# **Process Solutions for Pharmaceutical,** Dairy, Food and Cosmetics Industries!







**ASHTAVINAYAKA** TECHNOCRAFTS PRIVATE LIMITED



# **Company Profile**

#### ASHTAVINAYAKA TECHNOCRAFTS PRIVATE LIMITED

A.T.P.L. (Ashtavinayaka Technocrafts Pvt. Ltd) is an ISO 9001:2015 certified company by TUV NORD, Silver rated company by ZED, and MSE - 3 rated by NSIC CRISIL. A.T.P.L is a member of GCCI, CII & EEPC. ATPL has been a leading innovator of liquid processing equipment in the engineering industry since 2004. With a steadfast commitment to excellence, we specialize in delivering comprehensive engineering solutions that cater to a wide array of industries and applications. Our expertise spans across multiple disciplines, ensuring that we provide cuttingedge services and products tailored to meet the unique needs of our clients.



#### **Our Vision:**

At ATPL, our vision is to be at the forefront of engineering advancements, driving progress through innovation, sustainability, and unparalleled quality. We strive to create a positive impact on the world by designing and implementing solutions that enhance the efficiency, safety, and sustainability of the environments in which we live and work.

#### **Our Services:**

At ATPL, we work as a premier provider of engineering solutions specifically designed for the pharmaceutical industry. Our expertise in designing and fabricating high-quality process vessels ensures that your pharmaceutical operations run smoothly, efficiently, and safely. We understand the stringent regulatory requirements and the critical nature of pharmaceutical manufacturing, and we are committed to delivering solutions that meet the highest standards of quality and compliance.

### **Our Expertise**



#### **Our Expertise:**

At ATPL, we specialize in the engineering and fabrication of process vessels that are integral to pharmaceutical manufacturing. Our services include:

#### **Design and Engineering:**

Utilizing advanced CAD and simulation software, our team designs process vessels that are optimized for performance, efficiency, and compliance with industry standards such as ASME, GMP, and FDA regulations.

#### **Custom Fabrication:**

We offer custom fabrication services to create process vessels tailored to your specific needs, including reactors, Process vessels, and Storage tanks. Our fabrication processes adhere to the highest quality standards to ensure durability and reliability.

#### **Installation and Commissioning:**

Our experienced team handles the installation and commissioning of process vessels, ensuring seamless integration into your existing systems. We provide support throughout the commissioning process having comprehensive validation and testing services to ensure that your process vessels meet all regulatory



#### **After Sales Service Support:**

We respond promptly to any operational issues or failures, including on-site or remote troubleshooting, repairs, and parts replacement. We ensure the availability of critical spare parts and manage inventory to reduce downtime during repairs.

## **Innovation and Technology**



#### **Innovation and Technology:**

Innovation is at the core of our operations. We leverage the latest technologies and industry best practices to ensure our solutions are not only effective but also forward-thinking. By staying abreast of technological advancements, we can offer our clients state-of-the-art solutions that are both practical and pioneering.

#### **Commitment to Quality:**

Quality is paramount at ATPL. We adhere to stringent quality control measures and industry standards to guarantee the highest level of precision and reliability in our work. Our commitment to quality ensures that every project we undertake is executed with meticulous attention to detail and the utmost professionalism.

#### **Client-Centric Approach:**

At ATPL, we believe in building long-term relationships with our clients. Our client-centric approach ensures that we are attentive to their needs, responsive to their feedback, and proactive in addressing any challenges that arise. We take pride in our ability to deliver projects on time, within budget, and to the highest standards of quality.



### The company's Infrastructure and Facility



#### The company's Infrastructure and Facility:

ATPL has a state-of-the-art manufacturing facility comprised of qualitative and precision fabrication expertise with the latest technology to manufacture SS Process Equipment and Process Turnkey Plants having a team of qualified mechanical and chemical engineers, and a skilled and semi-skilled workforce of over 270 human resources including other staff and casuals.

