



**MATRIX APPLIED
TECHNOLOGIES**

STAINLESS STEEL INTERNAL FLOATING ROOF

The Matrix Applied Technologies Stainless Steel Internal Floating Roof (IFR) is the result of more than three decades of practical tank experience in IFR installation, maintenance and design, coupled with the unmatched expertise of our sister companies in the design, construction and maintenance of aboveground storage tanks. Our IFR's are durable and overcome many design problems that exist in other well-known brands on the market today. When stored product demands the use of 304 or 316 stainless steel, and you demand the best value over the life of your IFR, Matrix Applied Technologies Stainless Steel is your answer.

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.

A HIGHER STANDARD IN PRODUCTS.

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, 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.

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.