



CERACOMB

Ceramic Honeycomb Products

We create cleaner world with advanced technology

Ceracomb will continue its effort to
make clean world to improve our quality of life
by ceaseless development of new material

CEO's Greetings

On behalf of our employees, I sincerely appreciate all of our customers and shareholders for your continued interest and encouragement in Ceracomb.

Ceracomb Co., Ltd. has been producing and supplying ceramic honeycombs using ceramics extrusion molding technology. We have been developing and supplying catalytic products for industrial hazardous gas eliminating, automobile exhaust gas purification, and filters for reducing soot. Moreover, the automobile particulate matter reduction device developed based on Ceracomb's honeycomb and catalytic technology, is contributing greatly to the improvement of the fine dust / atmospheric environment which is becoming an issue in the 21st century.

Through the development of innovative technology, we are expanding the application field of Ceracomb's particulate matter reduction device to construction machinery, ship, power plant, etc. We promise to do our best to lead the environment improvement. In order to service our customers with a new look in the future, we have set our vision to be **"an eco-friendly enterprise that creates future and happiness with human respect and technology."** We are committed to realize our core values including respecting talents, challenging spirit, leading technology, changing innovation, and customer trust.

Now, while strengthening the core competitiveness of existing businesses, Ceracomb Co., Ltd. will promote efficient market access through related businesses, strengthen competitiveness by providing unitized environmental services, develop profit and growth models, practice sharing and win-win management. We will make every effort to continuously grow into a company that is always loved by customers and shareholders, a company that respects the society, and a company that has pride in its employees.

Please keep being interest and love on us, and give us more advices and encouragements.

Lee Ganghong, CEO of Ceracomb Co., Ltd.



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Industrial catalyst

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Industrial Catalytic System

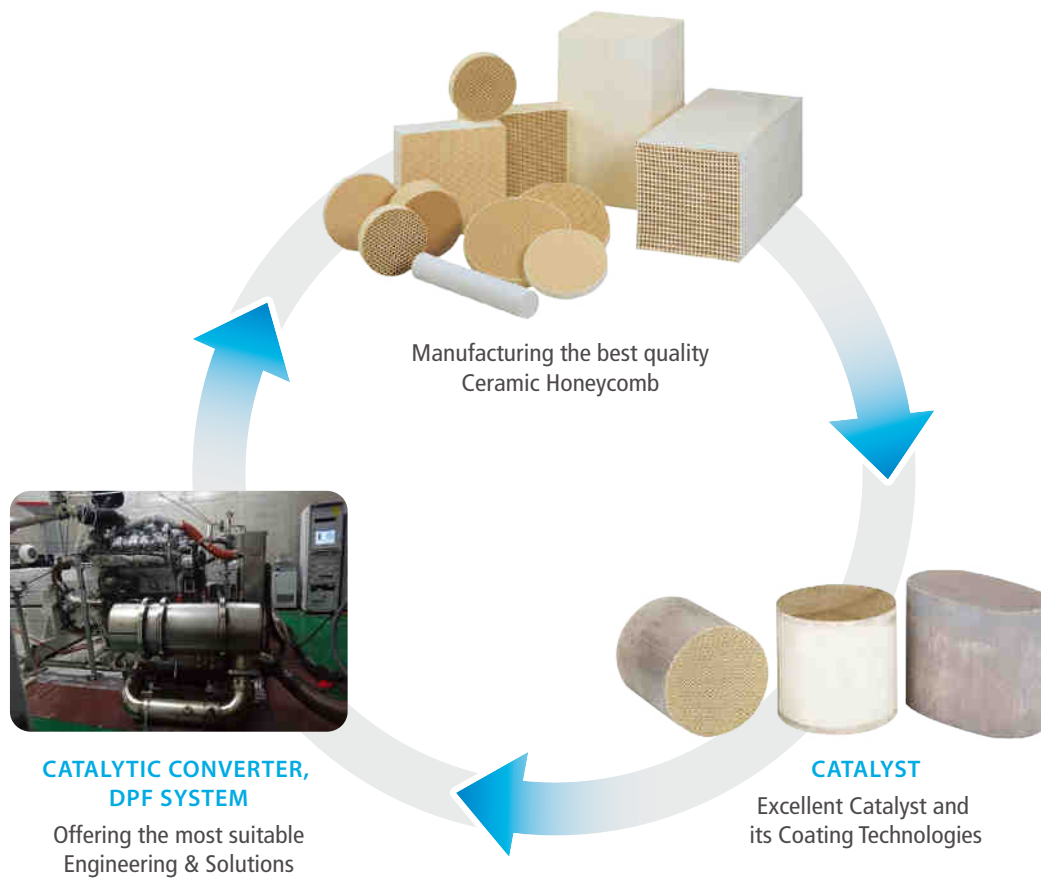
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Company profile

Introduction

CERAMIC HONEYCOMB Ceramic Support , Cordierite DPF



Ceracomb will offer you the best service with the best technology related to air pollution prevention materials.