The production facility has a built-up area of 5000 sq. mtrs., a separate Area: of 1000 sq. Mtrs. for the support structure fabrication of MS for logistics. The facility is equipped with all the required fabrication machinery like Bending rollers, the latest Laser Cutting machines, Orbital Welding Machines, Lathes, Drilling machines, Laser Printing Machine, Spinning Machine, Hydraulic Press, Shearing Machine, Grinding and Buffing machinery, PMI Machine, and Boroscopy machines.

The Quality Control Department is equipped with all In-house facilities for accessing welding quality, thicknesses, surface finishes, Hydro/Pneumatic/Vacuum testing, Agitator running performance, vessel calibration, etc. with the latest instruments. As per the Quality Assurance Plan, every vessel is passed through a stringent procedure of inspection right from material testing to trial running as per DQ/FAT formalities laid by current GMP standards. Dispatch of each vessel is followed by technical documents carrying DQ/IQ and OQ with all necessary test certificates and "As-Built" drawings.





## **Our Team**



#### Team:

Our corporate vision is based on passion, commitment, and a spirit of sacrifice. We focus our knowledge and competencies on the engineering and development of high-tech equipment for Pharma, Dairy, Food, and Cosmetics Industries.

The team of Project managers, Engineers, and Software experts, analyze the specification in detail, evaluating accurately the technical aspects in continuous partnership with the final customer.

More than 270 motivated and highly educated employees follow the company's vision always with passion.









#### **Our Mission:**

The endless development of ideas and new solutions has always been the mission of our company. From design to installation to plant validation: we can offer turn-key process plants, skidded vessels, and standalone vessels for the Pharma, Dairy, Food, and Cosmetic Industries.





## A tailor-made solution



#### A tailor-made solution:

Working closely with our customers ATPL's scope of supply ranges from planning, development, and installation of completely integrated production lines. Our experienced engineers will collaborate with your project team to supply innovative and efficient process solutions for your applications. The extensive product portfolio, technologies, and services include a complete system and components for the production of :

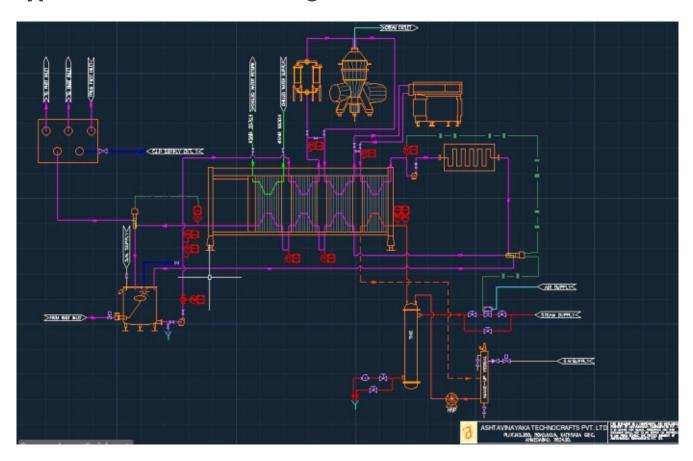
- Syrup and Suspension for Liquid Oral
- External Ointment and Semi Solids
- Non-Sterile products
- Milk Processing
- Shampoo/Cream/Lotions

