

BOUNDARYLESS PROCESSING SYSTEMS

COSMETICS



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OUR CLIENTS

# ABOUT US



## WE DELIVER VALUE ENGINEERED SOLUTIONS

For over 35 years Adam Fabriwerk has specialized in customized process system solutions for the cosmetic industry. We specialize in providing customized and integrated turnkey solutions for the production;

- Creams and lotions
- Shampoo
- Toothpaste
- Deodorants
- Lipsticks
- Gels
- Nail Polish

Experience gained over the years has helped us to understand the requirements of the cosmetic industry better and deliver customized solutions that are optimized to suit our customers requirements. With Adam Fabriwerk, you are backed up by our well equipped world class manufacturing facility supported by over 200 employees who are an ideal mix of process experts, trained technicians and skilled fabricators and project managers.

## CUSTOMIZED SOLUTIONS

Every project comes with its own challenges and is unique. We understand that every project is different and so are the solutions. Our ability to deliver customized process engineering solutions in a dynamic environment differentiates us from others.

## WORLD-CLASS QUALITY

Our equipments are designed to perform consistently, easy to operate, designed to be compact and reliable with low operational life-cycle cost. They are designed and engineered to be in compliance to international standards and guidelines as required.

## PROCESS CONTROL

Processes for the cosmetic industry has to be seamless, synchronized with repeatable consistency and quality. Our process automation expertise enables a high level of process reliability and flexibility. We closely co-ordinate mechanical designs of customized equipment and processes with instrumentation and control systems.

## MANUFACTURING INFRASTRUCTURE

Spread over an area of over 20,000 ft<sup>2</sup>, we have one of the largest manufacturing facility in the field of our activity at Nashik, India. Our plant at Nashik is a fully integrated, fabrication, assembly and testing facility managed by skilled technicians and engineers.

A dedicated area for Factory Acceptance Testing (FAT) enables all our systems to be tested under varying process conditions before shipment to site.

## TRAINING & SERVICE SUPPORT

Our experienced training team provides operational training and works with your team to help operate the system efficiently. Our warehouse stocks most of the spare parts for timely delivery. Our trained and experienced Service Team engineers ensure efficient and timely support.



□ EXPERTS IN CUSTOMIZING SYSTEMS AND SOLUTIONS

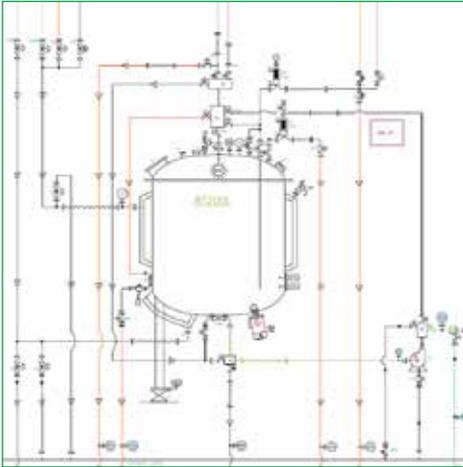
□ OVER 20,000 ft<sup>2</sup> OF MANUFACTURING, ASSEMBLY AND TESTING AREA

□ OVER 200 COMMITTED AND TRAINED EMPLOYEES

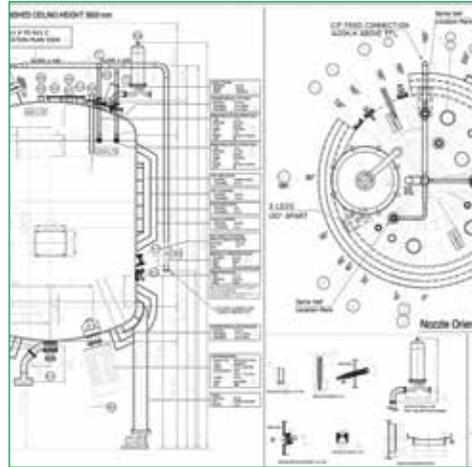
□ OVER 35 YEARS OF QUALITY MANUFACTURING EXCELLENCE

# MANUFACTURING WORKFLOW

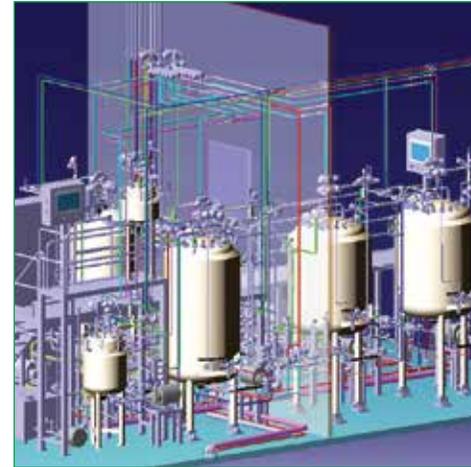
## P&ID



## GENERAL ASSEMBLY DRAWING



## 3D MODEL



## SYSTEM BUILD



**01** The system manufacturing process is initiated with the preparation and approval of P&ID drawings. The P&ID accurately captures the arrangement of all instruments, equipments and component like the vessels, pumps, valves and instruments. Once the P&ID is approved, the process of creation of General Assembly drawings is initiated.