1. Know-How accumulated over 30 years in Ceramic extrusion fields
2. World best qualified Ceramic Honeycomb structure
3. Air pollutant treatment expert such as Automotive emission, Industrial air pollutant, waste odor etc.
4. Most suitable solution for VOC gas removal on the basis of Know-how accumulated in industrial fields over 20 years
5. Most stable catalytic quality & competitive price by the process unification of catalyst substrate & catalytic material

History

- 1987** Established Honeycomb Department, Dongseo Industrial Co., Ltd., Hyundai Group
- 1989** Started production and supply of ceramic honeycomb
- 1999** Established Dongseo Industrial Co., Ltd., Dongseo Ceracomb Co., Ltd.
- 2001** Changed the company name to Ceracomb Co., Ltd.
- 2002** Acquired ISO 9001 Quality System Certification
Established R & D Center
- 2004** Participated in the project of KMOE. Participated in SMAQI (Seoul metropolitan air quality Improvement) project
Participation in the Seoul Metropolitan Air Quality Improvement Project of KMOE (DOC)
- 2005** Cooperated technically with KOBELCO Japan in the field of living odor treatment catalyst
- 2008** Acquired KMOE certification for CM-PDPF (partial DPF) module and started to supply to SMAQI project
- 2011** Developed Active DPF system and SCR Catalyst
- 2012** Acquired the Korea Hydro Nuclear Quality Q Level and selected as a PAR supplier,
Supplied to 18 nuclear power plants in Korea
- 2013** Acquired Certification of the Ministry of Environment for Active DPF, TS-16949 / ISO14001 Certification
- 2014** Developed PM-NOx simultaneous reduction system
- 2015** Participated in reduction project in China for particulate matter reduction device of Diesel vehicle (RETROFIT)
- 2017** Started OEM with Iran vehicle manufacturer
- 2018** Acquired Taiwan reduction business device certification (Pasive / Active / Hybrid DPF System)
- 2019** Participated in Construction Machinery Engine Replacement Project
Participated in DPF Pilot Project in Mongolia
- 2021** Completed Ceracomb's 3rd Plant
Participate in DPF ODA Project in Colombia

Certificate



IATF 16949



ISO9001



ISO14001



KHNP "Q"
level quality
certificate



Certificate of registration
for air environment
construction project

Patent

Application	Technology	Patent No.	Patent Title
Automotive application	Ceramic honeycomb	10-1567146	Binder composition for purifying exhaust gas filter of automobile
		10-0753212	Honeycomb filter for purification of the exhaust gas and method of manufacturing the same
		10-1250222	Manufacturing method of diesel particulate filter
		10-1351468	Manufacturing method of Diesel Particulate Filter and Diesel Particulate Filter manufactured by the method
		10-0769355	Masking apparatus for selectively charging honeycomb structures
		10-0625219	Method for preparing of catalyst filter for purifying exhaust gas of diesel automobile
	Catalyst	10-1095229	Method of preparing Vanadium/Tungsten/Titania-based catalyst
		10-1351469	Diesel Particulate Filter coated Diesel oxidation catalyst and De-Nitrogen oxide catalyst
		ZL 2012 1 0159618.3 (China Patent)	Method for manufacturing Vanadium/Tungsten/Titania catalyst for eliminating Nitrogen oxide capable of reducing the concentration of Non-reacted Ammonia
		10-0590308	Method for preparing a catalyst for diesel engine off gas purification and the catalyst prepared from the method
System	10-1567145	SCR catalyst composition for purifying exhaust gas filter of automobile	
	10-1292338	Combustion Method of Burner Apparatus For Purifying Exhaust Emissions of Diesel Engine using Liquefied Fuel and Burner Apparatus using the Method	
Industrial Application	Catalyst	10-1331391	Palladium/Titania catalyst for formaldehyde, Carbon monoxide and Hydrogen oxidation in the air at room temperature and manufacturing method using the same A Platinum Catalyst, A Method of Preparing the Same and A Method of Removing Formaldehyde, Carbon Dioxide, Methanol and Hydrogen
		10-1319064	A Platinum Catalyst, A Method of Preparing the Same and A Method of Removing Formaldehyde, Carbon Dioxide, Methanol and Hydrogen
		10-0998325	A platinum/titania-based catalyst, a method of preparing the same and a method of removing formaldehyde by using the same
		0511564	Catalyst for simultaneous removing poisonous gas and odor material exhausted from chemical process, preparing method for the same, and use thereof
		10-1407115	Method for treating hazardous gas generated in semiconductor manufacturing process
	Ceramic honeycomb	0486121	A method for Producing Aluminum titanate- Zirconium titanate Ceramics with Low Thermal Expansion Behavior
		0535299	Ceramics honey comb having high specific surface area and method for manufacturing the ceramics honey comb
		10-0695886	Honeycomb filter for purification of the exhaust gas comprising nanocomposite and method of manufacturing the same
	System	10-1312857	Passive Auto-catalytic Recombiner for controlling Hydrogen in nuclear reactor and control method Hydrogen in nuclear reactor using same
		0430672	A back washing apparatus of ceramics membrane
	Etc	10-1306593	Manufacturing method of support for solid oxide fuel cell
		10-0667043	Method for manufacturing single crystalline ZnO film
		10-1275265	Titania asymmetric membrane and method for preparation thereof

Automotive Products

Automotive ceramic honeycomb

Catalyst support for vehicles



• Outline

It is a material with high temperature durability and high thermal shock resistance. It is used as a catalyst support for vehicles with large surface area.

