Fire and explosion risks are a common situation in storage tanks. The main source of potential fire is the possibility of product exposed to the air, which can produce a FLAMABLE MIXTURE. The three places where this can happen are shown in this drawing.

**PONTOON**
These are the empty chambers required for floating purposes. Some are sealed, others only covered. Any perforation may generate a leak, getting product in this chamber, creating FLAMABLE MIXTURES.

**RIM SPACE AREA**
Also known as the seal area, this zone is responsible for 95% of the fires in this type of roof. The seal area is the only open surface exposed to the air in the tank, where mixtures can become flammable.

Electric atmospheric discharges are the main reason of fire in this area. Static sparks and other external ignition sources as ignited particles carried by the wind are also common.

So are personnel miss operations or negligent procedures extreme weather conditions, domino effects due to explosions and malicious attacks or sabotage.

**DECK AREA**
Main covered area, may be susceptible to perforation by corrosion, producing leaks that accumulate product exposed to the air. A faulty Drain System or spillage from Pressure Valves or Legs, also become sources of flammable product on the top of the roof.

**EXTERNAL FLOATING ROOF**
Shown is a Single Deck Type Floating Roof. Risks do not change very much for Double Deck Type.

For every one of these situations there is a SOLUTION to provide the highest intrinsic safety of the market.