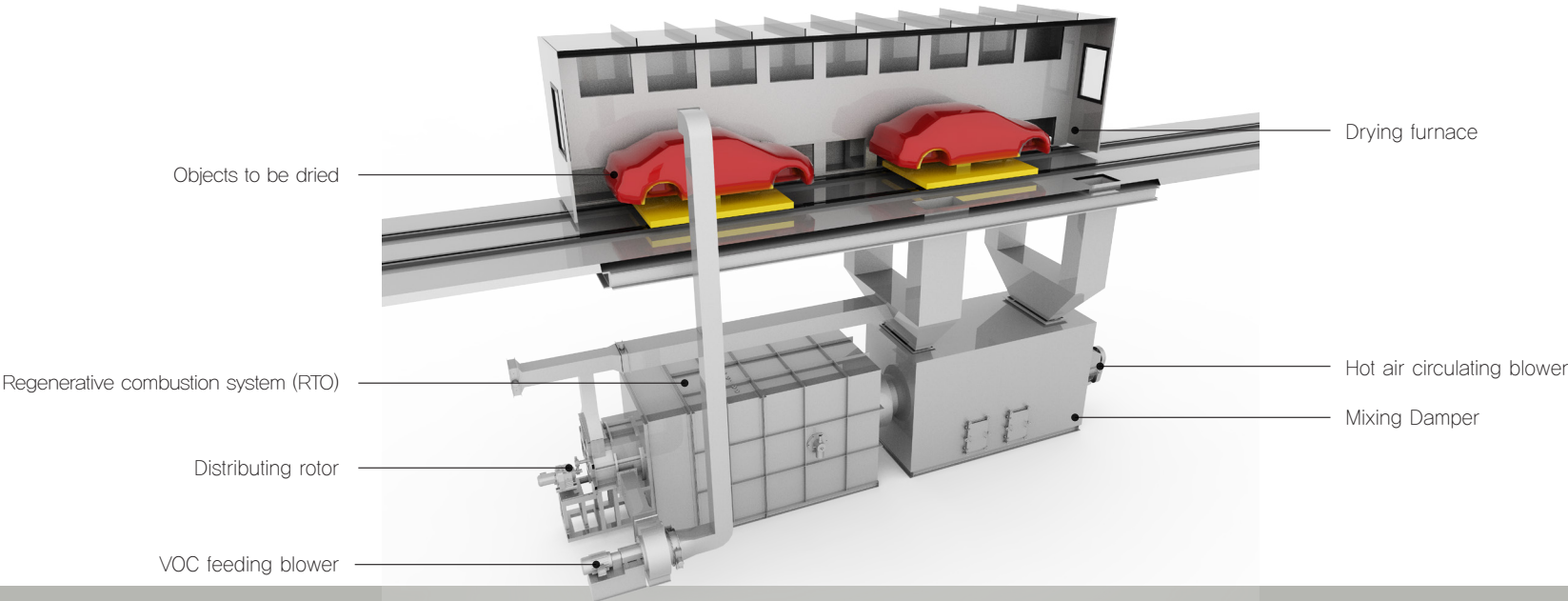
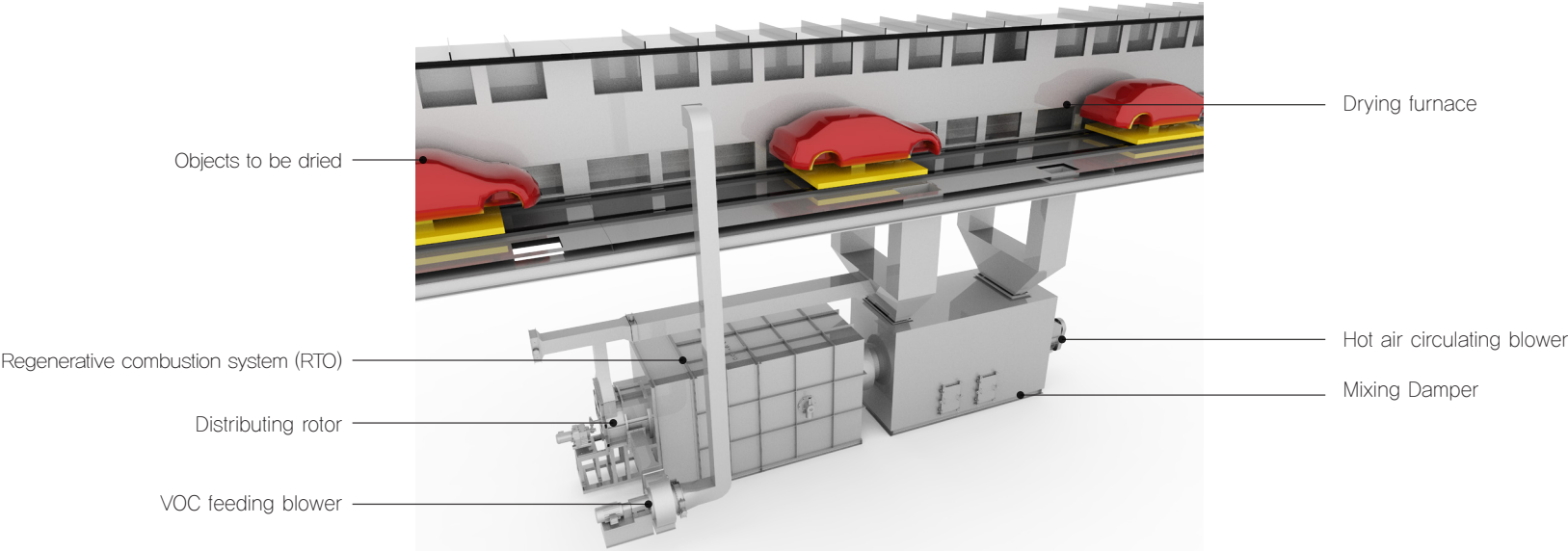
- Horizontal RTO and air heating furnace integrated hybrid module type dry oven
- Provides energy conservation by 35% or more along with high performance
- Highly efficient and compact system without air pollution
- Production cost reduction as well as productivity enhancement
- Not only applicable to the new dry oven line but also particularly applicable to remodeling/upgrade of the existing dry oven line.
- Excellent system design flexibility adjustable of area, height and direction maximizes installation space adaptability.
- Semi–permanent major components ensure reliability and low maintenance cost.
- Externally mounted core components ease maintenance of the horizontal rotor–RTO.
- Highly reliable VOC/odor removal efficiency of 95–99% and thermal energy recovery of 94% or more.

