3M™ Liqui-Cel™ Membrane Contactors offer a modular skid option for off-shore oil platforms that is significantly smaller and lighter than traditional vacuum towers.

Utilizing compact Liqui-Cel degassing contactors on platforms is now a viable option based on the new high-pressure degassing modules designed for ASME code-stamped RO vessels. High-pressure RO vessels are already proven and accepted on platforms; now they can be utilized to greatly reduce the footprint and the weight of degassing technology.

Compared to vacuum towers, Liqui-Cel contactors have 10 times the surface area per volume, which is a huge advantage on an offshore platform. The smaller, lighter design simplifies and lowers the cost of supporting a liquid-full vacuum tower.

Table 1 captures the expandable nature of these Liqui-Cel membrane contactor systems. For example, an initial system accommodating 75,000 BPD can easily be expanded to handle 200,000 BPD if future needs arise. It can also be turned down to meet smaller demands.

Liqui-Cel membrane contactors have been used around the world for over 20 years. They are field-proven in diverse applications such as nuclear and coal-fired power plants, boiler feed water applications, and in the food and beverage, pharmaceutical,
semiconductor and digital printing sectors for $O_2$ and $CO_2$ removal.

Figure 3 demonstrates the increased acceptance of 3M™ Liqui-Cel™ Membrane Contactors with the growth of installed systems over the years. Most systems that were installed over a decade ago are still reliably degassing the water streams they were installed to manage.

To learn more about Liqui-Cel technology and how it can be integrated into existing or new platforms, please contact your 3M representative or visit 3M.com/Liqui-Cel.

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