**02** The General Assembly drawings deliver information like the dimensional details, design parameters, quality of surface finish (Ra values), BO specs etc. On approval of this, we proceed to the next stage i.e. 3D design of the system.

**03** We use the latest state of art 3D visualization and simulation software like CATIA & SIEMENS NX. These are great tools for engineering, visualization and simulation. They are also of great help in understanding the integration, size, scale and issues that might arise at the site during the installation and integration with other systems.

**04** On the basis of the 3D model, the systems are manufactured, assembled and tested. The use of 3D softwares ensures that minimal time is taken to assemble and integrate the system without any delays. The system is then checked for compliance and deviations with the P&ID, GA and the 3D models.

ACCURATE DRAWINGS AND 3D MODELS

LATEST 3D CAD SOFTWARE DRIVEN MANUFACTURING

FASTER MANUFACTURING TURN AROUND TIME



# KEY APPLICATIONS

*Our years of expertise in working closely with the cosmetic industry has helped us grow our knowledge bank on this industry immensely. There is no one size that fits all. Each project is unique and our expertise in handling the challenges this brings forth has helped many of our customers immensely. We have unique and optimized solutions for various applications of the cosmetic industry like;*

## Cosmetic Creams and Lotions



Hydration of thickening and suspending agents is a challenge, so is agglomeration. Our systems are built with high shear mixer that delivers consistent product quality with stable emulsion ensuring agglomerate free mixture. Our system ensures complete hydration

and dispersion of thickening agents while delivering higher yield. Precise temperature control ensures faster completion of batches. High end automation enables easier operator control ensures repeatable consistent quality.

## Lipstick



Our system design enables faster melting of wax and enables proper dispersion of pigment grinds and pre-dispersion in the wax medium. Other advantages are faster mixing, improved consistency and product texture.

## Gels / Carbopol®



Low density of the carbopol powder coupled with difficult to disperse agglomerates can be a challenge when trying to prepare a homogenous mixture. Varying rates of viscosity also pose challenges when using Carbopol®. Our systems are designed to ensure complete

dispersion in the shortest possible time while eliminating the risk of polymer overheat. Our systems are also designed to handle higher viscosities and come with the right high speed mixers.

## Nail Polish



System is designed for improved dispersion for improved color strength, faster resin dissolution and wetting out of powders. It has the ideal combination of vessel and mixing system. Efficiently designed CIP cycles ensure faster cleaning.

## Shampoo / Bodywash / Handwash



All our systems are designed to ensure rapid blending of liquids of varying viscosities. We also understand aeration can be a problem for clear shampoos and hence all our system are designed to be a closed system to eliminate aeration. Based on our experience

we have optimized our systems to reduce the mixing time, handle varying batch sizes, deliver better yield with thickening agents and most importantly deliver consistent product quality everytime.

## Toothpaste



Our systems are designed to handle high viscosities, lower processing time and rapid feed and powder wetting and minimized aeration. They also ensure faster mixing, improved consistency and product stability.

**BEST COMBINATION OF VESSEL AND AGITATION SYSTEM**

**FLEXIBLE PROCESS PARAMETER SETTING**

**FULLY CONTAINED PROCESSING SYSTEM**

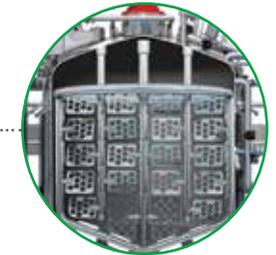
**Hydraulic Lift**  
to facilitate product recovery



Premix Vessel  
for Water Phase



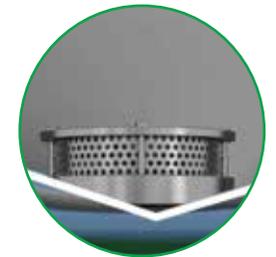
Premix Vessel  
for Wax Phase



Semi Contra Rotary Agitator  
with open slot scraper design

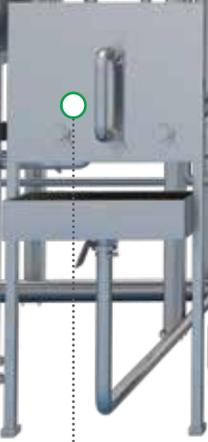


Short Cycle Recirculation  
for smaller batches



High Shear Mixer

Transfer Panel



SS316L, Mixing Vessel  
Jacketed, Insulated for  
heating and cooling



# SYSTEM FEATURES & ADVANTAGES

We have been a leader for over 35 years with considerable expertise in designing and engineering systems for the manufacture of Ointment and Creams. Our systems are fully optimized for delivering the best performance with reduced life-cycle cost. Our systems are designed for optimization of key resources and designed with features that include;

