



DESIGN/BUILD

Turnkey Cleanroom Environments



ABOUT OLAF

As a nationally recognized leader in cleanroom innovation, Olaf Engineers & Consultants is a one-stop source for world-class design-build modular cleanroom services.

Olaf Engineers & Consultants turnkey offering covers the entire cleanroom implementation process, from concept to certification.

With extensive cross-market industry knowledge, we deliver high-performing modular cleanroom environments that enhance your business results.





INDUSTRIES WE SERVE

Our Modular Cleanrooms

Pharmaceutical Cleanrooms

Our pharmaceutical cleanrooms are compliant to all North American, European and Indian regulations. They are also 21CFR Part 11 compliant, when applicable.

Biotech Cleanrooms

Built to the highest level of bio-contamination control, our biotech cleanrooms are able to be used as pilot plants and then converted directly into production suites, with no change in the facility itself.

Pharmacy Cleanrooms

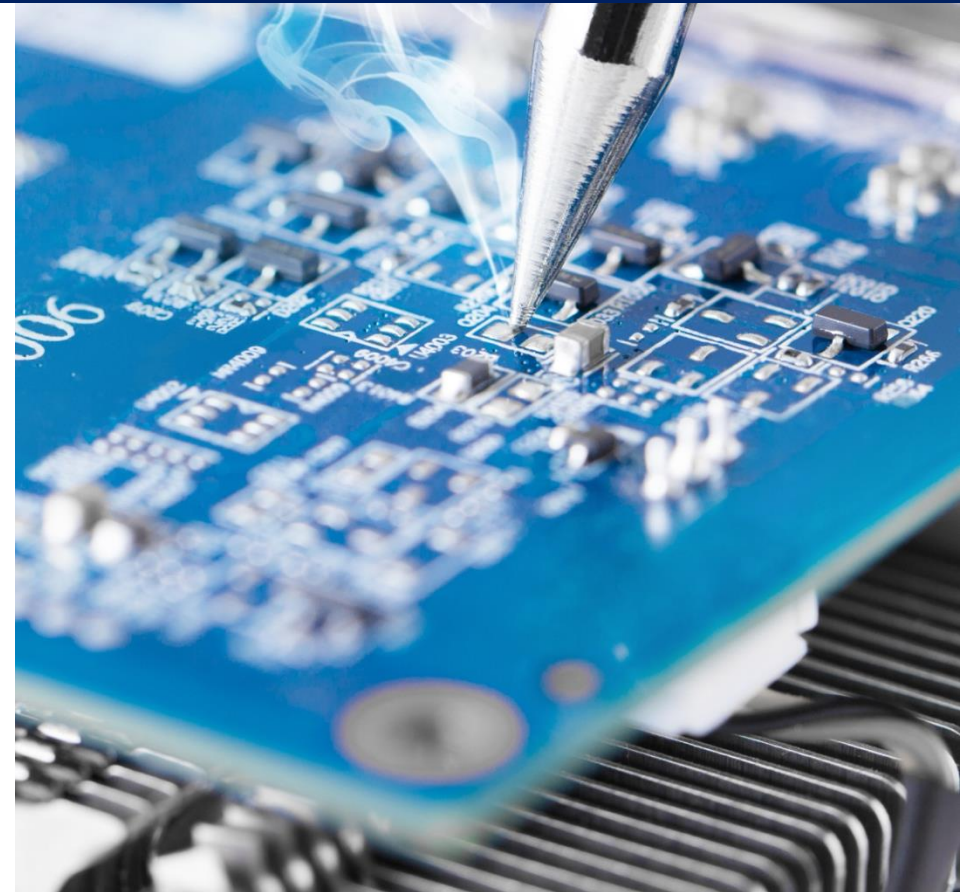
These cleanrooms are typically smaller and designated for specific drug compounding or manufacturing.

Semiconductor Cleanrooms

The highest level of contamination control is required by this industry. These cleanrooms are designed and built for the virtual elimination of particles in the suite, while maintaining a production type environment.

Life Sciences Cleanrooms

There are many other markets which require high level cleanrooms suites. All of these cleanrooms are designed for the specific requirements of the customer.





