

# Cryogenic Buyer's Guide

and Corporate Directory 2024



The Online CSA Buyers Guide is currently under construction. In the meantime, please utilize the information below for looking up product and service providers in the cryogenics industry.



Companies printed in red are CSA Corporate Members and appear first in each category.

✳️ Category sponsors are listed in blue.

## Products and Services

### PRODUCTS

#### ADHESIVES

Epoxy systems for cryogenic adhesive, sealant and coating. Uses include cryogenic pressure vessels, cryogenic piping and superconducting electronic components.

CMR-Direct  
CTD—Composite Technology Development, Inc.  
East Far Materials Co., Ltd.  
Master Bond

#### ADIABATIC DEMAGNETIZATION REFRIGERATORS (ADRs)

ADRs providing microwatts of cooling at temperatures down to 100s of mK. Cyclic devices that can maintain this cooling and temperatures for up to several days.

FormFactor  
kiutra GmbH  
STAR Cryoelectronics

#### ADSORBERS

Manufacturers and suppliers of adsorbers that function as filtration devices, cleaning up helium gas in a liquefier or refrigerator system.

Clark Industries, Inc.  
CryoSRV, LLC  
Austin Cryogenics Co.  
Hysytech Srl

#### AEROSPACE APPLICATIONS

Manufacturers with particular expertise in complex cryogenic systems used in high-tech research, including satellites, observatories and space simulation.

Ability Engineering Technology, Inc.  
Ad-Vance Magnetics, Inc.  
Aerospace Fabrication & Materials, LLC  
Air Liquide advanced Technologies  
Amuneal Manufacturing Corp.  
Barber-Nichols LLC  
Beyond Gravity Austria GmbH  
CoolCAD Electronics  
Creare LLC  
Criotec Impianti SpA  
Cryoguard LLC  
CryoTechnics LLC  
CryoWorks, Inc.  
Eta Space

Fin Tube Products, Inc.  
Meyer Tool & Mfg., Inc.  
Omega Flex, Inc.  
Scientific Instruments, Inc.  
Sierra Lobo, Inc.  
Space Dynamics Laboratory  
Spectrum Control  
Stöhr Armaturen  
Technology Applications, Inc.  
The Aerospace Corporation  
The Phoenix Company of Chicago, Inc.  
Thermal Management Technologies  
Thermal Space Ltd.  
Turbines Inc.  
Valcor Scientific  
Web Industries, Inc.  
West Coast Solutions  
XMA Corporation  
ZeroAvia  
Active Space Technologies  
Bal Seal Engineering  
Ball Aerospace  
Cryoconnect  
Cryogenic Electronics Institute  
CryoHiVac Consulting LLC  
CryoPacific, Inc.  
CS&P Technologies, LP  
CTP Cryogenics  
Dunmore Corporation  
East Coast Microwave Sales and Distribution LLC  
East Far Materials Co., Ltd.  
Empire Magnetics Inc.  
Erbe Engineering, Inc.  
Honeywell Hymatic  
Iris Technology  
Kistler Instrumente AG  
Lentus Composites  
Nexans Deutschland GmbH  
Norman Filter Company  
Omniseal Solutions  
PFI Advanced Equipment Manufacturing, LLC  
Pope Scientific, Inc.  
Thunder Technologies LLC  
Venture Mfg. Co.  
Yetispace, Inc.

#### AIR SEPARATION / LIQUEFACTION EQUIPMENT

Equipment, systems and related components for air separation, liquefaction, generation and storage of nitrogen, argon, oxygen, helium and other gases.

CCH Equipment Co.

Cryospain  
Eta Space  
Fabrum  
Imtek Cryogenics  
Kelvin International Corporation  
Linde Cryogenics, Division of Linde Engineering Americas  
Nikkiso Cryogenic Industries  
RIX Industries  
Stirling Cryogenics BV  
WEKA AG  
Air Products and Chemicals, Inc.  
Cosmodyne (Nikkiso Cosmodyne)  
Criomec SA  
Cryogen Environmental Solutions  
EOSgen-technologies  
Feda Nitrogen Inc.  
Ningbo DSW International Co., Ltd.  
Nitrotec Indústria e Comércio de Equipamentos para Gases Ltda  
Noblegen Cryogenics  
PBS Velka Bites  
Sauer Compressors USA  
SIAD Macchine Impianti S.p.A.  
Universal Industrial Gases, LLC (UIG)

#### AIR SEPARATION PLANTS

Standard and custom engineered air separation plants and components designed to separate atmospheric air into various gases—primarily oxygen, nitrogen and argon.

CCH Equipment Co.  
Nikkiso Cryogenic Industries  
Cosmodyne (Nikkiso Cosmodyne)  
Cryo-Plant International LLC  
Cryogen Environmental Solutions  
Cryogenic Machinery Corporation  
Feda Nitrogen Inc.  
Ranch Cryogenics, Inc.  
Sauer Compressors USA  
SIAD Macchine Impianti S.p.A.  
Solutionwerks, Inc.  
Universal Industrial Gases, LLC (UIG)

#### BEARINGS

Ball, roller, needle and plain bearings for cryogenic and ultrahigh vacuum environments, such as cryogenic pumps, manipulation equipment and rotary couplings.

Turbines Inc.  
Carter Americas, LLC  
Carter Manufacturing Limited  
CEROBEAR GmbH



CTP Cryogenics  
Omniseal Solutions  
Performance Sealing Inc.  
RBC Transport Dynamics  
UNASIS International

## BELLOWS

Welded metal bellows fabricated from a wide variety of standard and exotic alloys, including stainless steel and titanium.

CPC-Cryolab, an MEC Company

Penflex

Bellows Systems, Inc.

Flexaseal Engineered Seals and Systems, LLC

Kuzuflex A.S.

Piping Technology & Products

Thunder Technologies LLC

## BLOWERS

Complete blowers, parts and accessories including test chamber blowers, LNG vapor return blowers and fuel cell blowers used for circulating cryogenic gases.

Barber-Nichols LLC

CCH Equipment Co.

A-Vac Industries

## BULK STORAGE TANKS / TRANSPORT TANKS

Bulk tanks, tankers, trailers, vessels and ISO containers in various sizes for storing or transporting helium, CO<sub>2</sub>, LPG, LNG and other industrial gases.

Bhiwadi Cylinders Pvt. Ltd.

CCH Equipment Co.

Chart Inc.

Cryofab, Inc.

Cryospain

Equigas, Inc.

Gardner Cryogenics

GenH2 Corp.

Turbines Inc.

Wessington Cryogenics, Ltd.

Airflow North America Corp.

All-Weld Company Limited

American Industrial Gases, LLC

Cryo Fields

Cryo Rentals Limited

Cryo Storage Solutions Ltd.

Cryo-Plant International LLC

cryoDirect

Cryogas India

Cryolor

Cyl-Tec, Inc.

Eleet Cryogenics, Inc.

Energy Flux

FIBA Technologies, Inc.

GazTransport & Technigaz (GTT)

Haier Biomedical Co., Ltd.

HM Cryogenics Sdn Bhd

Incryo Systems Pvt. Ltd.

Inox India Private Limited

J.K. Cryogenics

Karbansan Pressure Vessels and Trading Co.

Kryooprema

Lone Star Cryogenics, Inc.

M1 Engineering Ltd.

Metalcraft (Stainless Metalcraft Ltd.)

Ningbo DSW International Co., Ltd.  
Nitrotec Indústria e Comércio de Equipamentos para Gases Ltda  
Prentex Alloy Fabricators, Inc.  
R-V Industries, Inc.  
Ratermann Manufacturing, Inc.  
Sauer Compressors USA  
Suretank Ltd.  
Taylor-Wharton  
Universal Industrial Gases, LLC (UIG)  
US Tank & Cryogenic Equipment, Inc.

## CHILLERS

Components and complete systems for cooling fluids and compressed dry gases, such as nitrogen, argon, ethanol or air, from ambient to cryogenic temperature, without pre-cooling.

Abess Instruments and Systems, Inc.

CryoSRV, LLC

Fabrum

CBI Surplus

Cole-Parmer, an Antylia Scientific company

Cryometrix, Inc.

CryoSpectra Systems GmbH

Edwards Vacuum

inTEST Thermal Solutions

## CIRCUIT BOARDS, CRYOGENIC AND SUPERCONDUCTING

Printed circuit board and integrated circuit manufacturers and assemblers with particular expertise in superconducting traces and connectorization, low temperature thermal conduction or insulation and mechanical robustness down to zero Kelvin.

CoolCAD Electronics

STAR Cryoelectronics

West Coast Solutions

Comunetics Inc.

Cryogenic Electronics Institute

Omni Circuit Boards Ltd.

Suntronic Inc.

## CIRCULATORS

Complete cryogenic gas circulators, parts and accessories for cooling system components in situations where the component is not located in close proximity to the refrigeration unit.

Air Liquide advanced Technologies

Barber-Nichols LLC

Fabrum

Sierra Lobo, Inc.

Stirling Cryogenics BV

European Cryogenics s.r.o.

PBS Velka Bites

## CO<sub>2</sub> GENERATORS

CO<sub>2</sub> generation equipment for the beverage, brewing, distillery and industrial gas industries.

Nikkiso Cryogenic Industries

# Products and Services

## COLD BOXES / DISTRIBUTION BOXES

Custom vacuum insulated cold boxes equipped with internal complex arrangement of piping and process vessels operating at cryogenic temperatures.

Ability Engineering Technology, Inc.

Cryospain

Cryoworld BV

Demaco Holland BV

Meyer Tool & Mfg., Inc.

Cryogenic Analysis and Design LLC

Fives Cryo Inc.

KrioSystem

M1 Engineering Ltd.

## COLD CABINETS

Cabinets for cold treatment of materials at cryogenic temperatures. Includes environmental chambers, altitude chambers and thermal shock chambers.

Cryogenic Institute of New England, Inc.

DMP CryoSystems, Inc.

Thermal Space Ltd.

CryoSpectra Systems GmbH

Dohmeyer

Haier Biomedical Co., Ltd.

Russells Technical Products

## COLD TRAPS

Single and multiple cold trap systems designed for operation at precisely controlled temperatures between 10 K and 450 K.

Abess Instruments and Systems, Inc.

Advanced Research Systems, Inc.

Cryofab, Inc.

Cryospain

CryoSRV, LLC

Fabrum

Independence Cryogenic Engineering (ICE)

Lake Shore Cryotronics, Inc.

A-Vac Industries

Advanced Photonics, Inc.

CryoSpectra Systems GmbH

Le-tehnika d.o.o.

Pope Scientific, Inc.

## COMPRESSORS

Complete compressors and components used to process hydrogen, nitrogen, natural gas and helium at cryogenic temperatures.

Barber-Nichols LLC

CCH Equipment Co.

Creare LLC

Cryo Service Ltda.

CryoSRV, LLC

Gas Equipment Company, Inc.

Independence Cryogenic Engineering (ICE)

Quantum Design, Inc.

RIX Industries

Sumitomo (SHI) Cryogenics of America, Inc.

West Coast Solutions

Capovani Brothers Inc.

Edwards Vacuum

Elliott Group

European Cryogenics s.r.o.

Honeywell Hymatic

PBS Velka Bites  
Pressure Wave Systems GmbH  
Sauer Compressors USA  
SIAD Macchine Impianti S.p.A.

## COMPUTER HARDWARE AND SOFTWARE

Hardware or software for cryogenic laboratories including inventory, labeling, tracking, sample management, fluid and material property packages, superconductivity analysis.

Canadian Nuclear Laboratories  
CoolCAD Electronics

Acromag, Inc.  
Cryogatt Systems Ltd.  
Horizon Technologies  
Sonicu

## CONTROL SYSTEMS

Lab and industrial process control systems including temperature controllers, monitors, magnetic measurement instruments, sensors and accessories.

Abdess Instruments and Systems, Inc.  
Acme Cryogenics, Inc.  
Alloy Valves and Control  
American Magnetics, Inc.  
Cryomagnetics, Inc.  
CryoTechnics LLC  
DMP CryoSystems, Inc.  
Kelvin International Corporation  
Lake Shore Cryotronics, Inc.  
Oxford Instruments NanoScience  
Scientific Instruments, Inc.  
Tech4Imaging LLC  
Thermal Space Ltd.  
West Coast Solutions  
Active Space Technologies  
Berkert Fluid Control Systems  
Cryogenic Control Systems, Inc.  
Elliot Scientific Ltd.  
Elliott Group  
Fredericks Company | Televac  
Hoffer Flow Controls, Inc.  
Iris Technology  
Phytron, Inc.  
Quantum Cryogenics Ltd.  
SGD Inc.  
Solutionwerks, Inc.  
Universal Cryogenics  
West Warwick Welding

## CRYOBIOLOGICAL SYSTEMS

Equipment for preservation of tissue, sperm, cord blood at cryogenic temperatures. Dewars, tubes and plate modules, special use vacuum insulated vessels, accessories.

