**Study Of Electro Magnetic Levitation**

Abstract:

Magnetic levitation is a way of using electromagnetic fields to levitate objects without any noise. It employs diamagnetism, which is an intrinsic property of many materials referring to their ability to temporarily expel a portion of an external magnetic field. As a result, diamagnetic materials are repelled by strong magnetic fields. This repulsive force, however, is very weak compared with the attractive force due to magnetic fields. Maglev is the means of floating one magnet over another. This maglev system is divided into two types attractive systems and repulsive systems, which are referred to as electromagnetic suspension and electrodynamics suspension. Thus many countries spend billions of dollars to use this maglev system.