OUR PROCESS

From Concept to Certification

Concept and Planning

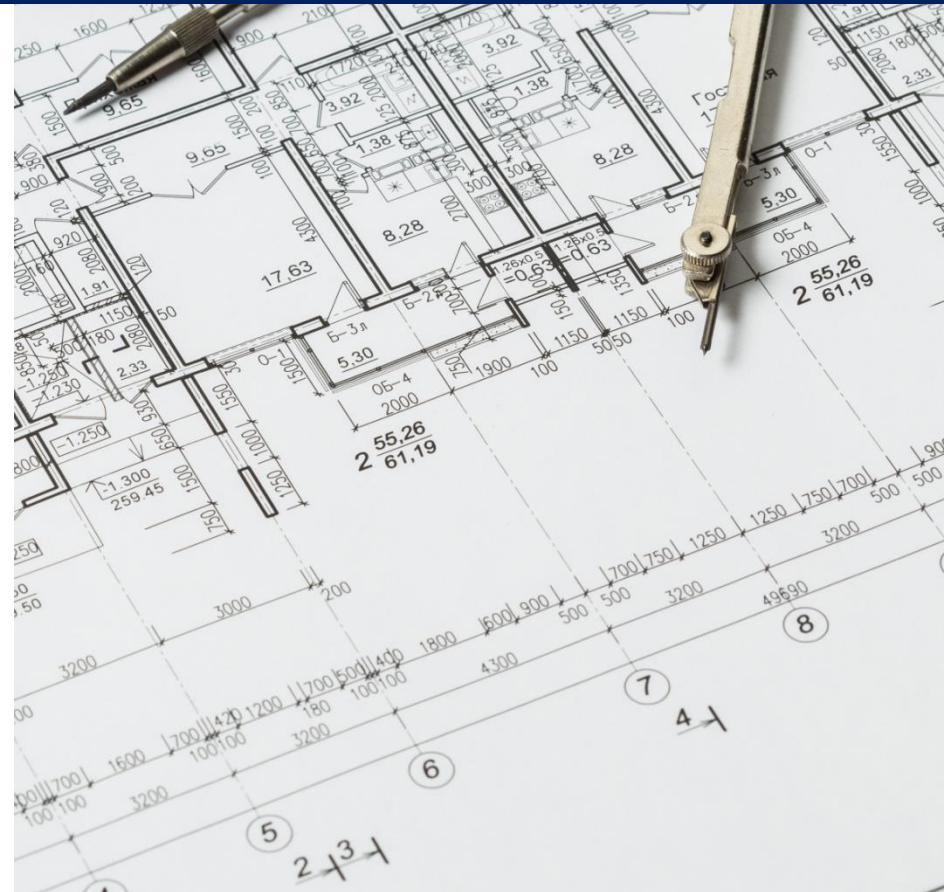
Olaf's engineers conduct site visits to understand process and personnel flow through the proposed cleanroom suite for potential cross contamination issues. The build site is reviewed for space utilization and design requirements. Our engineers work with our customers, identifying specific or unique requirements and cleanroom classification.

Design/Layout & Engineering

With many years of experience in architectural, structural, mechanical, control systems, electrical & process design, our engineering team designs your cleanroom to your custom requirements. We develop your cleanroom blueprints with a focus on efficiency, compliance and scalability.

Project Management & Construction

Olaf's construction team includes an operations manager, project manager and construction manager. Our cleanroom construction process is managed to maintain or accelerate schedule, quality and safety. A Olaf Engineers & Consultants manager is always on site to assist you in any needs you might have during the construction process.