Fabrum  
IC Biomedical  
Imtek Cryogenics  
Marathon Products, Inc.  
Rutherford & Titan Inc.  
Technifab Products, Inc.  
Cole-Parmer, an Antylia Scientific company  
Cryo Fields  
Cryo Products BV  
Cryo Storage Solutions Ltd.  
Cryogatt Systems Ltd.

Cryometrix, Inc.  
Cryonos Co.  
CryoPacific, Inc.  
Cryotherm GmbH & Co. KG  
Danclan Biotech Chengdu Co., Ltd.  
Dohmeyer  
HCP Life Science  
Inox India Private Limited  
Micronic  
Planer  
Quantum Cryogenics Ltd.  
Tobin Scientific

## CRYOCOOLERS

Open and closed cycle, LN<sub>2</sub>, LHe, 3 K-300 K, miniaturized, Stirling, Gifford-McMahon, single-stage, two-stage, pulse tube, high frequency, small-size and space-qualified cryocoolers.

Advanced Research Systems, Inc.  
Air Liquide advanced Technologies  
Bluefors  
Chase Research Cryogenics Ltd.  
Create LLC  
CryoSRV, LLC  
Cryoworld BV  
CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd.

Danaher Cryogenics  
Demaco Holland BV  
Fabrum  
FormFactor  
Imtek Cryogenics  
Independence Cryogenic Engineering (ICE)  
kiutra GmbH

### ❖ Lake Shore Cryotronics, Inc.

Lihan Cryogenics Co., Ltd.  
Niowave, Inc.  
Oak Ridge National Laboratory  
Oxford Cryosystems  
Quantum Design, Inc.  
RIX Industries  
Sierra Lobo, Inc.  
Stirling Cryogenics BV  
Sumitomo (SHI) Cryogenics of America, Inc.  
Sunpower, Inc.  
The Aerospace Corporation  
West Coast Solutions  
Absolut System  
AIM Infrarot-Module GmbH  
attocube systems  
Ball Aerospace  
ColdEdge Technologies  
CryoHiVac Consulting LLC  
CryoSpectra GmbH  
Edwards Vacuum  
Honeywell Hymatic  
JEVI Vacuum Instruments  
L-3 Cincinnati Electronics  
Le-tehnika d.o.o.  
Leiden Cryogenics  
NanoMagnetics Instruments Ltd.  
Operon Co., Ltd.  
Ricor USA, Inc.  
Thales Cryogenics BV  
TransMIT GmbH Center for Adaptive Cryotechnology and Sensors

## CRYOELECTRONICS (SQUIDS, ETC.)

Superconducting electronics used in complex superconductor circuits designed for wet and dry ultralow temperature cryogenic systems.

Cryogenic Limited  
Quantum Design, Inc.  
STAR Cryoelectronics  
Aivon Ltd.  
CMR-Direct  
Cryogenic Electronics Institute  
Hypres  
Mesuron Inc.  
Omni Circuit Boards Ltd.  
SENIS Group, Switzerland  
SkyWater Technology Foundry

## CRYOGENERATORS

A wide range of off-the-shelf and custom single- and multistage cryogenerators using liquid nitrogen for laboratory, medical, industrial and commercial applications.

Fabrum  
Imtek Cryogenics  
Kelvin International Corporation  
Stirling Cryogenics BV  
CryoSpectra GmbH  
Deep Cryogenics International  
EOSgen-technologies  
Instrucan Scientific Ltd.  
Noblegen Cryogenics  
Stratox Limited  
ULVAC Cryogenics Inc.

## CRYOGENIC FLUID PUMPS

Off-the-shelf and custom reciprocating and centrifugal pumps that move cryogenic liquids and gases through a system.

Air Liquide advanced Technologies  
Barber-Nichols LLC  
Equigas, Inc.  
Nikkiso Cryogenic Industries  
PHPK Technologies  
Stirling Cryogenics BV  
Cryogenic Machinery Corporation  
Cryostar USA  
CS&P Technologies, LP  
Elliott Group  
EOSgen-technologies  
European Cryogenics s.r.o.  
Fives Cryo Inc.  
Haskel International, LLC  
IGPH Ltd.  
ILK Dresden—Institute of Air Handling and Refrigeration  
Incryo Systems Pvt. Ltd.  
Mechanical Engineering Products Co.  
PBS Velka Bites  
Sauer Compressors USA



## CRYOGENIC FREEZING EQUIPMENT

Cryogenic tunnel and spiral freezers that use liquid nitrogen or liquid carbon dioxide, primarily for chilling or freezing of food products and pharmaceuticals at below 200 K.

DMP CryoSystems, Inc.  
Princeton CryoTech  
CryoHiVac Consulting LLC  
Cryometrix, Inc.  
Cryonos Co.  
CryoSpectra Systems GmbH  
Dohmeyer  
Haier Biomedical Co., Ltd.  
MVE Biological Solutions  
Russells Technical Products  
Tobin Scientific

## CRYOGENIC FUEL LINES

Flexible, corrugated or rigid, multilayer, vacuum-insulated transfer lines for cryogenic fuels such as LN<sub>2</sub>, He, LNG and LOX. Fully assembled, leak-tested and evacuated, and designed to customer specifications.

BRUGG Pipes  
CPC-Cryolab, an MEC Company  
Cryofab, Inc.  
Cryogas Tech Sdn Bhd  
Cryospain  
Cryoworld BV  
Omega Flex, Inc.  
Penflex  
Princeton CryoTech  
\* Vacuum Barrier Corporation  
H & J Enterprises  
Hose Master  
Kuzuflex A.S.  
Nexans Deutschland GmbH  
SST Technology  
Thunder Technologies LLC

## CRYOGENIC INDUSTRIAL SYSTEMS

Design, engineering and fabrication of integrated systems for purification, liquefaction, transfer, storage and distribution of cryogenic liquids and gases.

Ability Engineering Technology, Inc.  
Chart Inc.  
Cryo Technologies  
\* CryoWorks, Inc.  
Essex Industries  
Fabrum  
Imtek Cryogenics  
Independence Cryogenic Engineering (ICE)  
Linde Cryogenics, Division of Linde Engineering Americas  
Meyer Tool & Mfg., Inc.  
NASA Kennedy Cryogenics Test Laboratory  
Princeton CryoTech  
SPS Cryogenics BV  
Stirling Cryogenics BV  
Technifab Products, Inc.  
CryoSpectra Systems GmbH  
Green Resource Engineering Ltd.  
Habonim Industrial Valves & Actuators  
Hysytech Srl  
IGPH Ltd.  
IONEX Research Corporation  
Kryooprema

Leiden Cryogenics  
MVE Biological Solutions  
Noblegen Cryogenics  
Prestige Technology (S) Pte Ltd.  
Quantum Technology Corp.  
Sauer Compressors USA  
Shell-N-Tube Pvt. Ltd.  
TS Italia Srl—Tecnologie e Sistemi  
ULVAC Cryogenics Inc.

## CRYOGENIC MACHINING EQUIPMENT

Components for use as auxiliary system on existing or new machine tools including machining centers, turning centers and boring machines, for the purpose of cooling the cutting tool and improving performance, quality and sustainability.

Ishani Engineers  
MVE Biological Solutions

## CRYOGENIC PACKAGING

Specialty packaging solutions for the cryogenic industry, including tissue banks and companies working with heat sensitive drugs, biologics, electronics and frozen premixed adhesives.

\* CO<sub>2</sub> Meter  
Cryoguard LLC  
Thermal Management Technologies  
Instant Systems, Inc.  
Micronic  
PFI Advanced Equipment Manufacturing, LLC

## CRYOGENIC PIPING

Standard and custom vacuum insulated (vacuum jacketed) and other insulated pipe and piping systems for use in cryogenic applications.

Ability Engineering Technology, Inc.  
Acme Cryogenics, Inc.  
BRUGG Pipes  
Chart Inc.  
CPC-Cryolab, an MEC Company  
Creare LLC  
Criotec Impianti SpA  
Cryofab, Inc.  
Cryogas Tech Sdn Bhd  
Cryospain  
CryoVac low temperature technologies  
\* CryoWorks, Inc.  
Cryoworld BV  
Demaco Holland BV  
Gardner Cryogenics  
Imtek Cryogenics  
Meyer Tool & Mfg., Inc.  
Omega Flex, Inc.  
Penflex  
PHPK Technologies  
Princeton CryoTech  
Rutherford & Titan Inc.  
SPS Cryogenics BV  
Technifab Products, Inc.  
Vacuum Barrier Corporation  
Advanced Piping Products  
Anderson Dahlen  
Bellows Systems, Inc.  
CONCOA  
Criomec SA  
Cryo Storage Solutions Ltd.  
CryoComp

Cryogas India  
CryoHiVac Consulting LLC  
CryoPacific, Inc.  
Cryotherm GmbH & Co. KG  
Cryowest Inc.  
Green Resource Engineering Ltd.  
H & J Enterprises  
High Tech Services  
HM Cryogenics Sdn Bhd  
Hose Master  
J.K. Cryogenics  
Kryooprema  
Kuzuflex A.S.  
Lentus Composites  
Nexans Deutschland GmbH  
Oxiredes Ltda.  
Prestige Technology (S) Pte Ltd.  
Schwannner GmbH  
Senior Flexonics Canada  
Shell-N-Tube Pvt. Ltd.  
SST Technology  
Taylor-Wharton  
Thames Cryogenics Ltd.  
TS Italia Srl—Tecnologie e Sistemi

## CRYOGENIC PROBE STATIONS

Micro-manipulated platforms designed for non-destructive electrical and/or optical testing using DC, RF, or fiber-optic probes at low temperatures.

Advanced Research Systems, Inc.  
CryoVac low temperature technologies  
Danaher Cryogenics  
FormFactor  
\* Lake Shore Cryotronics, Inc.  
Quantum Design, Inc.  
attocube systems  
ColdEdge Technologies  
Elliot Scientific Ltd.  
Janssen Precision Engineering BV  
MicroXact Inc.

## CRYOGENIC TREATMENT EQUIPMENT

Components or systems used for cold treatment such as deep cryogenic processing, deep-freezing and sub-zero stabilization of metals and other materials.

Cryogenic Institute of New England, Inc.  
DMP CryoSystems, Inc.  
Cryogenics International  
CTP Cryogenics  
Deep Cryogenics International

## CRYOGENIC WIRING INTERCONNECTS

Cabling and interconnection for cryogenic systems, using constructions in silverplated copper, stainless steel, manganin, constantan and phosphor bronze.

CryoCoax  
KEYCOM Corporation  
Spectrum Control  
The Phoenix Company of Chicago, Inc.  
XMA Corporation  
Compunetics Inc.  
Cryoconnect  
Douglas Electrical Components, Inc.  
Quantum Coax  
Universal Cryogenics

## CRYOSTAT FEED-THROUGHS

Cryostat feed-throughs used to isolate feed-through vacuum from main vacuum in a cryostat, using a bellows to connect ambient and cold flanges.

Atlas Technologies  
Spectrum Control  
XMA Corporation  
CMR-Direct  
Douglas Electrical Components, Inc.  
SST Technology

## CRYOSTATS

Standard and custom cryostats, sample-in-vacuum and sample-in-vapor, liquid helium or liquid nitrogen cryostats, optical cryostats for research and magnet applications.

Abbess Instruments and Systems, Inc.  
Ability Engineering Technology, Inc.  
Advanced Research Systems, Inc.  
Bluefors  
Cryo Industries of America, Inc.  
Cryofab, Inc.  
Cryogenic Limited  
Cryomagnetics, Inc.  
Cryomech, Inc.  
CryoVac low temperature technologies  
Cryoworld BV  
CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd.  
Danaher Cryogenics  
Demaco Holland BV  
Eta Space  
Fabrum  
FormFactor  
IC Biomedical  
Imtek Cryogenics  
kiutra GmbH  
Lake Shore Cryotronics, Inc.  
Meyer Tool & Mfg., Inc.  
NASA Kennedy Cryogenics Test Laboratory  
Oxford Instruments NanoScience  
Photon Spot Inc.  
Quantum Design, Inc.  
STAR Cryoelectronics  
Thermal Management Technologies  
Thermal Space Ltd.  
Wessington Cryogenics, Ltd.  
Absolut System  
attocube systems  
ColdEdge Technologies  
Cryogas India  
Cryosystems Inc.  
Energy Evolution LLC  
evico GmbH  
Four Nine Design  
GazTransport & Technigaz (GTT)  
ICEoxford  
ILK Dresden—Institute of Air Handling and Refrigeration  
IRLabs  
JEVI Vacuum Instruments  
Kadel Engineering Corp.  
KrioSystem  
Le-tehnika d.o.o.  
Leiden Cryogenics  
Mesuron Inc.  
Metalcraft (Stainless Metalcraft Ltd.)  
Montana Instruments

NanoMagnetics Instruments Ltd.  
Precision Cryogenic Systems, Inc.  
Scientific Magnetics Ltd.  
Senseker Engineering  
Shell-N-Tube Pvt. Ltd.  
SST Technology  
Universal Cryogenics

## CRYOSURGICAL PROCESSES

Cryosurgical equipment, including cryosurgical ablation of disseminated metastatic tumors and cryosprays used to destroy lesions and other abnormal body tissue.

