



GEMERIK

(An ISO 9001: 2015 certified)



CORPORATE PROFILE



- **Gemerik** is a company engaged in manufacturing of precision stainless steel process equipment's for the Pharmaceutical & Biotech Companies.
- Established in **2017**, Gemerik is located in **Vasai** (Maharashtra) with fully equipped work shop.
- With the experience of more than 20 years in Pharma Industry, today with over **100** installations and a customer base of more than **70** satisfied Customers.
- In-house facilities for Designing, Fabrication & Documentation (including USFDA, 21CFR PART 11) as well as skilled & precision workmanship.
- We are able to comprehend the exact demands of our clients' Hi-Tech requirements & come up with a range that is in compliance with the latest market requirements.

OUR AIM & MISSION



Mr. Girish Wankhede
(Director)

- Our aim is to provide **cost effective solutions** to pharmaceutical & bio-pharmaceutical manufacturing facilities without compromising the quality.
- At Gemerik we offer complete solutions at different levels: Conceptualization, Design Consultancy, Equipment Manufacture, Commissioning, Qualification, Documentation and Validation.
- This strong focus on innovation and continuous improvement has enabled us to offer our customers a wide range of customized process solutions.
- We are focused to deliver the latest solutions on all the above products which are supported by comprehensive repairs and services and spares supply to ensure compliance with the latest US FDA, EU and cGMP norms.
- We Value our customers and understand their need for quick and reliable service. We have a team of trained Service Engineers to ensure high level of customer satisfaction.

PRODUCT PROFILE



BIOTECH APPLICATION VESSELS:

- Mixing/Manufacturing Vessel with Magnetic Mixer.
- Mixing Vessel with Top & Bottom Entry Mechanical Agitator.
- Mixing Vessel with Vibro-Mixer.
- Solution Preparation vessels.
- Fermenters of Capacity 10 ltr to 5KL.
- Filling Vessel.
- Holding Vessel.
- Blending Vessel.
- Inhaler Vessel.
- Pressure Vessel.
- Bio-Reactors.



PRODUCT PROFILE



BIOTECH APPLICATION VESSELS:

- Manual / Semi-Automated / Fully automated operation for all equipment's.



PRODUCT PROFILE



STORAGE TANKS:

- WFI Storage tanks ranging from 1000 L – 25KL.
- PW/ RO/DM Water Storage Tanks (1000 L – 25KL)
- PW/WFI Skid with piping, looping & Distribution.
- Sterile & Aseptic Process Pipe Line Site activity.



PRODUCT PROFILE



STERILIZATION SYSTEM:

- Autoclave / DHS / Terminal sterilizer / Vertical autoclave.
- Super-Heated Water Spray Sterilizer.
- Bung Processors.
- Terminal Sterilizer.
- Pure Steam Generators / Clean Steam Generators
- Multi column Distillation Plant.
- Hygiene Hand Wash & Feet wash Machines.

MISCELLANEOUS SYSTEM:

- Ointment & Cosmetic manufacturing plants with transfer system.
- Liquid/ Oral Syrup plants.

BIOTECH APPLICATION VESSELS



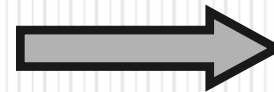
Mixing/Manufacturing Vessel
with Magnetic Mixer



Precision speed
control with
Magnetic stirrer
application.



Mixing Vessel with Top & Bottom
Entry Mechanical Agitator



Mixing vessels with High
Shear Mixers



High Quality
Finish with
accurate designs.

BIOTECH APPLICATION VESSELS



Mixing/Manufacturing Vessel
with Top entry mechanical
agitator.



In-house facility for
Testing.



Low volume Vessels upto 500 ml



In-houser facility for
Argon / orbital
welding.



