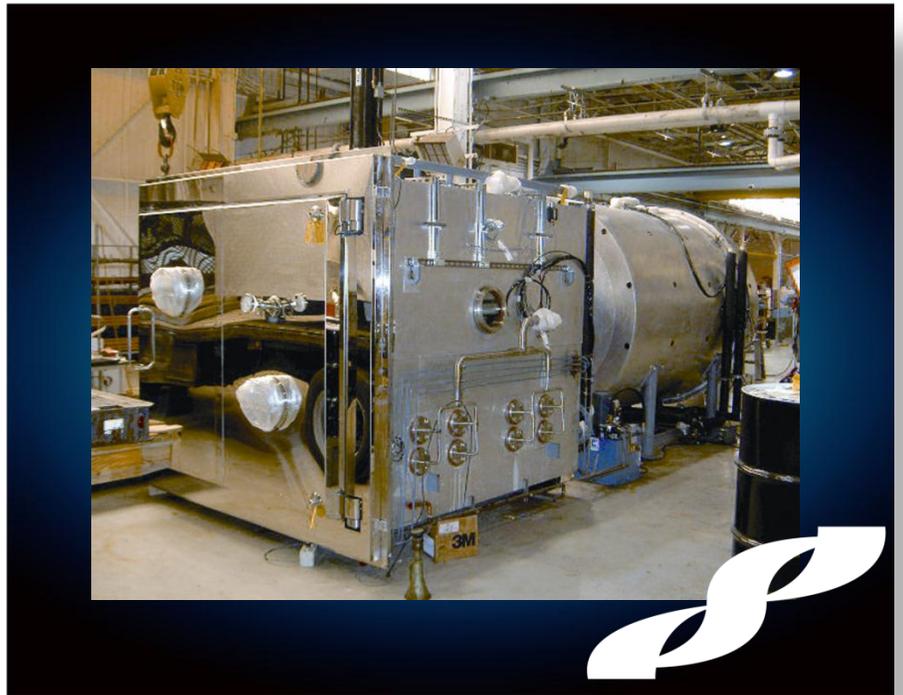




*Renew the life of
your tired, old
freeze dryer...*

...with Hull's LyoRenewal™ Program



Most Production Lyophilizers are built to last for decades but technology is changing at a far more rapid pace. This makes even a well maintained production dryer obsolete during its normal life span. Hull/SP Scientific's LyoRenewal program provides unparalleled service for updating, repairing, refurbishing and retrofitting previously owned lyophilization systems. Give new life to your older system by incorporating current performance capabilities found on newer freeze dryers and extend suitable life of your freeze dryer.

Serving lyophilization users and their requirements for superior performance is our business. SP Scientific manufactures Hull, VirTis and FTS freeze drying systems including small manifold bench top systems, research and development freeze dryers and clinical and production dryers.

SP Scientific is also available to advise you on retrofit feasibility of your dryer to include Praxair's ControLyo Nucleation on Demand Technology and to perform the retrofit as needed

Upgraded Control Features. Easier to use with more flexibility.

- Retrofit your controller from a selection of programs with 21 CFR 11 compliance.
- Don't need 21 CFR 11? There are valuable upgrades available for that as well.

Refrigeration System Upgrades. Better performance & product protection.

- Redundant compressor skids
- Conversion of mechanical refrigeration to liquid nitrogen refrigeration
- Liquid nitrogen back-up
- Convert a direct expansion system to a controlled fluid system

Component upgrades. Add processes that you need now.

- Add Steam in Place or Clean in Place
- Upgrade to Praxair's ControLyo Nucleation on Demand Technology
- Upgrade to a more efficient HyPro™ condenser design
- Add the control & efficiency of a Smart-Cool™ package
- Replace poppet or butterfly valves with the Rotary Disk Valve™

Let us take the headache out of buying or selling your used freeze dryer

- Equipment brokering services
- Audits – Inspections and appraisals
- Consignment warehousing
- Purchasing of excess equipment and Trade-Ins

Fast and efficient commissioning

- IQ/OQ and FAT documentation
- Complete Quality Assurance – System Integration Testing Package
- Full warranty on new parts.

Call or email us today to discuss your requirements with a Needs Assessment Specialist and find out more about LyoRenewal.

Email: LyoRenewal@spscientific.com Tele: + 845-255-5000 x 1304



“Many times Hull has been able to come up with solutions for us that enabled us to keep our aging Freeze Dryers running, thus allowing us to continue to provide critical care medicines to the patients who need them”

In order to simplify the assessment process you should be prepared to answer the following questions-

Manufacturer: _____

Model: _____

Year Built: _____

Chamber Size: _____

Chamber Door: single door, pass-through or sub-door

Shelf Size: _____

Condenser Material: _____

Equipment Conditon: excellent, good, fair

Types of Products Processed: _____

Removal/Access Issues: _____

Has Equipment been Sterilized? yes, no

Serial Number: _____

Chamber Material: _____ **Pressure Rating:** _____

Number ofShelves: _____ **Material:** _____

Condenser Configuration: _____ **Pressure Rating:** _____

Equipment Status: operational, out of service

Bulk or Stoppering? _____

Has equipment been sanitized? yes, no

Name: _____

Company: _____

Address: _____

Phone: _____

Email: _____

Best time to contact you: _____

Scan and email to Lyorenewal@SPScientific.com or fax to +215.672.7807
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