Brymill Cryogenic Systems

## DATA ACQUISITION AND ANALYSIS INSTRUMENTATION AND SYSTEMS

Data acquisition and analysis hardware and software solutions for use in cryogenic laboratories, including data loggers and sensor monitoring.

Cryogenic Limited  
CryoTechnics LLC  
Lake Shore Cryotronics, Inc.  
Marathon Products, Inc.  
Scientific Instruments, Inc.  
Tech4Imaging LLC  
Acromag, Inc.  
Aivon Ltd.  
Cryogenic Control Systems, Inc.  
Danclan Biotech Chengdu Co., Ltd.  
DeTech LLC.  
Dynavac  
Fabrika—Sensorbuild  
Kistler Instrumente AG  
Metrolab Technology S.A.  
NanoMagnetics Instruments Ltd.  
Sonicu

## DEFLASHING / DEBURRING / GRINDING EQUIPMENT

Components and complete systems used for cryogenic deburring or deflashing, or for cryogenic grinding of materials.

Cryogenic Institute of New England, Inc.  
Abrasive Supply Company  
Maxi-Blast, Inc.

## DEWARs

Standard and custom laboratory, detection, non-magnetic and storage dewars and related accessories for short- and long-term use in life science, agricultural, medical, industrial, scientific and commercial applications.

Ability Engineering Technology, Inc.  
Chart Inc.  
Cryo Industries of America, Inc.  
Cryofab, Inc.  
Cryomagnetics, Inc.  
CryoVac low temperature technologies  
Cryoworld BV  
Essex Industries  
IC Biomedical  
Marathon Products, Inc.  
Meyer Tool & Mfg., Inc.  
Princeton CryoTech  
Technifab Products, Inc.

Thermal Space Ltd.  
Vacuum Barrier Corporation  
Wessington Cryogenics, Ltd.

Advanced Photonics, Inc.  
Airgas Healthcare  
Ball Aerospace  
Cryo Fields  
Cryo Products BV  
Cryo Rentals Limited  
Cryo Storage Solutions Ltd.  
Cryonos Co.  
Cryotherm GmbH & Co. KG  
Cyl-Tec, Inc.  
Danclan Biotech Chengdu Co., Ltd.  
DeTech LLC.  
Green Resource Engineering Ltd.  
Haier Biomedical Co., Ltd.  
IRLabs  
Kadel Engineering Corp.  
Mesuron Inc.  
MVE Biological Solutions  
Ningbo DSW International Co., Ltd.  
PFI Advanced Equipment Manufacturing, LLC  
Planer  
Pope Scientific, Inc.  
Precision Cryogenic Systems, Inc.  
Prentex Alloy Fabricators, Inc.  
Schwanner GmbH  
Shell-N-Tube Pvt. Ltd.  
Spearlab, Inc.  
Thames Cryogenics Ltd.  
US Tank & Cryogenic Equipment, Inc.

## DILUTION REFRIGERATORS

Off-the-shelf and custom stand-alone dilution refrigerators and dilution refrigerator systems including cryogen-free, conventional and inverted (reversed) systems.

Air Liquide advanced Technologies  
Bluefors  
Chase Research Cryogenics Ltd.  
Cryomagnetics, Inc.  
CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd.  
FormFactor  
Oxford Instruments NanoScience  
Quantum Design, Inc.  
Cryoconcept  
ICEoxford  
Leiden Cryogenics  
Zero Point Cryogenics

## ELECTRICAL AND ELECTRONIC CIRCUITRY

Engineering and manufacturing of components used in electrical circuitry and electronics packaging for cryogenic environments.

CoolCAD Electronics  
CryoTechnics LLC  
KEYCOM Corporation  
Spectrum Control  
West Coast Solutions  
XMA Corporation  
Allectra Limited  
Compunetics Inc.  
Kepco Power  
Modular Devices, Inc.  
SkyWater Technology Foundry



## ELECTRICAL INSULATION

Electrically non-conducting material (coating, film, polymer composite, ceramics) providing electric isolation (blocks flow of electric current) of two parts at different voltage potentials.

Rockwood Composites Ltd.  
Cosmotec, Inc.  
CTD—Composite Technology Development, Inc.  
Dunmore Corporation  
East Far Materials Co., Ltd.  
Lentus Composites  
Master Bond  
Rochling Composites USA  
Rol-Vac, L.P.

## ELECTRONIC CONTROLS

Precision electronic instrumentation for cryogenic laboratory and industrial applications, including level, pressure, flow and temperature control.

American Magnetics, Inc.  
Bluefors  
CoolCAD Electronics  
Kelvin International Corporation  
Lake Shore Cryotronics, Inc.  
Oxford Instruments NanoScience  
Spectrum Control  
West Coast Solutions  
XMA Corporation  
Aivon Ltd.  
Cryogenic Control Systems, Inc.  
East Coast Microwave Sales and Distribution LLC  
Fabrika—Sensorbuild  
Hampshire Controls Corporation  
Iris Technology  
Metrolab Technology S.A.  
Senseker Engineering

## ELECTRONICS, PASSIVE AND ACTIVE COMPONENTS

Cryogenic circulators and isolators are ferromagnetic passive devices used to protect other RF components from excessive signal reflection. Applications include scanning tunneling microscopy, quantum computing, particle physics and radio astronomy.

CryoTechnics LLC  
Micro Harmonics Corporation  
Signal Microwave  
Spectrum Control  
STAR Cryoelectronics  
The Phoenix Company of Chicago, Inc.  
XMA Corporation  
East Coast Microwave Sales and Distribution LLC  
Kepco Power  
Paragraf Limited  
QuantX Labs  
QuinStar Technology, Inc.

## ENERGY RECOVERY TURBINES

Custom manufactured turbines for energy recovery, designed to maximize cryogenic system performance.

Nikkiso Cryogenic Industries  
EOSgen-technologies

## ENERGY STORAGE, CRYOGENIC

Products used in three types of cryogenic energy storage: flywheels (with superconducting bearings), Superconducting Magnetic Energy Storage and Liquid Air Energy Storage.

GenH2 Corp.  
NASA Kennedy Cryogenics Test Laboratory  
Cryogen Environmental Solutions  
Energy Evolution LLC  
Highview Power

## ENVIRONMENTAL TEST CHAMBERS

Custom designed, engineered, fabricated and integrated environmental test chambers for simulation of space environments.

Abess Instruments and Systems, Inc.  
Criotec Impianti SpA  
Cryogas Tech Sdn Bhd  
CryoTechnics LLC  
Scientific Instruments, Inc.  
inTEST Thermal Solutions  
Russells Technical Products  
Thermotron Industries

## EXPANSION ENGINES

Helium and hydrogen gas expansion engines used to expand work output from closed cryogenic systems.

## FILLING AND TRANSFER SYSTEMS

Custom design and manufacture of filling and transfer systems for cryogenic liquids. Components include manifolds, valves, flexible vacuum jacketed lines.

American Magnetics, Inc.  
Barber-Nichols LLC  
Cryo Technologies  
Cryogas Tech Sdn Bhd  
Cryospain  
\* CryoWorks, Inc.  
Essex Industries  
Kelvin International Corporation  
Nikkiso Cryogenic Industries  
Omega Flex, Inc.  
Technifab Products, Inc.  
Turbines Inc.  
Vacuum Barrier Corporation  
Cryowest Inc.  
CS&P Technologies, LP  
IGPH Ltd.  
International Technisystems, Inc.  
KrioSystem  
Prestige Technology (S) Pte Ltd.  
TS Italia Srl—Tecnologie e Sistemi

## FILTERS

Standard and custom filters specifically designed for use in cryogenic systems. Various system flow rates and pressure ratings are available.

CPC-Cryolab, an MEC Company  
Molecular Products, Inc.  
Stöhr Armaturen  
WEKA AG  
Cryogenic Electronics Institute  
Erbe Engineering, Inc.  
IONEX Research Corporation  
Norman Filter Company

## FITTINGS / CONNECTORS / COUPLINGS

Fittings, connectors and couplings for transfer and connecting of hoses, lines, pipe and wire used in connecting cryogenic and vacuum components.

Acme Cryogenics, Inc.  
Atlas Technologies  
Clark Industries, Inc.  
Coax Co., Ltd.  
CPC-Cryolab, an MEC Company  
CryoWorks, Inc.  
Cryoworld BV  
Essex Industries  
RegO  
Rockwood Composites Ltd.  
Spectrum Control  
The Phoenix Company of Chicago, Inc.  
WEKA AG  
XMA Corporation  
Allectra Limited  
Bal Seal Engineering  
Cosmotec, Inc.  
Cryocomp  
Dixon  
DK LOK  
Douglas Electrical Components, Inc.  
Erbe Engineering, Inc.  
H & J Enterprises  
HANTEMP Controls  
Hose Master  
Hy-Lok USA  
Ishani Engineers  
Mechanical Engineering Products Co.  
OPW Engineered Systems  
Ratermann Manufacturing, Inc.  
Ray Murray Inc.  
Sanitary Fittings, LLC  
Solid Sealing Technology  
Stäubli Corporation  
Thunder Technologies LLC

## FLOW CONTROLLERS / METERS

Meters, valves and other equipment designed to control the flow of cryogenic liquids and gases.

Alloy Valves and Control  
Equigas, Inc.  
Essex Industries  
Gas Equipment Company, Inc.  
RegO  
Tech4Imaging LLC  
Turbines Inc.  
WEKA AG  
Burkert Fluid Control Systems  
CBI Surplus  
Dynamic Structures and Materials

EnviroNics, Inc.  
Hoffer Flow Controls, Inc.  
Parker Bestobell  
Ray Murray Inc.  
SGD Inc.  
Shortall Meter  
Teledyne Hastings Instruments

## GAS ANALYZERS

Gas analyzers used in vacuum applications for contamination monitoring, leak detection and measurement of residual gas levels.

Abbess Instruments and Systems, Inc.  
Linde Cryogenics, Division of Linde Engineering Americas  
CBI Surplus  
Don Wolf & Associates, Inc.  
High Tech Services  
JEVI Vacuum Instruments  
Pfeiffer Vacuum

## GAS EQUIPMENT

Equipment for bulk storage, transfer and distribution of gases in medical, industrial and commercial applications.

Equigas, Inc.  
❄️ CO2 Meter  
Omega Flex, Inc.  
Princeton CryoTech  
Advanced Photonics, Inc.  
Airflow North America Corp.  
Airgas Healthcare  
Cryogas India  
FIBA Technologies, Inc.  
Haskel International, LLC  
Ishani Engineers  
Kuzuflex A.S.  
Sauer Compressors USA  
SGD Inc.  
TS Italia Srl—Tecnologie e Sistemi

## GAUGES

Alarm and pressure gauges for accurate measurement and instrumentation in cryogenic equipment and systems.

Equigas, Inc.  
RegO  
Cyl-Tec, Inc.  
Fredericks Company | Televac  
Hy-Lok USA  
Ishani Engineers  
Kistler Instrumente AG  
Pfeiffer Vacuum  
Ray Murray Inc.  
Teledyne Hastings Instruments

## GETTERS

Material used in vacuum annulus of cryogenic vessels, dewars, storage tanks, transfer lines and panels.

Molecular Products, Inc.  
Vacuum Energy Inc.  
SAES Getters USA, Inc.

## HEAT EXCHANGERS

Stock and custom heat exchangers for a variety of processes, including accelerators, helium liquefaction and space simulation systems with high heat loads.

Creare LLC  
Criotec Impianti SpA  
Fin Tube Products, Inc.  
Meyer Tool & Mfg., Inc.  
Nikkiso Cryogenic Industries  
Thermal Management Technologies  
Thermal Space Ltd.  
All-Weld Company Limited  
Cryo-Plant International LLC  
Cryogenic Analysis and Design LLC  
Erbe Engineering, Inc.  
Fives Cryo Inc.  
IONEX Research Corporation  
Le-tehnika d.o.o.  
Nirotec Indústria e Comércio de Equipamentos para Gases Ltda  
SST Technology  
Yetispace, Inc.

