

# AMINE MODULE

## Upgrading - Sweetening of natural gas and biogas

Our **absorption system with amine towers** allows for the treating of gases from different sources with high CO<sub>2</sub> and H<sub>2</sub>S content. This process is very efficient because removes these components due to its affinity with amine solvents. Our solution consists of contactor towers where the contaminants are absorbed and the treated gas is obtained; and regenerative towers (in a closed cycle) where the amines recover their absorption capacity.

It should be noted that the elimination of H<sub>2</sub>S is essential for the use of gas or biogas as an energy source, since its presence represents a significant safety danger and it can negatively affect the performance and useful life of the equipment used in the combustion of said gases.

While the absorption process is carried out, the contaminated amines are regenerated in the tower dedicated for this purpose. In this way, the upgrading process is continuous.

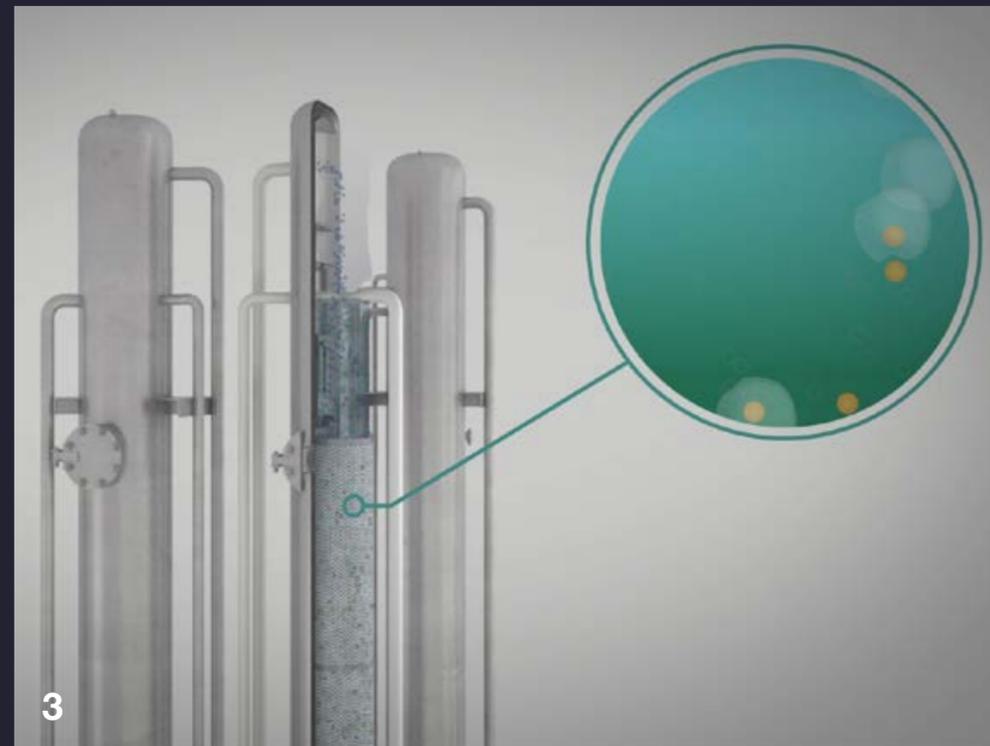
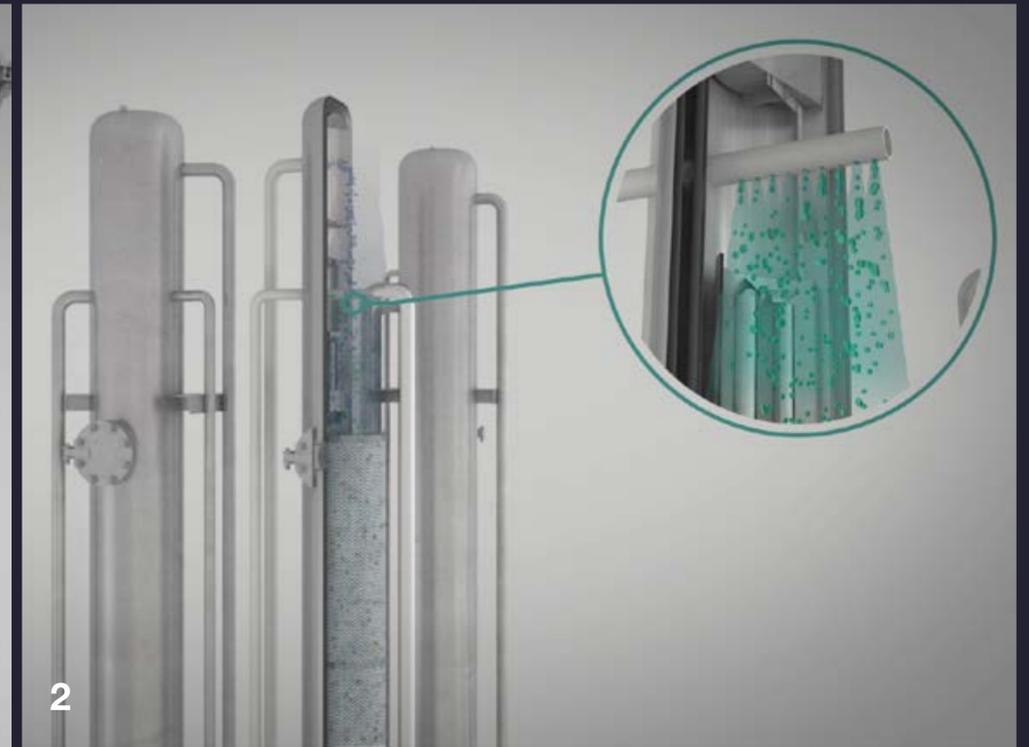
The configuration of the amine towers –like other of our solutions– is fully tailored to the customer, adjusting to the required input and output conditions.

