

MRI



## Praxair Cryomag Services: Combined Cryogen And Magnet Services

Praxair Cryomag Services was created specifically to service the needs of the Magnetic Resonance Imaging industry. When it comes to helium and magnet integrity, Praxair is recognized for its in-depth, hands-on experience in helium supply, related technologies and service. Praxair Cryomag Services combines a leading helium supplier with an in-house service team dedicated to superconducting magnet service. Created with the customer in mind, this new Praxair company is focused specifically on the needs of the Magnetic Resonance Imaging industry. One resource for all your MRI services — that's the Praxair Cryomag Services commitment.



### Working With The Leader

We have been a leader in helium refining, supply, distribution and processing technology since the turn of the 20th century. Combining superconducting magnet services targeted to benefit the MRI market with extensive helium experience makes Praxair Cryomag Services the leading choice today. We provide all of these services: high product quality; reliable delivery; long-term global supply; hands-on, expert magnet services; contract coverage; customer and emergency service 24 hours a day, 7 days a week.

These are the reasons why Praxair Cryomag Services is the company you can trust with your MRI system needs.

*Contact Praxair Cryomag Services at 1-800-328-1654 today.  
Just one call covers all your MRI needs.*



# Praxair Cryomag Services: Your One-stop Source For MRI Magnet And Cryogen Service

## It Starts With The Basics

Liquid helium has become one of the most important materials in medical science. Its ability to cool certain metal alloys below their critical temperature, where they become superconducting, is essential for the production and operation of magnets used in magnetic resonance imaging.

Liquid helium transfilling is performed at your facility or at our mobile MRI facility to keep your magnets at the proper temperature for superconductivity. Our high-performance, super-insulated dewars have capacities from 60 to 4,000 liters to supply the exact amount of cryogen that your system requires. By monitoring your helium level, you can schedule transfilling of additional liquid as needed with one simple call.

## But It's More Than Just Helium

Praxair Cryomag Services offers services beyond the highest-quality helium. Our expanded service encompasses your magnet operation, coldhead maintenance, system evaluation and performance monitoring, just to name a few. With decades of combined experience, the Praxair Cryomag Services technicians

in North America have the expertise to maintain, troubleshoot, test and repair your magnet cryogen system and ensure that your other equipment systems are performing at their peak.

## Cryogen System Integrity

Praxair knows cryogenics. Coupled with that knowledge is our industry-leading service capabilities to address the compressor system, vacuum integrity, cryogen meter calibration and repair to system elements. We believe in planned service as opposed to expensive emergencies. That's the Praxair Cryomag Services way.

## Coldhead System Maintenance

This system could be the most important part of your operation. When the coldhead is functioning properly, your system minimizes boil-off of essential helium and your magnet temperature remains precise. However, when it is neglected, the coldhead doesn't function as designed and your operational costs can greatly increase. Praxair Cryomag Services offers complete contract coverage to maintain your coldhead, including

replacement, if necessary. This regular investment actually saves you money in the long run by eliminating unplanned downtime, assuring efficient cryogen use and keeping your equipment operating as designed.

## Magnet Services

We pride ourselves in knowing how to service your magnets to ensure they continue to operate at peak performance. Shimming, repair and magnet cool-down are just the beginning of the services we perform when maintaining your magnet systems. During regularly scheduled maintenance periods, we check your system to be sure everything is working properly and can alert you when corrective action must be taken. That advance notice will save your operation time and money, and keep your MRI up and running.



# MAGNET SERVICES

## Total System Service Provider

*Prior to the creation of Praxair Cryomag Services, Magnaserv worked individually with Praxair as our national cryogen supplier and with Cryomag Services as a regional transfilling services provider. As a nationwide MRI total system service provider, we have chosen Praxair Cryomag Services to take care of all cryogen transfilling and related magnet issues for us. This allows us to take better care of our customers. The business decision to outsource select magnet services provides the opportunity to be more cost-effective and provide better service; with Praxair Cryomag Services, we get both.*

Len Spooner,  
President, MagnaServ, Inc.

## A Win-Win Situation

*The opportunity to work with Praxair Cryomag Services was a win-win situation for our customers. Our contracted MRI customer base benefits from Praxair's extensive cryogen delivery expertise combined with magnet servicing. This combination of services creates a more streamlined cryogen delivery process, allowing BioMagnetics to focus on other phases of a complete MRI service package.*

Jeff Yocum,  
Vice President, BioMagnetics, Ltd.

