



SUPPLEMENT TO M500.01 – Magnicator IOM

DUAL-INDICATION FLOAT REQUIREMENTS AND INSTALLATION

Scope: To identify the minimum requirements of the application, and the impact to the design of the gauge, when using one Magnicator® Magnetic Level Indicator to measure the level(s) for either an interface (liquid/liquid) or dual-indication (overall & liquid/liquid) application. As well as to provide additional installation steps for dual-indication.

Interface Requirements:

1. The chamber shall have (1) process connection, **at a minimum and at all times**, available to each phase of the application; upper vapor/gas (if present), upper liquid (lower density) and lower fluid (higher density). This provides a path/connection for which to transfer fluid/gas from the vessel/bridle to the Magnicator chamber, in order to maintain equal levels of each phase between them.
 - a. In the event the Magnicator is mounted to a bridle/standpipe, the bridles' connections to the vessel shall mirror the elevations as those to the Magnicator. This allows the levels of each phase in both the chamber and bridle to match those in the vessel.
2. Float requires the minimum difference in SG between the upper and lower fluids to be 0.10, as a standard, in order to be buoyant/float. Consult factory for differences less than 0.10.
3. Switches require a difference in SG of at least 0.33. Consult factory for smaller differences, as these are specific to the float selected.
4. Depth of the upper fluid shall be greater than the 3.00". Consult factory for smaller depths.

Dual-Indication Requirements:

1. Requirements 1 thru 3, from above 'Interface Requirements' section, applies to dual-applications.
2. Depth of the upper fluid shall be greater than the height of the upper float, as a standard.
 - a. Special designs may increase the minimum depth of the upper fluid.
3. Jerguson Magnicator Hermetically Sealed indicator must be used and assembled for dual indication.

Dual-Indication Installation Steps (in addition to M500.01):

1. Insert upper float first. This float will be etched with a singular SG, reflecting the upper fluid SG, and be marked "UPPER FLOAT" in etching area.
2. Insert the lower float. It will be etched with (2) SG's, formatted "(Upper SG)/(Lower SG)", pushing the upper float further into the gage.
 - a. During normal operation, with levels for each fluid present in the gauge, the indicator will reflect a band of flags of one color in the middle, and a band of flags in another color both directly above and below this middle band. The middle band reflects the upper fluid. The lower band reflects the lower fluid.
3. Reinstall bottom flange per normal procedures and continue to OPERATION section of M500.01.