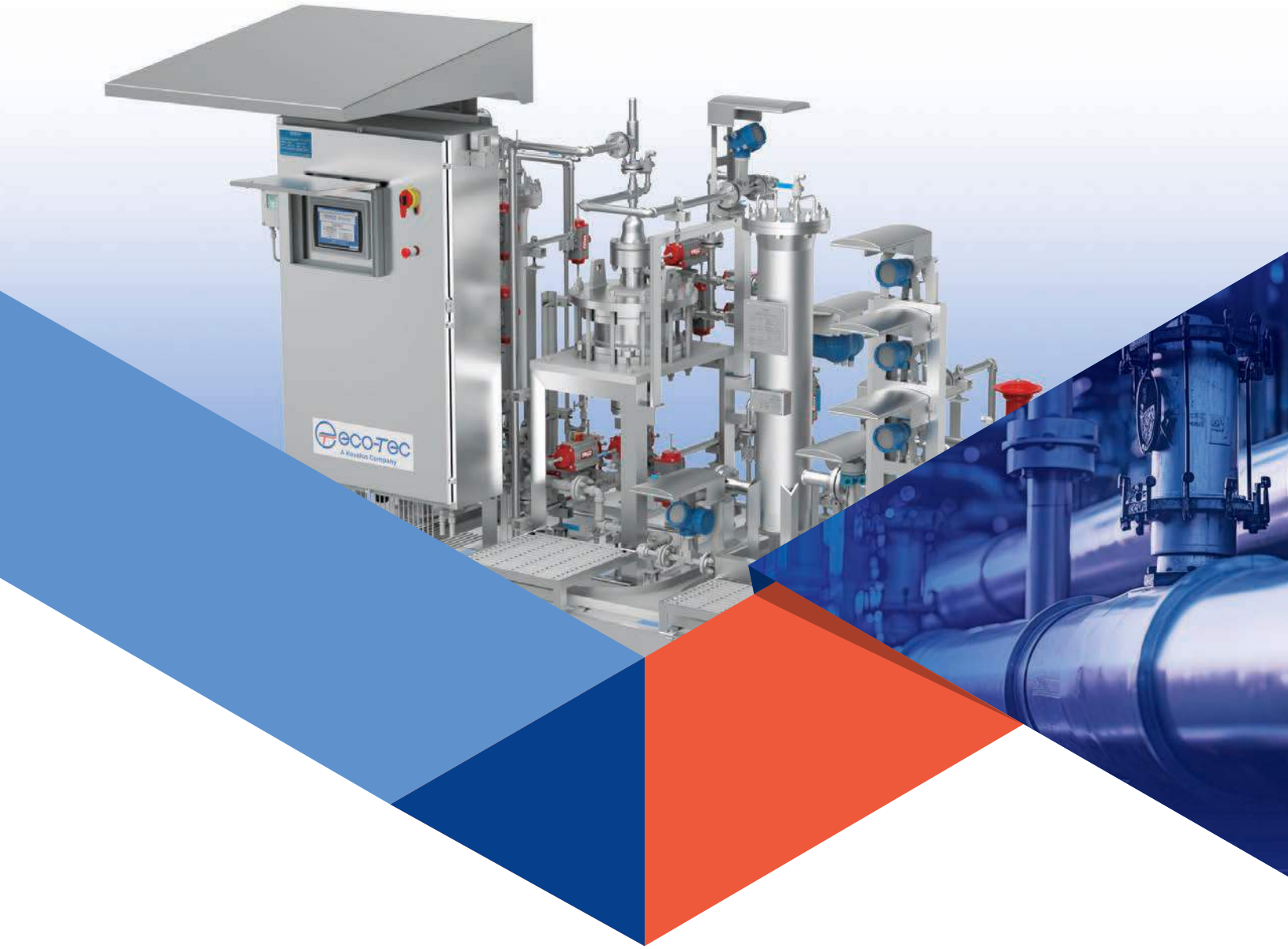
eco-Tec
A Kovalus Company



Amine Purification

AmiPur® - The Most Advanced Solution for Amine Solvent Contamination Control

Advanced Heat Stable Salt Removal

Proven, Innovative and Unique Ion Exchange Experience

KOVALUS SEPARATION SOLUTIONS ™ (KSS) is a global leader in innovative process separation technology. In addition to the world's largest membrane-based product portfolio, we have expanded to incorporate the proprietary ion exchange systems developed by Eco-Tec, a leader in water treatment and chemical recovery and purification.

Established in 1970 in Ontario, Canada, Eco-Tec engineers a range of ion exchange systems built around its proprietary Recoflo® fine mesh resin technology. Recoflo relies on a compressed shallow resin bed and short cycles of loading and counter-current regeneration for a more efficient IX process with smaller footprint, lower resin volume and operational costs, and longer resin life.

The Heat Stable Salt Problem

Amine is commonly used in oil refining, gas processing and other gas sweetening operations for the removal of hydrogen sulfide and/or carbon dioxide to meet product specifications, emissions standards, or other process requirements. During operation, contaminants such as heat stable salts (HSS), solid particulates, and hydrocarbons enter or are produced within the amine circuit resulting in process upsets that lead to higher maintenance costs and reduced performance and capacity.



