

Tank and Silo
Weighing



5 Safety Tips For Tanks and Silos

METTLER TOLEDO



1 Introduction

2 Consider Environmental Factors

3 Pay Attention to Explosion Risks

4 Set Up for Safe and Easy Repairs

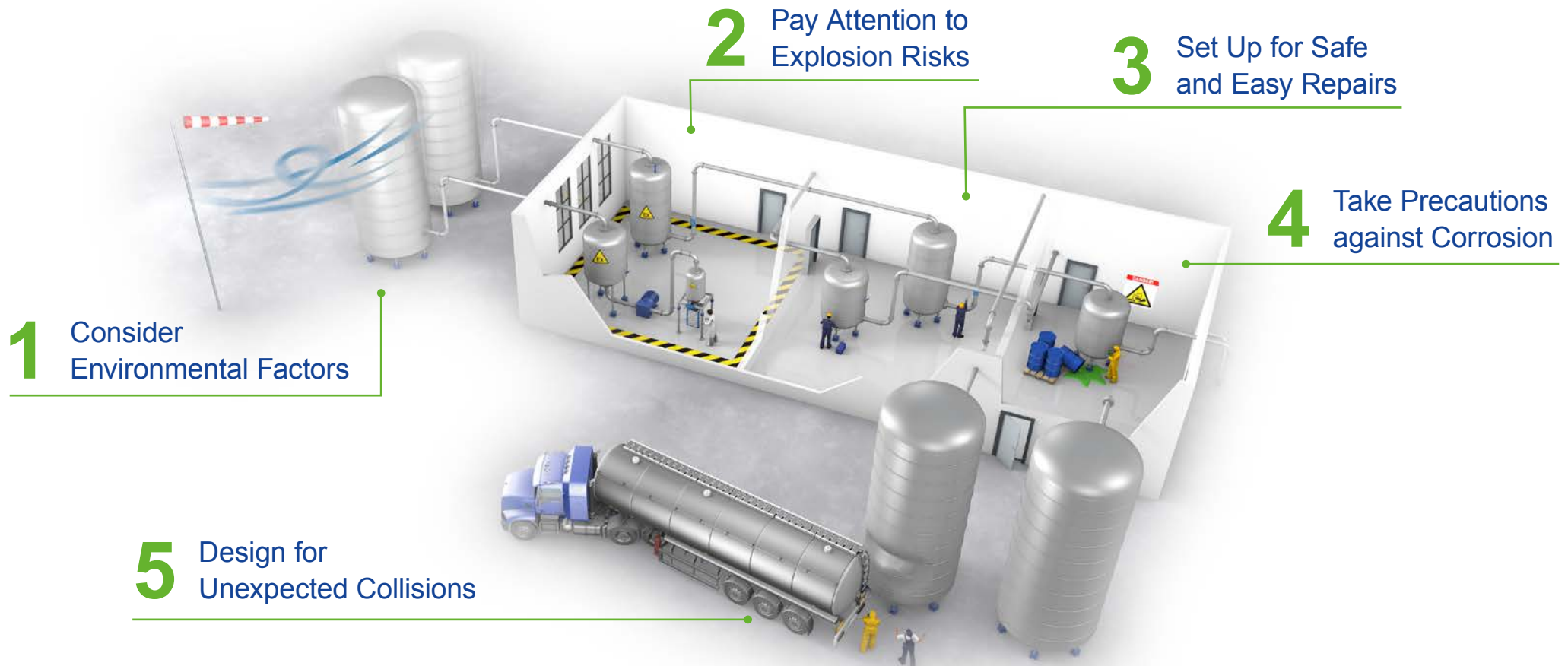
5 Take Precautions against Corrosion

6 Design for Unexpected Collisions

7 More Information

Minor Details – Major Impact

A major goal of tank and silo design is keeping workers safe and unharmed. Taking the necessary precautions and examining the smaller details concerning your tank and silo set-up can save time, money and most importantly, lives.



Be Prepared for Natural Forces

Environmental incidents such as earthquakes, hurricanes, tornadoes or thunderstorms can severely damage a tank system. In the worst case, it can result in collapse with devastating consequences for workers and the environment. Since weigh modules serve as the support beams for tanks, choosing modules that can withstand such forces is essential for safety.

- Be aware of the potential damage a tank system can endure from forceful natural disasters.
- Designing the tank structure with structurally sound weigh modules will prevent a possible catastrophe.



▶ Watch the Webinar: www.mt.com/webinar-safety-by-design-for-tanks



Eliminate Ignition Sources

Understanding the risk from equipment in hazardous areas is imperative in setting up a safe work environment.

- Correct classification and appropriate method of ignition protection must be considered.
- Installing intrinsically safe weighing instruments ensures accurate and reliable results with the highest protection levels.



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Installation, Maintenance & Repair Simplified

Maintenance activities, especially with third party contractors, are one of the major sources of accidents in manufacturing plants. All tanks require repair, calibration, and maintenance regularly. To reduce the occurrence of accidents :

- Pick weigh modules with suitable accessories that are easy to install
- Select certified and well-trained service providers



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www.mt.com/ind-wp-safety-by-design



Use Fit-for-Purpose Materials

Understanding the effects from chemicals that will come into contact with the modules is also a significant factor with regards to corrosion. Corrosive materials used in your process or for cleaning can reduce mechanical stability and tank weighing performance.

- Confirm that the weigh modules used in the under-structure are composed of applicable materials that can withstand the surrounding environment.
- Being informed about appropriate weigh-module materials and whether they are at risk for corrosion will save time and ensure the safety of your vessel design.



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Eliminate the Weak Spots

The likelihood of a large vehicle colliding into a tank or silo may be small, but accidents do happen and the consequences could be disastrous. It is essential that the weigh modules in the understructure are able to withstand impact forces.

- High quality weigh modules that can withstand such forces are recommended for use in large tanks and silos.
- Get it right the first time and avoid costly damage or downtime by selecting the correct weigh modules.



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Weigh Modules



Models available from 3 kg to 300 tons complying with all globally relevant standards and providing safety features such as anti-lift protection.

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