Application Areas

- Painting Industry: New dry oven line and remodeling/upgrade of the existing dry oven line
- Coating Industry: New dry oven line and remodeling/upgrade of the existing dry oven line
- Printing Industry: New dry oven line and remodeling/upgrade of the existing dry oven line



Green Dry Oven A
(CONVEYOR TYPE)

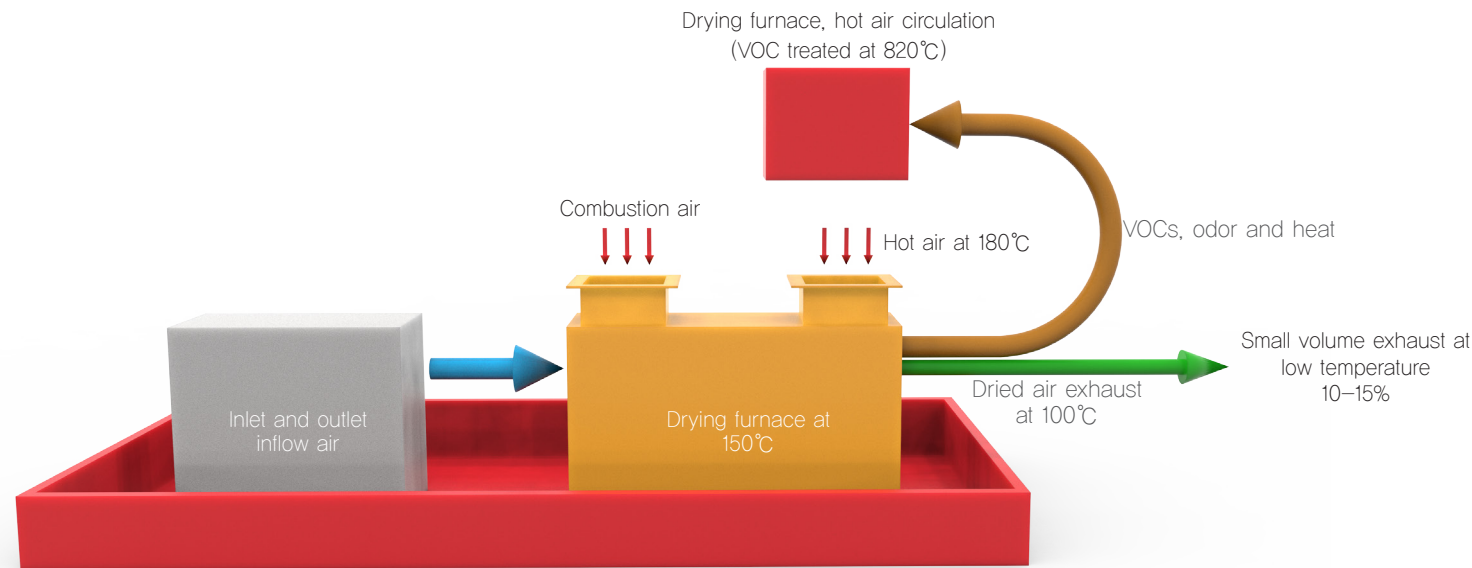
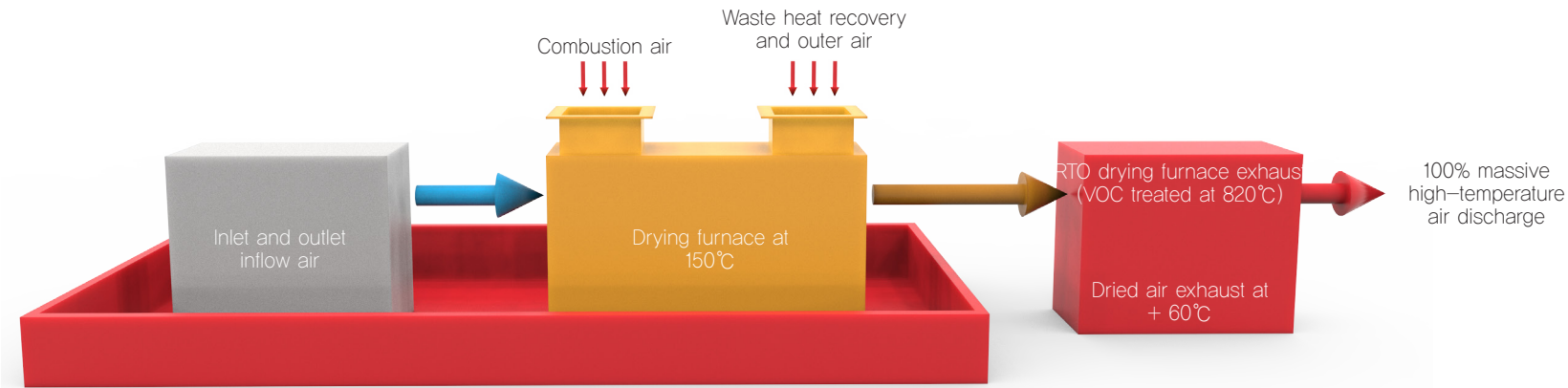


Green Dry Oven B
(BATCH TYPE)

Technical Comparison to Conventional Drying System

Conventional Technology

- Duct heat loss: 8.6%
- Main body heat loss: 7.1%
- Combustion air heating loss: 7.8%
- Bogie heating loss: 11.7%
- Painting object heating loss: 26.0%
- Exhaust heat loss: 38.8%



Green Technology

- Duct heat loss: 7.6%
- Main body heat loss: 12.5%
- Combustion air heating loss: 13.7%
- Bogie heating loss: 20.6%
- Painting object heating loss: 45.6%
- Exhaust heat loss: 0% → RTO treated heat recovery

Environmental Aspect

- VOC emission free (VOC removal from pollutant)
- Resource recycling (VOC calories are utilized as fuel)
- Energy conservation (reduced exhaust calories + VOC calories)

Economic Aspect

- No need of extra environmental pollution treatment cost
- Production cost reduction (fuel cost + maintenance cost)
- Productivity enhancement (virtually no after sales service)
- Compact system

