

Procedure for test rating Strong-Mag™ DL-Series Deluxe Permanent Magnetic Lifters

The procedure described below will allow a user to “test” the DL-Series permanent magnetic lifters on demand to ensure that the lifter is capable of lifting its safety rated load, and can also be used to “pre-test” loads of unknown weight.

To verify the maximum lift capacity of a lifter is still attainable, do the following:

1. Secure a piece of mild steel (1018 steel or other low carbon steel works fine) that is as thick as or thicker than the minimum thickness as stated on the side of the lifter. This piece of steel should be the rated maximum weight for the lifter to be tested and should larger than the footprint of the lifter. It should have a smooth, ground surface.
2. Place a 1mm (.039) non-magnetic “spacer” on the surface of the test load. The spacer should be of mild steel (1018 steel or other low carbon steel works fine) that is approximately the size of the footprint of the lifter being tested.

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3. Place the lifter on top of the “spacer” and turn the lifter on.
4. Raise the lifter a few inches – if the piece being lifted rises with the lifter with the “spacer” in place, then the lifter is safe-rated for its stated maximum load. If the piece being lifted does not rise, or drops off, the magnet is not functioning properly and should be returned for evaluation/repair/replacement.

To “pre-test” an unknown load, do the following:

1. Determine the work piece to be lifted. Work piece should be of at least the minimum thickness for maximum force as stated on the side of the lifter.
2. Place a 1mm (.039) non-magnetic “spacer” on the surface of the test load.

***** The spacer should be of mild steel (1018 steel or other low carbon steel works fine) that is approximately the size of the footprint of the lifter being tested. *****

3. Place the lifter on top of the “spacer” and turn the lifter on.
4. Raise the lifter a few inches – if the piece being lifted rises with the lifter with the “spacer” in place, then the lifter is safe-rated for this load. If the piece being lifted does not rise, or drops off, the magnet is either undersized for the weight to be lifted or is not functioning properly and should be returned for evaluation/repair/replacement.