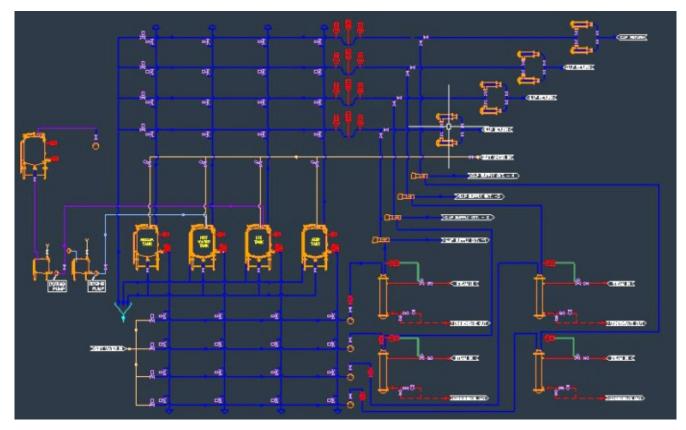


# **Typical P&IDs for Processing Plants**



# **Typical P&IDs for Processing Plants:**





## **Engineering Expertise**



#### **Engineering:**

ATPL has a team of engineers ready to develop new innovative process solutions in step with the latest technologies. From virtualization to reality. Design development goes hand in hand with 3D system modeling. These models are used to fully articulate the development of the project and allow to prevent critical issues and develop alternative solutions.



Our engineering expertise in process vessels ensures safe, efficient, and reliable operation in industrial applications. We focus on top-quality design, material selection, and compliance with safety regulations, providing robust solutions that withstand high pressures and temperatures. Trust us to deliver vessels that meet your industry's demands and exceed safety standards.

Unlock the potential of your pharmaceutical and dairy operations with expertly engineered process vessels. Designed to meet stringent industry standards, our vessels ensure optimal performance, hygiene, and safety.

## **Dairy Processing Equipment**



#### **Process Solutions:**

Based on the ATPL concept, we are in the unique position of being able to offer our clients absolute, industry-specific solutions at every stage of development. We offer turn-key solutions, from process engineering, through commissioning and Qualifications.

Offering a comprehensive range of services and project management, we guarantee successful outcomes and a tailor-made solution for your application.





Based on established standards, our project team will develop project documentation according to your individual needs and deliver the project on time, according to the agreed budget and quality level.

### **Liquid Oral Manufacturing Plant**



#### **Liquid Oral Manufacturing Plant:**

ATPL offers state-of-the-art liquid processing solutions designed to meet specific customer needs while ensuring compliance with global standards, including those set by WHO, USFDA, and MHRA. Our equipment is meticulously manufactured according to cGMP guidelines and ASME standards, guaranteeing superior quality and reliability.

#### **Key Features:**

- Raw Material Handling: Systems for the transfer and storage of raw materials like sugar and glucose.
- Mixing and Preparation: Design Process Vessels as well as Selection of homogenizers, and agitation systems.
- Filtration and Quality Control: Implement filtration systems to ensure the clarity and consistency of the product.
- Storage: Design storage vessels with appropriate agitation.
- Piping and Instrumentation: Design sterile piping systems with sterile control valves and appropriate instrumentation.
- CIP System: Design tailor-made CIP systems for cleaning and sanitization of the system.
- Automation: Implement PLC-based control systems, optionally compliant with 21 CFR Part 11.
- SCADA Systems: For real-time monitoring and control of the manufacturing process.
- Documentation: Provide comprehensive documentation including design qualifications (DQ), factory accurate tests (FAT), installation qualifications (IQ), and operational qualifications (OQ).

By combining cutting-edge technology with rigorous adherence to industry standards, we deliver liquid processing plants that excel in performance, safety, and compliance.



## **Ointment Manufacturing Plant**



#### **Ointment Manufacturing Plant:**

ATPL offers state-of-the-art ointment manufacturing equipment designed to meet specific customer needs for semi-solid products like ointments, creams, lotion, shampoo, conditioners, and Toothpaste. Our ointment manufacturing plant is designed to deliver high-quality, efficient production of ointments while adhering to stringent global standards. Equipped with advanced technology and built to comply with regulatory requirements, the plant offers customizable solutions to meet diverse production needs.