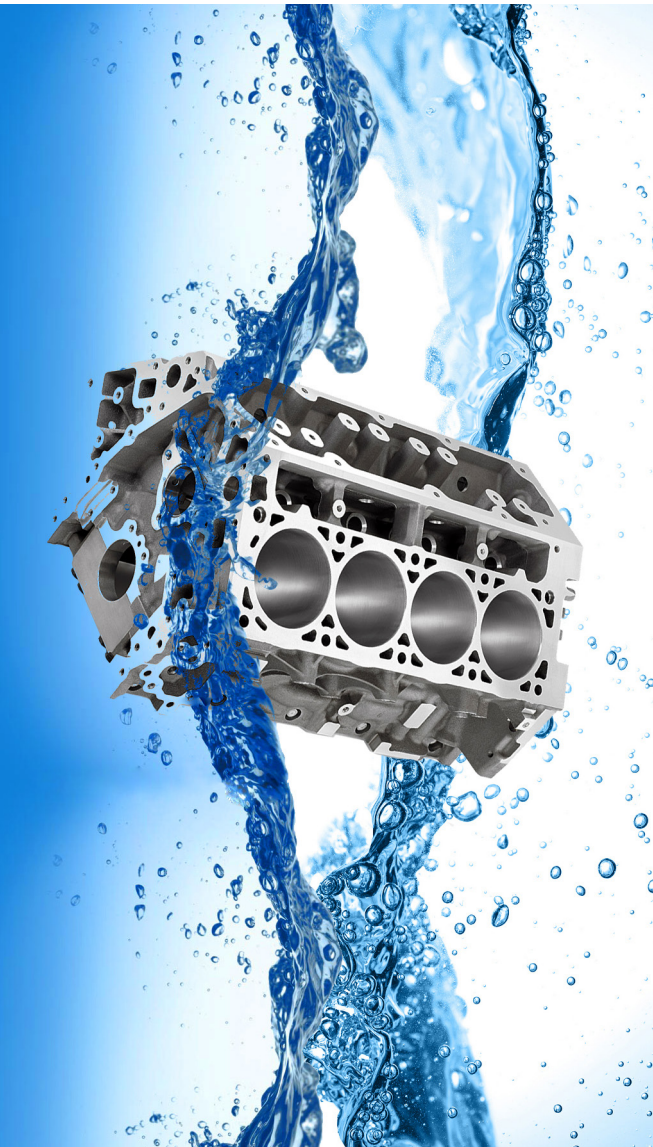
Technical Aspect

- While the conventional technology is based on the environmental pollution treatment, this green technology is the hot air generating dryer combined environmental pollution treatment technology.
- Low system cost and low operating cost

	Conventional Drying System		Green Dry Oven
	Catalyst Oxidation	Direct Combustion	Horizontal Regenerative Combustion
VOC Treatment Temperature (°C)	350–400	680–720	800–850
VOC Treatment Efficiency ΔT (%)	80	93	98
Heating Temperature Difference (°C)	190–250	300	190–250
System Cost (%)	100	100	100
Operating Cost (%)	70	100	43
Energy Consumption (%)	73	100	51
DUCT Size/Length (%)	90	100	15
Description	80	100	60
Maintenance	Clogged heat exchanger Catalyst exchange (3 years) Catalyst poison prevention and deterioration	Clogged heat exchanger Heat exchanger cracks Heat exchanger exchange	Virtually none

ECO Impregnation System

Eco-friendly! The Best Impregnation System for Casting/Products



Since having produced and supplied the impregnation system for the vehicle housing for the first time in 1993, Sang Won Machinery has responded to the support needs of customers of the automotive industry through continuous development and enhancement of the impregnation system, which has made the Company the leading manufacturer and supplier of the impregnation system for casting products in Korea.

We would like to extend our deepest thanks to our customers in the automotive industry that have been successfully using our impregnation systems.

In order to better fulfill the purpose of the impregnation process, seamless new technology development is required for the impregnation process, one of the finishing processes that have been used for the longest time in the casting/molding industry. Followed by users' increased demand for absolutely perfect high-performance parts, it is imperative for the casting industry to supply the best quality products. The casting process is very complicated to avoid generating defected parts time to time. Impregnation is one of production technologies that supplement and recycle such defects to meet the product quality standard according to the processing process. To provide perfect quality products without pressure leak, it seals the porous/processing surface with the sealant.

Defects of Casting Products and Sintering Products

In general, the casting product contains pores with variously shaped defects inside.

- When casting molten metal is cooled and solidified, its volume shrinks about 5% when its state changes from liquid to solid, and shrinkage holes are generated at this time.
- While hydrogen gas contained is discharged from the molten metal, the hydrogen gas not discharged yet forms the bubble.
- Other various defects are generated (such as the pipe, the large spherical hole, the small pin hole, the crack between small particles and the porous shrinkable material).

Defects as above generate leakage depending on the usage environment.

Impregnation Effect

- Impregnation treats casting products with defects to seal such through hole defects.
- While leakage defective products have been previously treated with recasting, it saves them into qualified products for productivity enhancement as well as realizes production cost reduction.
- Possible to prevent thin film and corrosion generated on the plated product surface by intrusion of plating solution.
- It plays a great role in machinability enhancement of sintered products.

Eco-friendly Impregnation Solution

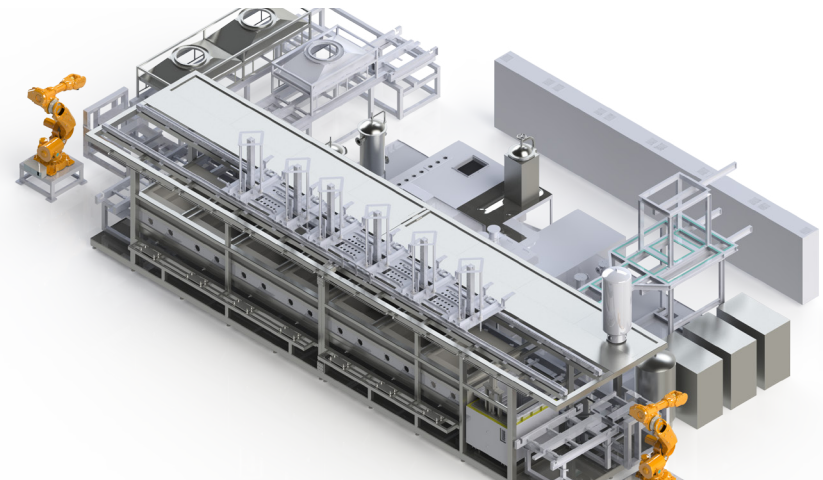
Impregnation solution (sealant) and aids provided with the Company's impregnation system are IM4500r recycling impregnation sealant, WBA water bath additive and CTA801 hot cure inhibitor from IMP, Germany (www.imp-sealants.de).

Features and Benefits

- Retains a lot of technologies and records on the impregnation system with the fastest cycle time.
- Implementation of not only the full impregnation process but also the fully automated in-line system for the pre and post processes.
- Prevention of excessive impregnation solution consumption with the impregnation recycling system and the recycling sealant system
- Eco-friendly system where waste is reduced along with reduced consumable costs
- Cutting-edge impregnation system optimized with accumulated design, production and field operation technologies.
- Optional: The recycling water system purifies and recycles cleaning and washing water becoming turbid in the hot water curing tank or the rinse tank continuously and constantly to enhance impregnation quality as well as it greatly reduces water usage and discharged waste water to a small volume (approximately 3%), which makes it an eco-friendlier system.

