

KETEK'S IN-TANK STATIC DRAIN

The simple, effective way to protect above-ground storage tanks from static buildup



EASILY INSTALLED INTO MOST ABOVE-GROUND STORAGE TANKS

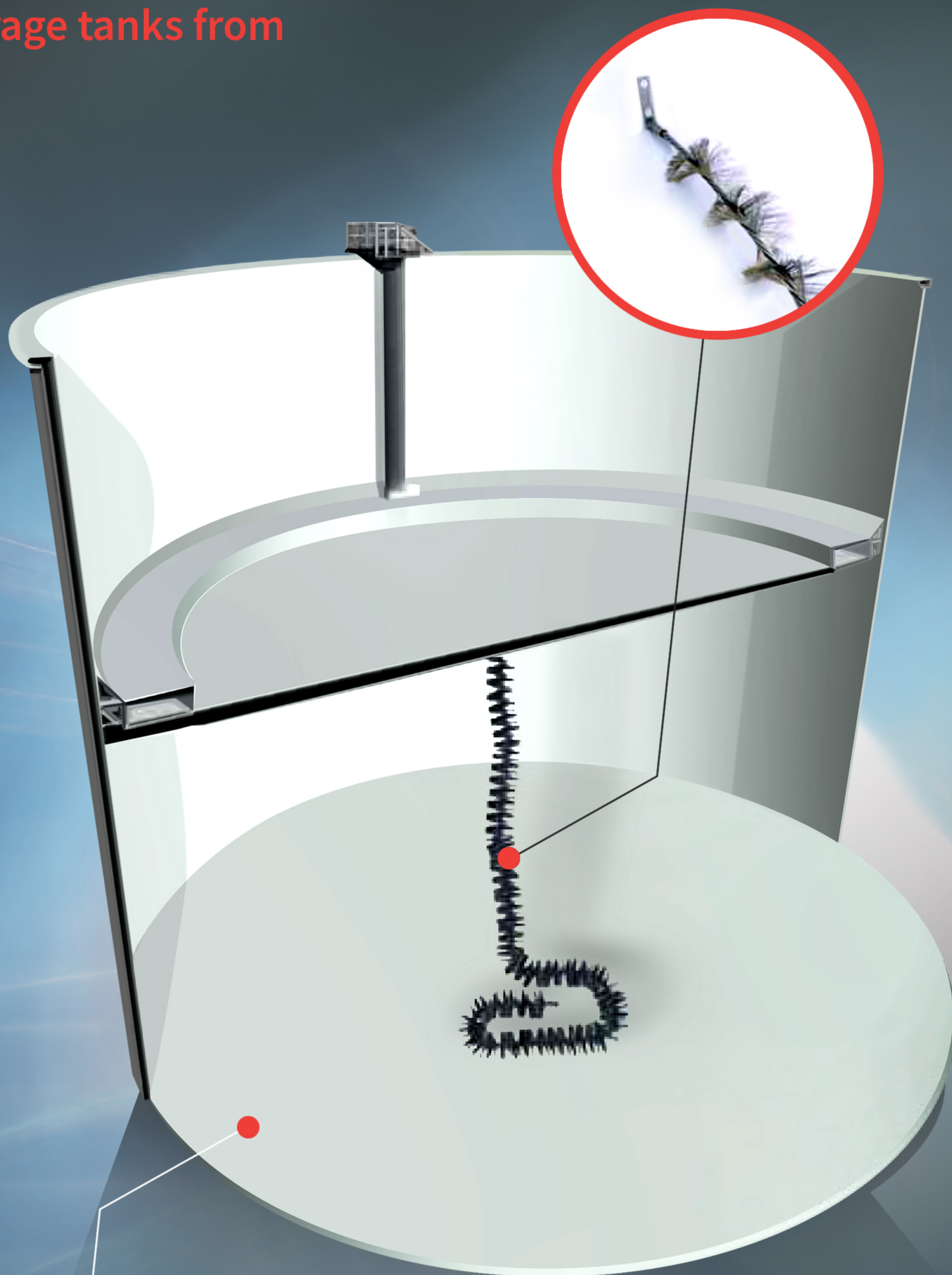


SUITABLE FOR TANKS WITH MIXING BLADES

COILS AND UNCOILS AS FLOATING ROOFS RAISE AND LOWER

AN ALTERNATIVE TO RETRACTABLE GROUNDING REELS

Cut-out view of floating roof tank with Lightning Master in-tank static drain.



KETEK
GROUP

Results Driven.

