




QUICKFREEZE®

THE **FASTEST**
WAY TO
FREEZE A PALLET
TEMPER
CHILL
WARM



FASTER
AT ANY
TEMP

www.QuickFreeze.com



Today's cold storage market is a highly competitive space. The QuickFreeze® system will give you the ultimate competitive advantage over facilities using outdated pallet freezing methods while quickly improving your ROI. The patented QuickFreeze family of products is the future of freeze technology.



QUICKFREEZE®





Results that Matter.

Tippmann Engineering (TE) specializes in the manufacturing of equipment for controlled environments. TE is world renowned for the patented QuickFreeze System.



Dan Tippmann, the inventor of QF+, QFR, and now QFM has over 40 years of experience in the industry, from operating PRWs to Ammonia Refrigeration design and more.



Bob Tippmann is the President of QuickFreeze in Ft. Wayne, IN. He has a skill set and expertise in leadership, team management, corporate management, engineering, and design. He is also the co-inventor of QuickFreeze QFM Technology, Auto Sense Technology, Auto Seal, and T Probe Technology for temperature-controlled products.





State-of-the-art **FREEZE** Technology

QuickFreeze is easier to work with, more consistent and predictable, less expensive to operate and turns product into profit more quickly. That's simply the definition of better in every way.

Get your QuickFreeze System with our 3 Step Process:



Test

We will test your product in your facility with a QFM unit.



Live Reporting

See the results instantly on the included Dashboard Software.



Install

QFMs can be installed in your existing racking (adapters may be required). Lead time will vary, but we try to have some QFMs in stock.



QUICKFREEZE® [vs]

**TRADITIONAL
BLAST FREEZERS**

The patented QuickFreeze System does more than provide an alternative to traditional blast freezers, it makes them obsolete. QuickFreeze beats the blast of the past with speed, flexibility and consistency.

Faster

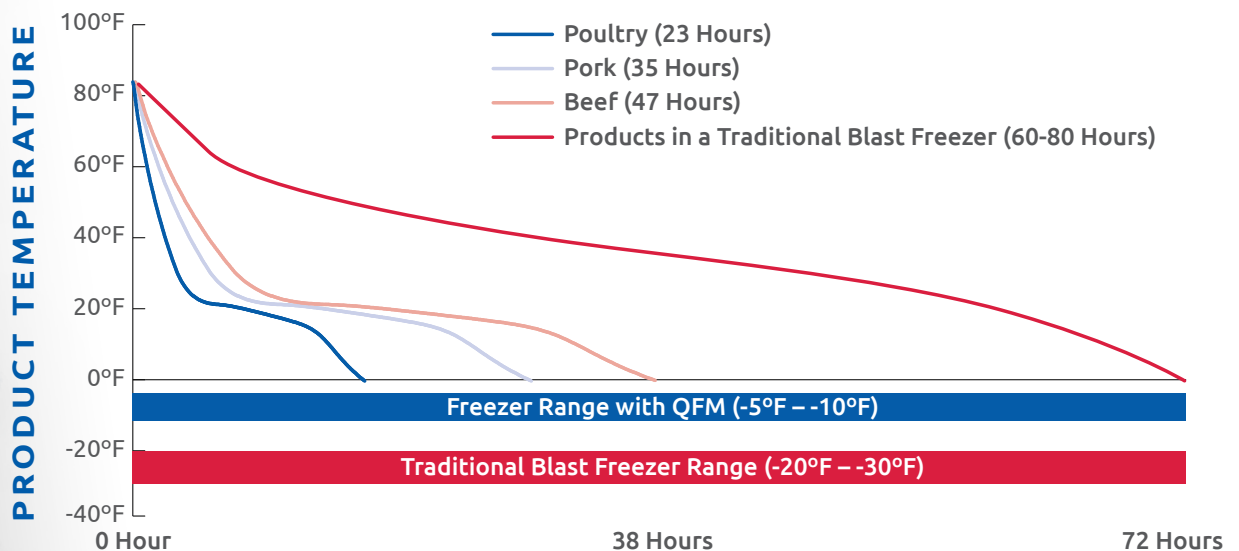
- The fastest way to freeze a pallet
- Up to 80% less time required to freeze a pallet
- Faster freezing results in higher quality frozen food product

Higher Consistency

- All product freezes at the same rate
- Each pallet freezes at the same rate
- Predictable freezing reduces quality control issues
- No “sweet” or “slow” spots