## HELIUM LIQUEFIERS

Off-the-shelf and custom helium liquefiers and accessories in various configurations with outputs ranging from .25 l/hr to over 2,500 l/hr.

Air Liquide advanced Technologies  
Bluefors  
Cryo Industries of America, Inc.  
Cryo Service Ltda.  
Cryo Technologies  
Cryonova Process Systems, LLC  
CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd.  
Independence Cryogenic Engineering (ICE)  
Linde Cryogenics, Division of Linde Engineering Americas  
Niowave, Inc.  
Quantum Design, Inc.  
Rutherford & Titan Inc.  
European Cryogenics s.r.o.  
Instrucan Scientific Ltd.  
JEVI Vacuum Instruments  
Quantum Technology Corp.  
Sinoscience Fullcryo  
Velan SAS

## HELIUM PROCESS SYSTEMS

Custom integrated helium process systems, including cryogenic purifiers, helium refrigerators, liquefiers and helium recovery systems for research, science and industry.

❄️ Cryo Technologies  
Cryonova Process Systems, LLC  
CryoVac low temperature technologies  
Cryoworld BV  
Demaco Holland BV  
Gardner Cryogenics  
Independence Cryogenic Engineering (ICE)  
Linde Cryogenics, Division of Linde Engineering Americas  
PHPK Technologies  
Quantum Design, Inc.  
Absolut System  
Cryogenic Analysis and Design LLC  
Green Resource Engineering Ltd.  
KrioSystem

Quantum Technology Corp.  
Sauer Compressors USA  
Velan SAS

## HELIUM REFRIGERATORS

Off-the-shelf and custom designed helium refrigerators used in applications including gas phase, supercritical and liquid across a temperature range from 80 K to 3 K.

Advanced Research Systems, Inc.  
Air Liquide advanced Technologies  
Bluefors  
Cryo Industries of America, Inc.  
Cryo Technologies  
Cryonova Process Systems, LLC  
CryoVac low temperature technologies  
FormFactor  
Linde Cryogenics, Division of Linde Engineering Americas  
Niowave, Inc.  
Oxford Instruments NanoScience  
Quantum Design, Inc.  
ColdEdge Technologies  
CryoSpectra GmbH  
Edwards Vacuum  
Sinoscience Fullcryo

## HELIUM RELIQUEFIERS

Manufacturers of helium reliquefiers for use in industrial helium transfills, as well as in laboratory settings, to reliquefy gaseous helium.

Bluefors  
Cryo Service Ltda.  
Cryo Technologies  
CryoVac low temperature technologies  
CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd.  
PHPK Technologies  
Quantum Design, Inc.  
JEVI Vacuum Instruments  
Quantum Technology Corp.  
Sinoscience Fullcryo

## HIGH PRESSURE GAS CYLINDERS

High pressure gas cylinder and accessory equipment for transport and storage of a wide variety of industrial, commercial and laboratory gases.

Cryospain  
Equigas, Inc.  
Essex Industries  
Kelvin International Corporation  
Airgas Healthcare  
CTD—Composite Technology Development, Inc.  
Cyl-Tec, Inc.  
Honeywell Hymatic  
Lentus Composites  
Quantum Technology Corp.  
Sauer Compressors USA



## HIGH TEMPERATURE SUPERCONDUCTORS

Design, engineering or manufacturing of superconductors operating in the range of 40 to 70 Kelvin.

Oak Ridge National Laboratory  
 STAR Cryoelectronics  
 SuperPower Inc.  
 Brookhaven Technology Group, Inc.  
 Bruker EST  
 CAN Superconductors, s.r.o.  
 Ceraco Ceramic Coating GmbH  
 Energy to Power Solutions (E2P)  
 Fujikura  
 Solid Material Solutions  
 THEVA Dünnschichttechnik GmbH

## HYDROGEN ANALYZERS AND INSTRUMENTS

Specialty calibrated equipment and instrumentation for testing and sensing hydrogen gas safely.

Scientific Instruments, Inc.

## HYDROGEN LIQUEFACTION SYSTEMS – LARGE SCALE

Greater than 5,000kg/d supply custom hydrogen liquefaction systems, utilizing a Claude cycle approach.

Air Liquide advanced Technologies  
 Chart Inc.  
 Cryo Technologies  
 GenH2 Corp.  
 Linde Cryogenics, Division of Linde Engineering Americas  
 Absolut System  
 Velan SAS

## HYDROGEN LIQUEFACTION SYSTEMS – SMALL SCALE

Small scale, 20 kg/d to 5,000kg/d custom hydrogen liquefaction systems, utilizing a helium Brayton cycle or cryocooler approach.

Air Liquide advanced Technologies  
 Cryo Technologies  
 GenH2 Corp.  
 Linde Cryogenics, Division of Linde Engineering Americas  
 Stirling Cryogenics BV  
 Cosmodyne (Nikkiso Cosmodyne)  
 Velan SAS

## HYDROGEN ORTHO-PARA CONVERSION SYSTEMS

Custom design system added to liquefaction, using catalyst to convert normal hydrogen (75% ortho, 25% para at ambient conditions) to a higher para concentration (up to 99% at 20 K).

GenH2 Corp.  
 Molecular Products, Inc.  
 Stirling Cryogenics BV  
 IONEX Research Corporation

## INDUSTRIAL GAS

Sales and delivery of noble and isotopic gases used in the cryogenic industry.

Airflow North America Corp.  
 American Industrial Gases, LLC  
 Hysytech Srl  
 ISOFLEX USA  
 Maximus Energy Corporation  
 Ningbo DSW International Co., Ltd.  
 Oxiredes Ltda.  
 Universal Industrial Gases, LLC (UIG)

## INSTRUMENTATION

Precision electronic instrumentation, including sensors, temperature and flow controllers, pressure transducer sensing and level meters for cryogenic environments.

Abess Instruments and Systems, Inc.  
 Alloy Valves and Control  
 American Magnetics, Inc.  
 Bluefors  
 Cryomagnetics, Inc.  
 CryoTechnics LLC  
 CryoVac low temperature technologies  
 KEYCOM Corporation

\* Lake Shore Cryotronics, Inc.  
 Oxford Instruments NanoScience  
 Scientific Instruments, Inc.  
 Turbines Inc.  
 Acromag, Inc.  
 AdSem, Inc.  
 Aivon Ltd.  
 AltoNovus Ltd.  
 Burkert Fluid Control Systems  
 CAEN ELS s.r.l. / CAEN Technologies Inc.  
 Criomec SA  
 Cryogenic Control Systems, Inc.  
 DeTech LLC.  
 Empire Magnetics Inc.  
 Environics, Inc.  
 Fabrika—Sensorbuild  
 Hoffer Flow Controls, Inc.  
 Hy-Lok USA  
 Janssen Precision Engineering BV  
 Link Industrial Technologies Ltd  
 Metrolab Technology S.A.  
 Montana Instruments  
 Philtec, Inc.  
 SENIS Group, Switzerland  
 Solutionwerks, Inc.  
 Sonicu  
 Teledyne Hastings Instruments

## INSULATION

High performance thermal insulation including MLI blankets, collated radiant barrier space systems, fiberglass blankets, microspheres and cryogenic insulation foams.

Aerospace Fabrication & Materials, LLC  
 \* Alkegen  
 Beyond Gravity Austria GmbH  
 Molecular Products, Inc.  
 NASA Kennedy Cryogenics Test Laboratory  
 Rockwood Composites Ltd.  
 Space Dynamics Laboratory  
 Technology Applications, Inc.  
 Thermal Space Ltd.  
 Web Industries, Inc.

Cryogenic Analysis and Design LLC  
 Duna USA  
 Dunmore Corporation  
 East Far Materials Co., Ltd.  
 Energy Evolution LLC  
 GazTransport & Technigaz (GTT)  
 Quest Thermal Group  
 Rochling Composites USA  
 Rol-Vac, L.P.  
 Soditech  
 Spaulding Composites Inc.  
 Yetispace, Inc.

## LABELS AND DECALS

Labels and identification tags, including laser labels and adhesive, for use in cryogenic environments.

Cole-Parmer, an Antylia Scientific company  
 GA International (LabTAG)  
 Label Solutions Inc.

## LABORATORY SYSTEMS

Design, engineering and construction of turnkey systems for laboratories using cryogenic liquids.

Advanced Research Systems, Inc.  
 American Magnetics, Inc.  
 Bluefors  
 Cryo Industries of America, Inc.  
 Cryomagnetics, Inc.  
 Independence Cryogenic Engineering (ICE)  
 Oxford Instruments NanoScience  
 Airgas Healthcare  
 CONCOA  
 Cryo Products BV  
 Cryogatt Systems Ltd.  
 CryoSpectra GmbH  
 Dynamic Structures and Materials  
 IRLabs  
 Montana Instruments  
 Tobin Scientific

## LEAK DETECTION EQUIPMENT

Custom and off-the-shelf leak testing equipment with automated functionality and sensitivity to detect helium leaks as small as 1 x 10<sup>-12</sup> mbar-liters/second.

CO2Meter, Inc.  
 CBI Surplus  
 High Tech Services  
 Kistler Instrumente AG  
 Leybold USA Inc.  
 Pfeiffer Vacuum

## LIQUID CO2 PUMPS

Manufacturers and distributors of off-the-shelf and custom liquid CO2 pumps, including transfer and recirculation pump models.

Gas Equipment Company, Inc.

## LIQUID HYDROGEN PLANTS, LAB-SCALE

Custom lab-scale plants up to 20 kg/d hydrogen production and liquefaction designed for experimental and research operations,

GenH2 Corp.  
 Stirling Cryogenics BV  
 Velan SAS



## LIQUID HYDROGEN POWERTRAINS

A liquid hydrogen powertrain, either hydrogen-electric or hydrogen-combustion, is a propulsion system used on transportation vehicles that use liquid hydrogen as an energy carrier, combining it with oxygen from the air to release energy for propulsion.

ZeroAvia  
Energy Flux

## LIQUID HYDROGEN TANK SYSTEMS

Design, engineering and fabrication of liquid hydrogen storage tank systems, valves, controls and piping systems.

Alloy Valves and Control  
American Magnetics, Inc.  
Cryofab, Inc.  
Eta Space  
Gardner Cryogenics  
GenH2 Corp.  
NASA Kennedy Cryogenics Test Laboratory  
Sierra Lobo, Inc.  
Wessington Cryogenics, Ltd.  
Ball Aerospace  
Eleet Cryogenics, Inc.  
Hylum Industries, Inc.  
Magna Energy Storage Systems (Magna ESS)  
Prentex Alloy Fabricators, Inc.  
Quest Thermal Group  
Sinoscience Fullcryo  
Yetispace, Inc.

## LIQUID HYDROGEN TESTING APPARATUS AND INSTRUMENTS

Custom calibrated equipment for use with testing and demonstration of liquid hydrogen, includes vacuum jacketed lines and tank and manufactured with compatible materials that thermal cycle from 20 K to 300 K.

GenH2 Corp.  
Scientific Instruments, Inc.  
Magna Energy Storage Systems (Magna ESS)

## LIQUID LEVEL SENSORS AND ALARMS

Probes, tank gauging systems and other equipment to control, measure and regulate liquid levels in a cryogenic fluid storage or transport device.

American Magnetics, Inc.  
CryoTechnics LLC  
❖ Lake Shore Cryotronics, Inc.  
Scientific Instruments, Inc.  
Sierra Lobo, Inc.  
AdSem, Inc.  
Advanced Photonics, Inc.  
Cryo Products BV  
Danclan Biotech Chengdu Co., Ltd.  
Hampshire Controls Corporation  
Planer  
Quantum Cryogenics Ltd.

## LN2 DOSING / INJECTION SYSTEMS

Liquid nitrogen injection (LNI) equipment is used for precise dosing of LN2 to extend food and beverage shelf life and to improve package integrity.

Chart Inc.  
Cryogas Tech Sdn Bhd  
Technifab Products, Inc.  
❖ Vacuum Barrier Corporation  
Cryo Fields  
Dohmeyer  
IceCure Medical

## LN2 LIQUEFIERS

Custom or off-the-shelf LN2 liquefiers in various configurations, production capacities and storage sizes for laboratory and industrial applications.