• Appearance

Shape	Round, Oval
Dimension	Diameter : Max. 13 inch Length : Max. 12 inch
Cell Geometry	100, 200, 300, 400

• Application

Catalyst support for gasoline and LPG, DOC support, SCR catalyst support

• Properties (400CPSI product)

Item	Property Value
Crystalline Phase	Major Phase : Cordierite (Min. 90wt%)
	Minor Phase : Mullite, Spinel, etc
Compressive Strength	A-axis : Min 105.5kgf/cm ²
	B-axis : Min 14.1kgf/cm ²
	C-axis : Min 1.76kgf/cm ²
CTE(30-800°C)	MAX. 1.25 x 10-6/°C
Water absorption	MAX. 1.25 x 10-6/°C
Softening Temperature	Min. 1410°C
PITCH(mm)	1.27
Wall Thick(mm)	0.16
O.F.A(%)	76.4

• Characteristics

1. Large surface area due to the geometrical structure
2. Low pressure loss
3. Excellent mechanical durability

Automotive ceramic honeycomb

DPF



• Outline

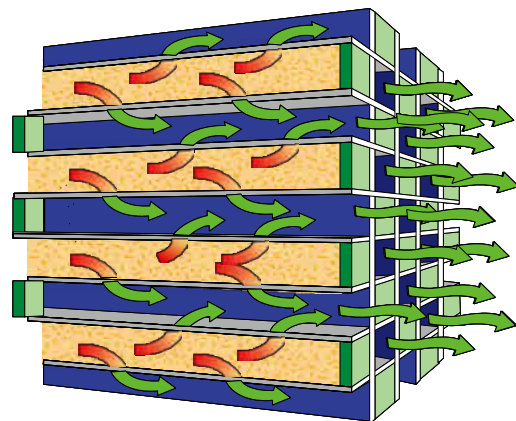
Ceracomb filters effectively remove PM (Particulate Matters) from diesel exhaust gases. These filters have a cellular structure with individual channels open and plugged at opposite ends. PM is collected on the channel walls when exhaust gas flow through the pores of the cell wall.

• Characteristics

1. High PM removal efficiency
2. Low pressure drop
3. High geometric surface area
4. Minimize vehicles' power loss and fuel consumption
5. Low thermal expansion coefficient

• Standard dimension

1. Diameter : 5.2inch, 5.66 inch, 7.5 inch, 10.5 inch, 12 inch
(Larger diameters are available.)
2. Length : Max. 12 inch



Automotive catalyst

Three way catalyst



• Outline

It is a catalyst that converts HC, CO, NOx as the exhaust gases generated during combustion of gasoline engine into harmless gases CO₂ and H₂O.

• Basic principle

hydrocarbon (HC), carbon monoxide (CO), and nitrogen oxide (NOx), which are harmful substances emitted from a gasoline automobile, are added to a ceramic carrier in the form of a catalyst coated with noble metals such as platinum (Pt), palladium (Pd), or rhodium to reduce three components simultaneously by causing oxidation and reduction reaction.

DOC (Diesel Oxidation Catalyst)



• Outline

The catalyst that oxidizes organic substances (SOF) dissolved in CO, HC, PM of exhaust gas by oxidizing action of catalyst coated on ceramic carrier.

• Characteristics

1. Excellent resistance to sulfur
2. Can be applied to various kinds of vehicle
3. Excellent SOF removal rate even at low temperature
4. Low pressure loss due to honeycomb structure

Automotive catalyst

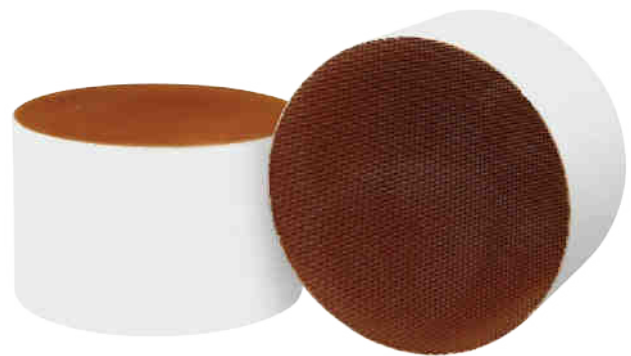
SCR (Selective Catalytic Reduction)

