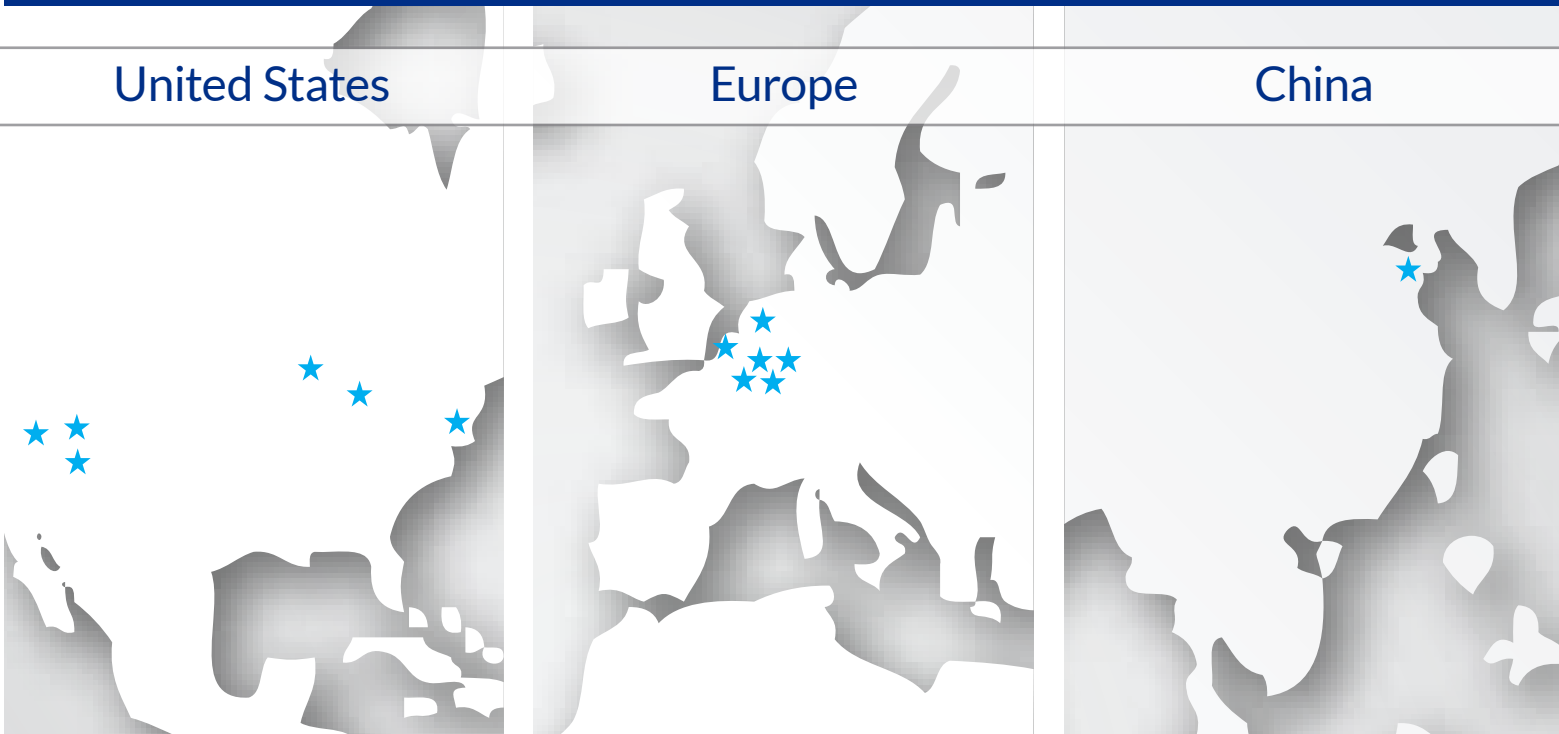


United States

Europe

China



**Around the World,** AirPrex Provides a Simple, Flexible and Right-Sized Solution for Phosphorus Recovery

AirPrex is a pioneering nutrient recovery technology developed for the sludge treatment process.

**Right-Sized Solution**

AirPrex is the most cost-efficient solution, giving plants of all sizes (including small to mid-size plants) the affordable options to control struvite and recover phosphorus.