Bluefors  
Cryo Industries of America, Inc.  
Fabrum  
GenH2 Corp.  
Imtek Cryogenics  
Kelvin International Corporation  
Rutherford & Titan Inc.  
Stirling Cryogenics BV  
Cosmodyne (Nikkiso Cosmodyne)  
Instrucan Scientific Ltd.  
Noblegen Cryogenics  
SIAD Macchine Impianti S.p.A.  
Sinoscience Fullcryo  
Stratrox Limited  
ULVAC Cryogenics Inc.

## LN2 SYSTEMS

Design, engineering, fabrication and implementation of complete liquid nitrogen distribution systems.

Acme Cryogenics, Inc.  
American Magnetics, Inc.  
Bluefors  
BRUGG Pipes  
CCH Equipment Co.  
Chart Inc.  
Cryo Industries of America, Inc.  
Cryogas Tech Sdn Bhd  
CryoVac low temperature technologies  
❖ CryoWorks, Inc.  
Cryoworld BV  
Demaco Holland BV  
Fabrum  
GenH2 Corp.  
Imtek Cryogenics  
Kelvin International Corporation  
Nikkiso Cryogenic Industries  
Princeton CryoTech  
SPS Cryogenics BV  
Stirling Cryogenics BV  
Technifab Products, Inc.  
Vacuum Barrier Corporation  
Wessington Cryogenics, Ltd.  
Advanced Piping Products  
CONCOA  
Cryogen Environmental Solutions  
Cryometrix, Inc.  
CryoPacific, Inc.  
Cryotherm GmbH & Co. KG  
Danclan Biotech Chengdu Co., Ltd.  
Instrucan Scientific Ltd.  
Kryooprema

Prestige Technology (S) Pte Ltd.  
ULVAC Cryogenics Inc.  
Yetispace, Inc.

## LNG FUEL SYSTEMS

Off-the-shelf and custom components for LNG fuel systems, as well as design, engineering, manufacture and installation of complete systems.

BRUGG Pipes  
Chart Inc.  
CryoWorks, Inc.  
Nikkiso Cryogenic Industries  
Penflex  
CS&P Technologies, LP  
GazTransport & Technigaz (GTT)  
Inox India Private Limited  
Karbonsan Pressure Vessels and Trading Co.  
KrioSystem  
Kuzuflex A.S.

## LNG FUELING STATIONS

Companies that design, build and/or install fueling stations, including LNG vehicle tanks.

BRUGG Pipes  
Chart Inc.  
Cryospain  
Demaco Holland BV  
Inox India Private Limited  
M1 Engineering Ltd.

## LNG IMPORT TERMINALS

Design, engineering and installation of LNG import terminal systems, including vacuum jacketed piping, valves, flow controls, monitors, storage tanks.

Barber-Nichols LLC  
Demaco Holland BV  
SPS Cryogenics BV  
Cryogen Environmental Solutions  
Hose Master

## LNG PLANTS

Design, engineering and production of liquefied natural gas plants, onshore and floating, including small, medium and large capacity LNG processing plants.

CCH Equipment Co.  
Stirling Cryogenics BV  
Advanced Piping Products  
Cosmodyne (Nikkiso Cosmodyne)  
Criomec SA  
Cryogenic Analysis and Design LLC  
Feda Nitrogen Inc.  
Hysytech Srl  
Karbonsan Pressure Vessels and Trading Co.  
SIAD Macchine Impianti S.p.A.



## LNG VAPORIZERS

Comprehensive range of LNG vaporizers including ambient natural and forced draft, electric, water bath, well service, shell & tube.

Bhiwadi Cylinders Pvt. Ltd.  
Airflow North America Corp.  
Cryogas India  
Eleet Cryogenics, Inc.  
Incryo Systems Pvt. Ltd.  
Inox India Private Limited  
Taylor-Wharton  
West Warwick Welding

## LOW TEMPERATURE SUPERCONDUCTORS

Suppliers of low temperature superconductors operating down to 4 Kelvin used in clinical MRI, ultrahigh field NMR, energy storage, high energy physics and fusion research.

CryoCoax  
KEYCOM Corporation  
Oak Ridge National Laboratory  
STAR Cryoelectronics  
Bruker EST  
Everson Tesla Incorporated  
Hypres  
Luvata  
Quantum Coax  
SkyWater Technology Foundry  
Supercon, Inc.

## LUBRICANTS

Lubricants to reduce wear on components exposed to cryogenic temperatures such as pumps, bearings, cams, valves, conveyors and other types of equipment.

A-Vac Industries  
Fluoramics, Inc.  
Ratermann Manufacturing, Inc.

## MAGNETIC SHIELDING

Magnetic shield components and assemblies in various materials used in cryomodules, SRF cavities, SQUIDS, cryostats, dewars and other cryogenic applications.

Ad-Vance Magnetics, Inc.  
Amuneal Manufacturing Corp.  
Magnetic Shield Corporation  
Niowave, Inc.  
Brookhaven Technology Group, Inc.  
CAN Superconductors, s.r.o.  
Luvata  
Magnetic Shields Ltd

## MANIFOLDS

Manifolds for filling and distribution of cryogenic gases in medical, industrial and commercial applications.

Acme Cryogenics, Inc.  
Clark Industries, Inc.  
CPC-Cryolab, an MEC Company  
CryoWorks, Inc.  
Meyer Tool & Mfg., Inc.  
Technifab Products, Inc.  
Valcor Scientific  
American Industrial Gases, LLC

CONCOA  
Cryocomp  
DK LOK  
Don Wolf & Associates, Inc.  
Eleet Cryogenics, Inc.  
H & J Enterprises  
Honeywell Hymatic  
Hy-Lok USA  
Ishani Engineers  
Senior Flexonics Canada  
SGD Inc.

## MATERIALS AND COMPONENTS

Materials and components for cryogenic equipment and systems: metals, metal foils and components, magnet shim components, composite structural isolation, composite suspension bands and struts, and flexible materials for insulation, gaskets and stiffeners.

Ad-Vance Magnetics, Inc.  
Amuneal Manufacturing Corp.  
Atlas Technologies  
Creare LLC  
CryoCoax  
CryoTechnics LLC  
Fin Tube Products, Inc.  
Molecular Products, Inc.  
NASA Kennedy Cryogenics Test Laboratory  
Rockwood Composites Ltd.  
Thermal Space Ltd.  
Advanced Piping Products  
AIM Specialty Materials  
All Foils, Inc.  
Allectra Limited  
Atlas Fibre  
CMR-Direct  
CTD—Composite Technology Development, Inc.  
Dunmore Corporation  
East Far Materials Co., Ltd.  
Herose GmbH  
HM Cryogenics Sdn Bhd  
Lentus Composites  
Luvata  
Norplex-Micarta  
Omniseal Solutions  
Parker Bestobell  
PFI Advanced Equipment Manufacturing, LLC  
Quantum Coax  
Rol-Vac, L.P.  
SAES Getters USA, Inc.  
Scientific Alloys Corp.  
Spaulding Composites Inc.  
UQG Optics Ltd.

## MATERIALS CHARACTERIZATION SYSTEMS

Automated or manual systems designed to allow characterization (e.g., magnetic, electrical, thermal) of organic or inorganic materials.

KEYCOM Corporation  
kiutra GmbH  
\* Lake Shore Cryotronics, Inc.  
Quantum Design, Inc.  
Elliot Scientific Ltd.  
Energy to Power Solutions (E2P)  
inTEST Thermal Solutions

## MEASUREMENT SYSTEMS

Equipment designed to monitor motion, level, flow, pressure and temperature in cryogenic and vacuum applications.

Abess Instruments and Systems, Inc.  
Alloy Valves and Control  
Bluefors  
Cryogenic Limited  
Cryomagnetics, Inc.  
CryoTechnics LLC  
kiutra GmbH  
\* Lake Shore Cryotronics, Inc.  
Oxford Instruments NanoScience  
Scientific Instruments, Inc.  
Turbines Inc.  
CAEN ELS s.r.l. / CAEN Technologies Inc.  
DeTech LLC.  
Elliot Scientific Ltd.  
Fabrika—Sensorbuild  
Fredericks Company | Televac  
Hampshire Controls Corporation  
Hoffer Flow Controls, Inc.  
Innovative Measurement Technology Kuechler  
Janssen Precision Engineering BV  
Maximus Energy Corporation  
Philtec, Inc.  
Quantum Cryogenics Ltd.  
SENIS Group, Switzerland  
Sonicu

## MEDICAL EQUIPMENT AND ACCESSORIES

Biological storage systems, bulk storage systems for oxygen, respiratory products, cryogenic refrigerators, dewars and freezers.

Cryo Service Ltda.  
Equigas, Inc.  
Essex Industries  
Fin Tube Products, Inc.  
KEYCOM Corporation  
ASG Superconductors  
Cryonos Co.  
Cyl-Tec, Inc.  
IceCure Medical  
Venture Mfg. Co.

## MEDICAL LOX STORAGE AND DELIVERY SYSTEMS

Design, engineering, fabrication and implementation of systems for liquid oxygen generating and liquefaction installations.

Acme Cryogenics, Inc.  
Essex Industries  
Fabrum  
Imtek Cryogenics  
US Tank & Cryogenic Equipment, Inc.

## MONITORS

Single-channel through eight-channel cryogenic temperature monitors measuring temperature from 1.4 K to 800 K.

CO2Meter, Inc.  
Lake Shore Cryotronics, Inc.  
Rutherford & Titan Inc.  
Scientific Instruments, Inc.  
Sierra Lobo, Inc.  
Cole-Parmer, an Antylia Scientific company

Cryogenic Control Systems, Inc.  
DeTech LLC.  
Hampshire Controls Corporation  
Maximus Energy Corporation

## MOTOR AND FEEDBACK RESOLVERS

Motors and feedback resolvers designed to withstand vacuum, deep space cryogenic, thermal shock, launch vibration and other harsh environments.

Empire Magnetics Inc.  
Phytron, Inc.

## OPTICS, CRYOGENIC APPLICATIONS

Leak-tight optical components for installation on cryogenic equipment, room temperature vacuum windows, material suitable for thermally cycled cold windows, cryogenic objective lenses.

CryoSpectra GmbH  
IRLabs  
SkyWater Technology Foundry  
Universal Cryogenics  
UQG Optics Ltd.

## OXYGEN MONITORS

Fixed and portable oxygen monitors to monitor air for oxygen content and sound alarm in the event of O<sub>2</sub> dropping to a level too low to sustain life.

CO<sub>2</sub>Meter, Inc.  
Rutherford & Titan Inc.  
Process Insights  
PureAire Monitoring Systems  
Quantum Cryogenics Ltd.

## PHASE SEPARATORS

Design, manufacture, installation and service of off-the-shelf and custom phase separators in a variety of configurations.

Criotec Impianti SpA  
Cryogas Tech Sdn Bhd  
Cryospain  
CryoWorks, Inc.  
Cryoworld BV  
Demaco Holland BV  
Princeton CryoTech  
Rutherford & Titan Inc.  
SPS Cryogenics BV  
Technifab Products, Inc.  
Advanced Cooling Technologies, Inc.  
Cryowest Inc.  
Hysytech Srl

## PIPE SUPPORTS

Pipe support technology to prevent corrosion and improve the life of piping systems, including pipe shoes and wear pads.

Princeton CryoTech  
Advanced Piping Products  
Duna USA  
Lift-Off Pipe Supports  
Piping Technology & Products

## POSITIONING / MOTION CONTROL

Motors, actuators, positioners, drives and other equipment for industrial research laboratories, medical applications, vacuum and aerospace and other extreme environments.

RIX Industries  
attocube systems  
Dynamic Structures and Materials  
Janssen Precision Engineering BV  
Onnes Technologies  
Philtec, Inc.  
Phytron, Inc.  
Venture Mfg. Co.

## POWER SUPPLIES

Power supplies for gas mass flow meters, gas mass flow controllers and pressure transducers. Also electromagnet power supplies and superconducting magnet power supplies.

American Magnetics, Inc.  
CAEN ELS s.r.l. / CAEN Technologies Inc.  
Kepco Power  
Teledyne Hastings Instruments

## PRESSURE VESSELS

Design, engineering and fabrication of custom, single or multiple pressure vessels built to exact customer specification using stainless steel, aluminum, carbon steel, nickel, copper and exotic alloys.

Ability Engineering Technology, Inc.  
Acme Cryogenics, Inc.  
Atlas Technologies  
Bhiwadi Cylinders Pvt. Ltd.  
CCH Equipment Co.

