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METTLER TOLEDO Seismic/Wind Analysis Policy

There is a misconception that a “Seismic Rated” weigh module is safe for any application in a particular seismic zone regardless of the geometry of the tank, hopper, or vessel and how it is supported. This is not true as tanks of varying heights, widths and support conditions will create a wide range of reaction forces at the weigh module to tank interface. In fact, my understanding is that building code authorities do not recognize the term “seismic rated” as used by other suppliers in the weighing industry. The term “seismic rated” only applies if a Certified Professional Engineer (P.E.) has evaluated a very specific range of tank sizes, capacities, and support conditions and documented the results for a specific weigh module product.

The METTLER TOLEDO position on applications with potential exposure to seismic and/or wind loading is to have a P.E. determine the resulting reaction forces at the weigh module interface to the tank, hopper, or vessel based on applicable building codes. METTLER TOLEDO provides all the necessary data for a P.E. to decide the suitability of a particular weigh module product in the datasheet load ratings for each particular weigh module product.

The METTLER TOLEDO ‘Weigh Module Systems Handbook’, publication 44098237, outlines how reaction forces can be determined in a general sense; however, this cannot replace a Certified Professional Engineer’s evaluation using applicable local building codes.

Best Regards,

Greg Queen
Regional Market Manager
The Americas