**Partnership - A Solution-Based Approach**

The CNP team works with utilities and determine the best fit configuration to meet your plant's objectives. The AirPrex process focuses on total treatment optimization. AirPrex provides:

- Harvesting: from digested sludge
- Sequestration: leaves the crystals in the sludge
- Centrate Recovery: produces a high purity product

**Sequestration - Beyond the Fertilizer Model**

The AirPrex sequestration model eliminates the logistics of handling, storing or distributing a marketable fertilizer. By expanding the nutrient recovery focus, AirPrex provides cost savings by:

- Reducing struvite precipitation in downstream equipment
- Reducing and stabilizing nutrient loading in the sidestream to the wastewater treatment line
- Improving sludge dewaterability
- Reducing polymer consumption

**QUICK GLANCE**

AirPrex by the Numbers



**13** Full Scale Installations Since 2009



Flexible Solution for Plants of All Sizes **(9 to 220 MGD)**



**3** Process Configurations (Harvesting, Sequestration and Centrate Recovery)



Reduce Orthophosphate in **48 Hours**



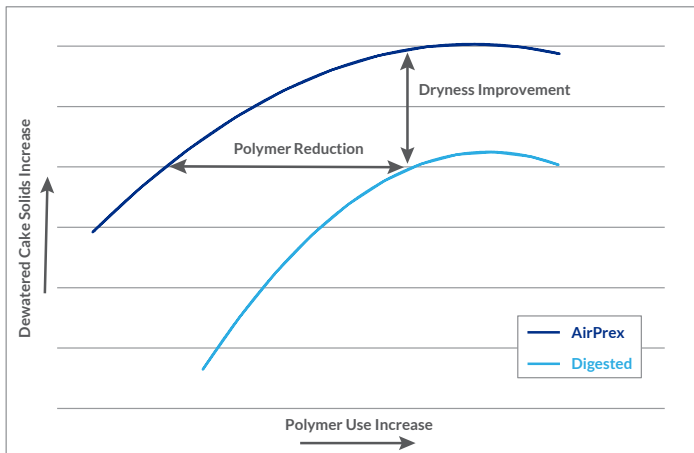
**Mobile** Pilot Test Unit Available



**No** Sodium Hydroxide Required

Full Scale Installations				After AirPrex		
Wastewater Treatment Plant	Location	Year Built	Plant Size MGD	Orthophosphate Reduction (%)	Dry Cake Solids Increase (%-points)	Polymer Reduction (%)
Mönchengladbach-Neuwerk (Niersverband) WWTP	Mönchengladbach-Neuwerk, Germany	2009	80	>90	+3	-15
Berlin Wasserbetriebe (BWB) WWTP	Berlin, Germany	2010	120	>90	+3 to 4	-20
Wieden-Echten (Reest & Wiedn) WWTP	Echten, Netherlands	2013	30	>90	+3	-15
Amsterdam-West (Waternet) WWTP	Amsterdam, Netherlands	2014	170	>90	+3	-25
ASG Salzgitter North WWTP	Salzgitter, Germany	2015	20	>90	+2	-15
Jing Nan Tianjin WWTP	Tianjin, China	2016	120	>90	Centrate Recovery	
Wolfsburg Entwässerungsbetriebe (WEB) WWTP	Wolfsburg, Germany	2017	25	>95	+2	NA*
Liverpool WWTP, Medina County	Valley City, Ohio	2019	15	>90	NA*	NA*
Little Patuxent Water Reclamation Plant, Howard County	Savage, Maryland	2019	29	>90	NA*	NA*
RWH Treatment Facility at Metro WWRD	Denver, Colorado	2020 Start-Up	220	>90**	+4 to 5**	-15 to -25**
Drake Water Reclamation Facility	Fort Collins, Colorado	2020 Start-Up	18		Pending Start-Up	
Fox River Water Reclamation District	Elgin, Illinois	2021 Start-Up	25		Pending Start-Up	
Central Valley Water Reclamation Facility	Salt Lake City, Utah	2021 Start-Up	60		Pending Start-Up	

\* AirPrex and the anaerobic digester were implemented at the same time. There is no historical dewatering data to compare. \*\*Pilot test data from 2016



Typical Polymer Curve for Digested Sludge

### Trade-Off Between Polymer Dosage and Cake Dryness

In addition to struvite control, the AirPrex system also provides advantages to the solids dewatering process. AirPrex increases the achievable dewatered cake dryness which allows for a reduction in polymer needed to maintain current plant specification. This dewaterability shift helps reduce the overall chemical cost associated with AirPrex and improve routine operation of dewatering equipment.