Inhaler Vessel



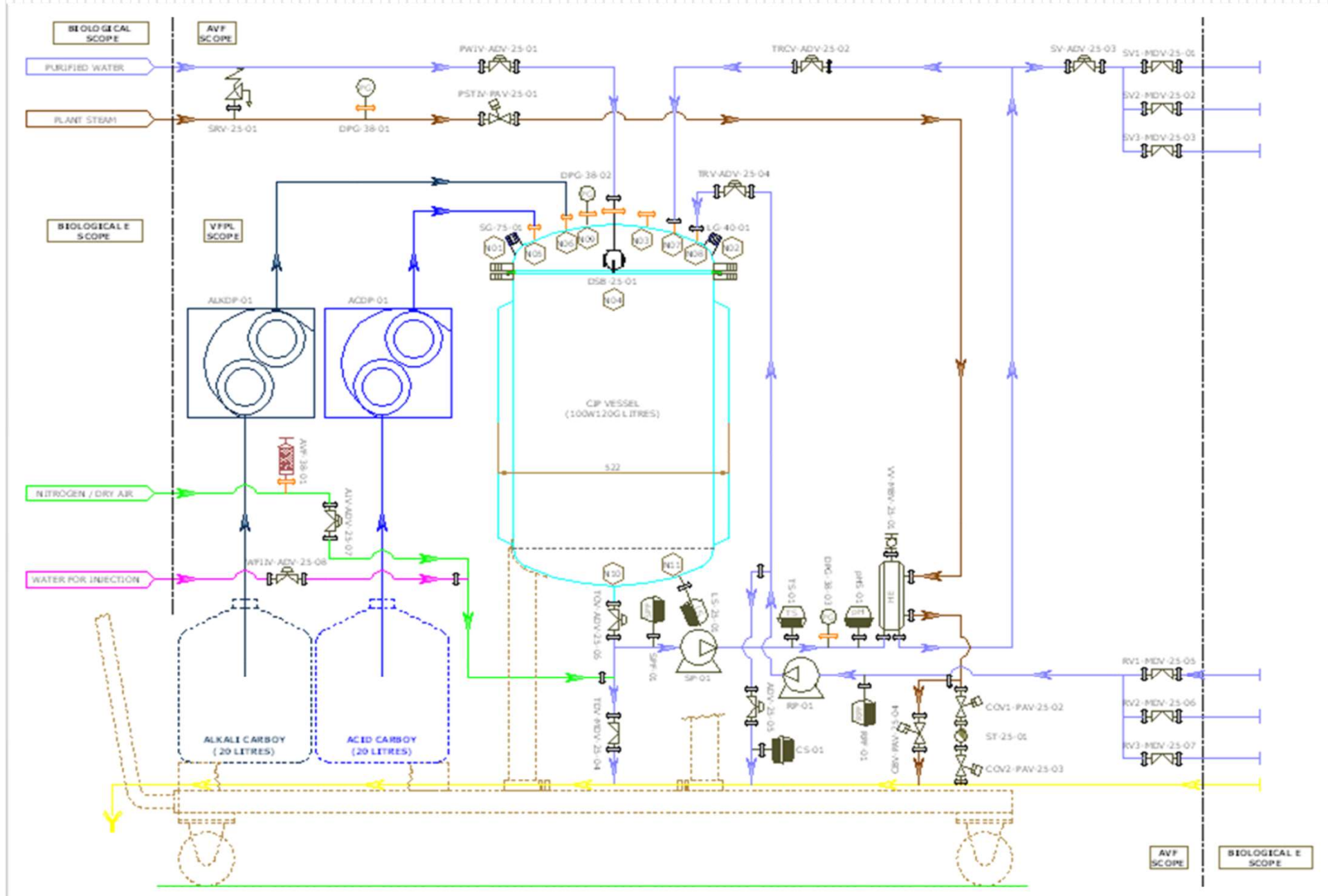
CIP SYSTEM CONSISTS OF:

- CIP Tank 50 Ltr to 5000 Ltr.
- CIP Skid with mobile trolley.
- Acid Carboy.
- Alkali Carboy.
- Acid Dosing Pump.
- Alkali Dosing Pump.
- Supply pump.
- Recirculation pump.
- Heat Exchanger if required.
- Air Vent Filter.
- Level Sensor.
- Pneumatic Diaphragm valves to control process.
- Steam trap.
- Temperature Sensor.
- pH sensor.
- Conductivity sensor.
- Control panel with PLC/HMI & Printer.

CIP SYSTEM



PROCESS DIAGRAM OF CIP SYSTEM



SIP SYSTEM



A cost efficient compact portable skid mounted module along with castor wheel for performing SIP of the existing vessels. The system is equipped with printer and BMS connectivity on demand.



Basic Features provided:

SIP Skid.

Pressure regulating valve.

Steam trap.

