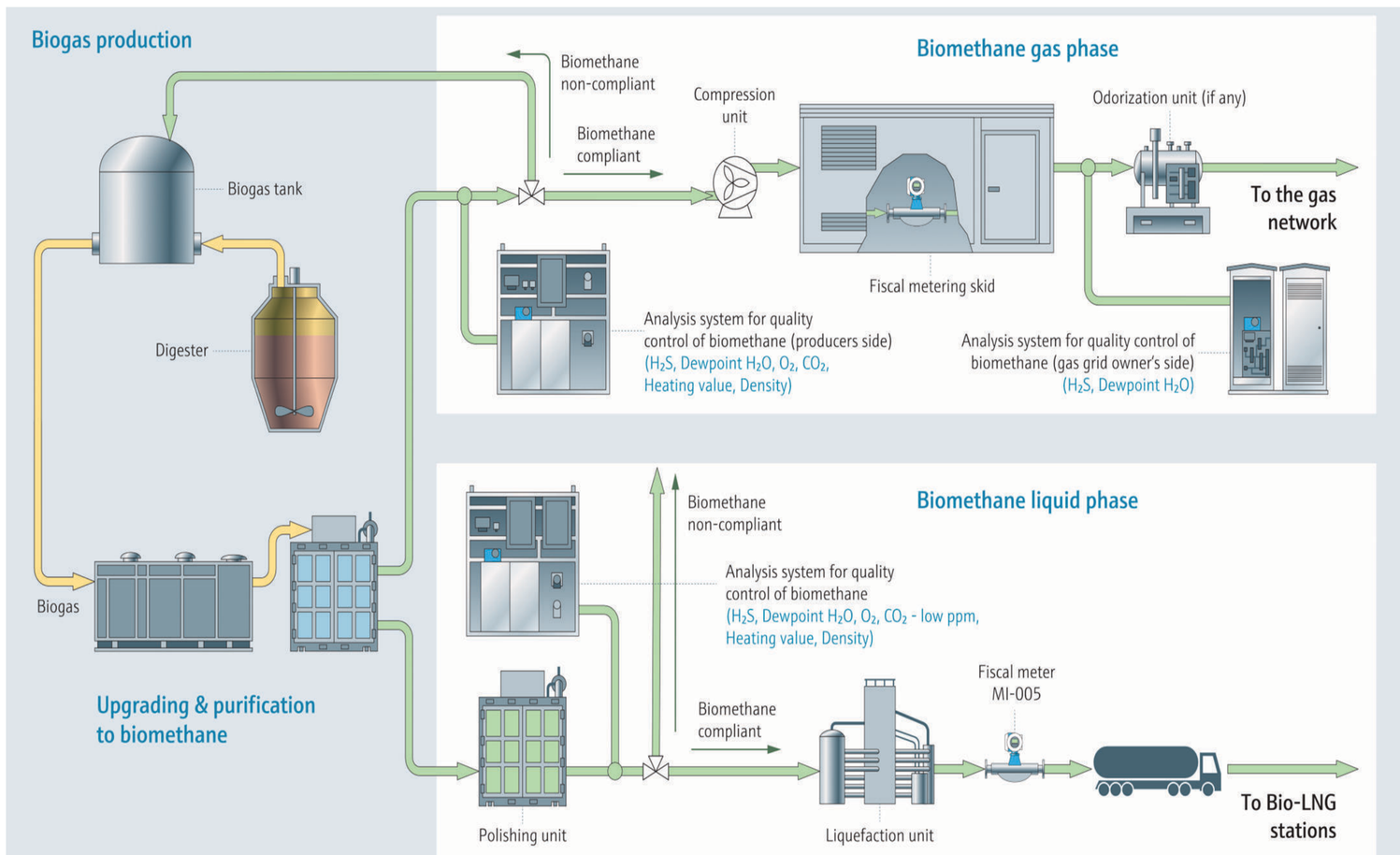
Endress+Hauser Optical Analysis in the Transition Focus on New Solutions for Biomethane / BioLNG

Real-time analysis of H_2O, H_2S, and CO_2 impurities in biomethane production

Endress+Hauser's differential tunable diode laser absorption spectroscopy (TDLAS) H_2S H_2O and CO_2 measurement technology is very selective and unaffected by background interferences.



In Spain the components that have to be monitored are specified in PD-01 (Protocolos de Detalle de las Normas de Gestión Técnica del Sistema Gasista):

Characteristics	Symbol	Limit values	u.m.
Upper Heating value	PCS	10,26 - 13,26	kWh/m³
Wobbe Index	WI	13,403-16,058	kWh/m³
Relative Density	ρ	0,555 - 0,7	-
Water Dew Point ≤ 2°C a 70 bar			
Oxygen content	O_2	≤ 1	%mol
Carbon dioxide content	CO_2	≤ 2,5	%mol
Hydrogen sulfide content	H_2S	≤ 15	mg/m³
Sulfur from mercaptans content	-	≤ 15	mg/m³
Total Sulfur content		≤ 17	mg/m³

European local norms are based on EN16723:2017, a standard that specifies requirements and test methods for natural gas (group L and H), biomethane, and blends of both at the point of use as automotive fuels.

Some of the references Installed base in Spain

E-COGENERACION CABANILLAS, SL

SITRA agua industrial & bioenergía

Endress+Hauser turnkey solution with minimal maintenance requirements and no consumables:

- No calibration required
- validation of analyzer on site with gas cylinders
- Solution certified for use in hazardous areas (ATEX/IECEx/CSA), IP66
- Ambient temperatures from -20 to +50 °C

New Product! JT33 H_2S TDLAS gas analyzer

- Proven differential technology which tolerates contaminants and stream changes in tough applications
- Heartbeat Technology for automatically stored historical data, spectrum logging, diagnostics, and verification reporting
- NIST-traceable calibration with superior accuracy and repeatability

JT33 H_2S TDLAS analzyer

J22 moisture TDLAS analzyer

Want to learn more? Come visit us at Endress+Hauser booth no. 299A

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Endress+Hauser
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