HIGH PURITY HYDROGEN GAS GENERATOR
This high purity hydrogen gas generator which is composed with MGC-MH process (Mitsubishi Gas Chemical company, Inc.) and our PSA gas separation system is suitable for using at customer’s plant site. It provides low cost hydrogen gas used for production of semiconductor and optical fiber glass, metal heat treatment such as bright annealing, and many kind of chemical process.

**Features**

- Low cost hydrogen gas available on site
- Highly active and long-lived catalyst at low temperature
- The simplified single stage reforming system
- The operation is automatic to minimize operator attention coupled with easy start-up and shut-down.
- The process control is easy since the thermal source is the electric heater. (PACKAGE TYPE)
- Skid mounted unit can be designed to decrease field installation cost and man-days.

**Principle**

- Methanol is reformed in the reactor to produce hydrogen rich gas vapor. Hydrogen rich gas is purified in PSA system of Sumitomo Seika which is general supplier of PSA.
- Heat recovery and condensate recovery for an energy saving.

- Reactor gas is properly cooled to remove the water and other impurities in the process gas.
- Concentrated hydrogen gas is produced in PSA system of Sumitomo Seika which is general supplier of PSA.
パッケージ型 PACKAGE TYPE

製品水素ガス Specifications

- 純度 Purity  
  H₂ ≥99.999 vol%  
  CO ≤1.0 ppm  
  CO₂ ≤1.0 ppm

- 压力 Press.  
  0.784 MPa(2)

- 冷却水 Pure Water/kg
  0.38

- 電気Power(kw)
  0.60〜0.75

- エタノール methanol(kg)
  0.66〜0.70

- 対象空気 Instrument Air(m³/h(nor.)) 5〜15

- 冷却水 Cooling Water(m³/h) 4〜15

<table>
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<tr>
<th>Capacity (m³/h(nor.))</th>
<th>D (m)</th>
<th>W (m)</th>
<th>H (m)</th>
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<td>5.2</td>
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<tr>
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<td>3.0</td>
<td>6.5</td>
<td>3.2</td>
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<tr>
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<td>3.2</td>
<td>8.0</td>
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フロー図 FLOW

Methanol Reforming Unit

PSA Unit

HEAT MEDIUM TANK

※装置仕様詳細は、個別にお問い合わせください。
※設置エリア、オプション等顧客様ニーズに合わせてアレンジが可能です。

Detail specifications are offered on request.
We can provide individual design to meet customer's requirements on our basic design.
製品水素ガス Specifications

- 純 度・Purity H₂ ≥99.999 vol% CO ≤1.0 ppm CO₂ ≤1.0 ppm

設置面積・Area

<table>
<thead>
<tr>
<th>Capacity (m³/h)</th>
<th>D</th>
<th>W</th>
<th>H</th>
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</table>

フロー図 FLOW

Methanol Reforming Unit

PSA Unit

フロー図 FLOW

本カタログの内容は予告なく変更することがありますのでご覧ください。

住友精化株式会社

SUMITOMO SEIKA CHEMICALS CO., LTD.

GASES DIVISION ENGINEERING AND SYSTEM DEPARTMENT
HEAD OFFICE: (TOKYO)
13-5, 1-Chome, Kudanshita, Chiyoda-ku, Tokyo, 102-0073, Japan
Tel: 03-3230-8576 Fax: 03-3230-8528
Internet address: http://www.sumitomoseika.co.jp