Application Areas

- Casting products of the automotive industry
- Casting products of the aviation industry and the defense industry
- Casting products, components and parts of the general industry



Front Load Type Impregnation System

Features and Benefits

The front load type impregnation system of Sang Won Machinery was created to solve past problems. It is composed of devices for impregnation, washing and curing processes while loading in and unloading out of each process tank to make its size small as well as to shorten the channel of movement compared to the top loading type that uses the top hoist. Consequently, it ensures a quicker cycle time as well as it is easy to simply change its structure for a process tank or to perform the additional process on the produced line for production of various product types.

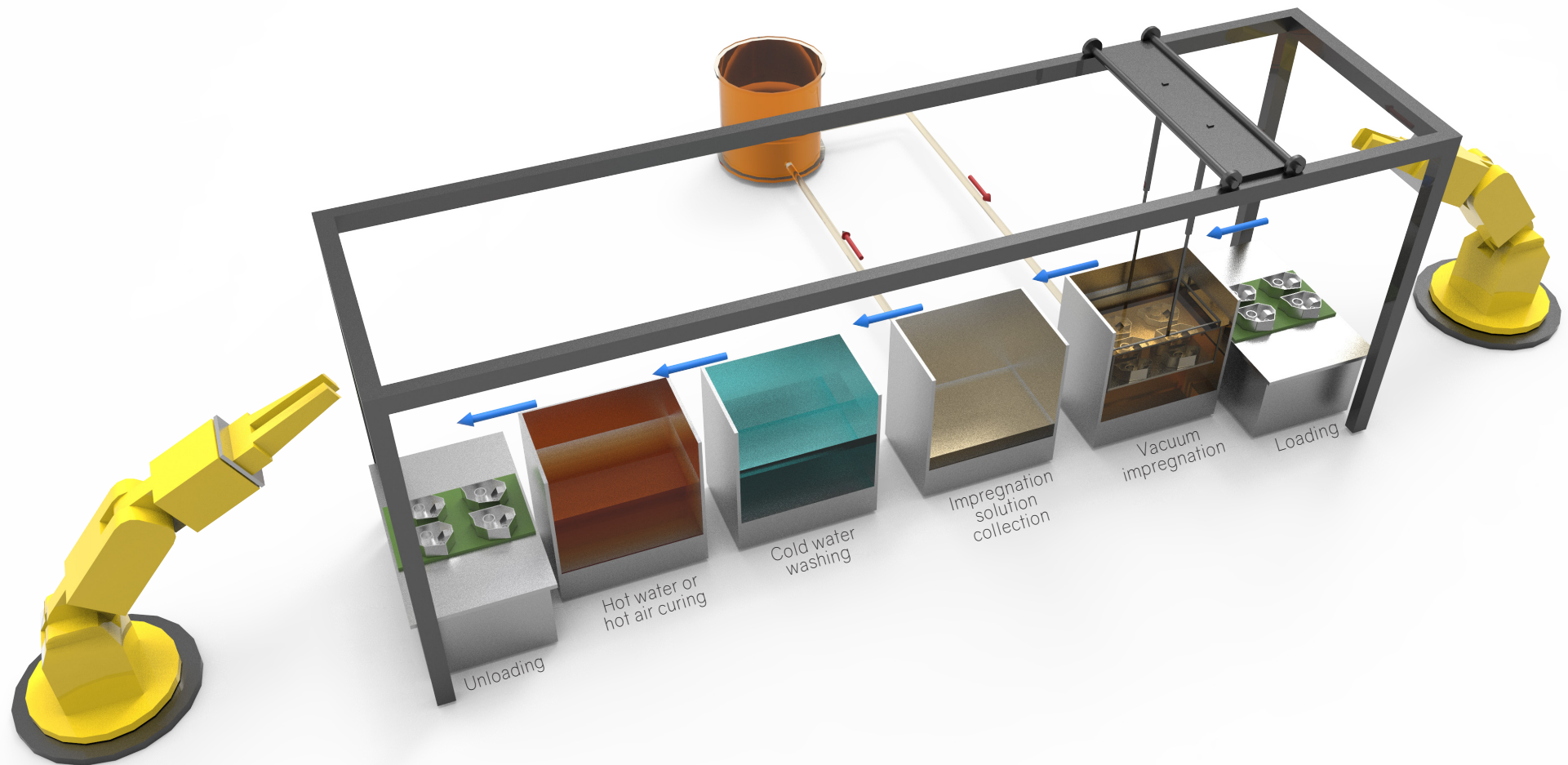


Top Load Type Impregnation System

Features

In general, the batch type top load impregnation system uses the vacuum-compression method and the hoist rail installed on each process tank. When processed in a process tank, the hoist is used to move products to the next processing tank. One of the benefits of this type is easy to cope with problems generated whenever the impregnating product type is changed. Again, it is possible to work if re-impregnation is required.

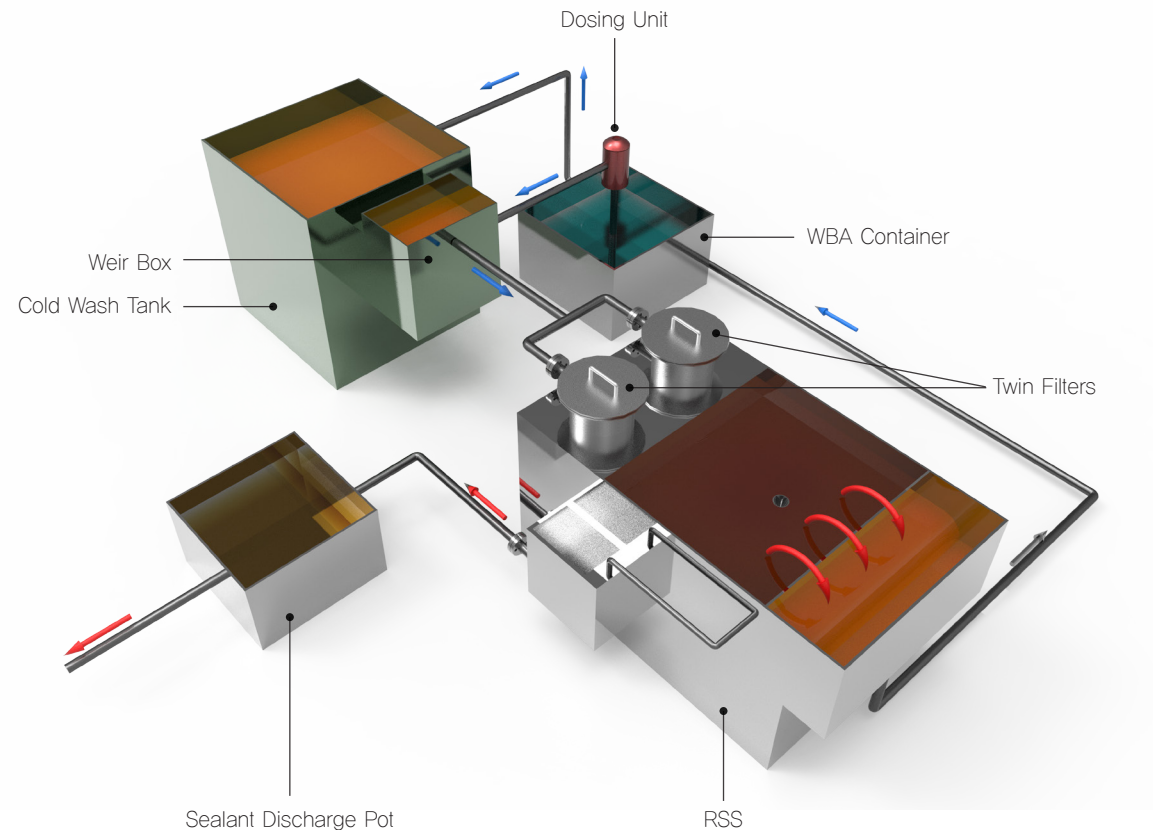
The Company also provides the full process automated unmanned system in the carrier mounted fully automatic batch type on top of this type.