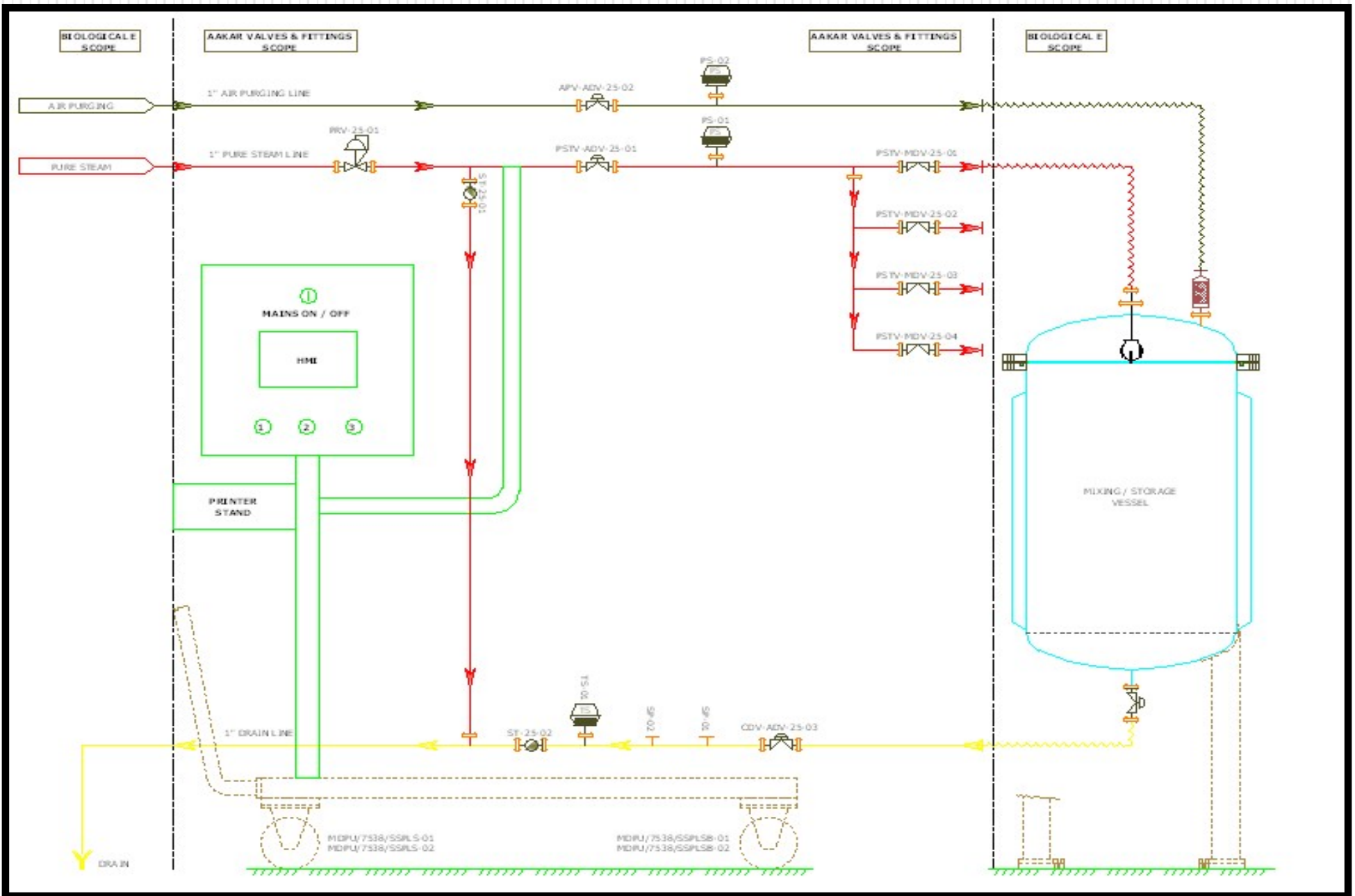
Pneumatic Diaphragm Valve to control Process.

Temperature sensor.

Pressure transmitter.

Spare ports if required.