Flexibility

- Locations can be used for freezing or storage
- No more batch freezing
- Reduced handling costs
- 200 – 400% increase in throughput per pallet position
- Install QuickFreeze temporarily for seasonal products





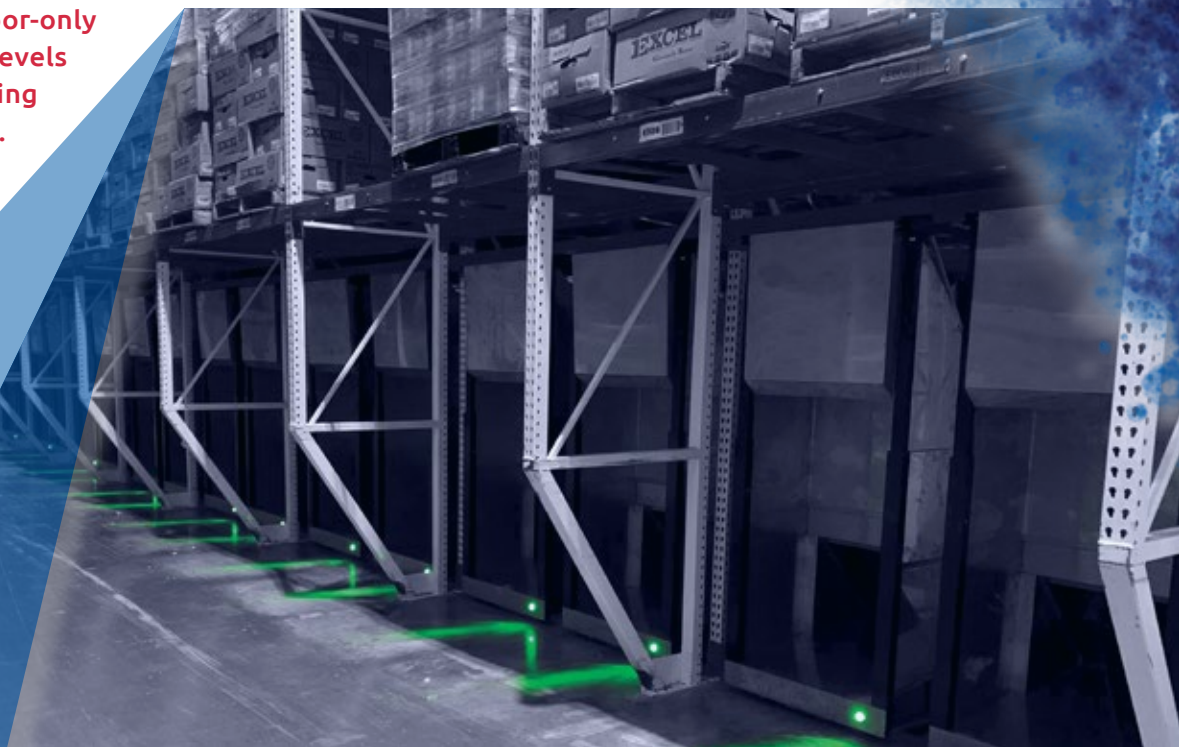
Beating the BLAST


What makes the QuickFreeze System so much better? It begins with the way it cools. Rather than blasting cold air at palletized products and hoping some airflow gets to the center, QuickFreeze uses patented technology to flow air through the center of the product for more consistent and predictable freezing. And it's fast – freezing pallets up to 80% faster than conventional methods.

MAXIMIZE AIRFLOW

QuickFreeze works by sealing the product against the air pressure plenum to flow air evenly through the spacers in every pallet. Pairing a QuickFreeze System with our exclusive T2 Spacers creates a uniform airflow pattern for maximum freezing.

The QFM is ideal for floor-only positions as well as multiple levels high in (2) deep structural racking inside your freezer or cooler. Floor positions work well for fast turnaround and high-volume product applications.





Our patented design includes an exclusive swing gate feature that automatically adjusts to various pallet heights. (20" for the QFM)

Easy Loading and Unloading

Because QuickFreeze uses the rear position of two deep racking, the system is much easier to load and unload than a traditional blast cell. QuickFreeze results in fewer touches and less time required to move each pallet, saving both time and money. Plus, you can leave pallets stored in their freezing positions when not in use.

