Activated Carbon Adsorption Bed Systems

Amine Filtration provides high efficiency, state-of-the-art adsorption bed systems for amine units requiring complete removal of dissolved species in amine solvents. Activated carbon bed systems offered by Amine Filtration are customized designs, utilizing advanced surface modifications and impregnation to ensure selective and efficient separation for each unique amine solvent. Systems are built for total bed use and the highest possible efficiency in each application. Pre-filtration and post-filtration systems are also designed and provided by Amine Filtration to ensure proper protection and lifetime of adsorbent beds and to prevent fragmented carbon fines from causing detrimental downstream issues.

Fundamental aspects for the efficient performance of adsorbent beds include effective bed loading, proper liquid distribution to avoid channeling, appropriate cross sectional velocity, and suitable bed diameter-to-length ratio. Each application is carefully analyzed in terms of process conditions and specifications, operation and maintenance, and performance requirements, and every system is designed to suit unique needs.

Activated carbon-based adsorption bed technology from Amine Filtration has a wide range of application for contaminant removal, including:

- Dissolved Salts
- Mercaptans
- Organic Acids
- Hydrocarbons
- Mercury
- Surfactant
- BTEX
- Amine Degradation Products

Amine Filtration adsorption bed systems and formulations are significantly more efficient than traditional techniques as they offer efficient flow geometry and residence time as well as proper adsorbent selection. In addition, extensive experience with dissolved contaminant removal in amine streams and with amine unit operation as a whole allows for the design, fabrication, and operation of the most effective systems, at the lowest operational cost and with unsurpassed performance.

For more information, please contact Amine Filtration at Help@AmineFiltration.com.