PROCESS DIAGRAM OF SIP SYSTEM



DESIGN SPECIFICATIONS FOR VESSEL



Design Code	ASME SEC-VIII, DIV-I / BPE STD.	
Parameters	SHELL	JACKET
Working Pressure (kg/cm ²)	2 kg/cm ²	3 Kg/cm ²
Design Pressure (kg/cm ²)	3 kg/cm ² (1.5 times working pressure)	4.5 kg/cm ² (1.5 times working pressure)
Hydrotest Pressure (kg/cm ²)	4.5 kg/cm ² (1.3 times design pressure)	6 kg/cm ² (1.3 times design pressure)
Vacuum (mm of Hg)	Full Vacuum/ NA	Full Vacuum/ NA
Working Temperature (deg C)	0 deg C- 150 deg C	0 deg C- 150 deg C
Design Temperature (deg C)	0 deg C- 200 deg C	0 deg C- 200 deg C
Corrosion allowance	1	1
Radiography	10% LS Joint, 10% CS Joint, 100% T Joint	

DESIGN SPECIFICATIONS FOR VESSEL



Inspection	By Client
Working Volume	3 Ltr. To 10000 Ltr.
Gross Volume	20% Excess Than Working Volume
L:D Ratio	1:1 to 1.5:1
Material of Construction for wetted parts	SS 316 L
Material of Construction for non-wetted parts	SS 304
O-Rings & Gasket	Silicon food grade/PTFE/EPDM/Viton
Internal Surface Finish	Mirror finished with Electro-polished 0.2 μm to 0.6 μm
External Surface Finish	Matt/Mirror finished with 0.2 μm to 0.6 μm
Insulation	Rockwool/Puff/Ceramic wool

MAGNETIC MIXER



ADVANTAGES:

- 1) Magnets can couple through barrier.
- 2) No Shaft, No Seal, No Contamination.
- 3) Minimal particle generation.
- 4) Lubrication by media & Inert bearing material.
- 7) CIP able & SIP able.

TYPES OF MIXING:

MIXING I: General Mixing

Use of mechanically generated fluid motion to achieve a process result.
Example: Two liquids blended together to a homogeneous solution.

MIXING 2: Dispersion

An insoluble phase dispersed into continuous phase.

Example: Downsize solid particles or liquid droplets in a liquid phase.

MIXING 3: Suspension

An insoluble phase dispersed into a continuous phase.

Example: Keeping crystals suspended in liquid.

MIXING 4: Emulsion

An insoluble liquid phase dispersed in a continuous liquid phase.

Example: Dispersing oil in water.

TYPES OF MAGNETIC MIXER:

- A. GMP MIXER
- B. HIGH SHEAR MIXER
- C. UP STREAM MIXER



MAKE:

- I. NOVASEPTIC
- II. ROPLAN
- III. PRG
- IV. MERIOTTI PECINNI

AUTOCLAVES FOR STERILE PRODUCT



Customized option for steam sterilizer

- Single door / double door
 - Shelf mounted / carriage & trolley design
- Inbuilt control panel / separate control panel
- Inbuilt steam generator / Pure steam operated
- Semi automatic / fully automatic

Option for 21 CFR part 11 complaint system design.



WFI GENERATORS FOR STERILE PRODUCT



STANDARD CAPACITY OF WFI PLANT / MCDP / MEDS

STANDARD SIZES	NO. OF COLUMNS	PLANT STEAM REQUIREMENT	ELECTRICAL HEATERS RATING	NO. OF HEATERS	FEED WATER REQUIREMENT	COOLING WATER REQUIREMENT
Lit/Hr	NOS.	Kg/hr	KW	NOS	LPH	LPH
30	1.00	40.50	12	2	34.50	37.50
50	1.00	67.50	18	3	57.50	62.50
80	4.00	27.00	24	4	92.00	100.00
100	4.00	33.75	30	5	115.00	125.00
125	4.00	42.19	48	8	143.75	156.25
150	4.00	50.63	NA	NA	172.50	187.50
200	4.00	67.50	NA	NA	230.00	250.00
300	5.00	81.00	NA	NA	345.00	375.00
400	5.00	108.00	NA	NA	460.00	500.00
500	5.00	135.00	NA	NA	575.00	625.00
600	6.00	135.00	NA	NA	690.00	750.00



PURE STEAM GENERATORS



STANDARD SIZES	PLANT STEAM REQUIREMENT	ELECTRICAL HEATERS RATING	NO. OF HEATERS	FEED WATER REQUIREMENT
Kg/Hr	Kg/hr	KW	NOS	LPH
10	13	12	2	12
25	32	18	3	29
30	38	18	3	35
50	65	24	4	55
75	100	36	6	86
80	100	48	8	95
100	127	48	8	115
125	160	NA	NA	145
150	200	NA	NA	175
200	255	NA	NA	230
250	320	NA	NA	288
300	380	NA	NA	345
350	445	NA	NA	402
400	505	NA	NA	460
500	635	NA	NA	575

CREAM & OINTMENT MANUFACTURING PLANT



Capacity range: 5 Kg to 10000 Kg.

