Responsible oil and gas | Gas treatment

GAS TREATMENT
OUR SOLUTIONS

IFPEN's objective is to propose more efficient processes in order to **minimize investment and operating costs**. The challenge is to be able to offer a global package, including the solvent and its process, as well as column packings and adsorbents.

MERCURY REMOVAL FROM NATURAL GAS

Today, for reasons related to operator health and safety, the operability of installations as well as protection of the environment, the removal of mercury from natural gas is essential. IFPEN has developed a new generation of adsorbents with optimized efficiency.

The new range marketed by Axens encompasses adsorbents implemented in irreversible adsorption processes: an active species is applied to alumina-based supports and interacts with the impurities to form strong chemical bonds. This new range optimizes active phase impregnation and quantity while retaining excellent matter transfer capacities to increase mercury retention.
It is also more robust and tolerates mercury removal at an early stage in the treatment process, when the gas still contains water and the operating pressure is much higher.

Recognized for its high level of performance, this technology helps reduce the energy sector's environmental footprint.

FILLERS AND PACKINGS

One of the challenges facing industrial players is the dimensioning of gas treatment units. IFPEN supports them by proposing equipment with a performance that makes it possible to reduce the size of these units and has developed sour gas capture packings for adsorption columns as well as more efficient and compact distributors.

SOLVENTS FOR NATURAL GAS SWEETENING

Natural gas sweetening consists in removing carbon and sulfur from the crude gas in order to meet the required specifications for its use and to be able to transport or liquefy it. While gas sweetening processes are fully mastered today, the objective of IFPEN's research is to significantly improve their performance and profitability. For example, teams have developed a process implementing an innovative solvent that is more reactive and has a higher capacity than conventional amine solvents while offering similar operability characteristics. The use of this new solvent is particularly suited to biogas purification.

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Gas treatment: Our solutions

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