



# Pharmaceutical Project Services

**Pharma Project, Turnkey Solutions**

## **Designing of the plant (As per WHO-GMP/USFDA/UK-MHRA)**

- Site master planning
- Conceptualization & capacity balancing
- Equipment sizing & selection
- Architectural design services:
- Civil and structural works
- Heating ventilation and air conditioning (HVAC) engineering
- Mechanical and piping engineering
- Electrical engineering

### **Equipment and processing specifications**

- Expertise in procurement, installation & qualification for required equipment & machineries
- Provide supply of complete production equipment as well as HVAC and Clean room panel system
- Preparations of these equipment and system qualifications protocol such as URS, DQ, IQ, OQ, PQ

## Facilities & Engineering Design

- . Inception to Execution
- . Commissioning of plant

The Building Design Team provide a fully integrated facility design and architectural service.

Where the building is an integral part of the process, a Design Leader is assigned to the project to take responsibility for facility design to best serve the manufacturing process - this is with regards to the layout of manufacturing areas, changing, people and material flows, and other required building services to support manufacturing operations.

### Services Design

The Design Lead will understand both requirements of the process and building services, which will enable an integrated conceptual layout to be developed. HVAC and other building services and architectural details will be developed as part of the building design. To support the design, full use is made of CAD and CAE packages.

### Co-ordinating Design and Equipment Integration

The co-ordination of the equipment in terms of location within the building and the connection of all interfaces with the building are a critical part of the project. The GMP Group are fully aware of the requirements of all types of equipment necessary in a number of sectors, as well as the need to co-ordinate the efforts of the design and construction team, the equipment supplier and the validation team, to successfully integrate the equipment into the facility.

### Manufacturing Equipment Procurement

The Equipment Team are responsible for the design, selection, engineering and procurement of specialised process manufacturing equipment and systems required for the manufacture and development of any pharmaceutical product.

#### Procurement in Various Facilities

Our technologists and engineers have specific knowledge and experience of the equipment requirements in facilities including Secondary and Primary Pharmaceutical, Biotechnology, Medical Devices, R&D Laboratories, Pilot Plants, QC Laboratories and Distributions Centres.

#### Procurement Support

The GMP Group are able to prepare the documentation and support the client throughout all stages of the equipment procurement processes.

## **Secondary Pharmaceutical Engineering**

The GMP Group has design and project delivery expertise in all types of secondary manufacturing and packaging facilities. The GMP Group will take your project from initial sales forecasting to manufacture start-up.

### **Pharma Facility Design for GMP Compliance**

Pharmaceutical manufacturing requires an environment that is designed to meet cGMP standards to ensure the safety, identity, strength, quality, and purity of the product. Product quality assurance and contamination control are key requirements, and The GMP Group brings the skill-set and engineering experience to ensure that your process, utilities and manufacturing space is designed to meet the rigorous demands of an FDA-licensed facility. This is a key requirement for facilities that are designed for drug substance (API) and drug product (fill/finish) manufacturing.

### **Pharma Design & Engineering Capabilities**

Core capabilities in environment, space design (clean and support areas) process engineering, critical utilities, and GMP equipment engineering provides a foundation for the successful execution of secondary pharmaceutical projects from concept through detailed design. Regardless of whether the goal is to expand an existing facility or to build a new plant, The GMP Group can provide the appropriate solution to meet the business needs.

# Biotech Engineering

With the current expansion of the biotechnology, R&D and manufacturing sector, The GMP Group are in an excellent position to offer our clients the benefit of our expertise in the design and project delivery of small- or large-scale biotechnology facilities.

## **Biotechnology Facility Design for GMP Compliance**

Biotechnology manufacturing processes bring with it some special requirements regarding environmental control. Manipulation and modification of cells and other microbiological processes may require specialist containment measures as well as manufacturing to cGMP standards to ensure safety, identity, strength, quality and purity.

## **Biotech Design and Engineering Capabilities**

Core capabilities in environment, space design (clean and support areas) process engineering, critical utilities, and GMP equipment engineering provide a foundation for the successful execution of biotechnology projects from concept through detailed design. Regardless of whether the goal is to expand an existing facility or to build a new plant, The GMP Group can provide the appropriate solution to meet the business needs.

## **Laboratory Development Services**

R&D and QC laboratories have always formed part of the services offered by The GMP Group. Our team has extensive knowledge of development and QC functions and we are able to establish space and environmental system requirements.

