

Innovation and Technology for your Future Facility

Specialties





Exyte at a Glance

Bringing the future of technology to life

Exyte is a global leader in the design, engineering and delivery of facilities for high-tech industries. With a history of more than 100 years, the company has developed a unique expertise in controlled and regulated environments. Exyte has a truly global footprint, serving the most technically demanding clients in markets such as semiconductors, batteries, pharmaceuticals, biotechnology, and data centers.

The company offers a full range of services from consulting to the managing of turnkey solutions – delivered to the highest quality and safety standards.



History of 100+ years



Special expertise in **controlled** and regulated environments



Serving the most **technically** demanding clients



Full spectrum of services from consulting and design to managing turnkey solutions

Advanced Technology Facilities Life Sciences & Chemicals



Semiconductor Flat Panel Display Photovoltaics Batteries



Pharmaceuticals & Biotechnology Food & Nutrition Consumer Care Specialty Chemicals





Cloud Computing
Co-Location
High Performance Computing
Enterprise

Solving the most complex challenges, Exyte forges trusted, long-lasting relationships with its clients. In 2018, Exyte generated sales of EUR 3.5 billion with over 5,600 highly experienced and motivated employees.

The company is ideally positioned to further strengthen its market leadership with its broad industry insight and its exceptional talents. www.exyte.net



Client centric operations in 20+ countries



Commitment to **Safety:** "Incident Free Workplace" (IFW)



Sales of €3.5bn (2018)



"Around **5.600** employees (2018) - highly **experienced and motivated**"

Safety is Important to Us!



We are committed to an Incident Free Workplace so that everyone goes home safe every day

"As a business, our employees are our greatest asset. Therefore, Incident Free Workplace is a personal and organizational commitment that all company and contractor employees go home safely to their families every day and it's a value we hold dear. That is why we believe in our IFW program and its slogan "Safety. Everyday for Everyone".



Dr. Wolfgang BücheleChief Executive Officer, Exyte AG

"Safety is not a statistic, the only acceptable figure is zero! Every day several thousand people are working on Exyte's project sites in different parts of the world: Our culture creates emotional commitment, active engagement, and courage to drive excellence in safekeeping."



François Abiven
President Life Sciences & Chemicals



Services that Suit Your Needs

Large or small, simple or complex, Exyte has the multi-discipline capability to support and deliver your project. Our services have been developed around the needs of our clients. We pride ourselves on providing all services under one roof, enhancing collaboration between our engineers and optimal coordination between disciplines. Whatever the location, our specialist engineers, architects, project and construction managers are focused on helping you to achieve your goals.

Exyte provides comprehensive regulatory cGMP and FDA compliance services including commissioning, risk assessment, validation, computer system validation and qualification through all phases of complex projects for life science plants and processes.

Full Spectrum of Services

Consulting & Planning

Engineering & Design

& Construction
Management

Equipment & Services

Commissioning
Qualification
& Validation

With our depth of knowledge in full lifecycle project delivery, Exyte offers expert, individual consulting to our customers for new facilities or processes, scale-up and project feasibility.

Exyte specialises in fully integrated facility design service to deliver innovative equipment, plants, buildings and laboratories for the life science sector.

With practical and effective methodology we provide an integrated and reliable structure to take a project from early planning stage to successful completion.

Exyte's Value Proposition

Client needs

Exyte's value

proposition



Technical expertise

- Unmatched process know-how
- Leading in-house expertise
- Highly skilled and experienced field execution
- Expertise in cutting edge manufacturing technologies
- Strong understanding of related regulatory requirements



& Scriedule

- Integrated delivery reduces project friction
- Contract flexibility allows for seamless execution
- Long-term relationships with clients result in a critical understanding of their needs
- Ability to trouble-shoot expediently

Cost target

- Market leader with robust market data, cost information and subcontractor intelligence
- Project costs competitive and within clients' targets
- Ability to ring-fence costs once scope is established

Markets we Serve

Clients rely on Exyte to bring their ideas of future high-tech facilities to life. Across specialty areas including API, highly purified chemicals, food & nutrition and consumer care, we have an in-depth understanding of the specific challenges and demands of clients in different segments.

Leveraging our in-house expertise, we develop custom-designed and future-proofed next generation facilities that meet their future needs. We combine leading-edge solutions with commitment to delivery excellence to enable our clients to achieve their next milestones.

Specialties / Chemicals Food & Nutrition



 Active (pharmaceutical) Ingredients (A(P)I), high potent substances

Nutrition

Neutraceuticals

• Flavours and fragrances

- Over the counter drugs (OTC)
- Medical devices
- Animal health
- Lube / oleochemicals
- Paints and pigments, coatings, surfactants
- Additives
- High grade electronic nanomaterials
- High purity chemicals

Consumer Care



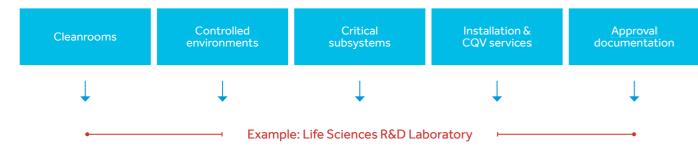
- Personal care
- Beauty care (cosmetics etc.)