Bottom Line

Because it freezes product faster, the QuickFreeze system makes a big impact on your bottom line. Faster freezing means shorter dwell times, which means you can turn inventory faster. It also reduces the amount of space devoted to freezing.

But that's not the only way QuickFreeze helps cut costs. Freezing product in a storage racking system results in fewer expensive inventory moves. Finally, the QuickFreeze System is less expensive to build per pallet position than a traditional blast freezer.

Food Safety

Unlike traditional blast freezers, there aren't any "sweet" or "slow" spots with QuickFreeze. Every case on each pallet freezes at the same rate, in a predictable, repeatable pattern every time. Food safety experts love predictability. Because foods freeze faster, QuickFreeze results in higher quality frozen food products – something else safety professionals love.

Guaranteed Results

Each QuickFreeze System is engineered based on product characteristics, pallet configuration, refrigeration capacity, in-bound product temperature and required throughput. TE guarantees the performance of the system based on these criteria and provides a specific freeze time. This way, you can determine the savings right away.



COOL MOVES.

EXPERIENCE DRIVEN DESIGN

The revolutionary modular design of the QuickFreeze In-Rack Freezing System is compatible with your existing racking, allowing you to quickly boost capacity! Plus, you can remove and transport QFM between different locations. Whether you need to freeze hundreds of pallets daily or just a few, QFM is the answer to your palletized freezing demands!



On average QFM will generate 26x the revenue of a standard pallet position.



Equipment Follows Demand

The days of “If you build it, they will come” are gone. Why invest in capital expenditures when you don’t have the account yet? With QFM, lead times for building your blast freezer have disappeared. Now you can build it when you know it is coming. Units are usually in stock and can arrive at your specified location in as little as 1 week anywhere in the 48 contiguous states.

More Than Just Freezing

Whether you need to freeze, temper, chill or warm palletized product, QFM is the answer. Warm to cold or cold to warm QuickFreeze will take your product to the specified temperature faster than any other method. We will factor all the variables that make your warehouse unique and find the optimal configuration to get your product to its desired temp as quickly and efficiently as possible.

The 'M' stands for Maximum airflow, Modular, Mobile...or just plain Magic.

How it Works

Airflow is the most important factor in removing heat during the freezing process. This proven principle is the basis for QFM. By flowing air through each pallet, heat is moved away as quickly as the product will release it, providing speed, consistency, and predictability.

Maximize Airflow

- A dedicated fan and plenum rapidly flows air through the pallet rather than blasting air at it.

Modular

- Users can install & remove QFM themselves. This allows equipment to be moved to other locations or stored off season.

