



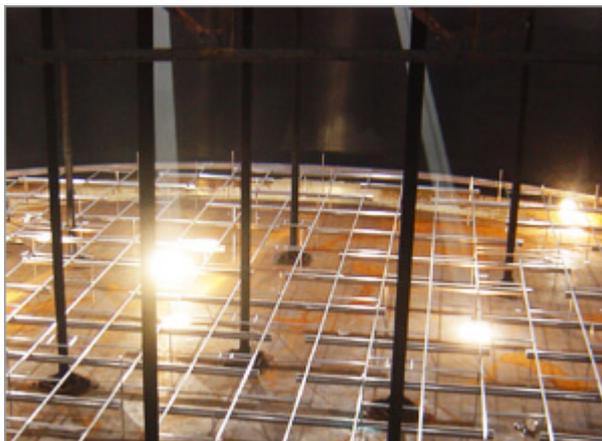
Internal Floating Roofs

Available in aluminum, pontoon, full contact and stainless steel

Our IFRs are durable and overcome the many design problems that exist in other well-known brand IFR's. When the concern is "whole of life cost," our quality engineered heavy duty IFRs offer tank owners the best possible value for money.

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.

HEAVY DUTY PONTOON INTERNAL FLOATING ROOF



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

- **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 light weight 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/ft²

API 650 Appendix H requires that IFRs be capable of withstanding a concentrated load of 500lb/ft². MAT has confirmed, through testing, that our heavy duty IFR can withstand 1000 lb/ft², 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 tanks 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 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 aluminums.

STAINLESS STEEL INTERNAL FLOATING ROOF



Our Stainless Steel IFR incorporates durability features designed to provide maintenance-free operation of the main structural elements. It is ideally suited for use on tanks in earthquake-prone regions or where tanks are subject to sloshing and/or turbulence due to high fill rates.

- **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.

- **PONTOONS**

Matrix pontoons are fabricated from 1.2mm thick stainless steel to conform to API650 Appendix H standards.

- **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, predetermined 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**

500lb/ft² API 650 Appendix H requires that IFRs be capable of withstanding a concentrated load of 500lb/ft². Matrix Applied Technologies has confirmed, through testing, that our Stainless Steel IFR can withstand 500 lb/ft², and 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.

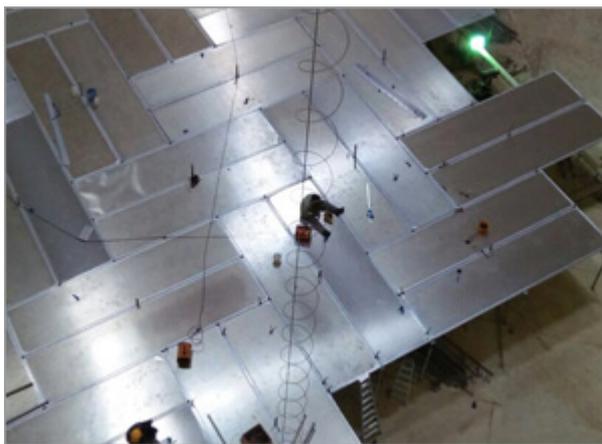
- **SUSPENDING OPTIONS**

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.

- **HEAVY DUTY FABRICATED RIM**

Matrix Applied Technologies IFRs are better able to resist deformation caused by wave action in the tank. This wave action frequently occurs as a result of turbulence caused by pumping, use of mixers, and gas slugs. Our fabricated rim allows for easy fitting of a shoe seal without reinforcement.

FULL CONTACT HONEYCOMB INTERNAL FLOATING ROOF



When it comes to quality, performance and value over the life of the asset, Matrix Applied Technologies' Full Contact Honeycomb IFR is unmatched in the industry.

Innovative in both form and function, our precision engineered Full Contact Honeycomb Internal Floating Roof (IFR) eliminates design issues that have historically plagued the industry and still exist with other IFR brands on the market

today. Unlike other brands, Matrix Applied Technologies' IFR allows for increased tank capacity, minimal evaporation, improved fire safety, and extended service life with minimal maintenance.

- **PREMIER PERFORMANCE**

Matrix Applied Technologies' Full Contact Honeycomb IFR meets industry standards for low emissions, is designed to allow attachment of a peripheral foam dam system that meets the latest version of fire protection standard NFPA11, and offers a variety of seal options to meet requirements for the product being stored or area regulations.

- **SIMPLE ASSEMBLY AND MAINTENANCE**

Shipped in either a 20ft. or 40ft. container, our patent-pending clamping method makes assembly simple and efficient, and our herringbone design provides for added roof strength. All components are designed to pass through a minimum 1500mm x 300mm tank opening. Each honeycomb panel is equipped with a test plug to perform sniff tests during product leak inspections. And, where other brands bond or weld their honeycomb panels together, if a panel on a Matrix Applied Technologies' IFR is found to be damaged or leaking, it can be replaced without discarding the entire floating roof by simply unbolting and replacing the panel.

- **LOAD CAPACITY**

1000lb/ft² API 650 Appendix H requires that IFRs be capable of withstanding a concentrated load of 500lb/ft². Matrix Applied Technologies has confirmed, through testing, that our Full Contact Honeycomb IFR can withstand 1000 lb/ft², 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.