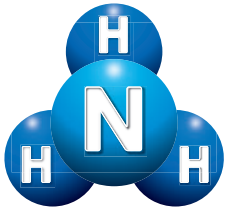


Gas Combustion Unit for Ammonia Fueled Vessels

Volcano

MECS-N



Cleanly combusts ammonia gas

Safely and properly detoxifies ammonia, the next-generation fuel!

Contributes to climate change mitigation

Safely combusts ammonia (NH₃) to

detoxify

- Supports low and free flow pressures
- Compact size with a small installation area
- Automatic control with a single button
- Light oil or biofuel can be used as auxiliary burner fuel

Combusts gas of any ratio up to

100%

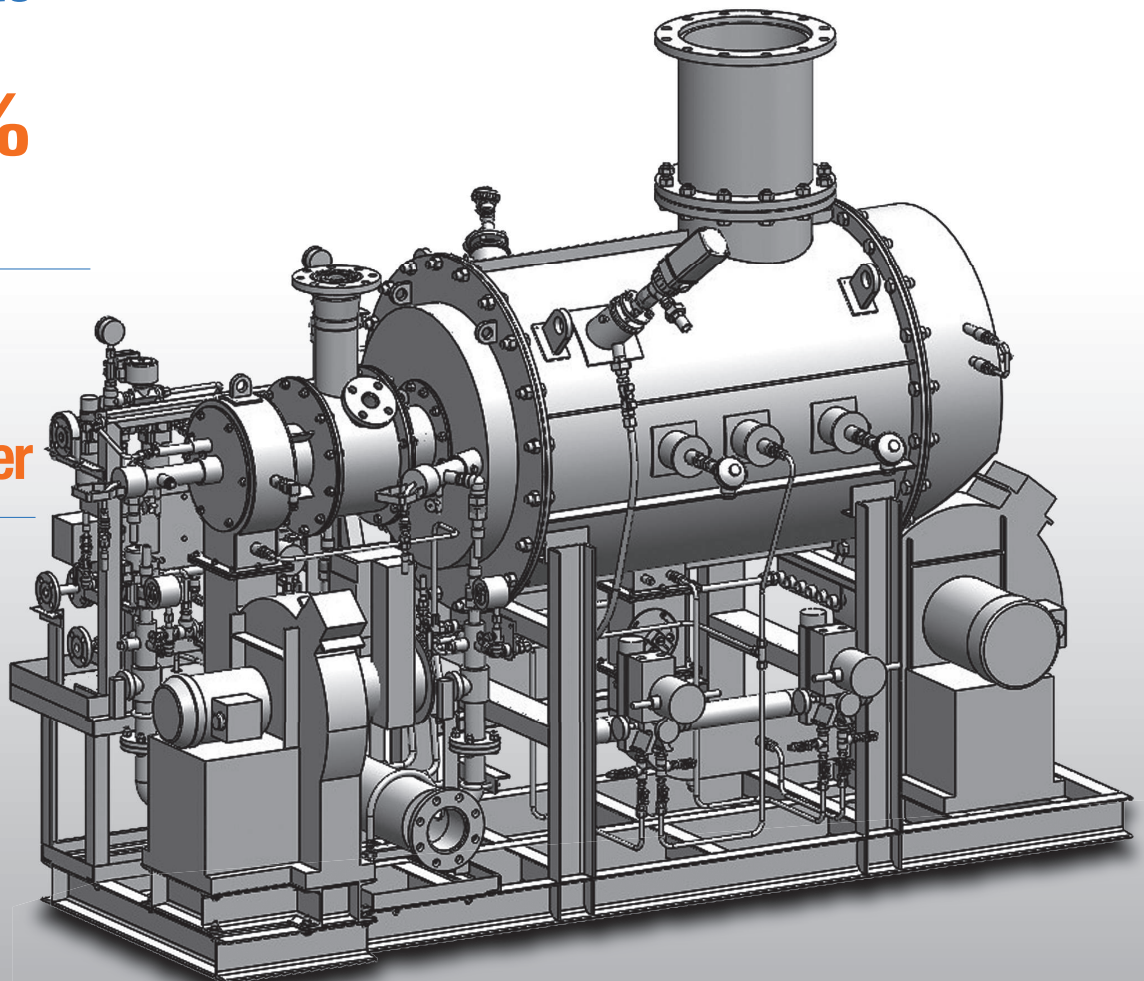
inert gas

Can also be used with ammonia water

*ClassNK issued type approval certificate obtained

MECS-N was developed with a subsidy from the Nippon Foundation.

