Filtration 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:

- Minimizing system pressure drop by eliminating flow recirculation
- Maximizing filtration area through uniform flow distribution across media
- Optimizing filtration media selection early in the design process
- Mitigating excessive particulate build-up/clogging for extended life
- Extending contact time for greater filtration efficiency
- 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
- Compliance – achieving specifications with better designs the first time
- Brand Recognition – introducing superior products ahead of the competition

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:

- Gas & liquid filtration
- HVAC systems
- Hydraulic systems
- Water purification
- Filtration media
  - Paper / cloth
  - Metal screens
  - Packed beds

“The engineers at IDP (now IMAGINiT) truly are experts in the real-world application of CFD. Their approach is focused, prompt and accurate, and their level of communication is top-notch. They were a tremendous asset in uncovering and communicating the design strategy required for acceptable mal-distribution on a recent integral plate settler development project which incorporated some new technologies that will give JMS a competitive edge in the water and wastewater industries. We now have the confidence and collateral to apply what we’ve learned to future design activities as well.”

— Kerry Dissinger
Sales Mgr., Jim Myers & Sons