### \* Chart Inc.

Cryofab, Inc.  
Meyer Tool & Mfg., Inc.  
Technifab Products, Inc.  
Wessington Cryogenics, Ltd.  
Anderson Dahlen  
CTD—Composite Technology Development, Inc.  
HM Cryogenics Sdn Bhd  
J.K. Cryogenics  
Karbonsan Pressure Vessels and Trading Co.  
Metalcraft (Stainless Metalcraft Ltd.)  
Nitrotec Indústria e Comércio de Equipamentos para Gases Ltda  
Piping Technology & Products  
Pope Scientific, Inc.  
Prentex Alloy Fabricators, Inc.  
R-V Industries, Inc.  
West Warwick Welding

## PROBES

Low frequency and high frequency probes to characterize electrical/opto-electrical properties of materials; fiber optic probes for precise optical excitation of wafers and devices, and for non-contact linear displacement measurements.

Advanced Research Systems, Inc.  
American Magnetics, Inc.  
Bluefors  
Cryo Industries of America, Inc.  
CryoVac low temperature technologies  
FormFactor  
KEYCOM Corporation

### \* Lake Shore Cryotronics, Inc.

Scientific Instruments, Inc.  
AdSem, Inc.  
ICEoxford  
Leiden Cryogenics  
MicroXact Inc.  
Philtec, Inc.  
Yageo Nexensos USA

## PSA OXYGEN / NITROGEN GAS PLANTS

Pressure swing adsorption oxygen and nitrogen plants and components.

Rutherford & Titan Inc.  
Feda Nitrogen Inc.  
Ranch Cryogenics, Inc.  
Solutionwerks, Inc.

## PURIFIERS

Cryogenic purifier components and complete purification systems designed to remove impurities from cryogenic gases down to sub-ppb levels.

Ability Engineering Technology, Inc.  
Air Liquide advanced Technologies  
Criotec Impianti SpA  
Cryo Technologies  
CSIC Pride (Nanjing) Cryogenic Technology Co., Ltd.  
Gardner Cryogenics  
Molecular Products, Inc.  
Quantum Design, Inc.  
Advanced Photonics, Inc.  
Cryogenic Analysis and Design LLC  
EOSgen-technologies  
Quantum Technology Corp.

## RF COMPONENTS

Components used in RF circuitry, including cryogenic isolators, circulators, amplifiers, attenuators, couplers, splitters, connectors and adaptors.

Micro Harmonics Corporation  
Signal Microwave  
Spectrum Control  
The Phoenix Company of Chicago, Inc.  
XMA Corporation  
East Coast Microwave Sales and Distribution LLC

## SAFETY APPAREL

Manufacturers and distributors of apparel designed to provide a high level of thermal protection of the body. Includes gloves, aprons and face shields.

Tempshield Cryo-Protection®  
Mapa Professional

## SAFETY SUPPLIES AND EQUIPMENT

Safety equipment, including monitoring apparatus, warning signs and placards, labels for use in cryogenic environment, cryogenic protective apparel.

Tempshield Cryo-Protection®  
Haier Biomedical Co., Ltd.  
Mapa Professional



## SAMPLERS

Sampling equipment, such as vessels with connections, valves and gauges used to receive, vaporize, contain and transport a sample of cryogenic gas for laboratory analysis.

**Criotec Impianti SpA**  
Cryo Sampler Service

## SCANNING PROBE MICROSCOPY

Techniques for applications including Atomic Force Microscopy (AFM), Scanning Hall Probe Microscopy (SHPM) and Scanning Tunneling Microscopy (STM).

**Advanced Research Systems, Inc.**  
**CryoVac low temperature technologies**  
attocube systems  
Janssen Precision Engineering BV  
NanoMagnetics Instruments Ltd.  
Onnes Technologies  
RHK Technology, Inc.

## SEALING MACHINERY

Heat sealing machinery and accessories using various processes, including: high temp, form fill, vacuum, constant heat, impulse, induction and ultrasonic.

Micronic

## SEALS, CRYOGENIC

Indium vacuum seals; mechanical seals including gas barrier, metal bellows, split, cartridge and component seals.

**Atlas Technologies**  
AIM Specialty Materials  
Austin Cryogenics Co.  
Bal Seal Engineering  
Cryogenic Machinery Corporation  
Flexaseal Engineered Seals and Systems, LLC  
Fluoramics, Inc.  
Indium Corporation  
Indium Wire Extrusion  
Omniseal Solutions  
Performance Sealing Inc.  
Solid Sealing Technology

## SENSORS

Sensors, indicators, controllers, liquid level probes, thermal exposure indicators, monitors, transmitters, vibrating sample magnetometers, fiber optic displacement probes and other precision instrumentation used in cryogenic environments.

**CO2Meter, Inc.**  
**Cryoguard LLC**  
**CryoTechnics LLC**  
**KEYCOM Corporation**  
\* **Lake Shore Cryotronics, Inc.**  
**Marathon Products, Inc.**  
**Scientific Instruments, Inc.**  
**STAR Cryoelectronics**  
**Turbines Inc.**  
AdSem, Inc.  
Aivon Ltd.  
Ball Aerospace  
Burkert Fluid Control Systems  
Cryogenic Control Systems, Inc.  
Fabrika—Sensorbuild

Fredericks Company | Televac  
Hampshire Controls Corporation  
ICEoxford  
IRLabs  
Kistler Instrumente AG  
Metrolab Technology S.A.  
Paragraf Limited  
Philtec, Inc.  
SENIS Group, Switzerland  
Senseker Engineering  
SkyWater Technology Foundry  
Sonicu  
Teledyne Hastings Instruments  
Temati  
Thames Cryogenics Ltd.  
Yageo Nexensos USA

## STORAGE VESSELS

Stock and custom vessels for storage of liquid nitrogen, helium, oxygen, argon, hydrogen and other cryogenic liquids.

**Ability Engineering Technology, Inc.**  
**Atlas Technologies**  
**Bhiwadi Cylinders Pvt. Ltd.**  
**CCH Equipment Co.**  
**Chart Inc.**  
\* **Cryofab, Inc.**  
**Cryospain**  
**Gardner Cryogenics**  
**IC Biomedical**  
**Meyer Tool & Mfg., Inc.**  
**PHPK Technologies**  
**Rutherford & Titan Inc.**  
**Technifab Products, Inc.**  
**Wessington Cryogenics, Ltd.**  
All-Weld Company Limited  
Cole-Parmer, an Antylia Scientific company  
Cryo Products BV  
Cryo Rentals Limited  
Cryo Storage Solutions Ltd.  
Cryonos Co.  
Cryotherm GmbH & Co. KG  
Kadel Engineering Corp.  
Planer  
Pope Scientific, Inc.  
Precision Cryogenic Systems, Inc.  
Prentex Alloy Fabricators, Inc.  
R-V Industries, Inc.  
Taylor-Wharton

## SUBCOOLERS

Subcoolers in various configurations, and for specific cryogens, designed to cool the liquid below its normal boiling point before storing it in large tanks for extended periods.

Cryo Technologies  
Cryofab, Inc.  
Cryogas Tech Sdn Bhd  
Demaco Holland BV  
PHPK Technologies  
Sierra Lobo, Inc.  
SPS Cryogenics BV

## SUPERCONDUCTING CABLE

Superconducting cable and related components manufactured from materials such as NbTi, Nb3Sn, MgB2, BSCCO-2212, BSCCO-2223 and ReBCO wires and tapes.

**Coax Co., Ltd.**  
**Criotec Impianti SpA**  
**CryoCoax**  
**KEYCOM Corporation**  
**STAR Cryoelectronics**  
**SuperPower Inc.**  
Advanced Conductor Technologies LLC  
AMSC  
ASG Superconductors  
Brookhaven Technology Group, Inc.  
Bruker EST  
Hyper Tech Research, Inc.  
Luvata  
Quantum Coax  
SkyWater Technology Foundry  
Solid Material Solutions  
Supercon, Inc.

## SUPERCONDUCTING COMPONENTS

Design development, fabrication, testing, packaging and production of superconducting electronics.

**American Magnetics, Inc.**  
**CryoCoax**  
**KEYCOM Corporation**  
**Niowave, Inc.**  
**Oak Ridge National Laboratory**  
**STAR Cryoelectronics**  
Brookhaven Technology Group, Inc.  
Bruker EST  
CAN Superconductors, s.r.o.  
Ceraco Ceramic Coating GmbH  
Cryogenic Electronics Institute  
Energy to Power Solutions (E2P)  
evico GmbH  
HTS-110  
Hyper Tech Research, Inc.  
Quantum Coax  
SkyWater Technology Foundry  
Solid Material Solutions  
Supercon, Inc.

## SUPERCONDUCTING CURRENT LEADS

High-temperature superconductor (HTS) current leads in various configurations for use in cryogenic applications.

**CryoCoax**  
**Cryomagnetics, Inc.**  
**Cryoworld BV**  
**SuperPower Inc.**  
Brookhaven Technology Group, Inc.  
Bruker EST  
CAN Superconductors, s.r.o.  
Energy to Power Solutions (E2P)  
HTS-110  
Hyper Tech Research, Inc.  
Quantum Coax  
Solid Material Solutions

## SUPERCONDUCTING LINACS / ACCELERATORS

Superconducting linear accelerators and their components (such as niobium RF accelerating structures, power couplers, diagnostics and cryo-modules).

Niowave, Inc.  
Elytt Energy

## SUPERCONDUCTING MAGNET POWER SUPPLIES

Superconducting magnet power supplies with bipolar, linear and true 4-quadrant output, as well as power supply programmers, for use in superconducting applications.

American Magnetics, Inc.  
Cryo Service Ltda.  
Cryomagnetics, Inc.  
CryoVac low temperature technologies  
Lake Shore Cryotronics, Inc.  
Oxford Instruments NanoScience  
STAR Cryoelectronics  
Bruker EST  
CAEN ELS s.r.l. / CAEN Technologies Inc.  
Elytt Energy  
Kepco Power

## SUPERCONDUCTING MAGNETS

Turnkey cryogen-free and liquid helium-based superconducting magnet systems, providing a range of magnet solutions.

Advanced Research Systems, Inc.  
American Magnetics, Inc.  
Cryo Industries of America, Inc.  
Cryo Service Ltda.  
Cryogenic Limited  
Cryomagnetics, Inc.  
CryoVac low temperature technologies  
kiutra GmbH  
Lake Shore Cryotronics, Inc.  
National High Magnetic Field Lab - Florida State University  
Niowave, Inc.  
Oak Ridge National Laboratory  
Oxford Instruments NanoScience  
SuperPower Inc.  
Advanced Conductor Technologies LLC  
AMSC  
ASG Superconductors  
Brookhaven Technology Group, Inc.  
Bruker EST  
ColdEdge Technologies  
Elytt Energy  
Energy to Power Solutions (E2P)  
Everson Tesla Incorporated  
Fujikura  
HTS-110  
Hyper Tech Research, Inc.  
ICEoxford  
Scientific Magnetics Ltd.  
Solid Material Solutions  
THEVA Dünnschichttechnik GmbH

## SUPERCONDUCTING WIRE

Low and high temperature superconducting wire, tape and related components, manufactured from a variety of metals and in numerous configurations, including variations in width, substrate thickness and copper stabilizer.

SuperPower Inc.  
Advanced Conductor Technologies LLC  
AMSC  
ASG Superconductors  
Brookhaven Technology Group, Inc.  
Bruker EST  
CMR-Direct  
Everson Tesla Incorporated  
Fujikura  
Hyper Tech Research, Inc.  
Luvata  
Solid Material Solutions  
Supercon, Inc.  
THEVA Dünnschichttechnik GmbH

## SUPERCONDUCTIVITY TEST INSTRUMENTATION

Equipment to test the superconduction performance of wires and components.

American Magnetics, Inc.  
Cryomagnetics, Inc.  
KEYCOM Corporation  
CAEN ELS s.r.l. / CAEN Technologies Inc.  
Hypres  
MicroXact Inc.  
SENIS Group, Switzerland  
THEVA Dünnschichttechnik GmbH

## TEST INSTRUMENTS FOR ELECTRICAL / ELECTRONIC SYSTEMS

Diagnostic equipment to test effect on signal integrity of electrical and electronic cabling, interconnection, feed-through, and grounding systems.

Abess Instruments and Systems, Inc.  
CoolCAD Electronics  
CryoTechnics LLC  
KEYCOM Corporation  
Scientific Instruments, Inc.  
AltoNovus Ltd.  
Senseker Engineering

## THERMAL COMPENSATORS

Thermal compensators provide compensation of stresses caused by varying thermal expansion rates and alignment of parts during installation.

## THERMAL SHROUDS

Design, engineering and fabrication of thermal shrouds to customer specifications in a variety of materials for use in laboratories, scientific applications and astrophysics.