Last update: MAR/2026.

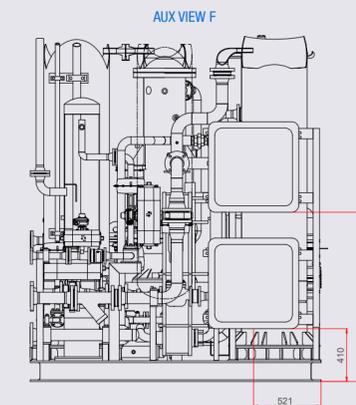
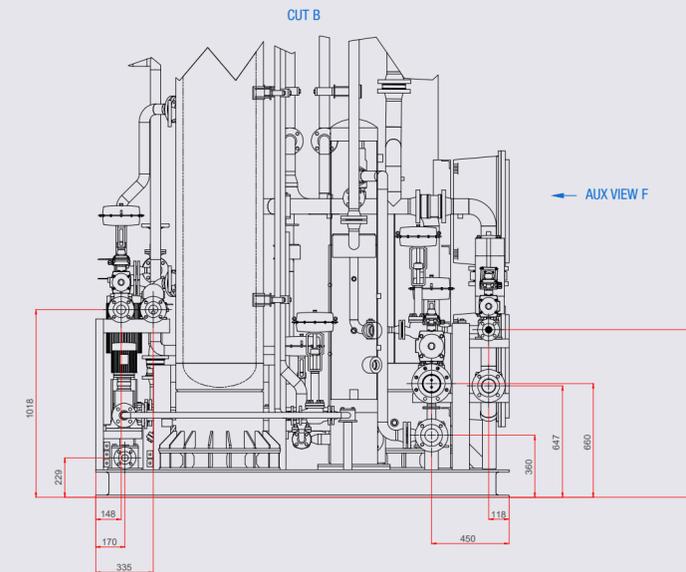
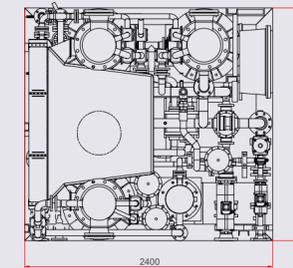
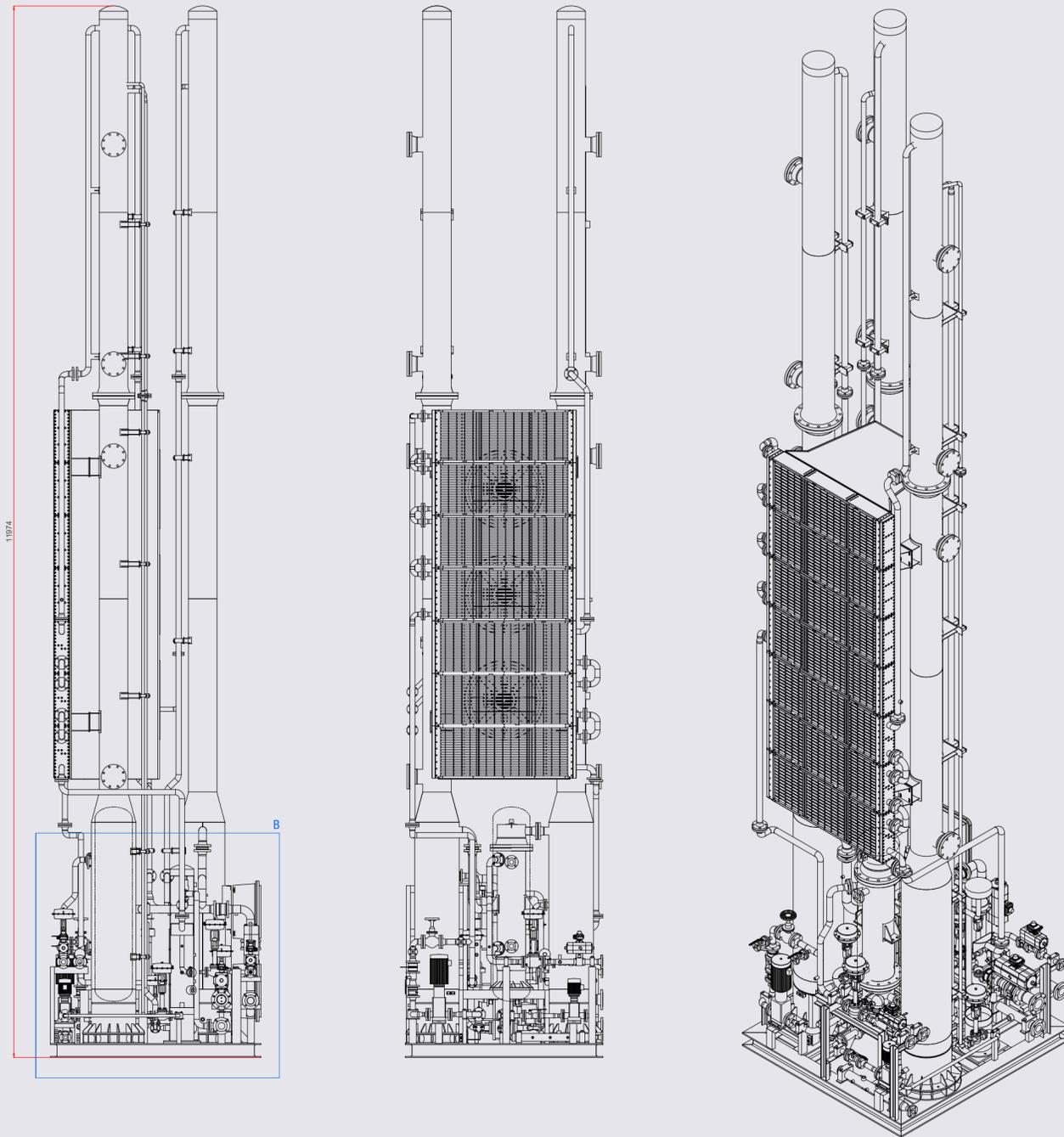