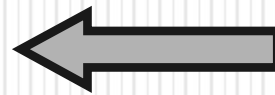
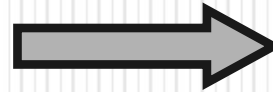
- Manufacturing Vessel.
- Agitator with scraper assembly for manufacturing vessel.
- Top entry/Bottom entry/Inline Homogenizer for manufacturing vessel.
- Lobe Pump.
- Vacuum Pump.
- Water Phase Vessel.
- Bottom/top entry mechanical stirrer for water phase vessel.
- Wax Phase Vessel.
- Bottom/top entry mechanical stirrer for wax phase vessel
- Interconnecting Pipelines.
- Manual/Pneumatic Butterfly valves.
- Conical Filter.
- Manual/ Electro-Pneumatic control panel.



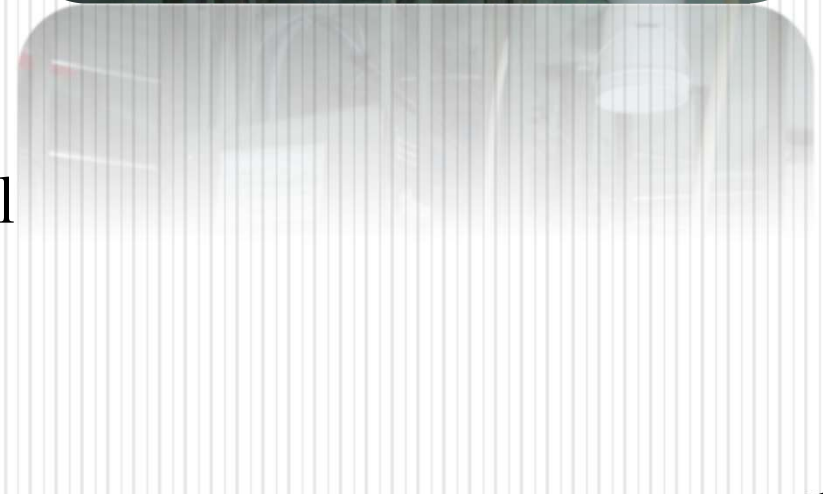
MISCELLENEOUS PROJECTS



Bioreactor
3000 Ltrs



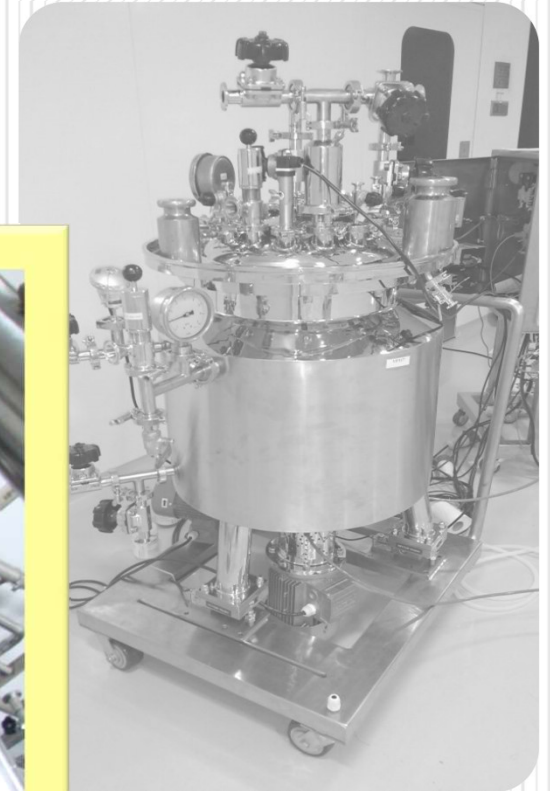
Sterile Vessel
200 ltr



MISCELLENEOUS PROJECTS



On site activities undertaken for pipe looping and distribution system.



On site activities undertaken for Sterile & Aseptic pipe lines.



THANK YOU

Contact :

Girish Wankhede

Email: girish.gemerik@gmail.com / girish@gemerik.in

Cell: +91-9819384820

Reg. address:

Gemerik

Vihang Valley, Phase -2, V2-504, Owale, Ghodbunder Road,
Thane (W), 400615, Maharashtra, India

Factory:

Unit no. B-9, Old Jivdani Industrial Estate,
Dhumal Nagar, Vasai East 401208.

www.indiamart.com/gemerik