

# Qualification and Validation

## GMP Compliance for Life Science Production Facilities

### Exyte – plant design and construction

Exyte is a global leader in design, engineering and construction in the life sciences industry with a special expertise in controlled and regulated environments, maintaining GMP compliance throughout the entire lifecycle – from consulting, concept and design to full turnkey realisation along with qualification and validation.

### Ensuring seamless GMP compliance

Regulatory requirements in the life science industry are becoming increasingly complex – with our thorough process and production understanding we offer seamless fulfillment of GMP regulations and deliver ideal and holistic solutions to our customers' investment projects. Our in-depth GMP knowledge and project management experience supports you from the scale-up of your laboratory throughout the commissioning and ongoing operation of your major production facility for all LSC industries:

Pharmaceutical Industry | Biotech Industry | Chemical and Fine Chemical Industry | Medical Devices | Laboratories | Food & Nutrition | Pharmacy and Hospital | Consumer and Beauty Care Industry



### GMP-Consulting

GAP analysis / GMP review | Mock inspection  
Preparation and support for inspections of authorities

### Validation Approach

Qualification master plan | Validation master plan  
Risk analysis | Qualification matrix | Traceability matrix

### Reference Clients

Abbott | B. Braun | Baxter | Catalent | Charité | CSL Behring | GSK | MSD | Novartis | Pfizer | Roche | Sanofi | Sandoz

### Process- and Cleanroom Qualification

Detail risk analysis (FMEA, HACCP, ...)  
DQ, IQ, OQ, PQ | Calibration | Requalification

### Validation

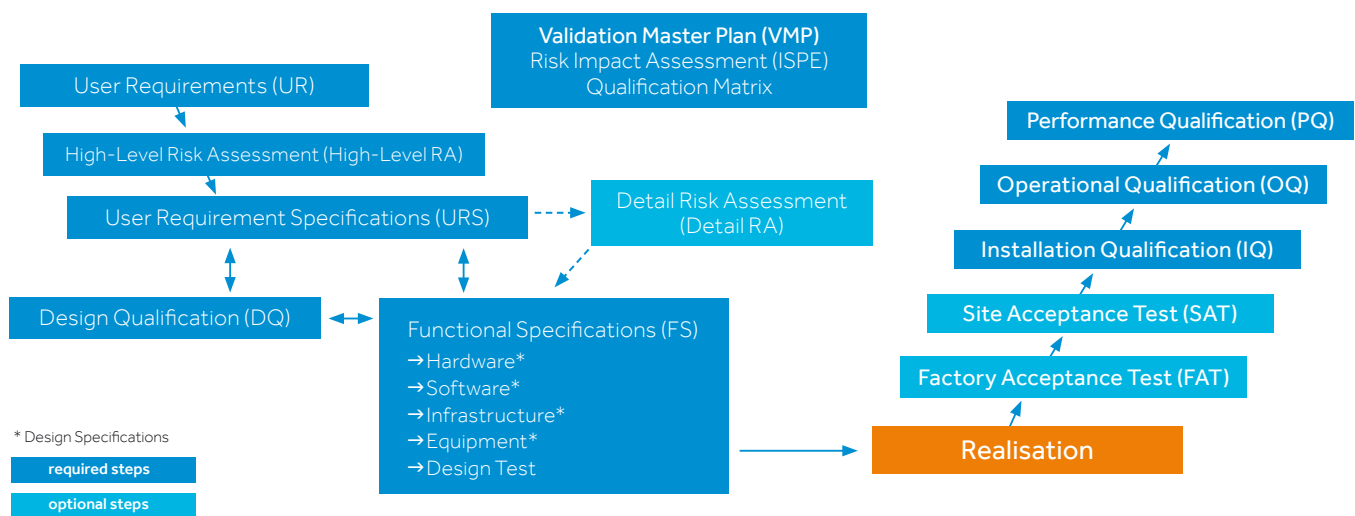
Process validation | Cleaning validation  
Method validation | Computer system validation

### Quality Management

Audit | SOP systems | GMP training

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## Comprehensive Concepts for the GMP/FDA Regulated Industry



### The V Model – basis for our validation concepts

The interpretation and professional implementation of international standards and guidelines such as EU GMP, FDA or ANVISA shapes our day-to-day work – our team of professionals help you to achieve and maintain GMP compliance throughout the lifecycle of your product by delivering customised compliance services.

### Our expertise in qualification & validation

Sampling systems | Weighing | Fermentation (USP)  
Purification (DSP) | Formulation | Filling | Packing  
Storage | HVAC | Lock system | Cleaning | Sterilisation

### How you benefit

- Customer-specific and cost-based procedure
- Establishment or expansion of the QM system
- GMP training for the operator's systems
- Qualification based on risk analysis
- Exyte standardised procedures
- GMP-trainings for operators

### Clean (ultraclean) media

WFI, HPW, AP | Compressed air  
Ultraclean steam gases (Nitrogen, Hydrogen, Helium, etc.)

### Cleanrooms

Classified rooms according to GMP (D,C,B) or ISO (8,7,6)  
Controlled rooms

### HVAC

Fresh air systems (with heat regeneration)  
Recirculation systems

### Monitoring

Environmental parameters (particles, air speed, room differential pressures, temperature, humidity, etc. in rooms and process systems)

### Computer System Validation

MSR process level | Process Control System (PCS)  
Plant Management Level (MES) | Enterprise Management Level (ERP)  
Special applications (Excel, logistics, etc.) | Cyber Security

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