

Advanced **Technology** Liquefiers

Automated 80 and 160 Liter Capacity Helium Liquefiers

Quantum Design's Advanced Technology Liquefiers (ATL) along with its innovative Helium Recovery, Storage & Purification Systems allow you to recover the helium gas currently being lost from the normal boil off and helium transfers of your MRI and other cryogenic instruments.

Advanced Technology Liquefiers Provide:

- Easy-to-Use, Fully Automated Operation
- Portable Liquefiers for Easy Transfers
- High Liquefaction Rates; Energy Efficiency
- Self-Cleaning, Uninterrupted Service
- No Gas Cylinders Needed for Helium Transfers

ATL160

Dewar Capacity: 160 liters

Liquefaction Rate: Greater than 22 liters / day*

Fully Automated Touch Panel Control

ATL80 (also available)

Dewar Capacity: 80 liters

Liquefaction Rate: Greater than 12 liters / day*

Fully Automated Touch Panel Control

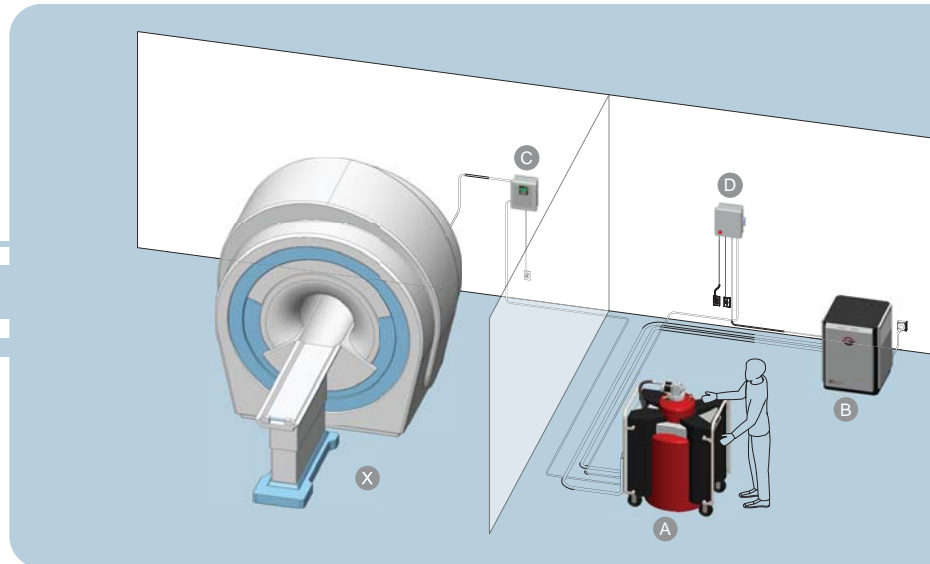
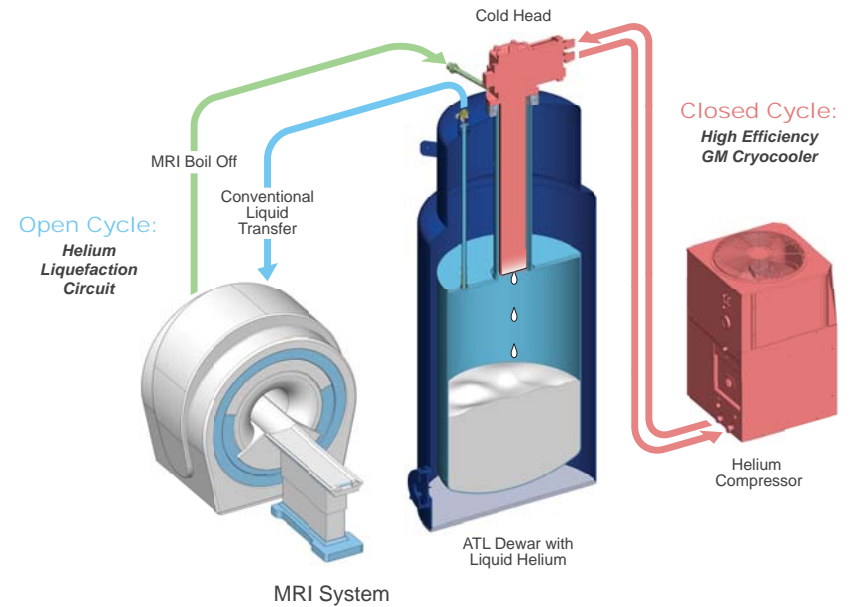
Integrated Compressor



**Liquefaction rates vary based on input helium quality and pressure.*

Direct Recovery - MRI

- An MRI consumes liquid helium at a low rate, but reliability of helium supply is crucial for preventing magnet quenches
- Serious space limitations of most MRI centers necessitates a compact liquefier solution
- Advanced automated features and high energy efficiency of ATL ideal complement for modern MRI systems
- Designed for general users – Requires minimal training and is easily operated by MRI technicians
- ATL recovery systems already have been successfully installed in many hospital environments
- Quantum Design's global service network guarantees prompt technical support and onsite response when needed



ATL Recovery Systems can be customized for MRI Centers large and small.

Direct Recovery (DR)

- A – ATL
- B – ATL Compressor
- C – Back Pressure Controller
- D – ATL Power Distribution Unit
- X – Customer MRI

Center with single or multiple MRIs
 Provides up to 15 liters/day in Direct Recovery mode
 Recover 100% normal boil off; Transfer boil off augmented with external Helium gas cylinders through *dual gas inputs*