## A True Magnet Service Business

*The Hitachi MRI installation contract extension is still another validation that the MRI marketplace is recognizing and accepting the Praxair Cryomag Services strategy of operating a true magnet service business under the umbrella of a major cryogen supplier. Hitachi has worked with the Cryomag Services team for several years, and the merger with Praxair further strengthens that relationship. Relying on Cryomag and now Praxair Cryomag Services for our system installations has greatly decreased startup cycle time, allowing our MRI customers to open practices and begin providing their services as soon as possible.*

Jim Confer, Hitachi Vice President, Service

## Expert Sourcing For Spare Parts

Since we also service the needs of the original equipment manufacturers (OEMs) of MRI systems, our extensive knowledge allows us to source replacement parts designed for your system. Our sourcing capabilities reduce the need for your staff to spend valuable time comparing prices and sourcing parts. One call to Praxair Cryomag Services gets the job done — saving you time and money.

## Optimization Of Cryogen Consumption

Praxair Cryomag technicians and your staff regularly monitor your MRI systems, keeping a close eye on your helium use and consumption. This data is compiled in our offices and allows us to spot trends that may indicate future maintenance needs well ahead of when they become



critical. Making adjustments and minor corrections as part of our regular maintenance service keeps your MRI up and running smoothly. Be sure to ask your Praxair representative about this unique service offering.

## Pre-owned Equipment Evaluations

Looking to purchase used equipment? Praxair Cryomag Services can help by evaluating the system to advise you on the current market situation and work with you to estimate operation costs and check the integrity of key systems. We can even help match up an appropriate seller to move the transaction forward.

The same holds true for selling one of your systems. We can help you package it for a potential buyer and ensure that all components are in working order.

## On The Go? Services Bundled At Mobile MRI Service Stations

For mobile MRI unit operators, unproductive time is an unfortunate part of the day. Coordinating times and locations for cryogen delivery, searching for storage space and securing external power sources contribute to that downtime.

As part of Praxair Cryomag Services' ongoing commitment to provide new and enhanced service to the marketplace, we have expanded the

capabilities at our mobile MRI stations. In addition to providing a ready supply of cryogenics and general trailer housekeeping, our stations now include superconducting magnet servicing and maintenance to keep your mobile operations up and running. These services allow your operators to reduce unproductive time and make your mobile MRI available to serve more customers.

## What The Future Holds — Developing Comprehensive MRI System Coverage

Praxair Cryomag Services is continually improving and expanding services to the MRI industry. We are currently developing pilot programs to offer broader, more comprehensive services that will include the computer, RF generator and other systems in addition to the cryogen, magnet and coldhead services that we currently perform. When fully implemented, this truly unique capability promises to be the only one of its kind in the industry.





© Copyright 2003  
Praxair Technology, Inc.  
All rights reserved  
  
www.praxair.com  
info@praxair.com

*Praxair* and the *Flowing Airstream* design  
are registered trademarks of Praxair  
Technology, Inc. in the United States  
and/or other countries.

The information contained herein is  
offered for use by technically qualified  
personnel at their discretion and risk  
without warranty of any kind.

Printed in the United States of America  
10-03  
P-8849 5M

North America  
World Headquarters  
Praxair, Inc.  
39 Old Ridgebury Road  
Danbury, CT 06810-5113  
USA

*Telephone:*  
1-800-PRAXAIR  
(1-800-772-9247)  
(716) 879-4077

*Fax:*  
1-800-772-9985  
(716) 879-2040

Canada, Mexico, Puerto Rico, USA

South America  
White Martins Gases Industriais, Ltda.  
Rua Mayrink Veiga, 9  
Rio de Janeiro, RJ  
20090-050  
Brazil

*Telephone:*  
55 (21) 588-6622

*Fax:*  
55 (21) 588-6794

Argentina, Bolivia, Brazil, Chile, Colombia,  
Paraguay, Peru, Uruguay, Venezuela

Europe & Middle East  
Praxair, Inc.  
Calle Orense, 11  
28020 Madrid  
Spain

*Telephone:*  
34 (91) 453-3030

*Fax:*  
34 (91) 555-4307

Austria, Belgium, Bulgaria, Croatia,  
Czech Republic, France, Germany,  
Hungary, Israel, Italy, The Netherlands,  
Portugal, Romania, Slovakia, Slovenia,  
Spain, Switzerland, Turkey, U.K.

Asia  
Praxair Asia, Inc.  
17th floor, China Merchants Tower  
161 Lujiazui East Road, Pudong  
Shanghai 200120  
People's Republic of China

*Telephone:*  
86 (21) 58827100

*Fax:*  
86 (21) 58824059

China, India, Japan, Korea,  
Malaysia, Singapore, Taiwan, Thailand