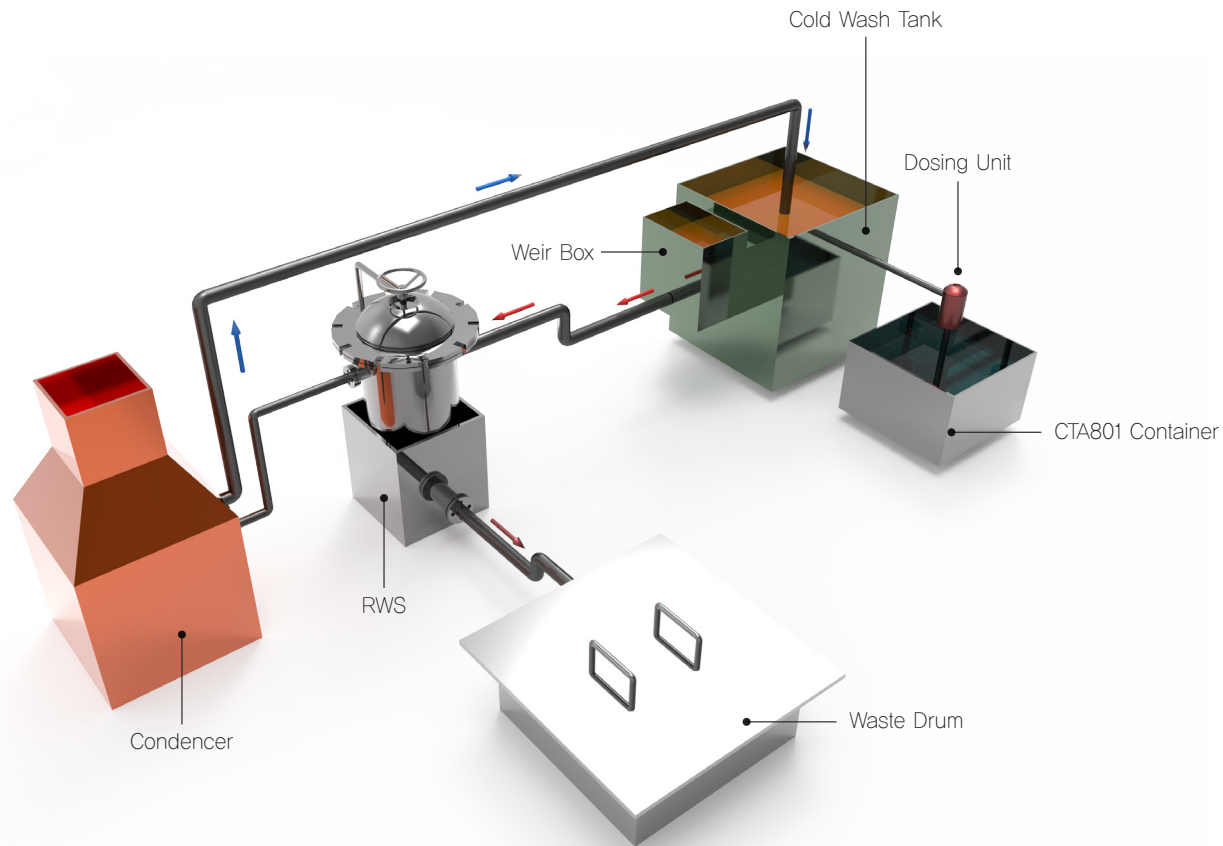
Recycling Sealant System

Recycling Sealant System (RSS)

- RSS and RWS systems were developed to solve problems in treating and recycling aqueous washing solution waste continuously generated from the washing machine or the impregnation system.
- These address the reduced need of the waste water treatment cost and energy cost required by ISO 14001 followed by increased environmental responsibility imposed on climate change.
- Waste water of the washing system causes production suspension and high labor cost due to process tank cleaning, dumping and refilling, it demands high energy costs due to reheating of the process tank and sometimes it causes high treatment cost that requires effluent storage in the collection container.
- The RSS system and the RWS system continuously collect waste water and purify and recycle it into washing water, which virtually removes the need for disposal.
- The RWS system concentrates washed and filthy waste water only and thus wastes only 2–3% of the total volume.
- The RWS system receives water from the washing tank and evaporates contaminated water using the latent heat of vacuum and water to collect clean water.
- Since the RWS system returns clean water to the washing tank for recycling, it maintains high-quality treatment performance.



