

ARTISAN



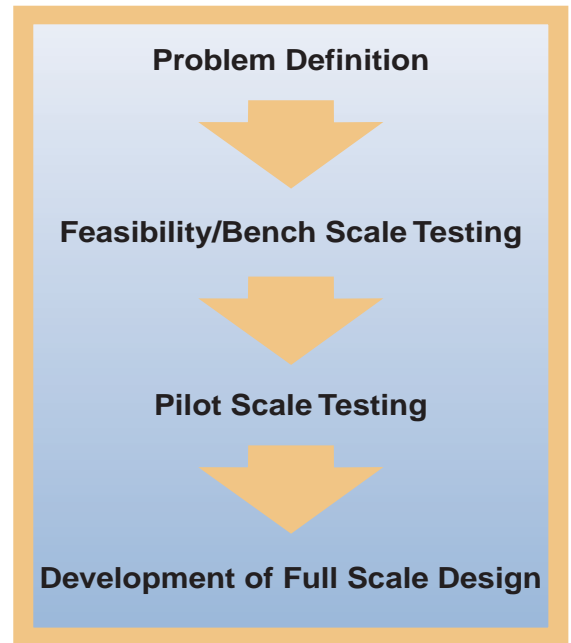
The Artisan Pilot Plant

Test Drive Our Process Separations Technologies

Artisan offers one of the most comprehensive pilot facilities in the industry for solving complex separation problems. Whether you need to develop a new process or optimize an existing one, we will work closely with you every step of the way – from earliest feasibility testing through full-scale pilot testing and scale up.

By offering unparalleled technology in each of the following areas, Artisan is uniquely equipped to meet your multi-step chemical processing challenges:

- Thin Film Stripping
- Thin Film Evaporation
- Liquid-Liquid Extraction
- Continuous Chemical Reaction
- Devolatilization
- Polymerization
- Pervaporation
- Distillation



Typical Stages of Process Development

Over the last sixty-five years, Artisan has gained unparalleled experience demonstrating solutions to the most challenging process separation problems. Combined with the advantages below, this experience means we have a unbeaten success rate in the industry:



- Each process is custom assembled to meet the exact separation requirements of the material being produced.
- Artisan combines a wide range of technologies to provide a complete solution.
- The pilot plant is equipped with an advanced real time data acquisition/control system for comprehensive data collection and process control.
- We offer complete service – from bench scale feasibility testing to pilot scale process demonstration.

Our pilot plant features a wide range of proprietary technologies including:

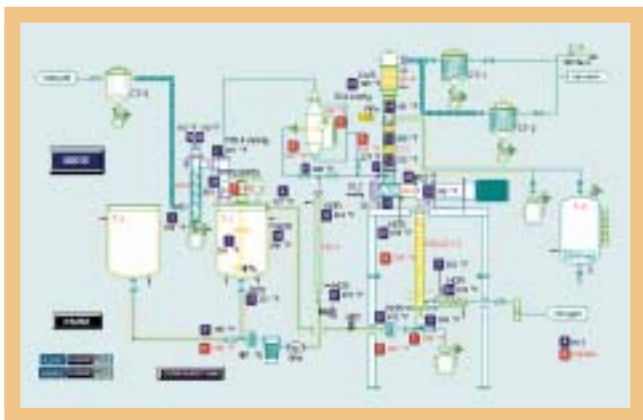
- Rototherms[®] with 1/4 sq.ft. to 2 sq.ft. heat transfer area
- 2" diameter Evaporator/Stripper[™]
- 4" diameter Dualflo[®] distillation column
- 10 stage Controlled Cycle Liquid-Liquid Extractor
- Pervaporation system with 0.05 sq.ft. membrane area

Other equipment includes:

- 1" dia. - 6" dia. packed distillation columns
- Falling film evaporators
- Rising film evaporators
- Reactors, batch and continuous



Arartisan's pilot plant is equipped with an advanced **real time data acquisition and control system**. It features computer graphics and enables on screen process visualization. This state of the art data logging system is especially valuable when analyzing process control data for scale up.



Utilities / Operating Conditions

Vacuum:	to 0.1 torr
Pressure:	to 15 psig
Heating media:	steam (150 psig) hot water (to 200°F) hot oil (to 650°F)
Cooling media:	varies
Temperatures:	0° to 650°F
Spurge gases:	steam, nitrogen, air, others

problem definition ❖ technology selection ❖ process design and optimization
bench scale testing ❖ in house or at site pilot scale testing
equipment design and specification ❖ complete system manufacture
start-up assistance ❖ operator training ❖ after sales support

For further information call our sales team at:

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Since 1934 Artisan experts have led the way, providing integrated solutions to the most challenging separation problems. We combine an innovative approach with an unparalleled depth of knowledge to develop cost effective, practical solutions. Designed and built to exacting standards, our powerful technologies have enabled us to succeed where our competitors have failed. That is why the Artisan name is synonymous with unrivaled product quality and level of service.