How it Works

Charge dissipates from a fluid into points and sharp edges, not flat surfaces. That is why charge does not readily dissipate into the shell of a metal tank – it is flat. This allows the charge to accumulate at a rate faster than it dissipates. Because the static charge eventually relaxes, an incendive spark is most likely while the charging mechanism is active.

The wild card in tank protection has always been equalizing the bound charge on the stored product. Even in a steel tank, there is nothing to help dissipate the bound charge on the stored product. The liquid simply lies against the side of the tank, and the charge must inductively couple onto the flat surface. It takes time for the potential to relax, allowing the static charge to accumulate faster than it dissipates.

Lightning Master has designed an in-tank static drain consisting of a stainless steel cable with stainless steel electrodes inserted into the wind of the cable. In fixed roof tanks, the drain is installed through the thief hatch, and in floating roof tanks, it is attached to the floating roof and sides or bottom of the tank. The thousands of electrically sharp points provide a low-resistance path for bound charge to leave the liquid and vapor space. It dissipates the charge on the product, allowing it to relax much more quickly. This allows the charge to dissipate faster than it accumulates.

The Complete Line of Lightning Master Products

Lightning Master is a full service, full spectrum static solutions and lightning and transient protection company, serving the oil and gas and chemical industries since 1984. Ketek Group is proud to distribute Lightning Master products in Canada.

With you every step of the way

Site survey and evaluation

- Our field engineers create a detailed report with the findings and recommendations for your site
- Our team of experienced engineers perform forensic analysis of lightning and static damage