Recycling Water System (RWS)



- Freely removes emulsified oil by washing and rinsing.
- Recycling for washing and rinsing by continuous recovery and resolution
- Reduction of precious water, labor and chemical costs
- Virtually eco-friendly waste treatment and removal
- No system interruption by maintaining continuous production
- Maintaining quality and performance with process integrity
- Compact system requiring minimum space
- PLC controlled fully automatic operation
- Possible to install this system in every hot water washing section
- No need for chemical additives or filter membranes
- Smoke or steam-free sealed system
- Low energy consumption by the low-temperature evaporation method



Washing System

The Best Washing System that Provides Continuous Recycling by Quick Contaminant Separation

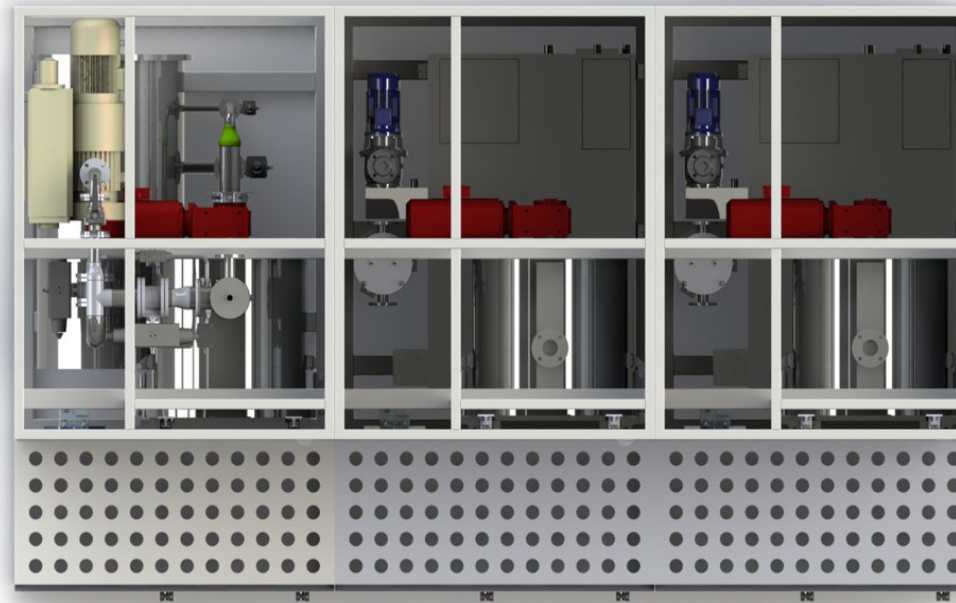


In the core of every production process of products and parts, what is most important is not the performance and quality of appearance but also effective washing and drying. The washing system of Sang Won Machinery greatly satisfies such core requirements of the market.

The Company's rotational washing system is a very different washing system in which the workload/part is rotated around a horizontal axis. Pouring washing water all over the workload in torrents to wash every hole and pocket to remove chip powder and to clearly remove any oil content, the system washes the most cleanly as well as rotating function, and an appropriate drainage function and drying function are added to solve corrosion problems, yet it is a simple and concise system.

The system solved fundamental problems of conventional washing machines. As one of the most important features, it cleanly washes the product as well as the carrier and it safely washes the product which requires damage preventive measure by fixing or containing it on/in the suitable container box or jig/fixture.





Features and Benefits

- Large capacity injection and immersion type washing maximize penetration even into the dense workload part.
- Rotational operation allows washing solution to access every surface and even every concave point.
- It perfectly washes and dries even the oil piping path, the blind hole, the non-through hole, the water jacket.
- Every solution contacting powder painted framework and panel including stainless steel is structured in a strong structure and ensures long service life and durability.
- Possible to monitor the processing operation precisely with the cycle counter.
- The standard carrier container and plastic container as well as the customized basket and fixture are designed to focus on easy use. These are also designed to prevent re-contamination while washing and drying.
- Possible to obtain an optimal result by specifying reverse rotation and variable speed rotation to generate vibration.
- Fully sealed design to eliminate the exhaust steam and drying fume generation condition.
- The PLC control system integrates the process monitoring, the user-defined configuration and the failure diagnosis.
- Circulating deposition, injection type rinse and value added equipment with the dedicated injection device for a specific purpose are available as optional products.
- Optional combination of high-quality supply water and monitoring equipment cleaning finishes the surface in the satisfactory visual/aesthetic condition.
- The automatic water/chemical supply solution maximizes performance and minimizes maintenance.
- Available vacuum drying surely removes water trapped in the deep point, the blind hole with small diameter, the internal piping hole and the fitting surface.
- High efficiency back or inline cartridge filtration and closed loop water flow separation work.
- For equipment handling and layout, possible to widely select SRW units as a part of the production process.

Washing Process

In any case, parts are securely fixed throughout the rotating washing process. The process treatment program is possible to define washing and drying conditions to meet requirements of individual parts or individual production characteristics.

Such program flexibility is the core of every rotational washing system of Sang Won Machinery based on basic washing and drying functions. High capacity washing water combined with rotating equipment is possible to penetrate into even very complicated parts. There will be no difficulty in the process for the non-through hole, the piping path and the oil piping particularly if combined with direct high-pressure injection. Each cycle includes rotational air injection, hot air drying and vacuum drying. With the rotational washing system, you can be sure that all of the parts or products will be fully dried and appear in a clean condition for the finished work or assembly, if properly used.

Flood



Rotational
Supersonic Waves Wash



Rotational
Flood Wash



Rotational
Spray Wash



Rotational
Dedicated Jetting



Rotational
Air Blast

Spray



Rotational
Flood Rinse



Rotational
Spray Rinse



Rotational
Dedicated Jetting



Rotational
Air Blast

Dry

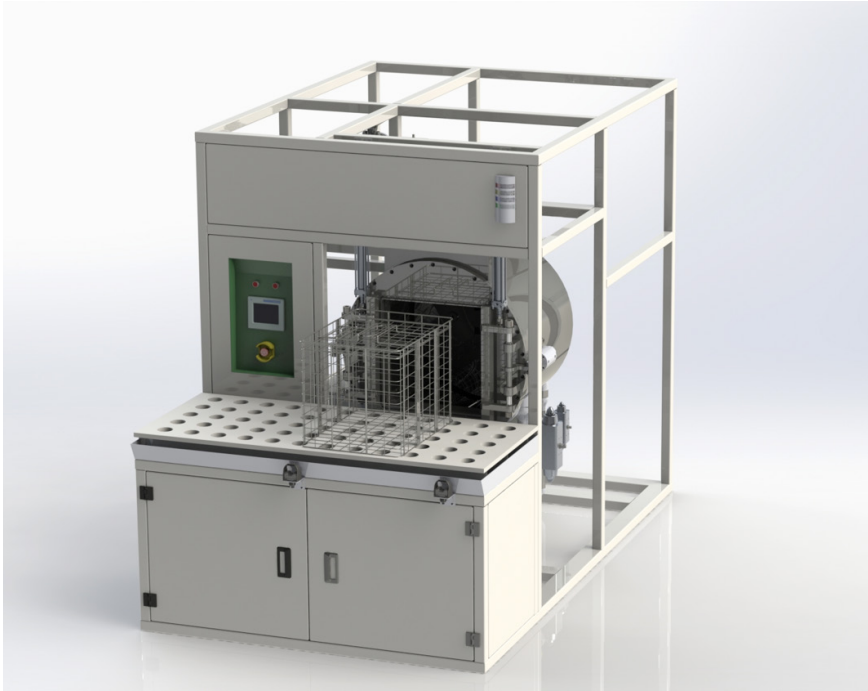
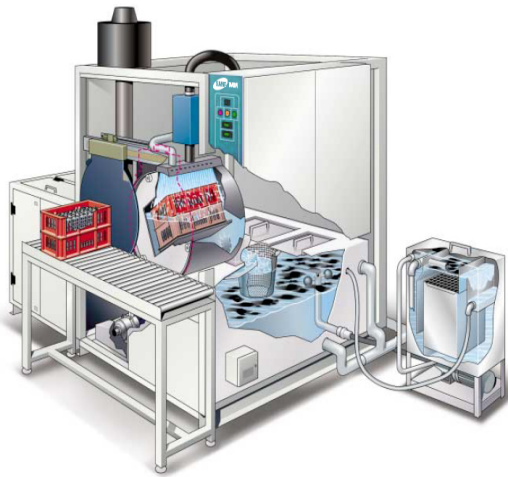