OUR PROCESS

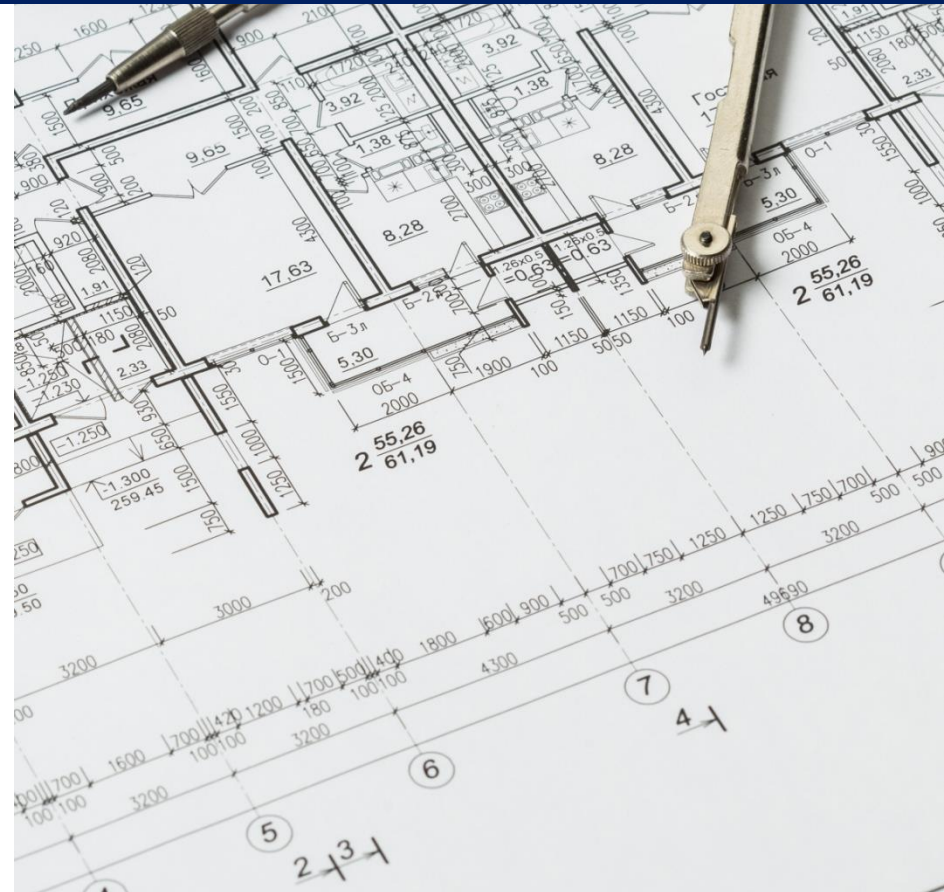
From Concept to Certification

Analysis and Certification

Olaf Engineers & Consultants concludes all testing with comprehensive reports, detailing test procedures and test results. All cleanroom testing is performed in accordance and is compliant with Current Good Manufacturing Practices (cGMP), Institute of Environmental Sciences Technologies (IEST) and International Organization for Standardization (ISO). Certification is conducted by a third party testing agency and Olaf Engineers & Consultants guarantees compliance to the level of certification you specified.

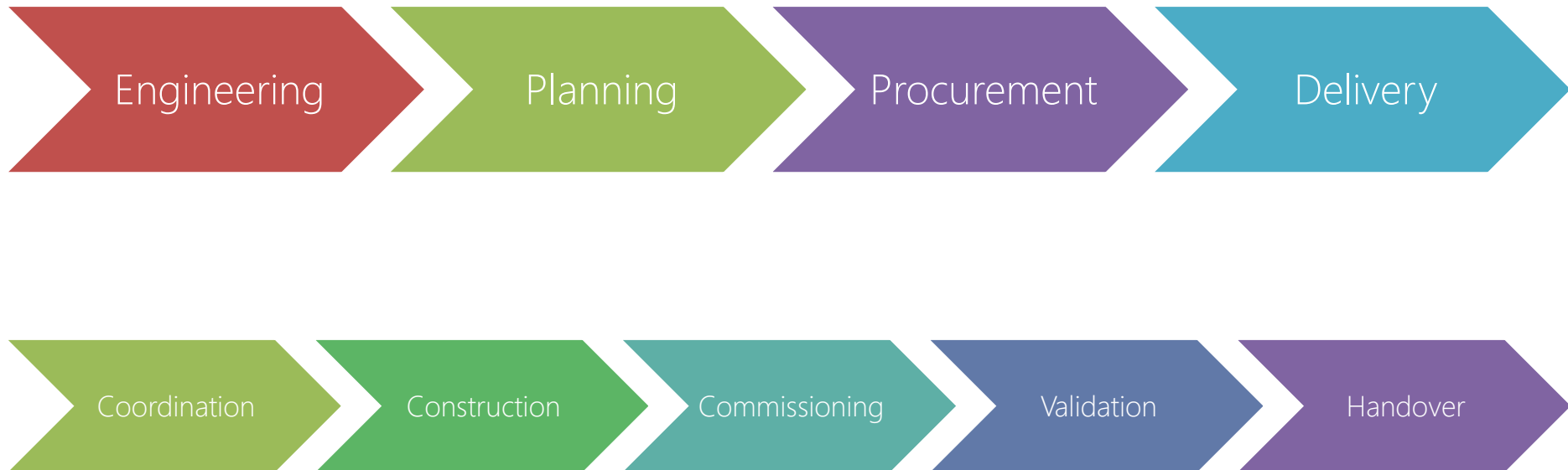
Training & Service

Olaf Engineers & Consultants offers full training for staff to maintain cleanliness protocols, proper operation of mechanical systems, overall operation of the cleanroom and use of any control systems installed. Service agreements are available to ensure the environmental performance of the cleanroom suite, while extending the life of the mechanical equipment.