Abess Instruments and Systems, Inc.  
Meyer Tool & Mfg., Inc.  
PHPK Technologies  
Thermal Space Ltd.  
Dynavac

## THERMAL STRAPS

Pyrolytic graphite film, graphite fiber, aluminum and copper thermal straps are flexible thermal connections used between heat sources and heat sinks.

Rockwood Composites Ltd.  
Space Dynamics Laboratory  
Technology Applications, Inc.  
Thermal Management Technologies  
Thermal Space Ltd.  
Active Space Technologies  
Advanced Cooling Technologies, Inc.  
Thermotive LLC

## THERMAL VACUUM TEST CHAMBERS

Thermal vacuum test chambers to ensure functionality when used in harsh environments such as satellites and other spacecraft.

Abess Instruments and Systems, Inc.  
Criotec Impianti SpA  
Demaco Holland BV  
Eta Space  
NASA Kennedy Cryogenics Test Laboratory  
PHPK Technologies  
Absolut System  
Anderson Dahlen  
CryoHiVac Consulting LLC  
Dynavac  
Kurt J. Lesker Company  
MicroXact Inc.  
Prentex Alloy Fabricators, Inc.  
Senseker Engineering  
Thermotron Industries  
Universal Cryogenics

## TRANSFER LINES / TRANSFER HOSES

Vacuum insulated piping, vacuum jacketed piping, transfer lines, transfer hoses.

Ability Engineering Technology, Inc.  
Acme Cryogenics, Inc.  
Air Liquide advanced Technologies  
Clark Industries, Inc.  
CPC-Cryolab, an MEC Company  
Criotec Impianti SpA  
Cryo Industries of America, Inc.  
Cryo Technologies  
Cryofab, Inc.  
Cryogas Tech Sdn Bhd  
Cryospain  
CryoVac low temperature technologies  
CryoWorks, Inc.  
Demaco Holland BV  
Eqigas, Inc.  
Gas Equipment Company, Inc.  
\* IC Biomedical  
Omega Flex, Inc.  
Penflex  
PHPK Technologies  
Rutherford & Titan Inc.  
SPS Cryogenics BV  
Technifab Products, Inc.  
Vacuum Barrier Corporation  
CONCOA  
Cryo Fields  
Cryocomp  
Cryowest Inc.



Dixon  
Elytt Energy  
H & J Enterprises  
Hose Master  
International Technisystems, Inc.  
IONEX Research Corporation  
Kadel Engineering Corp.  
Meiji Rubber & Chemical Co., Ltd.  
Nexans Deutschland GmbH  
Planer  
Precision Cryogenic Systems, Inc.  
Sanitary Fittings, LLC  
Schwannner GmbH  
Senior Flexonics Canada  
Thames Cryogenics Ltd.  
Thunder Technologies LLC  
TS Italia Srl—Tecnologie e Sistemi

## TURBOEXPANDERS

**Turboexpanders for natural gas processing and the petrochemical industry, and to produce cryogenic refrigeration for fractional distillation and liquefaction of air in air separation plants.**

Air Liquide advanced Technologies  
CCH Equipment Co.  
Creare LLC  
Nikkiso Cryogenic Industries  
Cryo-Plant International LLC  
Cryostar USA  
European Cryogenics s.r.o.  
PBS Velka Bites

## USED CRYOGENIC EQUIPMENT

**Sellers, refurbishers and buyers of used and reconditioned cryogenic equipment.**

CCH Equipment Co.  
Rutherford & Titan Inc.  
American Industrial Gases, LLC  
Capovani Brothers Inc.  
CBI Surplus  
Cryo-Plant International LLC  
Cryogenic Machinery Corporation  
Eleet Cryogenics, Inc.  
Lone Star Cryogenics, Inc.  
Ranch Cryogenics, Inc.  
US Tank & Cryogenic Equipment, Inc.

## VACUUM PUMPS

**Vacuum pump systems and high vacuum pumps, including mechanical (oil-sealed rotary vane and oil-free), cryogenic, turbomolecular, diffusion and getter pumps.**

Creare LLC  
CryoSRV, LLC  
PHPK Technologies  
Sumitomo (SHI) Cryogenics of America, Inc.  
Vacuum Energy Inc.  
A-Vac Industries  
Austin Cryogenics Co.  
Capovani Brothers Inc.  
Edwards Vacuum  
High Tech Services  
HSR AG  
Kurt J. Lesker Company  
Leybold USA Inc.  
Pfeiffer Vacuum  
SAES Getters USA, Inc.  
Welch Vacuum by Gardner Denver

## VACUUM SYSTEMS

**Engineering, design, integration, construction, installation and service of complete vacuum systems and components for cryogenic applications.**

Abess Instruments and Systems, Inc.  
Atlas Technologies  
Bluefors  
Criotec Impianti SpA  
Cryo Technologies  
CryoSRV, LLC  
CryoVac low temperature technologies  
Meyer Tool & Mfg., Inc.  
Oxford Instruments NanoScience  
PHPK Technologies  
A-Vac Industries  
Active Space Technologies  
Anderson Dahlen  
Dynavac  
High Tech Services  
HSR AG  
Kryooprema  
Kurt J. Lesker Company  
Maximus Energy Corporation  
Metalcraft (Stainless Metalcraft Ltd.)  
Nexans Deutschland GmbH  
Prentex Alloy Fabricators, Inc.  
SAES Getters USA, Inc.

## VACUUM VESSELS

**Custom and stock vacuum chambers in a variety of sizes, fabricated in stainless steel, carbon steel, aluminum, inconel, copper and exotic alloys.**

Abess Instruments and Systems, Inc.  
Ability Engineering Technology, Inc.  
Atlas Technologies  
CCH Equipment Co.  
Clark Industries, Inc.  
\* Cryofab, Inc.  
FormFactor  
Meyer Tool & Mfg., Inc.  
PHPK Technologies  
Wessington Cryogenics, Ltd.  
Anderson Dahlen  
Dynavac  
JEVI Vacuum Instruments  
Kadel Engineering Corp.  
Kurt J. Lesker Company  
Metalcraft (Stainless Metalcraft Ltd.)  
Pfeiffer Vacuum  
Precision Cryogenic Systems, Inc.  
Prentex Alloy Fabricators, Inc.  
Schwannner GmbH

## VALVES

**Shut-off, relief, metering and liquid flow control valves, high pressure, solenoid and specialty gas valves for use in cryogenic and vacuum applications.**

Ability Engineering Technology, Inc.  
Acme Cryogenics, Inc.  
Alloy Valves and Control  
Ampo Poyam Valves (AMPO)  
Atlas Technologies  
Bhiwadi Cylinders Pvt. Ltd.  
CPC-Cryolab, an MEC Company  
Equigas, Inc.  
Gas Equipment Company, Inc.  
Magnatrol Valve Corporation

PHPK Technologies

RegO  
Rutherford & Titan Inc.  
SPS Cryogenics BV  
Stöhr Armaturen  
Technifab Products, Inc.  
Valcor Scientific  
WEKA AG  
Advanced Valve & Instrument Inc.  
Burkert Fluid Control Systems  
Clark Cooper Div.  
Conval, Inc.  
\* Cryocomp  
Dixon  
DK LOK  
Don Wolf & Associates, Inc.  
Dynamic Structures and Materials  
Flowserve Corporation  
Gosco Valves Inc.  
Habonim Industrial Valves & Actuators  
Haskel International, LLC  
Herose GmbH  
HSR AG  
Hy-Lok USA  
IGPH Ltd.  
International Technisystems, Inc.  
Kurt J. Lesker Company  
Link Industrial Technologies Ltd  
m-tech gmbh  
Ningbo DSW International Co., Ltd.  
OMB Valves, Inc.  
Parker Bestobell  
PBM Inc. Valve Solutions  
Ratermann Cryogenics  
Ratermann Manufacturing, Inc.  
Ray Murray Inc.  
Re-Vac Inc.  
S&S Valve Co., Ltd.  
Sanitary Fittings, LLC  
Schwannner GmbH  
Score Valves  
Senior Flexonics Canada  
Sesto Valves  
SGD Inc.  
Thames Cryogenics Ltd.  
VAT, Inc.  
Velan SAS  
Zwick Armaturen GmbH

## VAPOR-COOLED CURRENT LEADS

**Standard and custom leads for efficient introduction of high currents (300 K to 4.2 K) into the liquid helium environment.**

American Magnetics, Inc.  
Cryomagnetics, Inc.  
CryoVac low temperature technologies  
WEKA AG  
Cosmotec, Inc.  
Solid Sealing Technology

## VAPORIZERS

**Ambient air, electric, steam, circulating water, water bath and fuel fired vaporizers for use in cryogenic conditions.**

Acme Cryogenics, Inc.  
Bhiwadi Cylinders Pvt. Ltd.  
CCH Equipment Co.  
\* Chart Inc.  
Criotec Impianti SpA

Equigas, Inc.  
Kelvin International Corporation  
Nikkiso Cryogenic Industries  
Princeton CryoTech  
Airflow North America Corp.  
Cryogas India  
CS&P Technologies, LP  
FIBA Technologies, Inc.  
IGPH Ltd.  
Incryo Systems Pvt. Ltd.  
J.K. Cryogenics  
Karbonsan Pressure Vessels and Trading Co.  
Nitrotec Indústria e Comércio de Equipamentos para Gases Ltda  
Ratermann Manufacturing, Inc.  
Ray Murray Inc.  
Shell-N-Tube Pvt. Ltd.  
Taylor-Wharton  
West Warwick Welding

## VIBRATION DAMPERS

Vibration dampers convert the kinetic energy of moving components into thermal energy, reducing hard stops and large oscillation amplitudes.

Flexaseal Engineered Seals and Systems, LLC  
Onnes Technologies

## VOLUME COMPENSATORS

Compensates for volumetric changes of liquid or gas through expansion and contraction. Welded bellows design will ensure that the system remains operational.

Flexaseal Engineered Seals and Systems, LLC

## VSA OXYGEN / NITROGEN GAS PLANTS

Vacuum swing adsorption oxygen and nitrogen plants.

CCH Equipment Co.  
Criomec SA  
Feda Nitrogen Inc.  
Noblegen Cryogenics  
Ranch Cryogenics, Inc.  
Solutionwerks, Inc.

## WELDING PRODUCTS

High performance welding materials of special grades with special testing requirements that can withstand cryogenic temperatures used in components for products such as LNG tanks, pumps, gas cylinders, pressure vessels and heat exchangers.

Midalloy

# SERVICES

## CERTIFICATION AND INSPECTION SERVICES

Certification and inspection services in various areas of cryogenics, including certification of pressure vessels and other cryogenic products to code.

Bhiwadi Cylinders Pvt. Ltd.  
Eta Space  
Gardner Cryogenics  
Turbines Inc.  
Wessington Cryogenics, Ltd.  
Airflow North America Corp.  
Bureau Veritas Inspection and Insurance Co.  
Cryotherapy Repair Service  
Deep Cryogenics International  
Dependable Truck & Tank Limited  
Shortall Meter  
Willets Midstream Services, LLC

## CONFERENCE & EXHIBIT MANAGEMENT

Providers of conference and exhibit management services for events and individual exhibitors, including planning, editorial management, registration and non-technical management, as well as exhibit booth design and construction for individual exhibitors.

Centennial Conferences

## CONSULTING AND ENGINEERING SERVICES

Services with cryogenic expertise—including research, engineering, design, manufacture, assembly, testing and operation—for prototypes, custom cryogenic projects and applications with all cryogenic fluids. Development of materials and new technology.

Ability Engineering Technology, Inc.  
Canadian Nuclear Laboratories  
CoolCAD Electronics  
Create LLC  
CryoSRV, LLC  
CryoTechnics LLC  
CryoVac low temperature technologies  
Cryoworld BV  
Danaher Cryogenics  
Demaco Holland BV  
EPSIM Corporation  
Eta Space  
Imtek Cryogenics  
Midalloy  
NASA Kennedy Cryogenics Test Laboratory  
Oak Ridge National Laboratory  
Oxford Instruments NanoScience  
Scientific Instruments, Inc.  
shirokuma GmbH  
Space Dynamics Laboratory  
Tech4Imaging LLC  
The Aerospace Corporation  
Thermal Management Technologies  
Turbines Inc.  
Vacuum Energy Inc.  
West Coast Solutions  
Absolut System  
Advanced Cooling Technologies, Inc.  
Advanced Cryogenics, Ltd.