- **Outline**

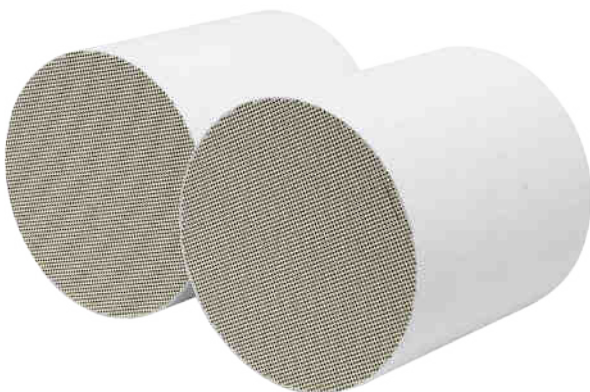
SCR catalyst is a technology to remove nitrogen oxides (NOx) emitted from diesel vehicles. It is a catalyst that reacts NOx with ammonia injected from the front of SCR catalyst and reduces it to N₂ and H₂O.

- **Standard dimension**

Diameter : 5.66 inch, 7.5 inch, 10.5 inch, 12 inch (Max. 13 inch)
Length : 3 inch (Max. 12 inch)



c-DPF(Catalyzed Diesel Particulate Filter)



- **Outline**

c-DPF (Catalyzed DPF) oxidizes CO and HC which are not eliminated completely by DOC and help soot regeneration.

- **Characteristics**

1. Excellent PM removal efficiency at low temperature
2. High thermal resistance
3. High Hydrocarbon oxidation
4. Low sulfur oxides oxidation

Automotive catalytic converter

TWC converter

• Outline

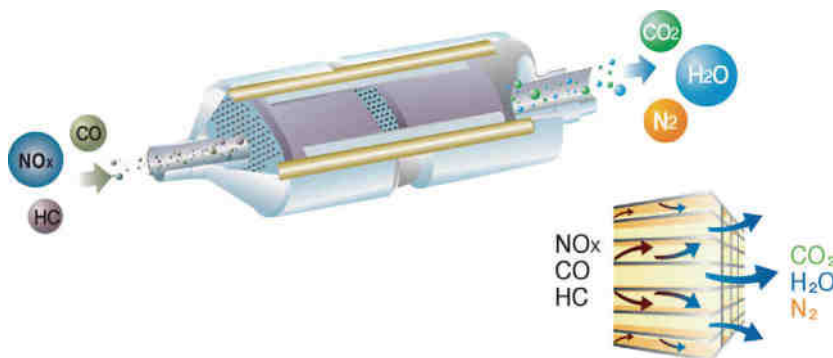
A device that converts HC, CO, and NO_x generated by incomplete combustion of fuel or high-temperature reaction in a gasoline car and into harmless H₂O, CO₂, N₂ by catalytic reaction

• Application

1. Gasoline vehicles
2. LPG Vehicles
3. CNG vehicles



• Working principle



• Characteristics

1. High removal efficiency of HC, CO, NO_x
2. We have participated in the KMOE Seoul metropolitan air quality reduction project since 2012, supplying for more than 200 devices.

Automotive catalytic converter

DOC(Diesel Oxidation Catalyst) Converter



• Outline

Catalytic converter that oxidizes CO,HC and PM (SOF) of exhaust gas by oxidation function of catalyst coated on ceramic carrier



- Ceracomb DOC converter
Certificate by Korea Ministry Of Environment



- The Ministry of Environment,
the environmental authority of the Republic of Korea

• Characteristics

1. Excellent removal rate for -CO, HC, SOF
2. Easy to install with optimal piping structure for different vehicles
3. We have participated in the KMOE Seoul metropolitan air quality reduction project since 2005, supplying for more than 50,000 devices.

Partial DPF system



• Outline

It is the type 2 device that eliminates harmful gas and particulate matters with a removal rate of more than 50% from the diesel engine of vehicle



- Ceracomb Partial DPF system
Certificate by Korea Ministry Of Environment



- The Ministry of Environment,
the environmental authority of the Republic of Korea

• Characteristics

1. Partially open DPF structure minimizes pressure drop and low fuel efficiency
2. Superior performance at low speed
3. Easy to install and to maintain after request

• Models

Regeneration method	Specification	Device name	Applied engine	Device configuration	Performance
Natural regeneration	S(Round 5.66 inch)	Partial DPF system (S)	Engine : under 3,000cc Power : under 115PS	DOC + Partial DPF	installed in more than 32,000 diesel cars
	M(Round 7.5 inch)	Partial DPF system (M)	Engine : under 3,000~6,000cc Power : under 155PS		

Automotive catalytic converter

Hybrid DPF system



• Outline

The combined regeneration system equipped with the DPF can reduce the PM in the exhaust gas by more than 98%. It can be regenerated by forced regeneration even under low speed / low load conditions when it is difficult to ensure exhaust gas temperature by using a gas burner.



