

PILOT PLANT SERVICES

A pilot plant from Applied Chemical Technology is specifically designed to test your unique process and production requirements in an accurate, small-scale simulation. This simulation provides process specific data on process efficiency, equipment design, product quality and more, all of which is directly scalable to full-size operations. An ACT pilot plant will also reveal bottlenecks and other unforeseen process problems, allowing corrections to be made while still in a low cost environment.

Along with test data, our pilot plants can provide small production batches for analysis, test markets, or specialty markets. During testing, your pilot plant project can also serve as a small-scale training facility for your plant operators and supervisors.



Large-Scale Specialty Fertilizer Pilot Plant at ACT

Advantages of ACT Pilot Plant Services

- Sizes range from bench scale plants to 2 tons per hour continuous production pilot plants.
- Pilot plant may be set up at ACT's facilities or at a location you select.
- Our large inventory of process equipment allows for rapid assembly and startup.
- Low cost specialty equipment can be easily designed and fabricated by ACT.
- All pilot plant services are tailored to your schedule and budget.
- We welcome and encourage your involvement throughout the project.
- Upon completion of your project, the pilot plant equipment may be leased or purchased from ACT. We will ship and erect the plant at your location.
- All ACT pilot plants are supervised by experienced chemical and process engineers and supported by our team of technicians, laboratory staff, designers, and craftsmen.



Fine Chemical Flash Drying Pilot Plant at ACT

Laboratory Development Services:



Analytical support for product and process development

ACT's laboratory technicians can provide you with quick assessments of process and product development, as well as custom analytical procedures and product quality testing. Our laboratory supports pilot plant operations with scale-up data, chemical analysis, and product quality testing. We can also provide assistance and training for specially developed lab equipment designed and constructed at ACT.

- 1100 sq. ft. research lab with separate 425 sq. ft. climate controlled lab room
- 700 sq. ft. research lab with adjacent client offices
- All laboratories may be secured for sensitive projects.

Laboratory Equipment

- Bench and Laboratory Scale Process Equipment
 - High Temperature Fluid Bed
 - Fluid Bed Dryer/Cooler
 - Fluid Bed Coater
 - Pug Mill Mixer/Granulator
 - Rotary Drums
 - Pan Granulators
- Ovens
- Fume Hood
- Glove Box for Inert Atmosphere Operations
- Steam Boiler
- Pressure Vessels
- Conductivity Meter
- pH Meters
- Karl Fisher Moisture Analyzers
- Total Nitrogen Apparatus
- Microscope
- Polarized Light Distribution Microscope
- Stereoscope
- Food/Pharmaceutical Grade Batch Fluid Bed
 - Maximum batch capacity of .05 m³ (1.7 ft³)
- Atomic Absorption Spectrophotometer



CONFIDENTIALITY

Your project and process requirements are kept strictly confidential and protected by signed secrecy agreements.

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LAB & PILOT PLANT