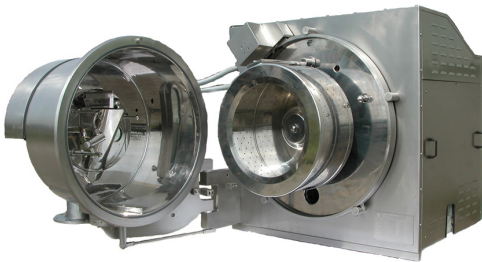




COMI POLARIS SYSTEMS

**INNOVATIVE
& CUSTOMIZED
SEPARATION
TECHNOLOGIES**



FILTERING CENTRIFUGES

Largest size options with
smallest footprints



FILTER/VACUUM DRYING

All-in-one machine with
superior cleanability



VOC/SOLVENT RECOVERY

Pollution and emission controls
with cost savings

FILTERING CENTRIFUGE

INVERTING FILTER CENTRIFUGE



Most versatile centrifuge for API, pharmaceutical and chemical processes.

- Ideal for compressible products
- Hyper centrifugation available for fixed-bed-drying
- 100% access to solids and filtrate housing
- Plug-flow wash effect
- Gentle product discharge
- No residual heel
- Sizes range from 300mm diameter to 1000mm diameter

PHARMA PEELER CENTRIFUGE



For the efficient separation of solids and liquids in a single sealed environment.

- Ideal for pharmaceutical, API and potent compound processes
- Small and compact footprint
- Laser cake detector
- Steep solids discharge chute (30° from vertical)
- Plug-flow wash effect
- Easy inspection of process area
- Sizes range from 400mm diameter to 1700mm diameter

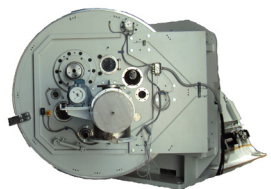
CHEMICAL PEELER CENTRIFUGE



Designed for high-throughput industrial liquid or solid separation applications.

- Rotary Siphon
- Backwashable basket
- Front skimming pipe
- Cake peeling at full rotational speed
- Laser cake detector
- Heel regeneration with backwash
- Sizes range from 500mm diameter to 2000mm diameter

STARCH PEELER CENTRIFUGE



Ideal for native and modified starches such as corn, wheat, potato, rice, tapioca, etc.

- Rotary Siphon
- Backwashable basket
- Front skimming pipe
- Cake peeling at full rotational speed
- Laser cake detector
- Heel regeneration with backwash
- Sizes range from 1250mm diameter to 2000mm diameter

VERTICAL BASKET CENTRIFUGE



Extremely versatile centrifugal solution for chemical and pharmaceutical processing.

- Top load with top discharge
- Top load with bottom discharge
- GMP design available
- Sintered metal screen for <2Qm micro-filtration

FILTER / VACUUM DRYING

DELTA NUTSCHE FILTER DRYER



Single unit of operation for filtration and drying in chemical, pharmaceutical, potent compound and API processing.

- Excellent product purity
- Superb filtering, washing and drying capabilities
- Ideal for critical processes with exposure or sensitivity concerns
- Easy to clean with the CIP system
- Optional automatic clamping ring
- Optional tilting (~30°)

VERTICAL VACUUM DRYER



Flexible, compact and robust drying equipment suitable for several processes in the pharmaceutical and chemical industries.

- Internally heated agitator allows for fast and efficient drying of product
- Agitator can be operated at different speeds, directions or rotations
- Exceptional product discharge
- Sample port instrumentation
- Optional automatic clamping ring

PADDLE DRYER



Horizontal cylindrical machine with internal agitator, manufactured to the highest possible standard of quality and safety.

- Paddles allow for gentle, efficient drying
- Tumble motion for homogeneous mixing
- Jacketed for ideal process conditions
- SIP (steam in place) capable
- Automated product discharge

CONICAL HELIX VACUUM DRYER



Central shaft helical dryer designed for the pharmaceutical, fine chemical and API manufacturing drying processes.

- Optional thermal fluid heated agitator
- Nitrogen purged central shaft for “fluidizing” and increased drying capacity
- Helical agitator combined with a special mixing blade reduces dead-areas
- Gentle mixing and drying action
- Units designed for portable pilot applications and large-scale production



VOC / SOLVENT RECOVERY

CRYOGENIC CONDENSATION



Recovery of VOCs through cryogenic condensation. This customizable and flexible process is suitable for most VOCs.

- Ideal for rich VOC streams
- Flow rates up to 5,000Nm³/h
- No limit for inlet VOC concentration
- Nitrogen can be reused in the process resulting in low operating costs
- No secondary Greenhouse gases are produced from the process
- Fully automated controls
- Highly reliable with low maintenance costs

INTERNAL REFLUX DISTILLATION



Solvent recovery from waste streams through the combination of mass and heat transfer in specialized columns.

- Most efficient in batch distillation of compounds
- Customizable based on the distillation process:
 - Distillation at pressure less, equal or more than atmospheric
 - Distillation under high vacuum
 - Azeotropic Distillation
 - Extractive Distillation
 - Dehydration by distillation with phase separation

TEMPERATURE CONTROL UNIT



Developed for the process industry for reactions at very low temperatures.

- Ideal for temperature control of critical processes
- Each unit is designed and engineered to the specification
- Cooling to temperatures as low as -148°F (-100°C)
- Heating temperatures up to +392°F (+200°C)
- Nitrogen can be reused in factory network
- Compact footprint
- Extremely efficient
- Low investment cost

SERVICE & TESTING FACILITY



We have factory trained, North American based technicians available 24 / 7 / 365. Our fully functional testing and rental facility is equipped with Class 1, Division 1, Group C and D portable filtering centrifuges and vacuum dryers.