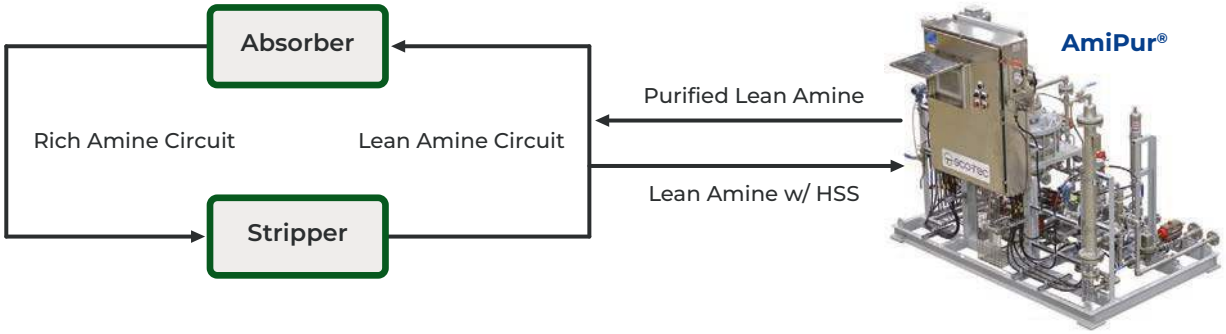
AmiPur-PLUS II System, Leading Technology in Permanent Installations

The AmiPur®-PLUS II amine purification system is the third-generation of Eco-Tec's proven AmiPur technology: a compact, automated, skid-mounted equipment package that is integrated into the amine circuit to continuously remove HSS from amine solvents. It utilizes the proprietary, highly efficient Recoflo ion exchange process to effectively load and remove HSS from the amine circuit.

Available in a range of standard models, the AmiPur-PLUS II system is designed and customized to meet HSS removal capacity requirements for virtually any operation. The AmiPur-PLUS II system uses semi-continuous treatment instead of batch treatment to ensure low, stable HSS concentrations with predictable amine characteristics. The installation of the AmiPur-PLUS II system reduces equipment corrosion, cleaning of fouled equipment, amine filtration costs, and overall improves absorber economy and performance.

HSS removal in Amine Circuits Designed for Carbon Dioxide Removal

Amine is a leading technology for CO2 removal in petrochemical and fertilizer plants and capture of CO2 from flue gas generated in coal-fired power stations as part of the Carbon Capture and Storage (CCS) approach to the mitigation of global warming. The AmiPur®-CCS is adapted from the AmiPur-PLUS II system to meet specific requirements of amine purification designed for CO2 removal.



Benefits

- Reduced equipment corrosion
- Improved absorber performance
- Reduced foaming
- Fewer amine purchases
- Consistently low HSS levels
- Lower operating costs

Applications

- Refineries
- Petrochemical plants
- Natural gas processing plants
- Carbon capture
- Steel plants
- Cement plants
- Coal gasification
- Hydrogen plants



Introducing AmiPur Mobile Services



Amine Purification, When and Where Needed:

Eco-Tec now offers AmiPur as a mobile service, allowing customers to access its trusted amine purification technology without the need for permanent installation. This flexible solution is ideal for situations where a fixed system isn't required, such as emergency interventions due to unexpected contamination.

With the AmiPur Mobile fleet, Customers Benefit From:

- Rapid deployment and seamless connection to existing amine circuits
- A hassle-free service model operated by Eco-Tec's experienced team
- The same proven technology used in our permanent installations
- Greater flexibility to align with operational priorities and budgets

By combining mobile and permanent solutions, Eco-Tec now offers the most versatile and complete amine reclamation portfolio on the market, supporting traditional gas sweetening operations and CCS applications with efficient solvent recovery and measurable operational savings.

Kovalus Separation Solutions™

We are excited to introduce Kovalus Separation Solutions, formerly Koch Separation Solutions. This evolution marks a pivotal moment for us as we continue our journey of pioneering advancements in separations technology. We're revolutionizing the field of separations through cutting-edge technologies like membrane filtration, ion exchange, evaporation, and drying. With over six decades of expertise, we provide comprehensive solutions for demanding applications in dairy, food and beverage, life sciences, and general industry sectors. Our extensive membrane portfolio features a range of pore sizes, enabling us to handle diverse process fluids, water, and wastewaters effectively. Collaborating with clients worldwide, we specialize in recovering high-value products, minimizing waste, reducing environmental footprint, enhancing productivity, and optimizing costs.

Kovalus Customer Support

We've got you covered with Kovalus support

With Kovalus-qualified personnel, we offer tailored expertise throughout the life cycle of your membrane filtration system, ensuring optimal performance, protecting your investment, and maximizing process efficiency. Our KSS ASSIST ™ program provides proactive site visits, remote monitoring, and operator training to keep your system running at peak levels, backed by global service and support. We're dedicated to delivering faster, more efficient solutions, forming lasting partnerships, and exceeding your expectations.

Additionally, we offer

The SepTrac™ Smart System which seamlessly integrates with any KSS system to collect live data, send notifications and alerts, store documentation, and manage influent logs, all while offering easy access to our customer service teams.

REACH US

WWW.KOVALUS.COM

GETINFO@KSS-SEP.COM

KOVALUS Separation Solutions™

eco-Tec A Kovalus Company

For complete contact information and listing of our global locations, visit www.kovalus.com
©2025 KOVALUS SEPARATION SOLUTIONS, LLC. All rights reserved worldwide.
For related patent and trademark information, visit www.kovalus.com/legal. 11/25