- Ceracomb Hybrid DPF system
Certificate by Korea Ministry Of Environment



- The Ministry of Environment,
the environmental authority of the Republic of Korea

• Characteristics

1. Can be used in low-speed vehicles with low exhaust gas temperature.
2. Can be regenerated naturally through catalytic reaction under high speed /high load condition
3. Easy to install and to maintain after request

• Models

Regeneration method	Specification	Device name	Applied engine	Device configuration	Performance
Combined regeneration (forced/natural regeneration)	S(Round 5.66 Inch)	Active-Passive DPF system(S)	Englne : under 3,00cc Power : under 126PS	Bumer + DOC + DPF	installed in more than 7,000 diesel cars
	M(Round 7.5 Inch)	Active-Passive DPF system(M)	Englne : under 5,00cc Power : under 170PS		
	L(Round 10.5 Inch)	Active-Passive DPF system(L)	Englne : under 11,000cc Power : under 340PS		

Automotive catalytic converter

Passive DPF system

• Outline

It regenerates the filter continuously while collecting the PM emitted from the engine into the DPF filter by using the exhaust heat of engine. It is applicable at lower temperature than existing products.

• Components

1. PM natural regeneration through catalytic reaction
2. Supplied to more than 2,500 cars in China from 8,000 to 12,000CC
3. Easy to install and to maintain after request

• Models



Regeneration method	Specification	Device name	Applied engine	Device configuration	Performance
Natural regeneration	L(Round 10.5 inch)	Passive DPF system(L)	Engine : under 10,000cc Power : under 350PS	DOC + DPF	installed in more than 3,000 diesel cars
	XL(Round 12 inch)	Passive DPF system(XL)	Engine : under 13,000cc Power : under 400PS		

Active DPF system

• Outline

A device composed of a DPF + a burner and forcibly regenerates PM collected in the DPF filter

• Components

1. Manual forced regeneration method
2. Applied to 3,000 ~ 15,000CC construction machinery and heavy equipments.

• Models



Regeneration method	Specification	Device name	Applied engine	Device configuration
Forced regeneration	S(Round 5.66 inch)	Active DPF system(S)	Engine power 19~37kW	Burner + DPF
	M(Round 7.5 inch)	Active DPF system(M)	Engine power 37~75kW	
	L(Round 10.5 inch)	Active DPF system(L)	Engine power 75~130kW	

Automotive catalytic converter

PM-NOx After treatment system



• Outline

Ceracomb PM-NOx simultaneous reduction system is a device that simultaneously eliminates PM and NOx from diesel engines effectively.

• Components

1. Catalytic filter : DOC, DPF, SCR, AOC
2. Urea dosing system : Urea tank, dosing pump, nozzle, DCU

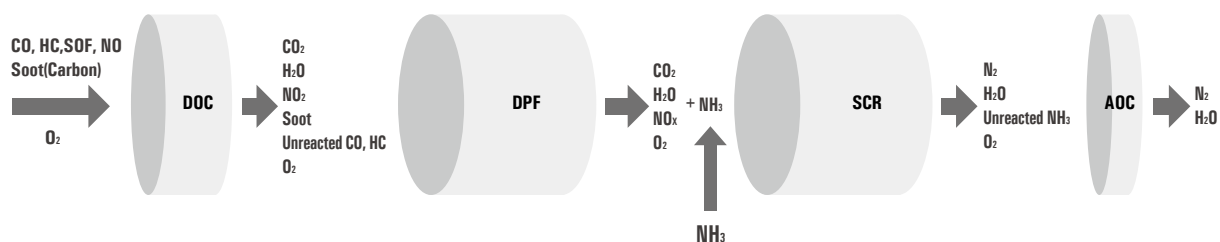


• The Ministry of Environment, the environmental authority of the Republic of Korea



• Ceracomb PM-NOx After treatment system Certificate by Korea Ministry Of Environment

• Working principle



• Application

1. Simultaneously reduce PM 80% or more and NOx (NOx) 70% or more
2. Applied to buses and construction equipments with large-sized diesel engines less than -16,000CC



• Installing PM-NOx converters on bus (EURO III -> EURO V)

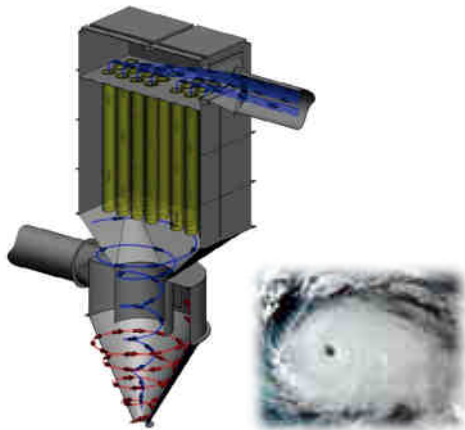
• Models

Regeneration method	Specification	Device name	Applied engine	Device configuration
Natural regeneration	XL (Round 12 inch)	PM-NOx After treatment system	Engine : under 16,000cc Power : under 440PS	DOC + DPF + AOC