Supported by



Product Specifications

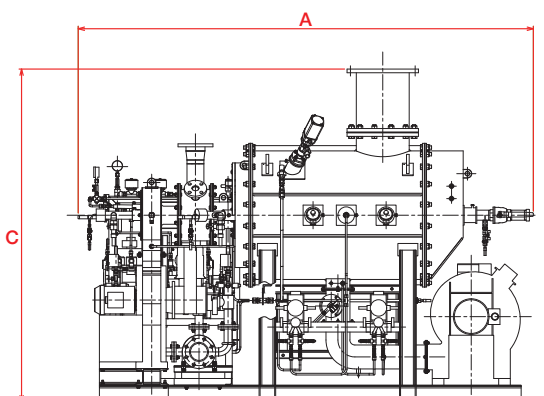
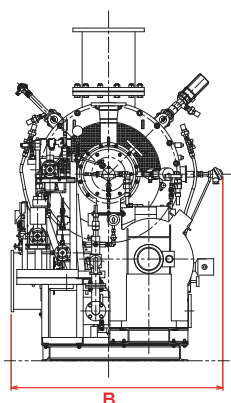
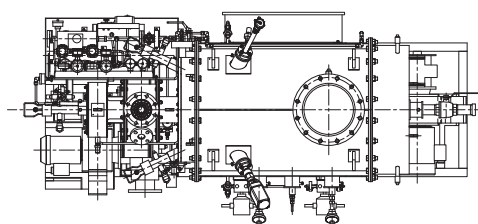
TYPE			MECS-N25	MECS-N50	MECS-N100	MECS-N150	MECS-N200V	MECS-N300V	MECS-N500V	MECS-N750V	MECS-N1000V
Combustion Rate		kg/h ^{*1}	70	135	270	400	540	810	1,350	2,020	2,700
Gas Pressure ^{*2}		MPaG	From free flow to 1.0 ^{*3}								
Dimensions ^{*5}	A	mm	2,530	3,200	4,000	4,500	5,000	2,400 ^{*4}	2,500 ^{*4}	2,700 ^{*4}	2,900 ^{*4}
	B	mm	926	850	1,200	1,300	1,500				
	C	mm	2,015	2,300	3,100	3,500	4,000				
Weight (ab) ^{*5}		kg	600	1,300	2,000	2,700	3,500	4,200	4,650	5,800	6,700

*1. NH₃: 100% (as low calorific value 18.8 MJ/kg) *2. Gas supply pressure at gas valve unit inlet *3. "Free flow" is when gas is supplied at the tank pressure without pressurizing boil-off gas *4. Vertical type hull dimensions *5. Dimensions and weight values are for reference only

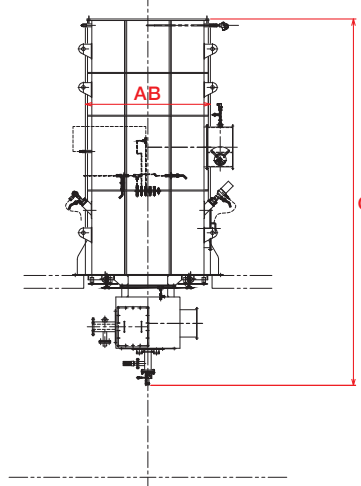
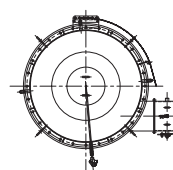
External View

Horizontal Type

*Either horizontal or vertical type can be selected according to the available space in your vessel.

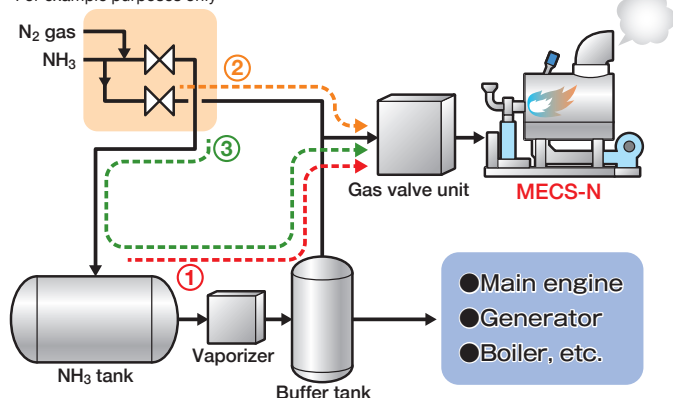


Vertical Type



Gas Combustion Flow Diagram

*For example purposes only



Configuration

- ▶ Gas Combustion Unit
 - ▶ Combustion air fan
 - ▶ Cooling air fan
 - ▶ Pilot burner combustion air fan
 - ▶ Pilot burner pump unit
 - ▶ Gas valve unit
 - ▶ Control panel
 - ▶ Remote control panel
 - ▶ Ammonia water valve unit (optional)
- Supports equipment redundancy

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Scan this code for more information on our products.