Process description:  
**Amine absorption**

1. Gas inlet to the absorption tower.
2. Amine spray.
3. Capture of  $\text{CO}_2$  and  $\text{H}_2\text{S}$  by absorption.
4. Closed cycle amine recovery tower.



# Dimensions (mm)



# Datasheet

		AMINE MODULE
<b>Electric Installed Power</b>	KW	30
	HP	40
<b>Gas characteristics</b>		
<b>Pressure (Min/Max)</b>	barg	1 to 35
	psig	14.5 to 507.6
<b>Temperature (Min/Max)</b>	°C	10 to 50
	°F	50 to 122
<b>Flow (Min/Max)</b>	Sm <sup>3</sup> /h	500 to 4000
	MSCFD	425 to 3397
<b>Carbon Dioxide</b>	CO <sub>2</sub>	up to 10%
<b>Sulfhidric Acid</b>	H <sub>2</sub> S	up to 2%
<b>Utilities Consumption</b>	Demi Water	1 m <sup>3</sup> /week
	Amine	0.5 m <sup>3</sup> /month
	Steam	350 kg/h @ 7 barg 8.4 Ton/Day @ 101.5 psig
	Air	2.8 Nm <sup>3</sup> /h @ 8 barg (ISO-8573-1 Type [2;2;2] or higher quality) 2.508 MSCFD @ 116.0 psig (ISO-8573-1 Type [2;2;2] or higher quality)
<b>Dimensions</b>	2.6m L x 2.5m W x 12m H	
<b>Weight</b>	16.5 ton	

All values are expressed under a regular operation and may present changes with variation of gas composition and environmental conditions.

# Tracked under Galileo DigiHub - Scada System

We don't just sell technology; we provide a service. We will be with you 24/7, monitoring key parameters through our **Galileo DigiHub - Scada System\*** and providing on-the-ground support to keep your uptime as high as possible.

Up to 99% Methane Recovery, easily tracked through a single integrated system.

Key variables from production, transportation and delivery to end user can be tracked on-line, remotely and in real time in our proprietary SCADA system.

Our integrated solution not only favors efficient troubleshooting and resolution, but it also provides a single control system for the complete operation, from inlet, to gas upgrading, to the outlet of the Virtual Pipeline.



\*This is an additional service and is contracted separately.



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