# **MySep Updates Newsletter**





## New Web Face for MySep

In June 2020 we launched our new web site at: https://www.mysep.com/

Here you will find lots of background on our heritage, our research foundations, and the value we bring to our expanding community of international customers.

We re-branded the former MySep product as **MySep Studio** and MySep-RunTime as **MySep Engine.** 

Please visit our site and explore the case studies, videos, downloads, news and more.

## More Value from MySep

Over the past year we embarked on a programme of awareness sessions for our customers. This Customer Care Programme (CCP) delivered web demonstrations, presentations, and user Q&A to many of our customers. Topics covered include:

- Rating & Design with MySep Studio
- Retro-fit to fix undesirable internals
- Links to process simulators
- Operational Envelope tool
- Sensitivity Analysis tool
- MySep Engine in Digital Twins

The CCP has so far offered 21 sessions for 15 companies with over 300 attendees. Sessions have been enthusiastically received by all attendees. We continue this initiative, with the objective of liberating more value for our customers' software investment.

If you think you and your colleagues could benefit from an awareness update, please request this at: https://www.mysep.com/contact

## **Digital Twins and MySep**

Increasingly, leading Oil & Gas operators recognise the power of simulation-based digital twins, to drive greater production and avoid unplanned shutdowns.



Data from DCS and process historians are combined with process simulations of varying complexity. These digital twins generate performance indicators which are not measurable, providing insights to guide optimisation of the operation. "What-if" scenarios and case studies further enrich understanding.

A missing link in the modelling armoury, has been the ability to reliably predict the performance of process separators within simulations. That was the industry status prior to release of our MySep Engine software module. This embeds MySep's rigorous research-derived gas-liquid separation modelling within a steady state or dynamic process simulation. Consider the following production application of a digital twin.

#### Asset Tie-Back Evaluation

Subsea tie-backs can offer economic development for smaller oil and gas reserves. A key consideration is the capacity of receiving facility equipment. An operational digital twin with adequate representation of the process system, is essential for engineering evaluation.

Here we see an **Aspen HYSYS**<sup>®</sup> process model, with MySep Engine representing the 1<sup>st</sup> stage separator and compressor inlet and intermediate suction scrubbers.



Separator models were built in MySep Studio with full geometry and internals configuration, and these were then mapped onto unit operations in the simulation.

Because this steady state model fully represents carryover performance, we see immediately the impact of connecting in the new asset tie-back on all unit operations, from the 1<sup>st</sup> stage separator onwards.

Watch the video to learn more: https://www.mysep.com/videos#steady-state

#### Dynamics and Hydrocarbon Dew Point

The impact of carry-over when low temperature separation is used for dew point control, can have a major impact on operational profitability.

See this and other operational considerations with MySep Engine within a dynamic simulation, in our video:

https://www.mysep.com/videos#dynamics

### **Kongsberg Alliance**

In September 2020 we announced an alliance with Kongsberg Digital AS. This provides fully rigorous separator modelling within **K-Spice**<sup>®</sup> dynamic simulation tool, the process twin in the Kognitwin Energy solution.



Customers with process optimisation or operator training requirements will be able to license MySep Engine directly from Kongsberg.

For more information follow this link:

https://www.mysep.com/kongsberg-mysep-alliance

## Tips & Tricks

MySep Studio case files can contain multiple vessel models. You may find it useful to "clone" a vessel model to explore the impact of some changes.

MySep v5.0.0	
File Data Input Analysis Tools Results Help	
New Project O+H_Start - MySep data.	xls
Add New Vessel	
Manage Project	
Lie id section Liefs & Gas	nut
Manage project	
Change Project name: O-Head Drum Apply name	Split flow no
Add vessel(s) from a saved MySep data file: Import file	
Manage vessels	
O         1         V-101           O         2         V-101 Process Import         Delete	
OL 3 V-101 Retro-fit Duplicate	
Apply sequence	
0	
(inch) (inch) (inch)	

Use "Manage Project" under the file menu to duplicate any vessel model.

For general support, email: support@mysep.com

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