Smarter

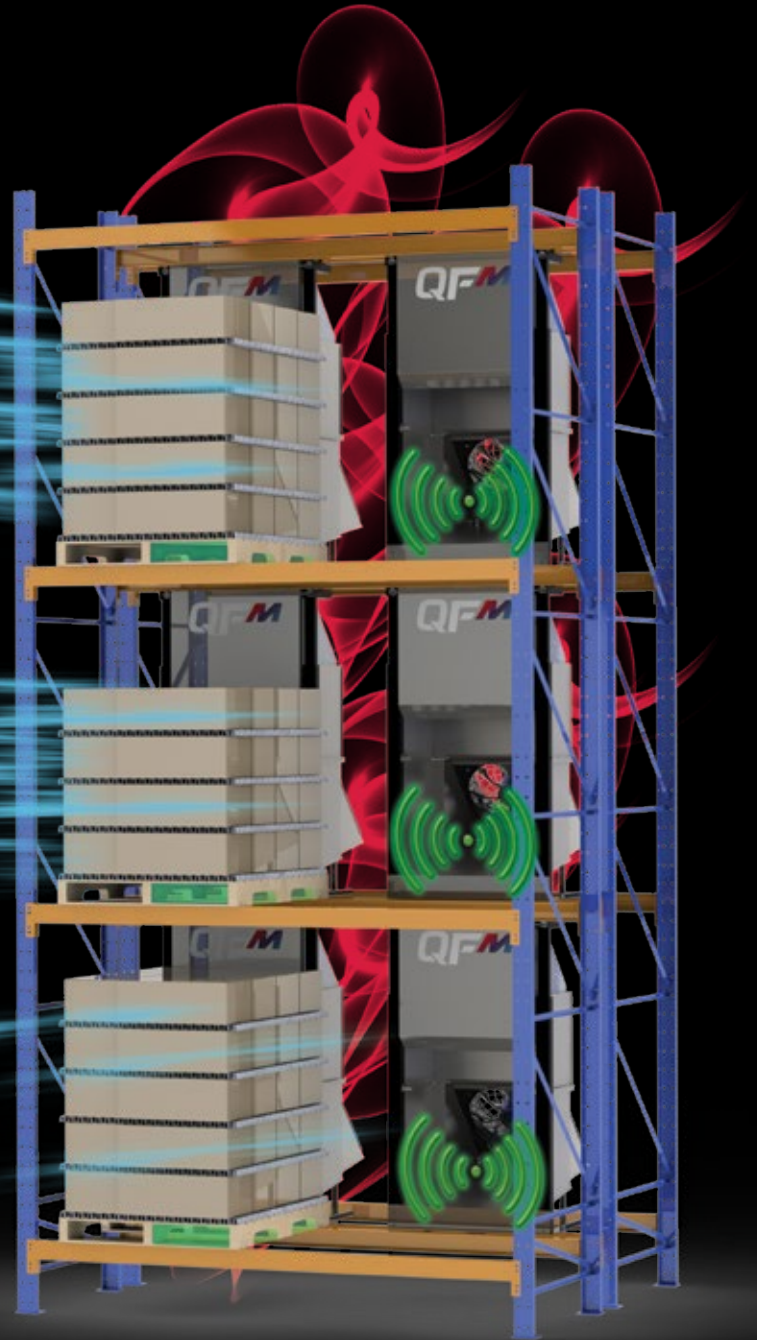
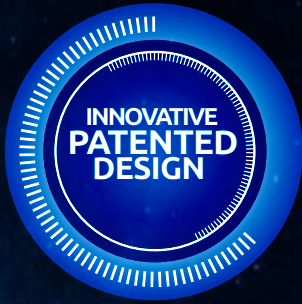
- **Occupancy Sensing** - QFM starts when pallet is placed in front of the QFM unit and shuts off when the cycle timer elapses or pallet is removed
- **Adjustable Dwell Time** - Change the cycle time remotely through API or web interface
- **IoT** - Data logging, remote control, WiFi, JSON Communication
- **Traceability** - License plate/lot info can be associated with freeze data

Faster

- QFM freezes up to 80% faster than conventional blast
- Faster and consistent freezing results in higher quality product
- Fastest freezing times in the industry

Agile

- Works with existing racking
- Easily expandable
- Allows you to adjust for seasonal product freezing fluctuations
- Eliminates downtime with no batch freezing
- Reduces handling costs
- Allows you to freeze occupied pallet locations only



Cool Features

- An LED shines through the pallet indicating status of each pallet position
- Automatic shutdown lowers utility costs
- Ability to gather KPIs and other smart data

SPECIFICATIONS

- Unit weight: 182 lbs.
- Shipping Weight: 412 lbs. (2 units palletized)
- Motor: 480V / 3-Phase / 60 Hz / EC Motor
- Width: 36"
- Maximum beam to beam height: 83"*
- Minimum beam to beam height: 55"
- Maximum pallet height: 77"
- Minimum pallet height: 29"

* The QFM has NO maximum beam to beam height limitation as we offer plenum extensions which allow installation to any height of beam to accommodate any height of pallet.





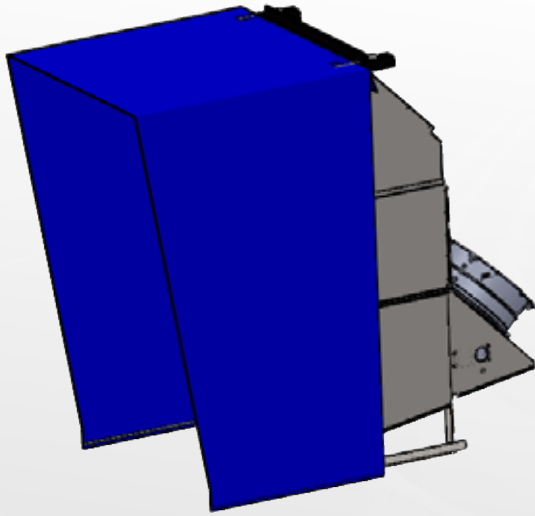
A PERFECT SEAL EVERY TIME

If you want the best freeze performance, you need the best seal, but right now, factors outside of your control can affect the quality of your seal and cost you money.

