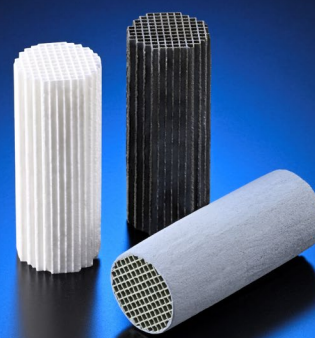


Ceramics Honeycomb Catalyst for CO₂ Methanation

Under Development

Ni resource saving and energy reduction can be achieved by using ceramics honeycomb catalyst



Outline

Honeycomb catalyst with high reaction area realizes *Resource Saving, Low Pressure Drop* and *High CO₂ Conversion*.

Feature

Honeycomb catalyst with 80% lower Ni content compared with the pellet-type catalyst has the following features ;

• Lower Pressure Drop

Reduction of compressor energy consumption by 50% lower pressure drop

• Higher CO₂ Conversion

7% higher CO₂ conversion to Methane

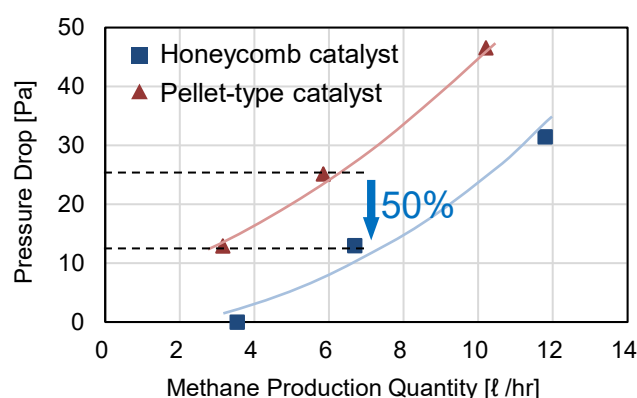
Main specification

catalyst	Honeycomb	Pellet-type	
	[Low Ni content] [Under Development]	[Low Ni content]	[High Ni content, commercial]
Catalyst Volume [-]	1	1	1
Ni content [-]	0.17	0.17	1
Pressure Drop [-]	0.75	1.5	1
CO ₂ Conversion to Methane [%]	85	78	87

Applications

- Industrial catalyst for CO₂ recycle and/or utilization
- Industrial catalyst used in the heat exchanger type reactor and/or heat insulated type reactor
- Other industrial catalyst using precious metal

Pressure drop



CO₂ conversion to methane