Brookhaven Technology Group, Inc.  
Bureau Veritas Inspection and Insurance Co.  
CRYO-Schippl Consultant Cryogenic Systems  
Cryogenic Analysis and Design LLC  
Cryoguy  
CryoHiVac Consulting LLC  
CTD—Composite Technology Development, Inc.  
DeTech LLC.  
Elliott Group  
Energy Evolution LLC  
Energy Flux  
European Cryogenics s.r.o.  
Flexaseal Engineered Seals and Systems, LLC  
Haier Biomedical Co., Ltd.  
High Tech Services  
iLenSys Technologies India Pvt. Ltd.  
ILK Dresden—Institute of Air Handling and Refrigeration  
Iris Technology  
Janssen Precision Engineering BV  
Kornbluth Helium Consulting, LLC  
Label Solutions Inc.  
Leiden Cryogenics  
Magna Energy Storage Systems (Magna ESS)  
Maximus Energy Corporation  
Ningbo DSW International Co., Ltd.  
Nordstern Associates LLC  
Polar Cryogenics  
Prestige Technology (S) Pte Ltd.  
Quest Thermal Group  
RS&H  
SENIS Group, Switzerland  
Sinoscience Fullcryo  
Solutionwerks, Inc.  
Thunder Technologies LLC  
Universal Cryogenics  
Universal Industrial Gases, LLC (UIG)  
Willets Midstream Services, LLC  
Yetinspace, Inc.

## CRYOGENIC GRINDING SERVICES

Companies that provide cryogenic grinding of materials such as used tires and other rubber components, plastic, drugs and foods, including spices.

Airflow North America Corp.  
Allgrind Plastics, Inc.

## CRYOGENIC TREATMENT, DEEP-FREEZING AND SUB-ZERO STABILIZING SERVICES

Providers of deep cryogenic processing, deep-freezing and sub-zero stabilization of metals and other materials to improve wear resistance and service life.

CryoEdge&trade;  
Cryogenic Institute of New England, Inc.  
DMP CryoSystems, Inc.  
Circle City Cryogenics  
Colorado Cryogenic Processing  
Cryogenics International  
Cryogenix Ltd.  
CryoPlus, Inc.  
CTP Cryogenics  
Deep Cryogenics International  
ILK Dresden—Institute of Air Handling and Refrigeration  
Polar Cryogenics  
UB Cryogenic Solutions



## DEFLASHING AND DEBURRING SERVICES

Providers of deflashing and deburring services and media for metal and plastic components to remove machine burrs or mold flash.

Cryogenic Institute of New England, Inc.  
Abrasive Supply Company  
Cryoblast Deflashing UK Ltd  
Maxi-Blast, Inc.  
Polar Cryogenics

## EDUCATION / TRAINING COURSES

Providers of seminars, specialty education and advanced training courses in specific cryogenic functions and applications.

Canadian Nuclear Laboratories  
CRYOCO LLC  
CryoVac low temperature technologies  
Danaher Cryogenics  
Equigas, Inc.  
Facility for Rare Isotope Beams – Michigan State University  
Penflex  
Bureau Veritas Inspection and Insurance Co.  
Cryo Products BV  
Cryoguy  
Energy Evolution LLC  
High Tech Services  
Karlsruhe Institute of Technology (KIT)  
UNASIS International  
Willets Midstream Services, LLC

## EQUIPMENT RENTAL

Rental of cryogenic equipment including storage vessels, dewars and bulk tanks.

Cryo Service Ltda.  
Gardner Cryogenics  
Princeton CryoTech  
Airflow North America Corp.  
American Industrial Gases, LLC  
Cryo Products BV  
Cryo Rentals Limited  
cryoDirect  
DeTech LLC.  
High Tech Services  
Incryo Systems Pvt. Ltd.  
Lone Star Cryogenics, Inc.  
Prestige Technology (S) Pte Ltd.  
Sauer Compressors USA  
Tobin Scientific

## FIELD SERVICE

Providers of cryogenic equipment repair, installation, refurbishing and retrofitting services at customer's location.

Acme Cryogenics, Inc.  
Bhiwadi Cylinders Pvt. Ltd.  
Cryo Service Ltda.  
Cryogas Tech Sdn Bhd  
Cryonova Process Systems, LLC  
CryoSRV, LLC  
CryoVac low temperature technologies  
CryoWorks, Inc.  
Danaher Cryogenics  
DMP CryoSystems, Inc.  
IC Biomedical  
Independence Cryogenic Engineering (ICE)  
Niowave, Inc.

Oxford Instruments NanoScience  
Technifab Products, Inc.  
Turbines Inc.  
WEKA AG

Bishop Pipe Freezing USA  
Cosmodyne (Nikkiso Cosmodyne)  
Criomec SA  
Cryolor  
CryoPacific, Inc.  
Cryotherapy Repair Service  
Dixon  
Edwards Vacuum  
Eleet Cryogenics, Inc.  
Elliott Group  
European Cryogenics s.r.o.  
Fives Cryo Inc.  
High Tech Services  
Incryo Systems Pvt. Ltd.  
Leiden Cryogenics  
Prestige Technology (S) Pte Ltd.  
Sauer Compressors USA  
Senior Flexonics Canada  
Shortall Meter  
Solutionwerks, Inc.  
Universal Industrial Gases, LLC (UIG)  
Willets Midstream Services, LLC

## INSULATION RESEARCH

Research and testing of the qualities, capabilities, effectiveness and uses of various types of insulation for cryogenic projects.

Aerospace Fabrication & Materials, LLC  
Alkegen  
Beyond Gravity Austria GmbH  
Eta Space  
NASA Kennedy Cryogenics Test Laboratory  
Oak Ridge National Laboratory  
Rockwood Composites Ltd.  
Sierra Lobo, Inc.  
Space Dynamics Laboratory  
Technology Applications, Inc.  
Thermal Space Ltd.  
Cryogenic Analysis and Design LLC  
CTD—Composite Technology Development, Inc.  
Energy Evolution LLC  
European Cryogenics s.r.o.  
Karlsruhe Institute of Technology (KIT)  
Quest Thermal Group  
Rochling Composites USA  
Soditech  
Yetinspace, Inc.

## MACHINING AND WELDING SERVICES

Manufacturers with expertise in welding a variety of metals and alloys for cryogenic applications.

Ability Engineering Technology, Inc.  
Ad-Vance Magnetics, Inc.  
Meyer Tool & Mfg., Inc.  
Rutherford & Titan Inc.  
All-Weld Company Limited  
Anderson Dahlen  
Atlas Fibre  
Bellows Systems, Inc.  
Criomec SA  
Cryowest Inc.  
European Cryogenics s.r.o.  
High Tech Services

Ishani Engineers  
Magnus Precision Manufacturing, Inc.  
Metalcraft (Stainless Metalcraft Ltd.)  
PBS Velka Bites  
Prentex Alloy Fabricators, Inc.  
Prestige Technology (S) Pte Ltd.  
West Warwick Welding  
Yetinspace, Inc.

## MATERIALS RESEARCH

Research and development of high performance materials used primarily in low temperature and high magnetic field environments and energy applications.

Amuneal Manufacturing Corp.  
CryoTechnics LLC  
NASA Kennedy Cryogenics Test Laboratory  
Scientific Instruments, Inc.  
Technology Applications, Inc.  
Thermal Space Ltd.  
AdSem, Inc.  
Advanced Conductor Technologies LLC  
Advanced Cooling Technologies, Inc.  
Atlas Fibre  
Brookhaven Technology Group, Inc.  
CTD—Composite Technology Development, Inc.  
Deep Cryogenics International  
Energy Evolution LLC  
European Cryogenics s.r.o.  
Hyper Tech Research, Inc.  
Karlsruhe Institute of Technology (KIT)  
Label Solutions Inc.  
Omniseal Solutions  
Rochling Composites USA  
SAES Getters USA, Inc.  
UNASIS International  
Yetinspace, Inc.

## PIPE FREEZING

Field service to repair leaks in pipe systems, preventing system drain-downs and eliminating costly venting procedures without interrupting process.

Princeton CryoTech  
Bishop Pipe Freezing USA

## SHOP SERVICE

Providers of cryogenic equipment repair, installation, refurbishing and retrofitting services in their shop or factory.

Ability Engineering Technology, Inc.  
Chart Inc.  
Cryo Service Ltda.  
Cryo Technologies  
Cryogenic Institute of New England, Inc.  
CryoSRV, LLC  
CryoWorks, Inc.  
DMP CryoSystems, Inc.  
Essex Industries  
Gardner Cryogenics  
Linde Cryogenics, Division of Linde Engineering Americas  
Nikkiso Cryogenic Industries  
Sumitomo (SHI) Cryogenics of America, Inc.  
WEKA AG  
Austin Cryogenics Co.  
Cryo Sampler Service  
Cryogenic Machinery Corporation  
Cryolor



Cryotherapy Repair Service  
Elliott Group  
High Tech Services  
HM Cryogenics Sdn Bhd  
JEVI Vacuum Instruments  
Ningbo DSW International Co., Ltd.  
Polar Cryogenics  
US Tank & Cryogenic Equipment, Inc.

## SPECIALTY AND CRYOGENIC TRANSPORT SERVICES

Providers of high-priority, time-sensitive, specialized transport solutions for cryogenic equipment and projects by air or ground transportation.

**Cryo Service Ltda.**  
Airflow North America Corp.  
CryoHiVac Consulting LLC  
DeTech LLC.  
Shortall Meter  
Sinoscience Fullcryo  
Tobin Scientific

## TESTING AND RESEARCH SERVICES

Testing services such as prototype and high-temperature semiconductor (HTS) applications testing, cryogenic infrastructure, leak-testing, cooling systems used in nuclear fusion and in particle accelerators.

**Ability Engineering Technology, Inc.**  
**Canadian Nuclear Laboratories**  
\* **CoolCAD Electronics**  
Creare LLC  
Criotec Impianti SpA  
CryoSRV, LLC  
CryoTechnics LLC  
CryoVac low temperature technologies  
Danaher Cryogenics  
Demaco Holland BV  
Eta Space  
Gardner Cryogenics  
Imtek Cryogenics  
NASA Kennedy Cryogenics Test Laboratory  
National High Magnetic Field Lab - Florida State University  
Oak Ridge National Laboratory  
Scientific Instruments, Inc.  
Space Dynamics Laboratory  
Tech4Imaging LLC  
Technology Applications, Inc.  
The Aerospace Corporation  
Thermal Management Technologies  
Thermal Space Ltd.  
TRIUMF  
West Coast Solutions  
Absolut System  
Advanced Cooling Technologies, Inc.  
Bellows Systems, Inc.  
Cryogenic Electronics Institute  
Cryowest Inc.  
CTD—Composite Technology Development, Inc.  
Dayton T. Brown Inc.  
Deep Cryogenics International  
Elliott Group  
Energy Evolution LLC  
Energy Flux  
Erbe Engineering, Inc.  
European Cryogenics s.r.o.  
Flexaseal Engineered Seals and Systems, LLC

H & J Enterprises  
High Tech Services  
ILK Dresden—Institute of Air Handling and Refrigeration  
Karlsruhe Institute of Technology (KIT)  
Kratos SRE  
Label Solutions Inc.  
Lentus Composites  
Magna Energy Storage Systems (Magna ESS)  
Maximus Energy Corporation  
MicroXact Inc.  
NIST  
Norman Filter Company  
Onnes Technologies  
Polar Cryogenics  
Precision Measurements and Instruments Corporation  
Prestige Technology (S) Pte Ltd.  
Quest Thermal Group  
SENIS Group, Switzerland  
Senseker Engineering  
THEVA Dünnschichttechnik GmbH  
Yarmouth Research and Technology, LLC  
Yetispace, Inc.

## Who's New in the Cold Facts Buyer's Guide?

**Cold Facts** Buyer's Guide is the place to find suppliers in every area of cryogenics and superconductivity. These are the new suppliers added to the Buyer's Guide since the last issue of **Cold Facts**. Find it online at [csabg.org](http://csabg.org).

## Bellows Systems, Inc.

Cryogenic service bellows for applications ranging from full vacuum and cryogenic temperatures to high pressure and temperatures. Products include cryogenic transfer line bellows, double wall vacuum insulated pipe bellows and cryogenic transfer hose.

## CBI Surplus

CBI Surplus specializes in both new and used scientific and industrial equipment. The company's extensive inventory encompasses a wide range of products, from flow controllers and analyzers to leak detection equipment and cooling systems and equipment.

## Dragon Valves, Inc.

Manufacturer of high pressure cryogenic instrumentation needle valves, manually and remotely operated in end connection sizes from 1/4" through 1". Cleaning for O<sub>2</sub> service is available.

## NanoMagnetics Instruments Ltd.

NMI specializes in NV-Center microscopy, high-res confocal microscopy, HEMS, AC & DC measurements, VSM, and sub-nanometer nanopositioners. Their cryostat systems enable low temperature research, advancing quantum sciences and material characterization.