#### **Key Features:**

- Tailor-made systems to accommodate both semi-automated and fully automated production processes, ensuring flexibility and scalability to meet varying production demands.
- The plant adheres to international standards including WHO, USFDA, and MHRA guidelines. All equipment and processes follow cGMP guidelines and ASME standards to ensure product quality and safety.
- High-efficiency vessels for thorough mixing and blending of ingredients. The plant is equipped with Integrated homogenizers for achieving consistent ointment texture.
- Automatic cleaning (CIP) and sterilization systems (SIP) to maintain hygiene and prevent cross-contamination.
- Programmable Logic Controllers (PLC) for seamless process automation, ensuring accuracy and efficiency with SCADA 21 CFR Par 11.
- Quality Assurance: Comprehensive quality control measures are in place, including system validation (DQ, FAT, IQ, OQ) and adherence to stringent quality standards to ensure consistent product quality.



### **SS Reactors**



#### SS Reactors:

As a leading manufacturer of cGMP Stainless Steel Reactors, ATPL is committed to providing high-quality, reliable, and compliant equipment designed for the pharmaceutical, biotechnology, and chemical industries. Our reactors are engineered to meet the stringent requirements of current Good Manufacturing Practices (cGMP) to ensure the highest standards of product safety, quality, and efficacy. We manufacture reactors from 100 Ltrs. capacity up to 100KL size capacity.

#### **Key Features:**

- Our reactors are made from high-grade stainless steel (316L), known for its exceptional corrosion resistance, durability, and ease of cleaning. This material ensures the longevity and integrity of the reactor under various operational conditions.
- Our reactors are designed and manufactured in strict adherence to cGMP regulations. This includes comprehensive documentation such as validation and qualification reports, operation manuals, and adherence to standard operating procedures (SOPs) to ensure regulatory compliance.
- Equipped with state-of-the-art agitators and mixing systems to ensure uniform and efficient blending of reactors, enhancing product consistency and quality.
- Features integrated heating and cooling systems for accurate temperature regulation and robust pressure control systems to handle various operational pressures safely.
- Incorporates Clean-In-Place (CIP) and Steam-In-Place (SIP) systems designed to ensure thorough and efficient cleaning, minimizing the risk of cross-contamination and ensuring product integrity.
- Designed with safety in mind, our reactors include multiple safety mechanisms such as pressure relief valves, emergency shutdown systems, and comprehensive monitoring systems to safeguard operators and ensure reliable operation.
- Available in a range of sizes and configurations to meet diverse production needs, from laboratory-scale reactors to large-scale production units. We also offer customization options to tailor reactors to specific process requirements.
- Each reactor undergoes extensive testing and validation processes to ensure it meets the highest standards of performance, safety, and compliance before it reaches our customers.
- We provide complete documentation packages that include design specifications, validation protocols, and certification to support regulatory submissions and quality audits.



## **CIP Systems**



#### **CIP Systems:**

At ATPL, we specialize in providing advanced Clean-In-Place (CIP) systems designed to streamline and optimize the cleaning process for a variety of industries, including pharmaceuticals, biotechnology, food and beverage, and chemicals. Our CIP systems are engineered to meet the highest standards of efficiency, reliability, and regulatory compliance.

#### **Key Features:**

- Our CIP systems incorporate the latest technology to ensure thorough and effective cleaning. This includes precision pumps, heat exchangers, and automated controls to handle complex cleaning requirements.
- We offer customizable CIP systems tailored to meet the specific needs of your operation. Whether you need a
  system for small-scale laboratory use or large-scale production, we can provide a solution that fits your
  requirements.
- Equipped with intuitive controls and user interfaces, our CIP systems simplify operation and monitoring. Our systems include programmable logic controllers (PLCs) and touchscreen interfaces for easy setup and adjustments.
- Our systems are designed to optimize the use of cleaning solutions and water, reducing waste and minimizing operational costs. Features like automated concentration control and recycling of cleaning solutions ensure cost-effective operations.
- We provide complete documentation, including system design specifications, validation protocols, and operation manuals. This supports regulatory compliance and facilitates seamless integration into your processes.