Rotational
Hot Air Dry



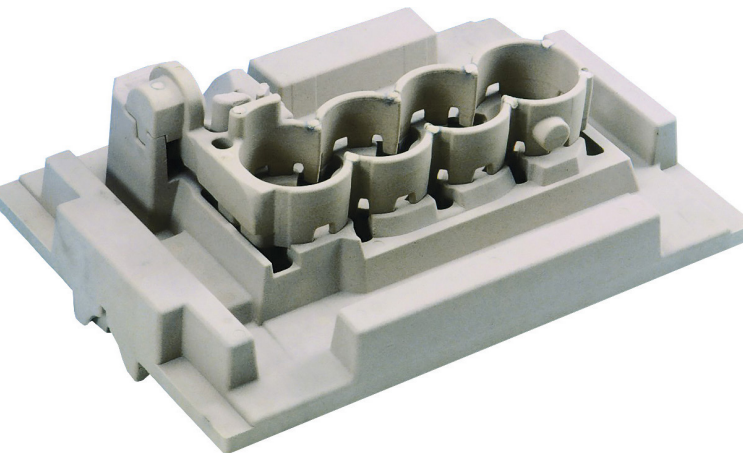
Rotational
Vacuum Dry

Specification			
	SRW 300	SRW 450	SRW 600
Dimensions (W x D x H)	1650x1650x2150(mm)	1650x1650x2150(mm)	2650x2050x2400(mm)
Dimensions with optional Rinse	2750x1650x2150(mm)	2750x1650x2150(mm)	3850x2050x2400(mm)
Wash Chamber Size (W x H x L)	300x300x600(mm)	450x470x600(mm)	600x600x600(mm)
Maximum Charge Weight	50~100kg	100~200kg	150~250kg
Wash Tank Capacity	550~600liters	550~600liters	160liters
Rinse Tank Capacity	250~300liters	250~300liters	450~500liters
Parts Containers	Standard carrier container, plastic container, tray, basket and customized fixture		
Filtration	500μm strainer basket, in-line bag or cartridge filter		
Oil Separation	Belt oil skimmer or oil separator		
Operating Temperature	Generally 60~80℃		
Process Chemicals	Eco-friendly method based water used		
Construction	Stainless steel or corrosion resisting steel on every solution contact section		
Services	Water, drain, compressed air, ventilation and electricity		
Electrical Rating	11kw	11kw	13kw



Microwave Dry System

Energy Conservation + Eco-friendly Microwave Dry System



In 2000, Sang Won succeeded in R&D of Industrial Microwave Dryer (Industrial Drying Oven) as an environmentally friendly and energy saving technology, supported by Korea's MOCIE. Subsequently to the pilot scale system, super grade 400Kw Microwave Dry System (Industrial Drying Oven) was successfully supplied/installed for Foundry Core Line of Automotive Plant in 2002. Through positive responses of customers to the excellent features and benefits of the system, the company became the leading manufacturer and supplier of the eco-friendly and energy saving microwave dry system in Korea.

Microwave Based Dielectric Heating and Drying Technology

When the microwave is applied to the dielectric material, bipolar rotational oscillation occurs in the dielectric molecule and its friction generates heat.

Self-heating in the material enables very fast moisture extraction/diffusion from the inside to the surface. Highly efficient thermal energy transformation enables to achieve perfect drying within a short time of period.

It dramatically improves quality problems of the conventional drying method, i.e. surface contraction, surface hardening, crack generation, residual moisture and bubble defects. The technology can be widely used in the dry process of various industries required of productivity enhancement and ensures a more pleasant and safe environment.

Features and Benefits

- Productivity enhancement and energy conservation from dramatic processing time reduction compared to hot air/gas type drying
- Selective moisture drying from the drying material ensures high-quality achievement/quality enhancement of color maintenance and perfect drying
- Safe and pleasant environment proving eco-friendly dry system with minimized noise, exhaust gas and outer wall heat loss
- No need of extra cooling process when transferring immediately after dried since the product surface temperature is low
- Easy to control and optimize the cycle time according to the product type/size and production quantity
- Easy operation and maintenance as well as small installation area (1/4 or less compared to conventional general dry systems)

Application Areas

- Vehicle-casting core drying
- Various materials drying
- Ceramic industry/ceramic drying
- Rubber and plastic industries
- Food and drug drying/sterilization
- Textile and wood drying/heat treatment
- Papers/printed materials drying and the semiconductor industry

Automotive Plant Parts Industries

Exhaust Purification System Installed Eco-friendly and Energy Saving 'Painting and Coating Plant'

In 1984, Sang Won Machinery successfully localized the painting plant for the automotive industry for the first time in Korea. Since then, the Company localized the exhaust gas purification system for the painting dry line under the support of customers. Along with commercialization of the next generation environmental technology development program of MOE, with the MOE having certified the advanced RTO as new environmental technology (NeT mark certified). With patents acquired in Korea, USA, Japan and China, the Company reinforced its global competitiveness. With successful construction of the VOC reduced aqueous painting plant, the Company became a more eco-friendly and energy conserving painting and coating plant supplier.

