

MAGNETOM Avanto 1.5T Site Layout and Planning Guide

The MAGNETOM Avanto 1.5T MRI system by Siemens Healthineers is a versatile imaging solution known for its advanced capabilities and patient-friendly design. For comprehensive site planning and installation, Siemens provides detailed resources to ensure optimal setup and operation.

Site Planning Resources

Siemens Healthineers offers specific site planning documents for the MAGNETOM Avanto 1.5T, including:

- Typical Layouts: PDF, DWG, and DWF formats detailing room configurations.
- 3D Models: For visualizing the MRI system within your facility's space.

These resources can be accessed through Siemens Healthineers' Magnetic Resonance Implementation Site Planning page.

Key Room Specifications

- Minimum Room Size: Approximately 30 m² (323 sq. ft.)
- System Length: Approximately 150 cm (59 inches)
- Magnet Length: Approximately 150 cm (59 inches)
- System Weight: Approximately 5,500 kg (12,125 lbs)
- Bore Size: 60 cm

Power & Cooling Requirements

- Electrical Supply:
 - Line Voltage: 380/400/420 V or 440/480 V
 - Frequency: 50/60 Hz
 - Power Consumption: Up to 91 kVA
- Cooling System:
 - Heat Dissipation to Water: Approximately 60 kW
 - Water Flow Rate: 120 liters/min
 - Water Supply Temperature: 19–22°C
 - Water Quality: De-ionized water with 35–40% ethylene glycol antifreeze

Magnetic Fringe Field Considerations

The magnetic fringe field extends beyond the magnet and must be considered for safety and equipment placement:

- 0.5 mT (5 Gauss) Line:
 - X-axis: 2.5 m
 - Y-axis: 2.5 m
 - Z-axis: 4.0 m
- 0.1 mT (1 Gauss) Line:
 - X-axis: 3.5 m

- Y-axis: 3.5 m
- Z-axis: 5.5 m

Installation & Structural Requirements

- Transport Openings:
 - Ceiling: Minimum 240 cm × 240 cm
 - Wall: Minimum 240 cm × 240 cm
- Floor Loading: The floor must support the system's weight, including the magnet and additional components.

For a comprehensive overview and detailed planning, refer to the MAGNETOM Avanto Basic Planning Information guide.