### **Dairy Processing Equipment**



#### **Dairy Processing Equipment.**

At ATPL, we are a leading manufacturer of high-quality dairy processing equipment designed to meet the diverse needs of the dairy industry. Our state-of-the-art equipment is engineered to optimize production efficiency, ensure product quality, and adhere to the highest industry standards.

#### **Product Offerings:**

- Milk Pasteurizers: Our pasteurizers are designed to ensure the safety and quality of milk and dairy
  products by effectively killing harmful microorganisms while preserving essential nutrients. We offer a
  range of models, including batch and continuous flow pasteurizers, to suit different production scales.
- Cheese Processing Systems: We provide comprehensive cheese processing solutions, including curdling tanks, cheese vats, and aging rooms. Our equipment supports various cheese types and production methods, ensuring consistent quality and efficiency.
- Yogurt and Fermentation Equipment: Our yogurt processing systems are designed for precision and flexibility, accommodating various fermentation processes and probiotic cultures. Equipment includes fermenters, cooling systems, and homogenizers.
- Cream Separators: Our cream separators are engineered for efficient separation of cream from milk, with
  options for both centrifugal and membrane separation technologies. These systems ensure high-quality
  cream and skim milk production.
- Equipped with intuitive control systems and automation options, our equipment simplifies operation and monitoring, reducing the need for manual intervention.



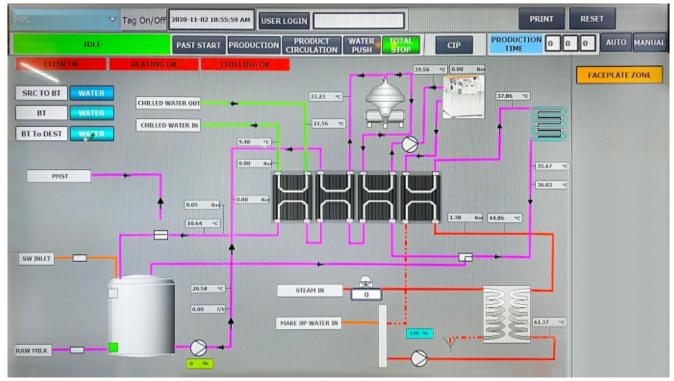
### **Automation**



#### **Automation:**

In the pharmaceutical industry, compliance with regulatory standards is crucial for ensuring product safety, quality, and efficacy. One of the key regulations is 21 CFR Part 11, which governs electronic records and electronic signatures. Process automation, particularly through SCADA (Supervisory Control and Data Acquisition) systems, plays a vital role in meeting these stringent requirements.





### **Quality Assurance**



#### **Quality Assurance:**

Equipment for use in the Pharmaceutical Industry is designed for operation according to Good Manufacturing Practices (GEP and GMP), FDA regulations (CFR 21 Part 11 for control systems), and Good Automated Manufacturing Practices (GAMP), while meeting the requirements of European, American or applicable national standards.

Every technical and business department is involved during each step of the project. The customer-user has an important role in the preliminary design phases, writing out construction and functional specifications that are the guide for the manufacturer to realize the right product for the problem. In addition, ATPL has an in-house facility comprised of fabrication, welding, polishing, and machining having well-equipped hi-tech machinery like a Laser welding machine, the Biggest Bed size laser Cutting machine, PMT Machines, and Digital Roughness Testing machines.



Productivity and Performance are the bounds between which the company pursues its objectives by introducing not only preventive tests but also intermediate and final ones before the delivery to the customer.





Product process reliability consists of periodic monitoring of tests and inspection of instruments carrying out a customized and specific test and maintenance schedule. Instrument calibration ensures result reliability and reduces failure tolerance. ATPL is ISO 9001-2015 certified for design, production, sales, and after-sales activities. Design (DQ), Installation (IQ), and Operational (OQ) qualifications, Exhaustive testing, and documentation are precisely taken care of by ATPL. The aim is to provide customers with an end product that complies with strict regulations and process compliances.





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