Environment · Energy [Dust Collector]

CERAFIL-CB™

1. For Room Temperature



• Advantages

1. Integral (centrifugal force + Filtration) structure minimizes installation space and reduces initial investment costs
2. Filter life extension reduces maintenance costs
3. The higher the dust concentration and the amount of gas treated, the more economical

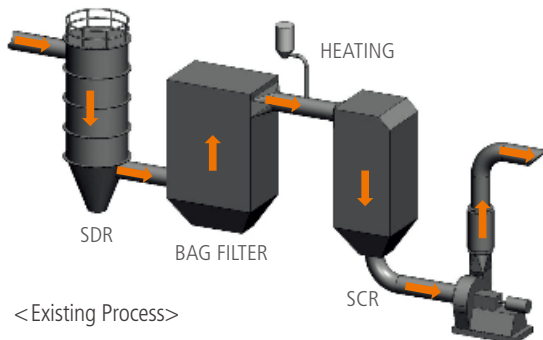
• Applications

1. Raw material transport line for thermal power plants
2. Various incinerators and metal processing plants
3. Facilities where high-water dust is generated
4. Facilities where high concentrations and high viscosity dust occur

• References

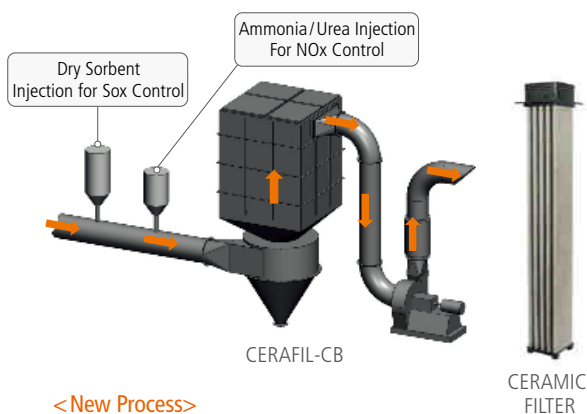
1. Supplied more than 150 units to domestic thermal power plants
2. Supplied more than 100 units to private companies
3. Supplied more than 100 units to overseas

2. For High Temperature



• Feature (Existing Process)

1. It is easy to control each harmful gas separately, but the initial investment and maintenance costs are too high



• Advantages (New Process)

1. Simultaneously treat high temperature harmful dust (SOX, NOX, DUST) with system normal working temperature (500°C ~ 600°C)
2. Omit existing facility configurations (temperature control, SCR) to minimize installation space and reduce initial investment costs

• Application

1. Steel, cement, plastic furnace, crematorium, etc.
2. High temperature gas inflow (MAX 600°C) SOX, NOX, DUST simultaneous process

Environment · Energy [VOCs Collector, Regenerator]

CHF (Carbon Honeycomb Filter System)

1. Introduction



- Components : Activated Carbon
- Standard Size : 100mm × 100mmL (square shape)
- CPSI (cell per square inch) : 100, 200 cpsi
- Weight : 0.45kg

• Features

1. Great performance of VOC gas removal and deodorization (Remove 95% or more)
2. Reusable by regeneration
3. Low pressure loss due to honeycomb shape

• Applications

1. Painting facilities (car and ship painting)
2. Printing facilities
3. Solvent manufacturing plant
4. Textile dyeing facilities

2. Removal Mechanism

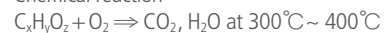
• Adsorption / Desorption (Stage 1)

1. Adsorption of low and medium concentrations of VOC
2. Small heat wave (150~200°C) desorption / regeneration

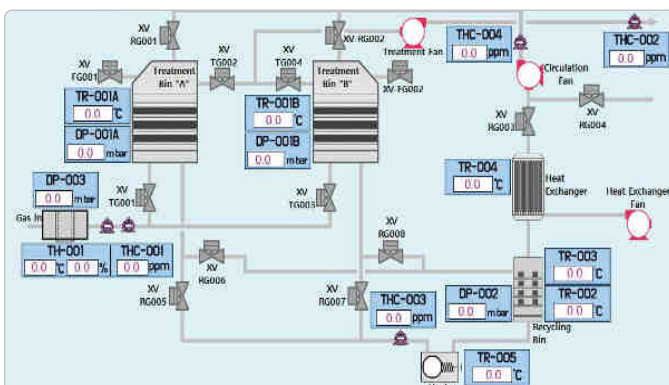
• Catalytic Decomposition (Stage 2)

: Low-temperature oxidation catalyst (300~400°C) removes high concentration of VOC.

