Making **Science Work**

To keep pace with the rapidly changing world for medicines, you may be called upon to constantly reconfigure or modernize your production facilities. We are prepared to establish long lasting partnerships to find the right individual approach.

With our technical expertise, our regulatory knowledge and our worldwide network we are the ideal partner for your projects. Our teams unremittingly strive to integrate innovation and to find technological solutions that will move your production plants into the era of the connected and efficient factory.

Safety, our absolute priority

Safety is an absolute priority and a pre-requisite to all our actions. Our teams and business units operate in accordance with safety management guidelines and are empowered and encouraged at all times to strive for the only possible objective – “Zero accidents”.

A global presence with a local approach

Actemium is the VINCI Energies brand dedicated to industry. Operating throughout the entire industrial life cycle, Actemium designs, builds and maintains its customers’ facilities, with the goal of improving their industrial performance.

Our business units are located close to your production sites, thus building long-term relationships with our customers. Thanks to the profound knowledge of the customer’s processes and equipment, equipment, Actemium is able to design and implement customized solutions.

A network **entirely dedicated** to industry

300	business units
38	countries
20 000	engineers and technicians
2.1 BN €	turnover

At the heart **of industrial performance**

ACTEMIUM

Life Science

Healthcare process, our passion

Some references

BASF	**GSK**	**Novartis**	**Roche**
Boehringer Ingelheim	**LFB**	**Novo Nordisk**	**Sanofi**
Delpharm	**Merck & Co**	**Pfizer**	**UCB**
Fareva	**Merck GmbH**	**Pierre Fabre**	**Unither**

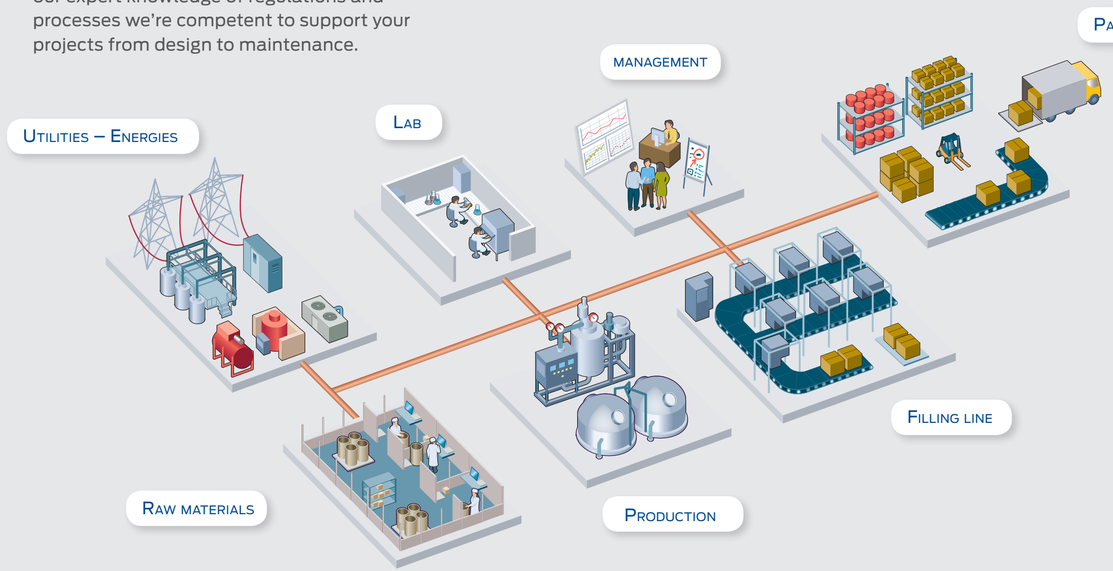
www.actemium.com

Solutions & Services for Industry

VINCI ENERGIES

Healthcare process, our passion

Since more than 30 years we are preferred partner for the Life Science industry. With our expert knowledge of regulations and processes we're competent to support your projects from design to maintenance.



Building solutions

- HVAC
- Monitoring
- Process Utilities
- Energy Efficiency

Process solutions

- Biotechnology
- CIP / SIP
- Clean piping and utilities
- Packaging and logistics

MES / IT solutions

- Track and Trace
- Serialization
- Electronic Batch Records
- Architecture virtualization
- Big data

Design

- Design studies
- Risk analysis
- URS
- PID
- Preliminary design
- Functional specifications (SDS, HDS, NDS)
- Design qualification (VMP)

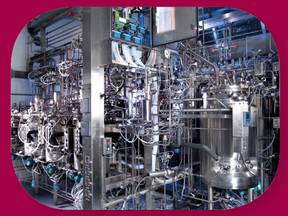
Build

- Detailed design
- Project Management
- Monitoring / Process Control
- Electricity / Instrumentation
- Pipework, sheet metal work
- HVAC
- FAT / SAT & IQ / OQ
- Commissioning
- Training

Maintain

- Maintenance engineering
- Reliability
- Multi-technical and/or Multi-site
- Preventive, corrective
- Metrology & Valves control
- 24/7 services

Dedicated solutions and services for Life Science



Turnkey process

With the strong backbone of VINCI Energies, we help you master the upcoming challenges. Through our network we could implement complete process and utility installations. A single point of contact for your entire project (stainless steel vessels, piping, automation and electrical installations,...)

Modernization

In regards to technical, regulatory, or production changes, revamping projects improve existing facilities to meet cost, scheduling and risks and adapt to management objectives. Our technological knowledge and skills in engineering and project management, our experts, supported by local teams, are able to match our customer's requirements.

Maintenance

We provide multi-technical, preventive and corrective maintenance at your pharmaceutical sites to ensure maximum availability of your production facilities in compliance with regulatory and safety requirements.

Qualification and validation

To achieve your objectives with respect to automated CxP production we offer a simple four-step approach:

- Schedule & organise the validation phases
- Design and draft the DQ, IQ, OQ protocols and advocate draft PQ protocol
- Execute the DQ, IQ, OQ and provide support for the PQ
- Draft the audit reports and as built documentation (records).

This structured approach makes it possible to create a draft validation document that could serve as proof for the authorities.