Gas Combustion Unit for Hydrogen Fueled Vessels

Volcano

MECS-H



Combusts hydrogen gas Safely

Contributes to the utilization of next-generation fuels for a carbon-free or low-carbon society

Safely

combusts the hydrogen gas (evaporating gas H₂) generated in the tank

- Supports low and free flow pressures
- Compact size with a small installation area
- Automatic control with a single button
- Light oil or biofuel can be used as auxiliary burner fuel

Combusts gas of any ratio up to

100%

inert gas

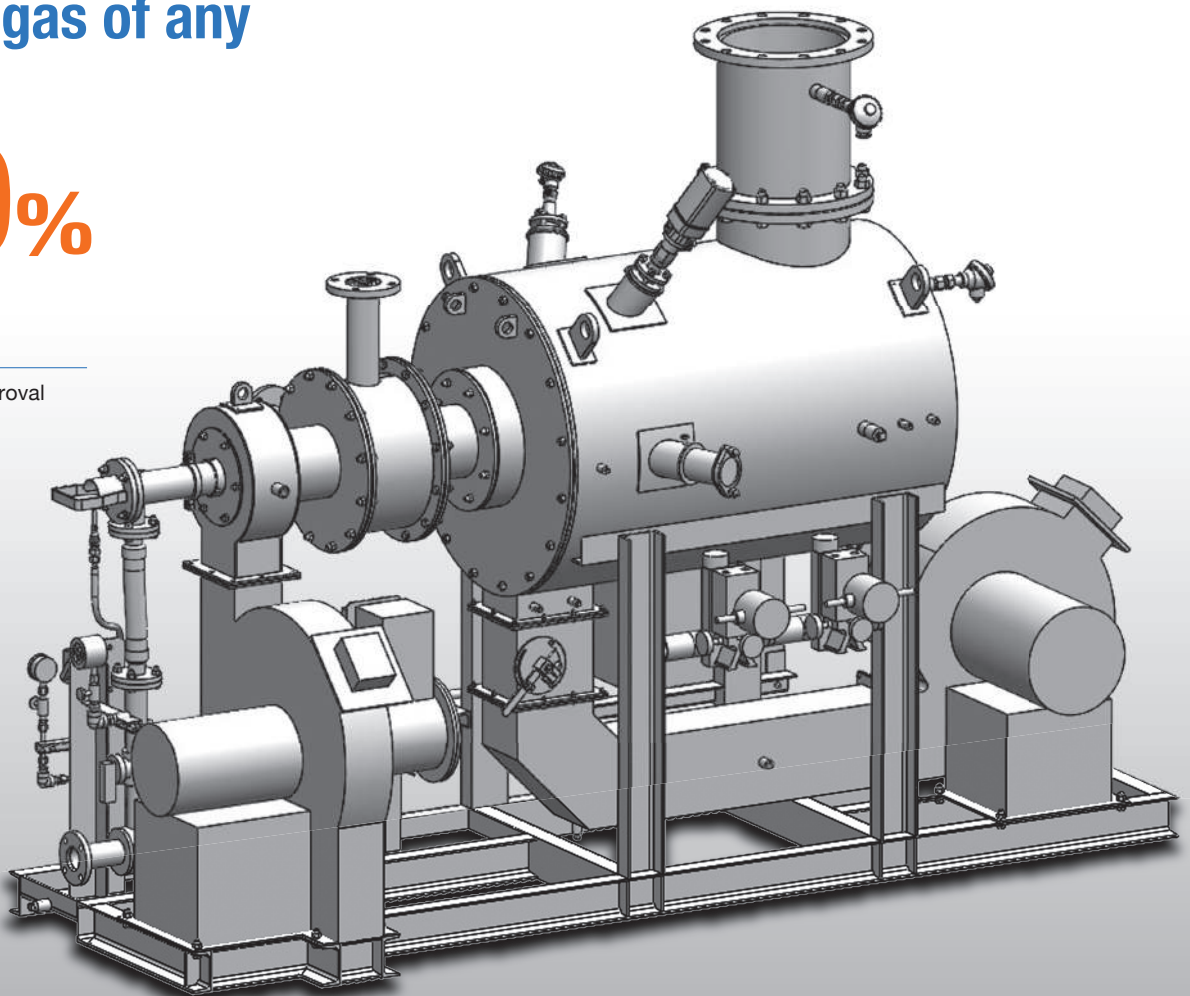
*ClassNK issued type approval certificate obtained

MECS-H was developed with a subsidy from the Nippon Foundation.