*Chemical reaction



3. Configuration



<D*** Company, Dangjin plant>

4. Specification

Size	Depends on capacity, installation environment
Type	Vertical, Horizontal
Adsorbent	CHF (Carbon Honeycomb Filter)
Catalyst	Ceramic honeycomb substrate + VOC Catalyst with precious metal (Ceracomb own patented product)
Economics	High-efficiency, low-cost system with excellent adsorption/Desorption performance and low maintenance costs

Environment·Energy [ZDF Odor Deodorant Device]

ZDF (Zeolite Deodorant Filter)

1. Introduction



- Components : Zeolite + Mn Catalyst
- Standard Size : 100mm×100mmL (square shape)
- CPSI (cell per square inch) : 100,200 cpsi
- Weight : 0.6kg

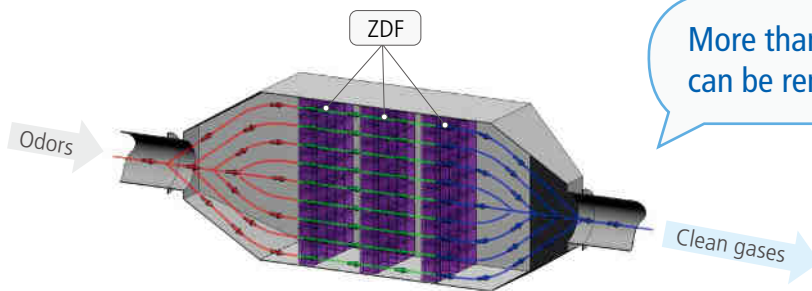
• Features

1. Room Temperature Natural Regeneration Catalyst Filter (Inflammable)
2. Strong deodorization effect on sulfur compounds and nitrogen compounds
3. Long Life (2 to 5 years) Low Operating Costs
4. Low pressure loss due to honeycomb shape

• Applications

1. Septic tanks, sewage treatment plants, odor exhaust facilities
2. Exhaust facilities in buildings, apartments, food waste storage rooms
3. Exhaust facilities at chemical plants
4. Exhaust facilities at odor material storage warehouses

2. Configuration



3. References



Odor treatment facility
(A***, Osan plant)



Restaurants in city center
(Japan)



Food processing plant
(Japan)

Industrial Products

Industrial ceramic honeycomb

Ceramic catalyst substrate



• Outline

Catalyst support has special characteristics such as high geometric surface area, low pressure drop, chemical durability, high thermal shock resistance. This catalyst support is used for catalyst substrate for various catalysts.

• Application

Support for VOC catalyst, SCR catalyst, cooking devices catalyst, etc.

• Standard dimension

1. 150x150x25, 50, 100, 150, 200, 300mmL/20, 50, 100, 200, 300 CPSI
2. Round 93x50/300CPSI
Round 96x30/50, 100CPSI

• Geometric properties

	150(W) * 150(W) * 50, 100, 150, 200, 250, 300mm(L)			
Cell per in ² , CPSI	50	100	200	300
Channel No.	42 x 42	59 x 59	83 x 83	102 x 102
Pitch, mm	3.60	2.54	1.80	1.47
Opening size, mm	3.0	2.09	1.47	1.19
Wall Thick, mm	0.6	0.45	0.33	0.28
Surface area, m ² /m ³	940	1296	1818	2207
O.F.A, %	69.4	67.7	66.6	65.5

Industrial catalyst

VOC catalyst



• Outline

Ceracomb VOC catalyst perfectly removes all kinds of VOCs (Volatile Organic Compounds) and odors at 250~400°C.

• Standard dimension

150x150x50mm/100cpsi	150x150x100mm/100cpsi	R93x100mm/300cpsi
150x150x50mm/200cpsi	150x150x100mm/200cpsi	R93x50mm/300cpsi
150x150x50mm/300cpsi	150x150x100mm/300cpsi	

• Application

1. Chemical plant
2. Wire enamel coating
3. Painting factory (Automobile, home appliances, etc.)
4. Painting factory (Off-set, gravure)
5. PTA process
6. Aluminum and Film coater
7. Food factory
8. Waste food disposer, livestock feces disposer, waste water disposal plant, etc.

Industrial catalyst

Hydrogen removal catalyst

- **Outline**

Catalysts to remove Hydrogen efficiently emitted from nuclear power plant, gas manufacturing, SOFC system and semi-conductor process.