### **Lab Design & Engineering for GLP/GMP Compliance**

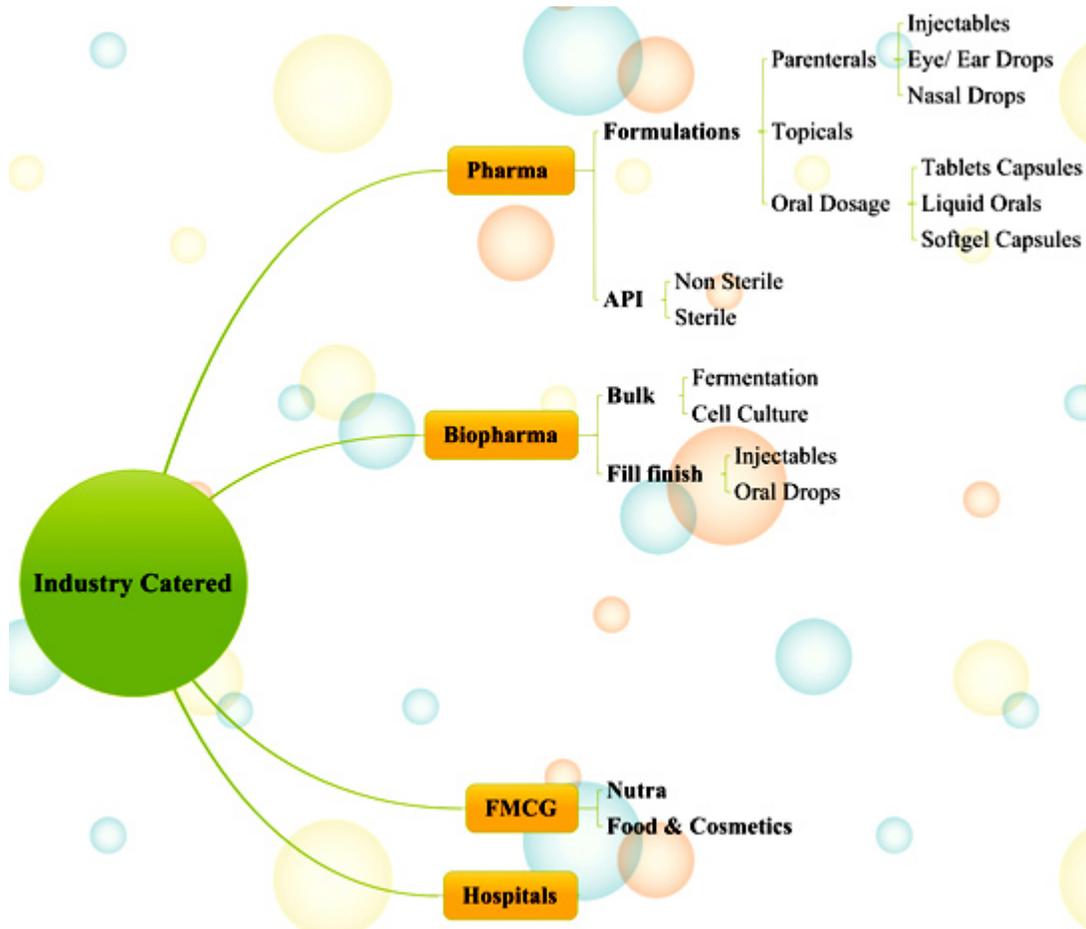
GLP/GMP is a requirement for all laboratories involved in the pharmaceutical industry. Laboratory staff safety and protection is also critical in this environment and The GMP Group are aware of all legislation and regulatory standards. This is increasingly so, as new chemical and biological processes become more hazardous.

### **Lab Design & Engineering Capabilities**

Core capabilities in space environment ensure that all GLP/GMP safety requirements are designed and design intent achieved.

The GMP Group team are, and have been, designing and building biological containment laboratories to CAT 2, 3 & 4.

# Industry Catered



# OUR OFFERINGS



ARCHITECTURAL



CIVIL



PIPING/PLUMBING



HVAC/MECHANICAL



ELECTRICAL



FIRE FIGHTING



PROCESS DESIGN



BUILDING  
AUTOMATION SYSTEM



3D MODELLING  
/ANALYSIS



QUALITY CONTROL



VALIDATION



PROJECT  
MANAGEMENT



GMP/ENERGY AUDIT



ENERGY MANAGEMENT



Want to Learn More?

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To learn more about how we are Shortening the distance from lab to life®, visit [qacal.in](http://qacal.in).

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