

Adsia[™] Adsorption Systems

Adsia provides high efficiency, state-of-the-art adsorption bed systems for applications requiring complete removal of dissolved species in gas or liquid streams. Adsia technologies are customized designs utilizing advanced surface modifications and impregnation for selective and specialized separations. Systems are built for total bed use and the highest possible efficiency for each application. Pre- and post-filtration systems are also designed and implemented by Nexo in several designs to ensure proper protection of adsorbents and to prevent fragmented adsorbent from causing detrimental downstream issues.

Adsia systems have been used with demonstrated success across many industries including:

- Chemical processing
- Refining operations
- Gas processing plants
- Water plants
- Power plants

Applications

Fundamental aspects for the efficient performance of adsorbent beds include effective bed loading, proper liquid distribution to avoid channeling, correct cross sectional velocity and suitable bed diameter to length ratio. Each



application is carefully analyzed by our engineering group in terms of process conditions and specifications, operation and maintenance, and performance requirements, and every **Lumia** systems are designed to suit unique needs.

The technology has a wide range of applications including:

- Amine and dehydration units
- Gas treating and purification
- Liquid hydrocarbon purification
- Produced Water Treating

- BTEX removal
- Sulfur removal
- Odor control
- Water purification and reuse

Benefits

Adsia systems and formulations are significantly more efficient than traditional techniques as they offer efficient flow geometry and residence time in addition to proper adsorbent selection. In addition, Nexo Solutions' extensive experience in dissolved contaminant removal in both gas and liquid streams allows for the design, fabrication and operation of the best systems at the lowest operational cost and unsurpassed performance.

For additional information on Adsia Adsorption Systems, visit us at www.nexosolutions.com