- **Working condition**

1. Room temperature

- **Standard dimension**

150x150x50mm/35cpsl	150x150x100mm/35cpsl	R96x50mm/100cpsl
150x150x50mm/50cpsl	150x150x100mm/50cpsl	R96x100mm/100cpsl
150x150x50mm/100cpsl	150x150x100mm/100cpsl	R93x50mm/300cpsl
150x150x50mm/200cpsl	150x150x100mm/200cpsl	R93x100mm/300cpsl
150x150x50mm/300cpsl	150x150x100mm/300cpsl	



Formaldehyde removal catalyst

- **Outline**

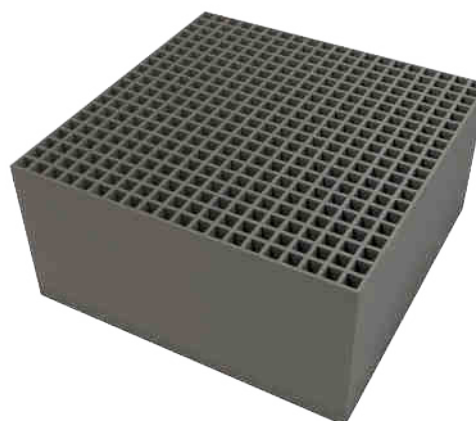
Catalysts to remove HCHO efficiently which causes sick house syndrome out of new building finish materials

- **Working condition**

1. Room temperature

- **Standard dimension**

150x150x50mm/35cpsl	150x150x100mm/35cpsl	R96x50mm/100cpsl
150x150x50mm/50cpsl	150x150x100mm/50cpsl	R96x100mm/100cpsl
150x150x50mm/100cpsl	150x150x100mm/100cpsl	R93x50mm/300cpsl
150x150x50mm/200cpsl	150x150x100mm/200cpsl	R93x100mm/300cpsl
150x150x50mm/300cpsl	150x150x100mm/300cpsl	



Industrial catalytic system

PAR driven hydrogen recombiner



• Standard dimension

Div.	Model	Size(WxLxH)	Weight(Kg)	H2 Removal(g/sec)
Small	NP-400	378 x 343 x 1000	45	0.27
Medium	NP-800	725 x 365 x 1000	80	0.58
Large	NP-1600	1428 x 365 x 1000	145	1.41

• Outline

The air mixed with hydrogen reacts with the catalyst in PAR to generate reaction heat. In this device, hydrogen is introduced into PAR by natural convection to remove hydrogen continuously without additional power

• Application

1. Acquired Q level of quality standard of KHNP
2. Supplied to No. 18 equipment at operation nuclear power plant in Korea
3. Ability to treat hydrogen at both of low and high concentrations as well as at high concentrations
4. Stand type, wall type in various sizes

Hydrogen removal device for submarines



• Outline

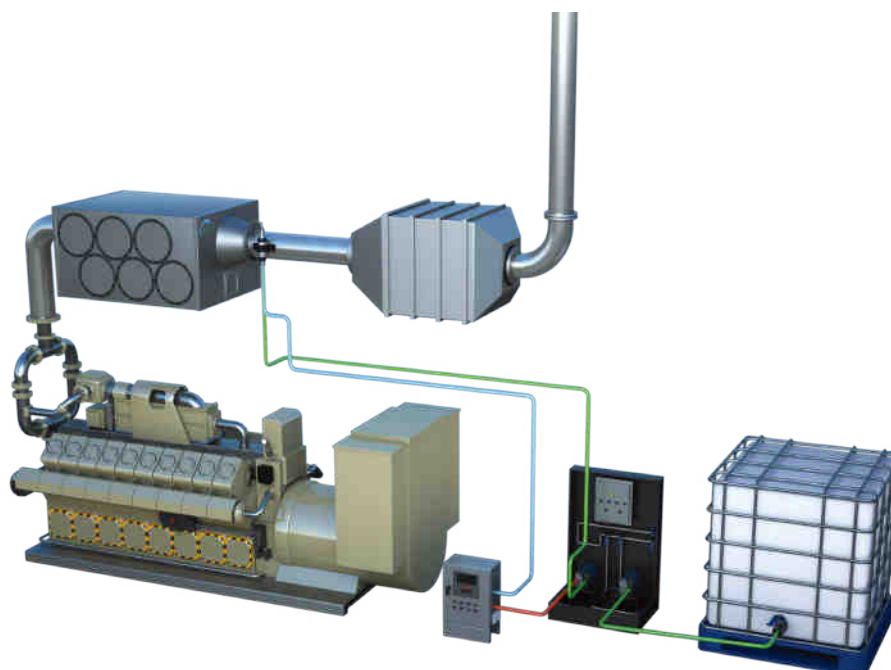
A device for continuously removing hydrogen discharged from the battery of submarine without additional power

• Application

1. Supplied devices to 4 export submarines of Indonesia
2. Delivered and contracted with the Ministry of National Defense for Jang Bogo III (60 devices – 3 submarines)

Industrial catalytic system

Diesel exhaust after treatment system



• Overview

Diesel exhaust after treatment system reduce PM, NOx, CO and HC exhausted from Stationary prime or emergency standby generators where use Diesel or LNG or Biogas fuel.

• Application

1. Diesel generator : 100kW ~ 5,000kW
2. Small cogeneration system : 100 kW~ 10,000kW
3. Boiler : 2ton ~ 10ton

• Performance

Item	CO	HC	PM	NOx
conversion efficiency	90%	80%	90%	90%

• System



DPF



SCR



Dosing system



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