System design

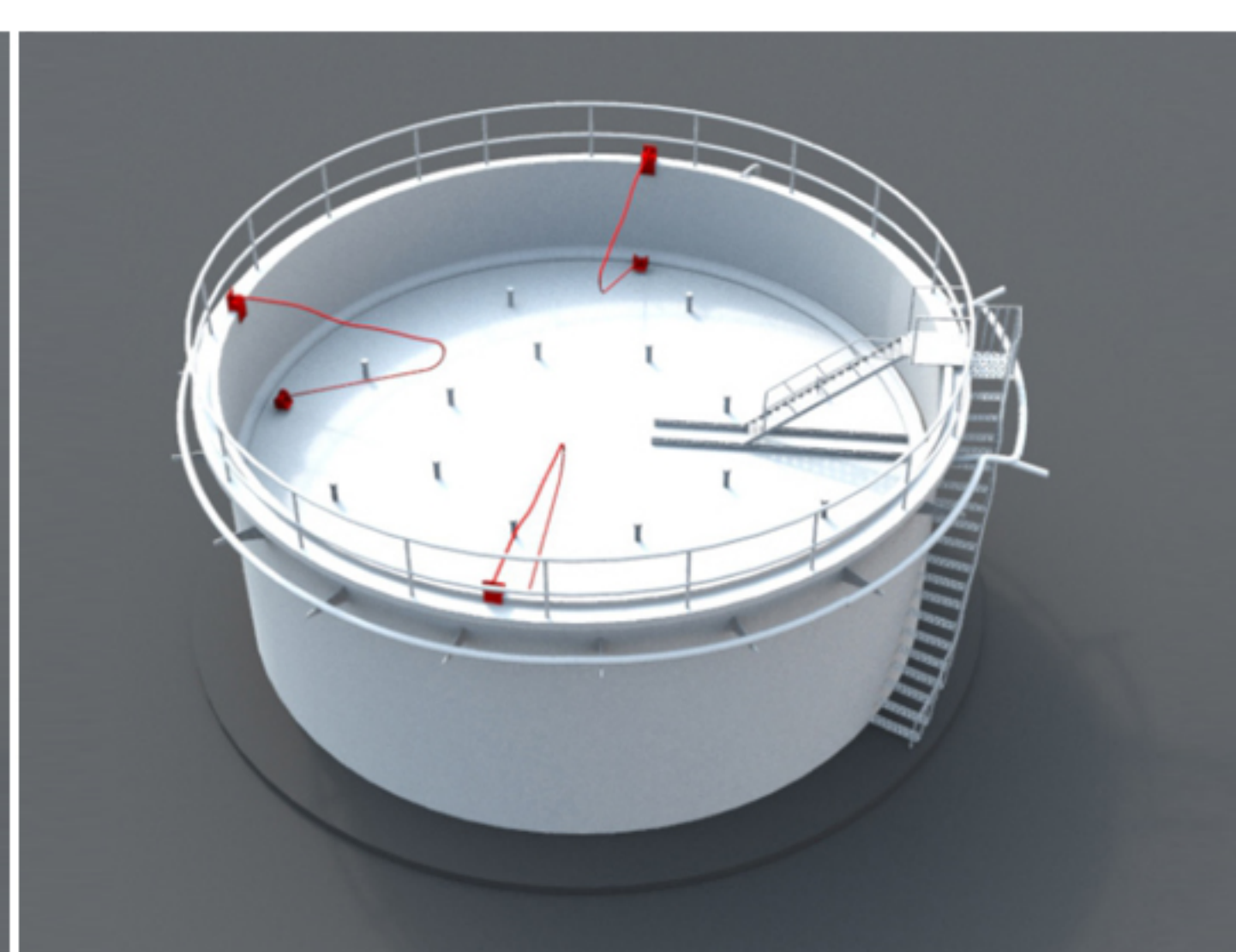
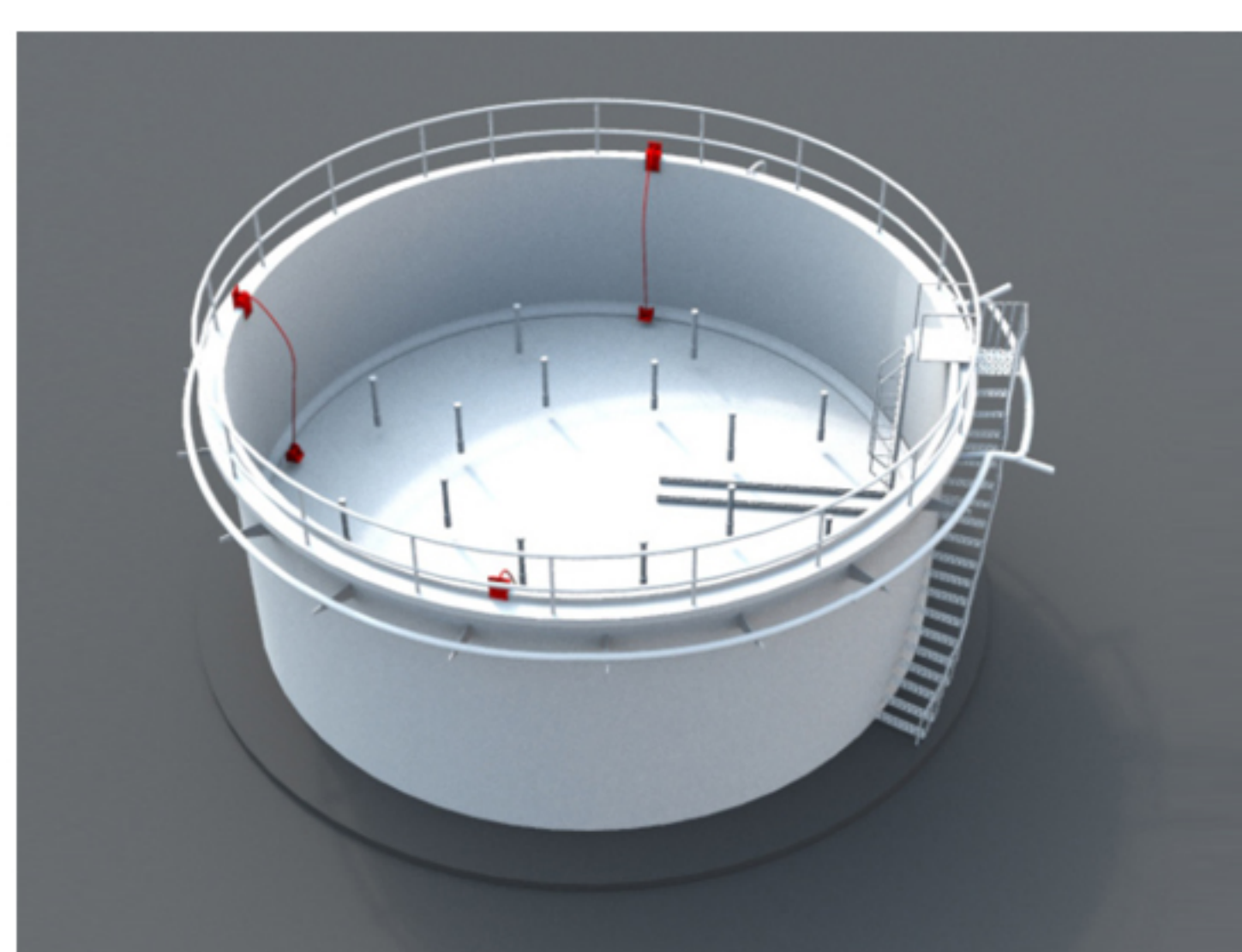
- We custom-tailor site-specific protection
- We help you write specifications and best practices that meet your needs