Systems & Processes

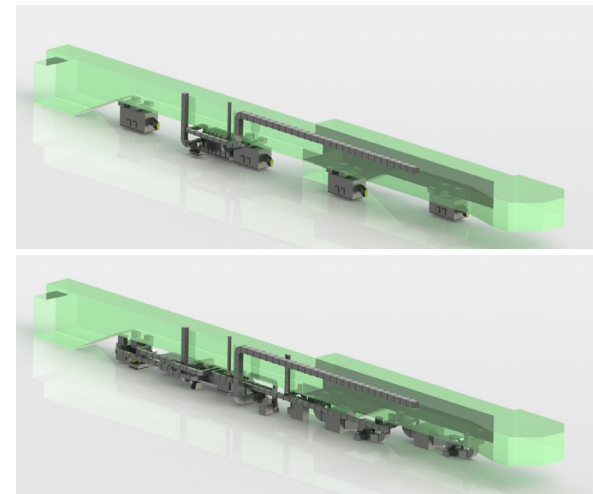
- Preprocessing system
- Electro-coating System
- Liquid painting system
- Powder painting system
- Painting booth and mobile painting booth
- Dry oven system
- Lubricating film system
- Recoating booth and wax booth
- Air conditioning and exhaust gas purification system

Features and Benefits

- Enhanced expediency and precision with turnkey system engineering, production, construction and maintenance
 - ※ Full automation High responsiveness of the customized system based on safety and ease of use
- Top technology capacity and reliability acquired from the first localization in the Korean market and the longest and top records in Korea
- Enhanced technical capacity from ability of chemical analysis and drying experiment on various painting, coating, impregnation and washing materials
- Complete supply of the top eco-friendly exhaust gas purification system that ensures a pleasant work environment.

Application Areas

- Painting and coating of main bodies of vehicles and trucks
- Vehicle and truck parts painting and coating
- Heavy equipment and parts painting and coating
- Steel pipes and plates painting and coating
- Painting and coating of furniture and other products



General Layout of Painting Plants



Exhaust Air Purifying System
(VOC/Odor Treating System)

Patent & Appointment

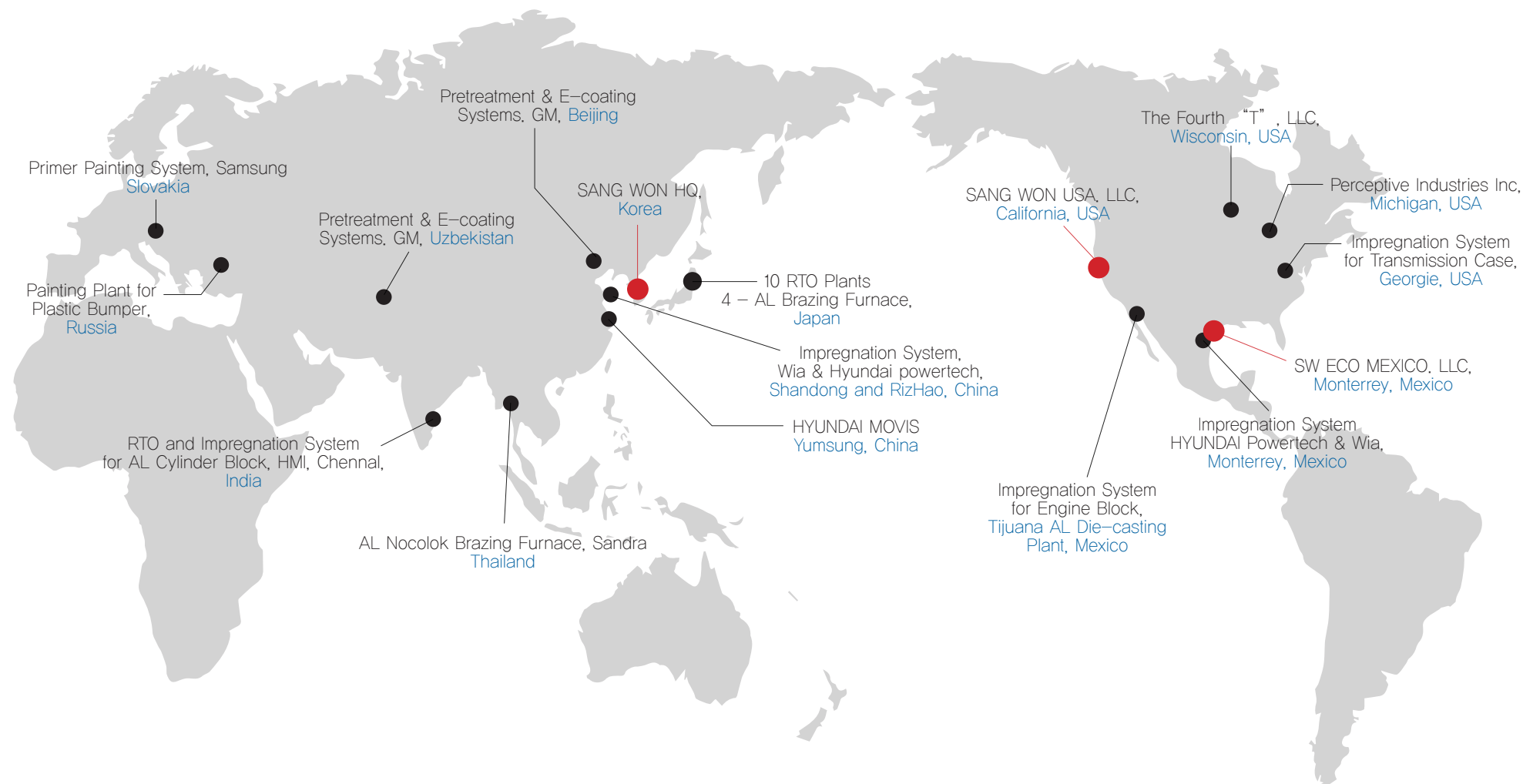
Top 50 Export Leading Technologies Selected from 2001-2008 Next Generation Core Environmental Technology Development Program of the Ministry of Environment, Korea

Top 100 Export Leading Technologies Selected from 2001-2009 Next Generation Core Environmental Technology Development Program of the Ministry of Environment, Korea

Patent List		
	Date of Registration	Patent Title
KOREA	2004. 8. 5	Horizontal Distribution Type Regenerative Thermal Oxidizer
	2005. 10. 20	Separation Type Distribution Rotor and Horizontal Type Rotor Distributor
	1005. 11. 11	Regenerative Oxidizer with a Rotor that has Air Sealability
	2005. 12. 8	Waste Heat Recovery Equipment that Increases Heat Recovery Efficiency by a Symmetrically Distributed Rotor Operation
	2007. 5. 25	Waste Water Recycling System
	2010. 12.14	Green Dryer Having a Regenerative Thermal Oxidation Incorporated with Hot Air Generator
	2012. 12. 5	Controlling Method of Regenerative Hot Air Dryer
	2013. 9. 24	Apparatus for Controlling of Dry Using Temperature of Microwave Shielding Section
	2015. 3. 18	Front Load type Impregnation Machine
	2015. 6. 24	Distribution Rotor for Rotor Distributor of Regenerative Oxidation Equipment
CHINA	2009. 6. 24	
JAPAN	2007. 7. 13	
USA	2006. 8. 1	

Worldwide Network

Worldwide Network and Equipment Export Record





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2017 CATALOGUE

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