

**BELLFINE® MG-407SL** *New*

## High Performance Carbon Molecular Sieves (CMS)



- In 1989, we developed the CMS “BELLFINE® MG” using the in-house developed phenolic resin “BELLPEARL®” as the raw material. Our nitrogen PSA, which introduced these CMS, has a cumulative sales record of more than 3000 units, mainly in the Japanese market.
- From material (CMS) to machinery (PSA). The strong product development based on consistent design and manufacturing is our feature.
- Our nitrogen PSA has the No.1 market share in Japan in 2019.

**1. Features**

- Reducing the amount of CMS used to fill nitrogen PSA is the strongest point . In addition, the nitrogen yield is high and energy saving design is possible.
- Suitable for med-size (100Nm<sup>3</sup>/h or less) nitrogen PSA. The equipment can be made more compact and can be differentiated by using BELLFINE® MG-407SL.
- Japan made CMS with excellent strength and durability.
- BELLFINE® MG is durable against performance degradation due to long-term use of PSA.

**2. Properties**

Item	Values
Pellet dia. [mm]	0.7~0.8
Packing Density ※) [g/ml]	0.73
Hardness ※) [wt%]	96

※) Test method JIS K1474

**3. PSA performance**

Characteristics of the PSA Nitrogen Gas Generator using MG-407SL.

- Pressure 0.8MPa
- Temperature 20°C
- Adsorption time 35s

N <sub>2</sub> Purity [%]	Productivity [Nm <sup>3</sup> /ton·h]		N <sub>2</sub> /Air [%]	Air/N <sub>2</sub> [-]
	[Nm <sup>3</sup> /ton·h]	[Nm <sup>3</sup> /m <sup>3</sup> ·h]		
99.99	183	134	26	3.8
99.9	263	193	33	3.0
99	399	292	43	2.3

※ The above data presents typical values that are not guaranteed.

**BELLFINE® MG-405L**

High Performance Carbon Molecular Sieves (CMS)



- In 1989, we developed the CMS “BELLFINE® MG” using the in-house developed phenolic resin “BELLPEARL®” as the raw material. Our nitrogen PSA, which introduced these CMS, has a cumulative sales record of more than 3000 units, mainly in the Japanese market.
- From material (CMS) to machinery (PSA). The strong product development based on consistent design and manufacturing is our feature.
- Our nitrogen PSA has the No.1 market share in Japan in 2019.

**1. Features**

- Reducing the amount of CMS used to fill nitrogen PSA is the strongest point . In addition, the nitrogen yield is high and energy saving design is possible.
- Suitable for small-size (20Nm<sup>3</sup>/h or less) nitrogen PSA. The equipment can be made more compact and can be differentiated by using BELLFINE® MG-405L.
- Japan made CMS with excellent strength and durability.
- BELLFINE® MG is durable against performance degradation due to long-term use of PSA.

**2. Properties**

Item	Values
Pellet dia. [mm]	0.5~0.6
Packing Density ※) [g/ml]	0.70
Hardness ※) [wt%]	96

※) Test method JIS K1474

**3. PSA performance**

Characteristics of the PSA Nitrogen Gas Generator using MG-405L.

- Pressure 0.8MPa
- Temperature 20°C
- Adsorption time 35s

N <sub>2</sub> Purity [%]	Productivity		N <sub>2</sub> /Air [%]	Air/N <sub>2</sub> [-]
	[Nm <sup>3</sup> /ton · h]	[Nm <sup>3</sup> /m <sup>3</sup> · h]		
99.99	201	142	29	3.5
99.9	278	197	35	2.8
99	410	289	44	2.3

※ The above data presents typical values that are not guaranteed.