



# HEAVY-DUTY PONTOON INTERNAL FLOATING ROOF

With decades of real-world experience in the design, installation, and maintenance of Internal Floating Roofs (IFRs), Matrix Applied Technologies' Heavy Duty Pontoon Aluminum IFR provides virtually maintenance-free operation of all main structural elements. Our IFRs are custom-engineered to provide optimum performance, even in earthquake-prone regions or instances where a tank may be subject to sloshing or high fill rates.

When it comes to quality, performance, and value over the life of the asset, Matrix Applied Technologies' Heavy Duty Pontoon Internal Floating Roof is unmatched in the industry.

A HIGHER STANDARD IN **PRODUCTS.**

# HEAVY-DUTY PONTOON IFR

## Heavier Construction

Our heavy-duty IFR construction has an integral structure/frame to which the sheeting and pontoons are added, in contrast to other conventional IFR designs where the pontoons are an integral part of the structure. In the event sheeting or pontoons need to be replaced, the process of replacing sheeting or pontoons on a Matrix Applied Technologies IFR is faster and more efficient.

## Leg Connections

Our innovative design eliminates the likelihood of pontoon end cracking, a common phenomenon in lightweight IFRs that results from tank turbulence or landing the floating roof during cycling. We've done so by ensuring our IFR has a proper frame with regularly spaced crossbeams. Legs are not connected to the pontoons, and pontoons are not connected to each other.

## Easy Assembly, Exceptional Fit

Our Heavy-Duty Pontoon IFRs come ready to install, with no field cutting required, reducing both potential safety issues and installation time. All peripheral main beams are angle cut to conform exactly to the tank's inside rim radius. Main beam and crossbeam connection holes within our IFR are pre-punched for fast, easy assembly. Shoe seal mounting holes on the rim are pre-drilled to precise, pre-determined seal shoe spacing and overlaps, and main beam connections to the rim are flush with the top of the rim, which allows proper sheet clamping to the rim. The end result is easy assembly and exceptional fit.

## Load Capacity 1000lb/ft<sup>2</sup>

API 650 Appendix H requires that IFRs be capable of withstanding a concentrated load of 500lb/ft<sup>2</sup>. MAT has confirmed, through testing, that our heavy-duty IFR can withstand 1000 lb/ft<sup>2</sup>, and accordingly, we guarantee our IFRs meet this standard.

## Stainless Steel Fasteners

Matrix Applied Technologies' IFRs use only high-quality stainless steel fasteners which provide exceptional resistance to corrosion, durable strength, and stiffness. Our stainless steel fasteners are also coated in liquid Teflon to prevent "galling" when tightening during installation.

## Suspending Options

Matrix Applied Technologies' IFRs can be suspended using either cable or chain, providing significant operational advantages over conventional IFRs with legs. Suspending the IFR by either cable or chain allows for floor scanning; easier floor repair, free of leg interference; adjustment of high and low leg positions from outside the tank while the tank is in service; and increased tank working volume.

## Extruded Rim

Matrix Applied Technologies IFRs utilize a heavy-duty aluminum extruded rim, making it better able to resist deformation caused by wave action in the tank as the result of turbulence caused by pumping or use of mixers and gas slugs. This extruded rim also allows for easy fitting of a shoe seal without rim reinforcement.

## Hybrid IFR

When product storage requires the use of an IFR made from other than aluminum wetted parts, Matrix Applied Technologies' offers heavy-duty IFRs in a Hybrid design with the wetted parts available in either or both stainless steel or anodized aluminum.



For more information  
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