

GENERAL MAGNET SERVICE AND REPAIR



Thousands of Walker magnets are in service today performing safe, efficient material handling applications. Like any other type of industrial equipment, they should be maintained properly for optimum safety and performance. Worn contact surfaces, loose or broken cam-links, weld cracks, worst of all, illegible or missing labels and nameplates are common problems with older magnets. After years of use, worn bottom surfaces may not yield their original rated lift capacities. After reconditioning, IMI calibrates the bottom surfaces to ensure that they yield their original rated lift capacities. Don't wait until your magnet has an expensive breakdown requiring emergency repairs. IMI will inspect your magnet and controls and advise what repairs are needed. Before proceeding with your repairs, you'll receive an accurate estimate of the cost for your approval.

All IMI authorized repairs will carry a full 12-month warranty on the work performed. IMI reconditions other manufacturers' heavy lift, material handling and separation equipment. Equipment found to be in need of inspection/repair should be taken out of service and scheduled for inspection and repair at the IMI facility.



LIFT MAGNET SERVICE AND REPAIR

Safety consultants often say, "It's always better to prevent an accident than to defend your responsibility for one." Now is the time to inspect your lift magnets. Contact IMI to recondition or repair your magnet so it's as good as the day it was put into service.

- STEP 1:** The first step in the repair process is a complete incoming inspection. This inspection process includes both a mechanical and electrical evaluation. The magnet is assigned a job number and a "Magnet Service Report" is initiated.
- STEP 2:** The magnet is disassembled by machining or a controlled arc process. The parts are then inspected, noting those needing reconditioning or replacement. At this point a quotation is prepared and sent to the customer.
- STEP 3:** After the quotation has been approved by the customer, mechanical parts are cleaned and sand blasted in preparation for reassembly.
- STEP 4:** If required, the copper or aluminum conductor is then cleaned and inspected, noting any that are out of specification or needing replacement. Failure to replace conductor with the proper width and thickness leads to premature failure.
- STEP 5:** Engineering creates a CAD drawing for the production department along with a detailed bill of materials for the store room.
- STEP 6:** Coils are wound turn by turn with Nomex insulation in between each turn. When winding aluminum, the last three turns are wound with copper conductor.
- STEP 7:** After winding, the coil is tied off with vertical straps of copper. Alcuplate is used to join the aluminum conductor to the last two turns of copper conductor. This is one of the crucial steps that differentiates Walker Magnetics from other repair facilities. Alcuplate prevents galvanic corrosion and we are the only manufacturer to use this quality material.
- STEP 8:** Components are inspected against OEM drawings and remanufactured to the latest revision. Following a machining process, the magnet is ready for reassembly.
- STEP 9:** After the coil is installed in the case and properly insulated, the bottom plate is inserted and pressed to 4000 psi and tack welded. The magnet is then semi-automatically welded using stainless steel weld to permanently create a water tight seal.
- STEP 10:** The magnet is filled with a specially formulated insulating potting compound and baked to over 350 degrees F to produce a water tight fit and cure the potting compound.
- STEP 11:** In this final stage, all magnets are electrically tested. The values are recorded to create a historical record in the customer's individual folder.
- STEP 12:** Prior to shipment, the magnet is painted and the chains and pins are attached. The completed magnet is ready for shipment or to be put in a customer's individual Magnet Exchange Program inventory.
- STEP 13:** Walker delivers the highest quality New or Remanufactured magnet to your facility.