- Flexible process parameters setting
- Variable shear force adjustment
- Fully contained processing system

## KEY FEATURES

- The easy-to-use mixer control package can incorporate process parameters storage for simple and fast set-up
- Heating / cooling and insulated jackets with temperature control and safety equipment
- Semi Contra Rotary agitator with open slot scraper design
- Short loop product re-circulation for smaller batch sizes
- Hydraulic lifting on manufacturing vessel top dish to facilitate product recovery
- Separate pre-mix vessels for wax and water phase
- Process piping with transfer panel design for automated plants
- Cleaning-in-place cycles with dosing systems
- In-line high shear mixer options

## VESSEL DESIGN

- Extensive research and development has produced the best combination of vessel and agitation system, offering high productivity, quality and yield

- Low relative batch size
- Conical design and proven geometric ratios ensure optimum product flow
- All surfaces angled to ensure ease of cleaning during CIP operations

## INTEGRATED VACUUM SYSTEMS

- Fully controllable to permit variation of vacuum levels according to the process phase
- Vacuum line can be fully flushed for sanitation purposes

## USER FRIENDLY INTERFACE

- The easy-to-use mixer control package can incorporate process parameters storage for simple and fast set-up
- PLC based, with touch screen MMI and SCADA packages
- Choice of packages to suit application requirements
- Flexible configuration

## CAPACITY

5 - 20,000 Kgs.

## SYSTEMS DESIGNED FOR PERFORMANCE, CONSISTENCY AND RELIABILITY



**BEST COMBINATION OF VESSEL AND AGITATION SYSTEM**

**FLEXIBLE PROCESS PARAMETER SETTING**

**FULLY CONTAINED PROCESSING SYSTEM**

# PROJECT MANAGEMENT & QUALITY

## PROJECT MANAGEMENT

*Our turnkey approach - 360° Vision, integrated and synchronized*

Over the past 35 years, our project management capabilities, workflow, training methods, project monitoring systems (software and measurable metrics) have been refined many times over.

Our highly skilled and experienced project management team has access to high end tools, training and project review mechanisms. This ensures timely project delivery and efficiency in dynamic resolution of project issues.

Our project team is always in sync with our customers requirement and site situations. Our established policies, business processes and guidelines are designed to meet the rigorous standards.



## QUALITY

*Defines everything that we do*

Quality continues to be our defining identity. Every component that goes into our system passes through a stringent quality process by fully trained, committed and experienced quality experts. The team ensures dedicated focus on the **material, workmanship and documentation**. High quality and reliable *Orbital welding machine, Borescopy machines, Pipe Bending machines* and other key measuring instruments are integral to the quality of our systems. We rely on standard as well as project specific quality assurance and qualification procedures that ensure the conformity of the system to the designed specifications and GMP requirements.

Many bought out components like instruments, valves, pumps etc. are critical to the functioning of our systems. We have a stringent qualification standards for our partners. We buy from the most reliable and reputed international companies that are known for their quality and global service support. They are quality checked by our QC team to ensure they perform as designed and expected.



**HIGHLY EXPERIENCED PROJECT MANAGEMENT TEAM THAT DELIVERS CONSISTENTLY**

**HIGH QUALITY TESTING AND MEASURING INSTRUMENTS**

**TRAINED AND EXPERIENCED QUALITY ASSURANCE TEAM**

# INTELLIGENT AUTOMATION

We design comprehensive automation system that is reliable, easy to operate, connects, streamlines and sequences the processes seamlessly. Our system design ensures different equipments work together in harmonious sequence. Our ability to understand the process requirements in-depth, ensures robust, optimized, safe and user friendly system automation.

Our automation standards are driven by highly reliable and accurate instruments and controls that deliver consistency and repeatability over a period of time. A highly skilled, experienced and well trained electrical and automation team works together with our process specialists and our customers to design automation sequences that are implemented and rigorously tested.

## KEY FEATURES

- 21 CFR part 11 compliant
- PLC-SCADA open solution
- As per Gamp 5 guidelines
- Programming in accordance with S88
- HMI / IPC controls for localized control
- Electronic Batch Records (EBR)



**RELIABLE, EASY TO OPERATE  
AUTOMATION**

**AUTOMATION DRIVEN BY RELIABLE,  
WORLD CLASS INSTRUMENTS**

**SYSTEMS DESIGNED WITH  
21 CFR PART 11 COMPLIANCE**



## DELIVERING VALUE BY CUSTOMIZING SOLUTIONS PHARMA | BIOPHARMA PROCESSING SYSTEMS

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