

# Process gas purification and separation by membrane technology – Process gas membrane

**Mahler AGS process gas membrane systems are custom made package units for a wide range of applications. Various process gas mixtures can be handled with a product recovery of 99 % and product purities up to 99 vol.-%.**

Mahler AGS process gas membrane units can be employed in numerous processes. The application area can range from purification or recovery of waste gas streams to generation of a high quality product (e.g. hydrogen, methane, syngas, helium).

Package units including process gas compression, pre- and after-treatment can be realized. A typical membrane system includes a treatment unit with filter and a heater for performance adjustment of the separation process itself. Additional after-treatment units can consist of optional drying units, heat management systems or even high-purity PSA systems. Also units including high pressure process gas compressors can be provided.



A unique selling point of Mahler AGS systems is the possibility of tailor made control systems for adjustable part-load operation and the design and execution of the plant based on customer's specifications.

## Features of the process gas membrane units

- Manual or automatic and unattended operation options
- Product flexibility regarding flow, purity and recovery
- Completely pre-manufactured skids
- High availability and reliability
- Design for long lifetime

<b>Plant data</b>	Feedstock:	Process gas / natural gas / fuel gas
	Feedstock capacity:	5.000 to 60.000 Nm <sup>3</sup> /h
	Feed pressure:	20 bar(abs) to 160 bar(abs)
	Product purity:	Up to 99 vol-%
	Recovery of product:	Up to 99 %

## Typical applications for process gas membrane units

- Chemical and petrochemical industry
- Oil and gas
- Refineries
- Electronic industry