

# **Heating and Refrigeration CFD Analysis Consulting**

IMAGINIT provides an effective collaborative consulting business model to deliver CFD simulation services for confident design decisions. The insight we provide empowers our clients to create robust designs faster and more reliably without distractions to their current development process.

## Our model is built on leveraging strengths

By partnering with IMAGINIT, the analysis process is left to our analysis experts and the design process is left to your design experts. Sharing of these core competencies encourages continuous collaboration and bi-directional flow of information. This ensures all design guidance and ideas exchanged fit within your constraints for timing, cost, manufacturability, size and aesthetics.





## Benefits of IMAGINiT insight:

- Assessing performance effectiveness before tooling commitments
- Establishing uniform flow distributions for faster cycle times
- Identifying proper sensor locations for less thermal cycling
- Minimizing losses, backpressures and dead zones for greater product throughput
- Balancing overall performance with size, cost and aesthetics
- No flow/thermal expertise or software needed We have it!

#### Initiatives impacted:

- Cost Control mitigating overdesigning, redundancy and costly rework
- Time to market reducing exploratory testing with greater confidence
- Differentiation substantiating performance claims
- Efficiency improving energy ratings and NSF & UL compliance
- Margins increasing production and yield

#### What are the biggest reasons companies partner with IMAGINIT?

Design Insight. Our team provides impactful design insight for understanding how to fix a problem or innovate new and better performing products without diverting internal engineering resources.

Analysis Expertise. Our team has built careers around CFD analysis and we have the expertise to confidently gain and interpret simulation results to empower our clients to make informed design decisions and meet critical project deadlines.

Preserve design intent. Our process is highly collaborative and built around leveraging the strengths of both IMAGINiT and our clients. The combination of focused core competencies and frequent design review meetings where IMAGINiT works as an extension of the team ensures we are always in lock step with your objectives to preserve the original design intent.

## Application Areas:

- Refrigeration
- Freezing
- Cooking
- Holding
- Chilling
- Dispensing
- Washing
- Steaming



"Extending ice retention rates is what it's all about in the cooler industry. With our diversity in product lines, time required to build prototypes and the sheer number of design variables, relying exclusively on empirical testing to vet out design concepts can be impractical. Leveraging the IDP (now IMAGINiT) team; however, allows us to quickly and accurately determine this performance metric and gain much needed design insight to optimize material selection and overall design layout, ultimately compressing the design process and extending ice retention."

> — Fred Schmidt **Product Engineering Director Igloo Products**