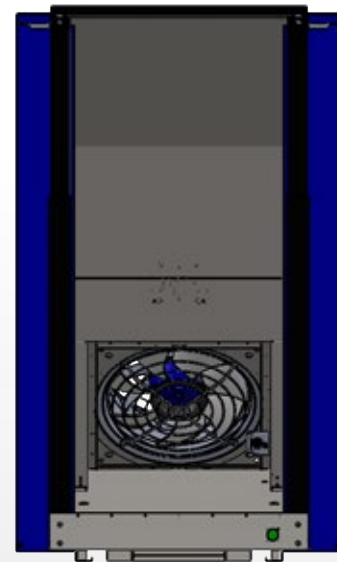
Not anymore, introducing Auto Seal. Auto Seal is a flexible tunnel that installs into any QuickFreeze system. After placing the pallet, Auto Seal automatically activates, clinging to the sides and top of pallets and creating a leak free seal every time.

What if the pallet wasn't perfectly stacked? It doesn't matter. What if the pallet wasn't perfectly placed? It Doesn't Matter. Auto Seal will deliver peak performance to any pallet inside the tunnel.



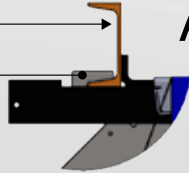


Auto Seal (Shown in Blue) By QuickFreeze
A Perfect Seal on Every Pallet

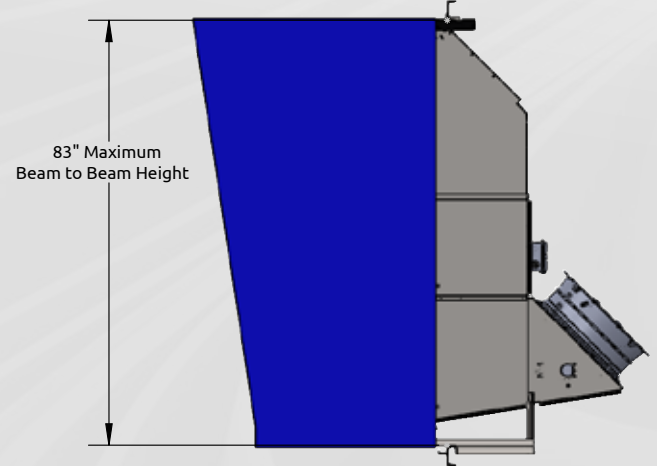
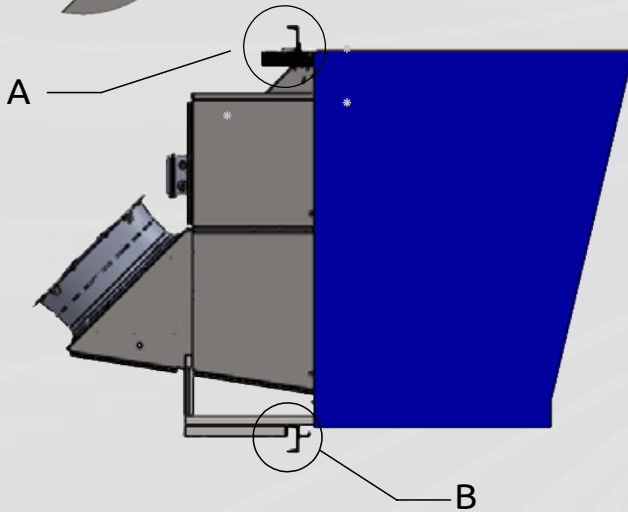


44"
Pallet Opening Width

4" Structural Racking Beam
BAC Block



A. Beam Attachment Clamp Detail



83" Maximum Beam to Beam Height



4" Structural Racking Beam

B. Bottom Beam Attachment Detail

*Plenum Extensions:

The QFM has NO maximum beam to beam height limitation as we offer plenum extensions which allow installation to any height of beam to accommodate any height of pallet

HS Codes for Import/Export Shipping

QFM	8414.60.0000
QFM Fan Only	8414.59.6590
QFM Control Box	8414.90.1080
QFM Install Tool	8482.90.0390

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QUICKFREEZE



**QUICKFREEZE®
SPARTAN**

DEEP LANE FREEZING

Introducing QuickFreeze Spartan, the latest innovation from Tippmann Engineering. What is Spartan? Spartan builds on the highly successful QuickFreeze In-Rack Freezing platform with two new features, "Auto Seal" and "Deep Lane" freezing.

