



**THOMPSON
ENGINEERING**

HIGHLINE MRI

Kellogg Building
Littleton, CO



Highline MRI, located in Littleton, Colorado, offers patients advanced diagnostic technology, including MRIs.

The Challenge:

Create a space in an existing multi-story building for a full service imaging office with MRI, CT, Ultra Sound and other imaging equipment.

Specific requirements included:

- Cooling and humidity control separate from the space and building.
- A Cryogen cooling and quenching system (a series of refrigerant cooling condensing units and helium cooling chiller) for the MRI.
- A city water backup in case of chiller or pump failure.
- All mechanical ductwork, air devices and controls must be non-ferrous in an MRI room, as any ferrous items in the room may be dangerous and could cause image distortion.

The Solution:

- The MRI, MRI equipment room and other imaging equipment were successfully installed in the allocated space.
- The images are consistently clear (per the doctors and technicians) and the facility is comfortable.
- Space temperature has not fluctuated. (If the MRI space temperatures do fluctuate, the magnet equipment may flex from expansion and contraction, which causes image quality to degrade.)
- No fluctuations in space temperature have been noted in any of the MRI facilities that we have designed.