STANDARD TURNKEY PROJECTS

Flow Chart



PRODUCTS & SOLUTIONS

Modular Cleanroom Partition System



PRODUCTS & SOLUTIONS

Cleanroom Epoxy / PU Flooring



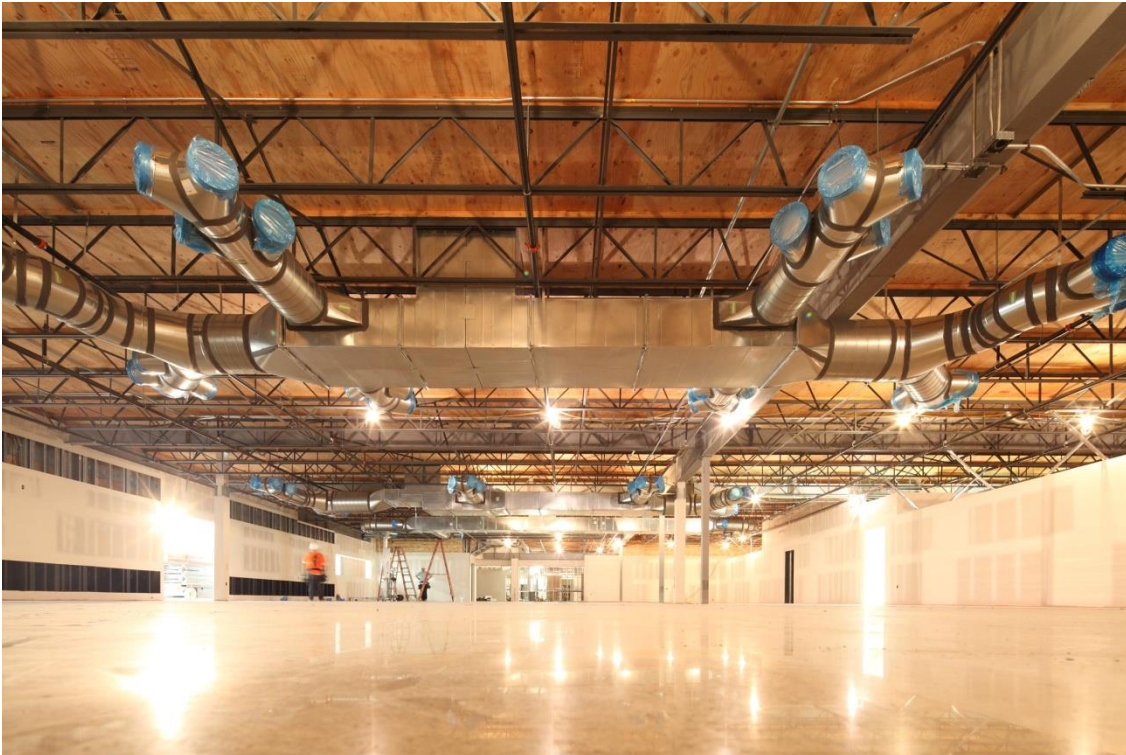
PRODUCTS & SOLUTIONS

Cleanroom HVAC System



PRODUCTS & SOLUTIONS

Pharmaceutical MEP (Mechanical, Electrical & Plumbing)



PRODUCTS & SOLUTIONS

Cleanroom Utilities & Process Piping (Steam, Water, Gases, Fire Fighting, ETP, STP, Process)



PRODUCTS & SOLUTIONS

Water Treatment (Generation & Distribution)



PRODUCTS & SOLUTIONS

Cleanroom Equipment & Furniture



PRODUCTS & SOLUTIONS

QC/QA/RnD Lab



PRODUCTS & SOLUTIONS

Commissioning & Validation



PRODUCTS & SOLUTIONS

Documentation

Performance Qualification Protocol		Doc. No.: AIR PMS-001						
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PRODUCTS & SOLUTIONS

Training / Operation & Maintenance



OUR CUSTOMERS

