

# KOCKEN

## SISTEMAS DE ENERGIA INC.

### PHASE SEPARATION



Kocken Sistemas de Energía Inc. separators are available in both horizontal and vertical configurations and in two, three, or four-phase designs. All separators are constructed according to the API 12J Specifications for Oil and Gas Separators, GPSA Section 7, ASME Section VIII and applicable Industry Codes and Standards. In addition to published design standards, Kocken has a vast array of in-house programs and standards that have been developed from real world operating data and customer feedback.

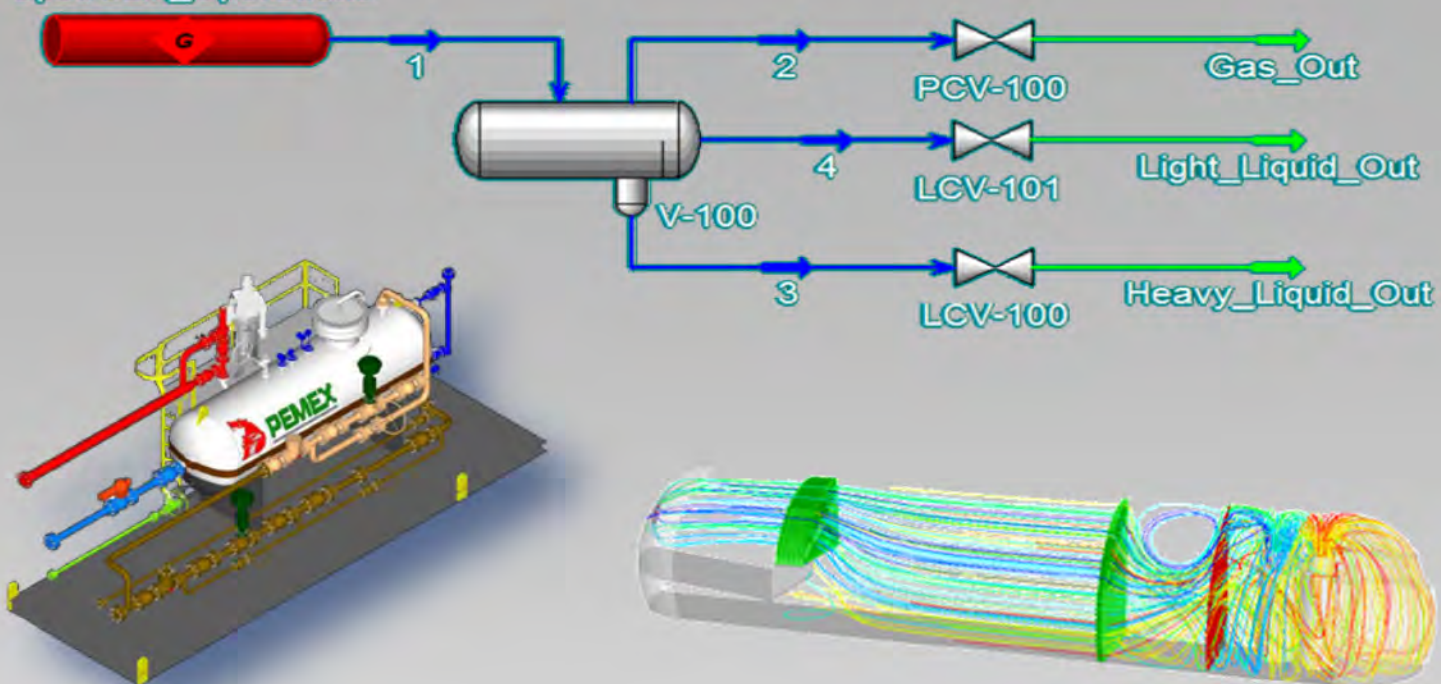
Kocken Sistemas de Energía Inc. offers the following separation technologies:

- |                               |                             |
|-------------------------------|-----------------------------|
| ➤ S-Cone Inlet Device         | ➤ High Efficiency Vanes     |
| ➤ High Efficiency Mesh Pads   | ➤ High Efficiency Mesh-Vane |
| ➤ Multi-Bank Mist Eliminators | ➤ Inclined Mist Eliminators |
| ➤ Vortex Tube Recycle         | ➤ Gas-Liquid Cyclonic       |

Kocken Sistemas de Energía Inc. considers any and all combinations of the available technologies to offer the best overall solution based on the actual conditions of operation and separation objectives. A combination of S-Cone Internals and Multi-Bank High Efficiency Mesh-Vane assembly can achieve up to 99.9% removal efficiency of 1.0 microns and larger with 12:1 turndown while handling liquid loading to as high as 2,000 BBLS per MMSCF of Gas. The right combination of selected technologies improves efficiency, minimizes equipment size and weight, and reduces both capital and operating costs. Let the Team of Kocken Engineers help you select the best separation solution for your project.



Upstream\_Operations



TECHNOLOGY SELECTION CRITERION

	High GOR	Low GOR	Large Liquid Flow	Liquid Slugs	99.9% $\geq 10\mu$	99.9% $\geq 1-10\mu$	High Gas Flow	Fouling Service	Foam Service
S-Cone Inlet Device	S	HR	HR	HR	NA	NA	S	S	HR
High Efficiency Vanes	S	S	NA	NA	R	NR	R	HR	S
High Efficiency Mesh	S	S	NA	NA	HR	HR	S	NR	S
High Efficiency Mesh-Vane	S	S	NA	NA	HR	HR	S	S	S
Multi-Bank Mist Eliminator	S	S	NA	NA	S	S	HR	S	S
Inclined Mist Eliminator	S	S	NA	NA	S	S	R	S	S
Vortex Tube Recycle	HR	R	S	NR	S	S	HR	R	S
Gas-Liquid Cyclonic	S	HR	HR	HR	S	NR	S	R	S
LEGEND	HR HIGHLY RECOMMENDED				R RECOMMENDED				
	S SUITABLE				NR NOT RECOMMENDED				
	NA NOT A DESIGN FACTOR								

# APPLYING WORLD CLASS TECHNOLOGIES IN PURSUIT OF SUPERIOR EFFICIENCY

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