Supported by



THE NIPPON FOUNDATION



Product Specifications

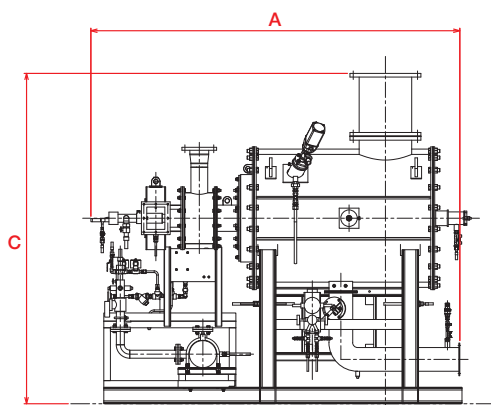
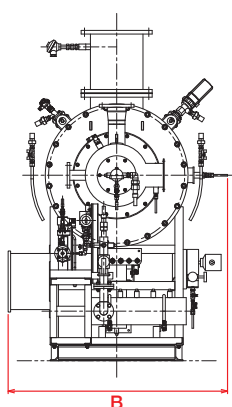
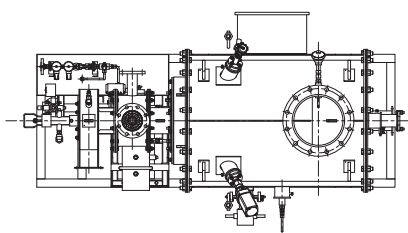
TYPE			MECS-H25	MECS-H50	MECS-H100	MECS-H150	MECS-H200V	MECS-H300V	MECS-H500V	MECS-H750V	MECS-H1000V
Combustion Rate		kg/h ^{*1}	10	20	40	60	80	125	205	310	415
Gas Pressure ^{*2}		MPaG	From free flow to 1.0 ^{*3}								
Dimensions ^{*5}	A	mm	2,530	3,200	4,000	4,500	5,000	2,400 ^{*4}	2,500 ^{*4}	2,700 ^{*4}	2,900 ^{*4}
	B	mm	926	850	1,200	1,300	1,500				
	C	mm	2,015	2,300	3,100	3,500	4,000	5,100	6,100	7,200	7,500
Weight (ab) ^{*5}		kg	600	1,300	2,000	2,700	3,500	4,200	4,650	5,800	6,700

*1. H₂: 100% (as low calorific value 120 MJ/kg) *2. Gas supply pressure at gas valve unit inlet *3. "Free flow" is when gas is supplied at the tank pressure without pressurizing boil-off gas *4. Vertical type hull dimensions *5. Dimensions and weight values are for reference only

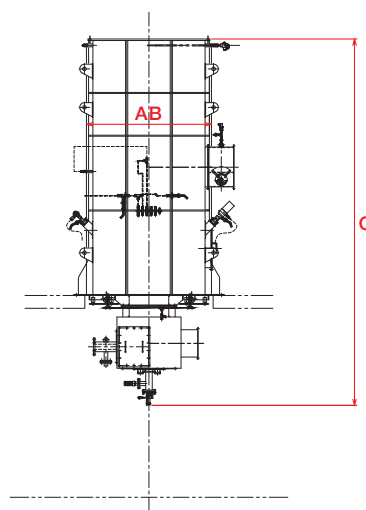
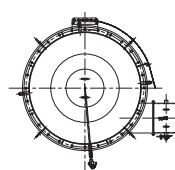
External View

Horizontal Type

*Either horizontal or vertical type can be selected according to the available space in your vessel.

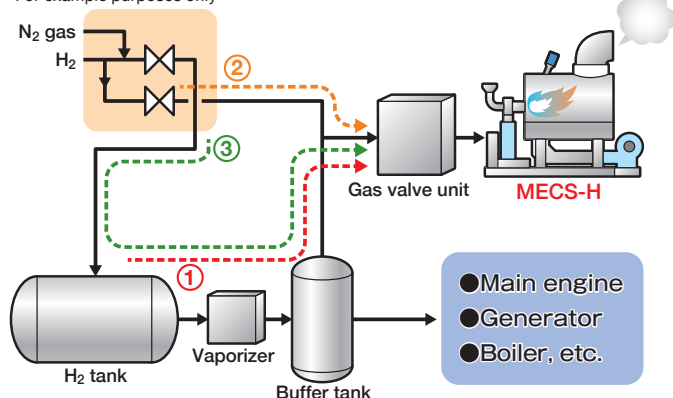


Vertical Type



Gas Combustion Flow Diagram

*For example purposes only



Configuration

- ▶ Gas Combustion Unit
 - ▶ Combustion air fan
 - ▶ Cooling air fan
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 - ▶ Control panel
 - ▶ Remote control panel
- Supports equipment redundancy

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