Products

- Bonding and grounding
- Surge protection devices
- Structural lightning protection
- In-tank static dissipators

Customer service

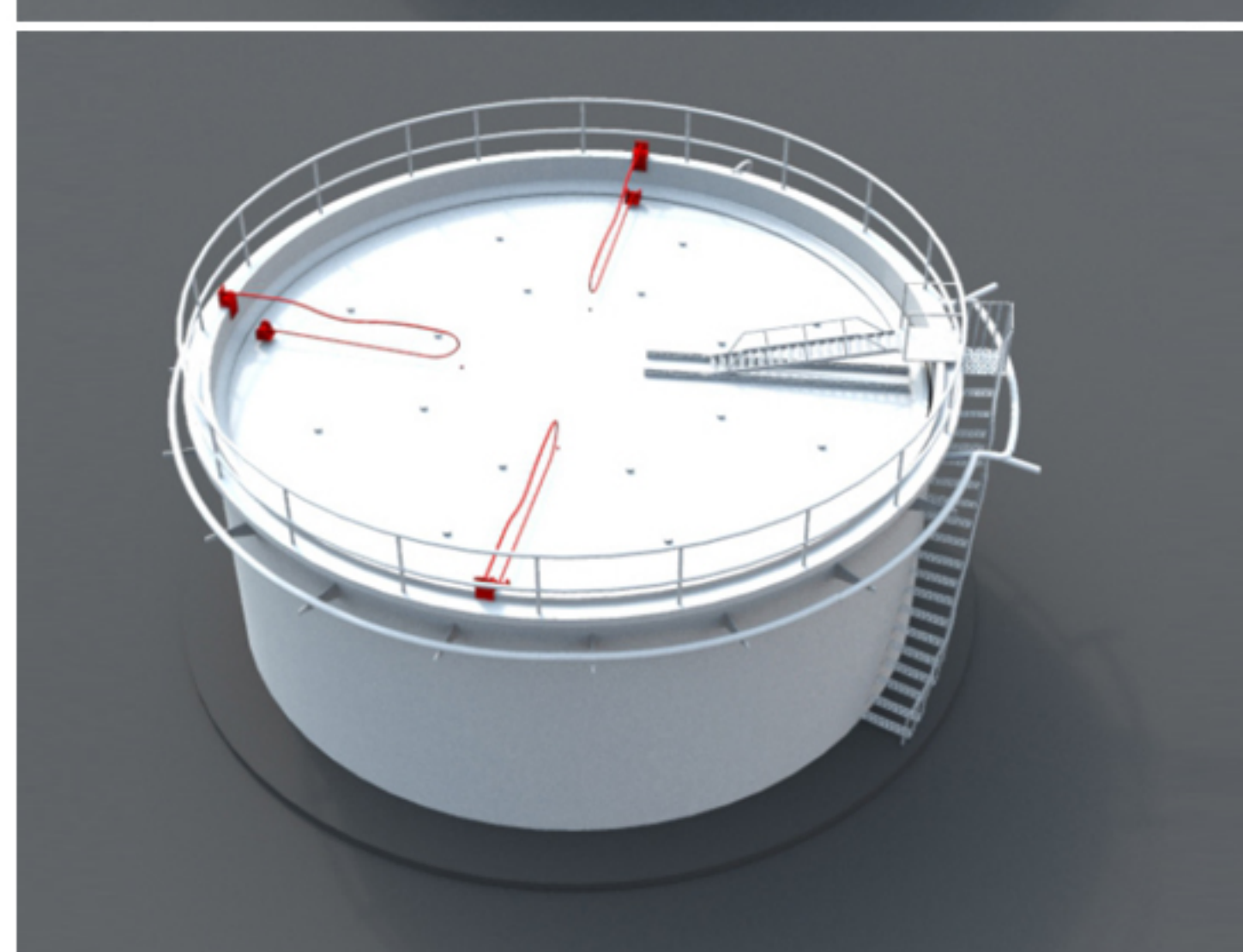
- Turn-key installation by Lightning Master-trained crews
- Training, supervision, and ongoing support of customer personnel or contractors
- Lightning Master approved installation contractors (in selected areas)



In-tank Static Drain for above-ground storage tanks



Streamer-delaying air terminal for structural lightning protection



Moveable arm grounding system for external floating roof tanks