QuickFreeze In-Rack technology requires the pallet to be sealed and engaged to the air plenum. Without a good seal, freeze performance suffers.

With the all-new Auto Seal, a perfect seal around all three sides is formed every time a pallet is placed in front of the system. This forces air to flow between layers of cased product, unevenly stacked products, or products stored in drums. The perfect seal, combined with increased air velocity, results in the fastest possible freeze times.

Deep Lane Freezing is achieved by placing multiple pallets in a single air plenum and using the Auto Seal.



AUTO SEAL - A perfect seal every pallet

DEEP LANE FREEZING - Freeze multiple pallets in a lane

SMALLER FOOTPRINT - Freeze more pallets in the same space

REDUCED CAPITAL & ENERGY COST - Spartan fights inflation by costing less to install and operate than previous QuickFreeze Systems.

QUICKFREEZE - The fastest way to freeze a pallet!



FREEZE IT. LOG IT. PROVE IT.

OBSERVES:

IR Camera watches the surface temperature of the food as it freezes.

ANALYZE THERMAL PATTERNS:

It learns the relationship between surface cooling and internal temperature change.

MONITORS THE CORE TEMPERATURE:

Without using invasive probes, it determines when the center of the pallet has reached the target temperature.

SAVES ENERGY:

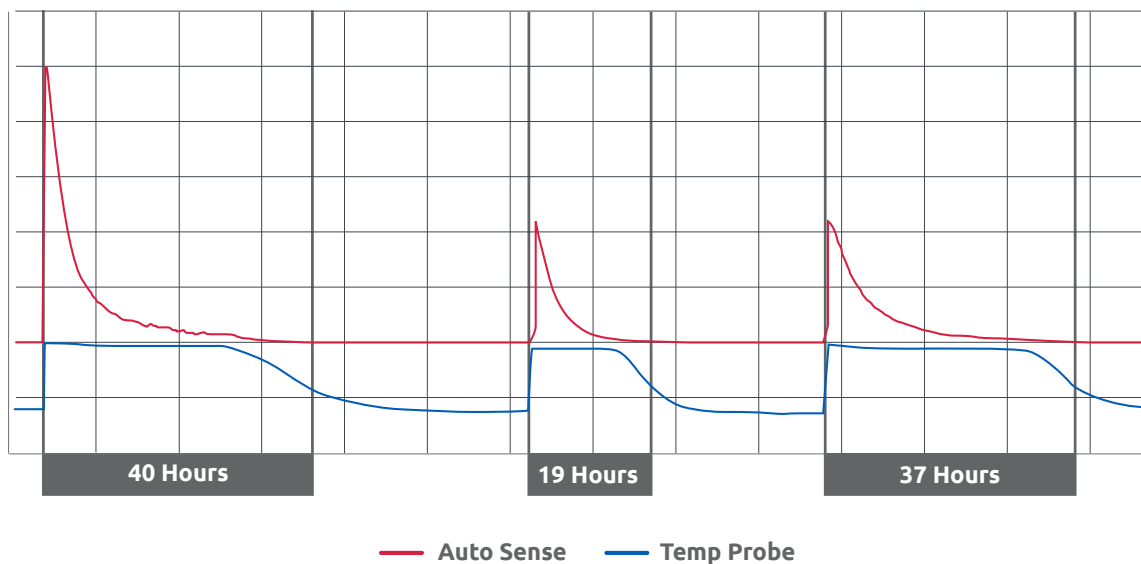
Eliminates the guessing game and QuickFreeze unit shuts off when pallet is to temperature.

INCREASED THROUGHPUT:

Frees the QuickFreeze Unit up allowing the placement of a new pallet.

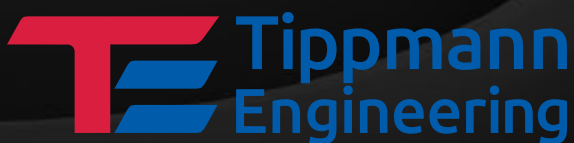
IMPROVED ACCURACY:

Averaging IR results reduces the random errors that are characteristic of individual models.





WE BUILD **COOL** SOLUTIONS



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www.QuickFreeze.com

MKT-196.5 • 1.16.26 | Patents: <http://www.QuickFreeze.com/Patents>