

1.2.2 Electromagnets There are two categories can be used in MR scanner: Resistive and Superconducting Magnets 1.2.2. 1. Therefore, they produce a lot of heat, which requires significant cooling of the magnet coils. These magnets are very large that utilizes the principles of electromagnetism to generate the magnetic field, like the ones used in scrap yards to pick up cars. Resistive magnets are typically limited to maximum field strengths can be up to 0.6 Tesla. These superconductors, such as niobium–tin and niobium–titanium are used to make the coil windings for superconducting magnets. Resistive Magnets Resistive magnets are made from loops of wire wrapped around a cylinder through which a large electric current is passed. Once