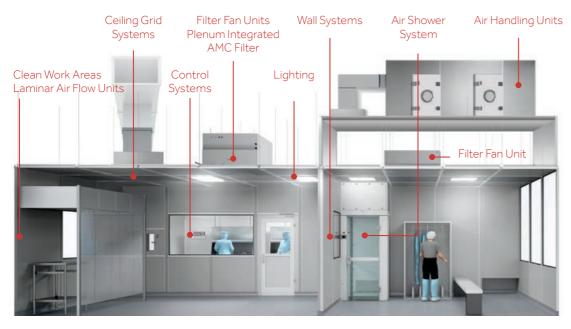


Our Engineering Capabilities

Special Expertise in Controlled and Regulated Environments

With more than 50 years of experience in ultra pure, clean room and sophisticated production environments, we ensure that manufacturing processes are productive, cost effective, clean, environmental friendly and safe.





Consulting & Planning

With our depth of knowledge in full lifecycle project delivery across the life science industries, we provide consultancy and planning services to clients on plant projects based on their needs and industry-specific requirements.

Project & Construction Management

Early, accurate and comprehensive project definition and understanding is paramount to Exyte, and helps ensure successful project execution.

Our aim is to provide our clients with complete solutions. Further to design, this extends to construction and procurement management, including safety management, cost controlling, contractor supervision, start-up and commissioning.

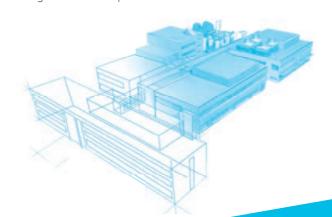
Our team listens to understand your business and is suggesting innovative solutions that meet your objectives.

Engineering & Design

Our global engineering network provides our clients with world class expertise in design for all engineering disciplines. With long successful track record and as an experienced GMP design partner, we have the process expertise needed for the design of advanced systems.

Commissioning, Qualification & Validation

We understand that innovative production methods and changing regulations make qualification and validation efforts an increasingly complex task. Being able to draw on the expertise of our highly qualified in-house personnel, we offer our clients service from pre commissioning to mechanical completion and qualification for systems and equipment as well as comprehensive validation programs. ensuring full cGMP compliance.



References





Fvonik

New fine chemical facility

China

Engineering, Procurement and Construction Management (EPCM). Gross floor area of the facility is 14,400 m², the project consists of betaine, amido amines, ester, alkoxylation and quat production.



Verdezyne Inc. USA

Design of a new greenfield Dodecanedioic Acid (DDDA) plant Malaysia

Front end engineering design of a new greenfield facility to build the world's $1^{\rm st}$ bio-based crude dodecanedioic acid (DDDA) plant with production capacity of 6,100 tons/annum of diacids.



Coca-Cola (Pacific Refreshments)

New automated warehouse and link bridge $\,$

Singapore

The $6,000\,\mathrm{m^2}$ four-story concentrate plant with overhead bridge having a dual two-way fully automated conveyance system transports the finished products from the manufacturing facility to the storage.

Mead Johnson Nutrition

New nutritional manufacturing facility – greenfield

Singapore

Master plan, detail design, construction and commissioning for an integrated nutritional bulk production facility, EPC (openbook). The facility includes a spray drying system, wet-process and dry process areas, packing areas, QC labs, admin building, a warehouse, a central utility and WWT plant.



References





Kerry

New food flavors plant and distribution center

China

EPC and GC for a food flavors and ingredients production facility which is adjacent to the existing production facility including a recently completed distribution center.



Givaudan

New greenfield fragrance facilities

Singapore

Exyte was awarded the concept, basic and detailed design and subsequently the construction of a new greenfield fragrance facility in Singapore.



BASF

High purity nitric acid plant

Germany

Exyte as EPC provider and responsible for technology integration. Two million plus safe man hours.



Merial

Animal vaccine facility

China

Greenfield master planned facility implemented in phases to transfer operations from existing facility. New site includes animal building, QC laboratory building, production building, fill & finishing facility (vials), warehouse, utilities, WWT and office/cafeteria building.

References





Emery

Esterification and beads production plant

German

EPCM – feasibility study, basic and detail design, EPCM for esterification plant, EPC for a beads production plant. New reactor line and new beading towers for the beads production from a liquid product.

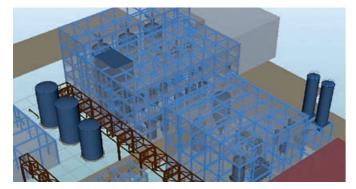


Sanof

Business contingency plan (BCP) project

Singapore

Award for the basic and detail engineering for the expansion of an API manufacturing plant. Include the integration of the new facility within the existing facility and the development of a new process area.



Evonik

New biotechnology production plant for Biolys®

ussia

Basic design (process and CSA) of a new plant for a feed additive, utilities, media-preparation, large scale industrial fermentation and large scale granulation system.

Chr. Hansen

Capacity expansion fermentation plant

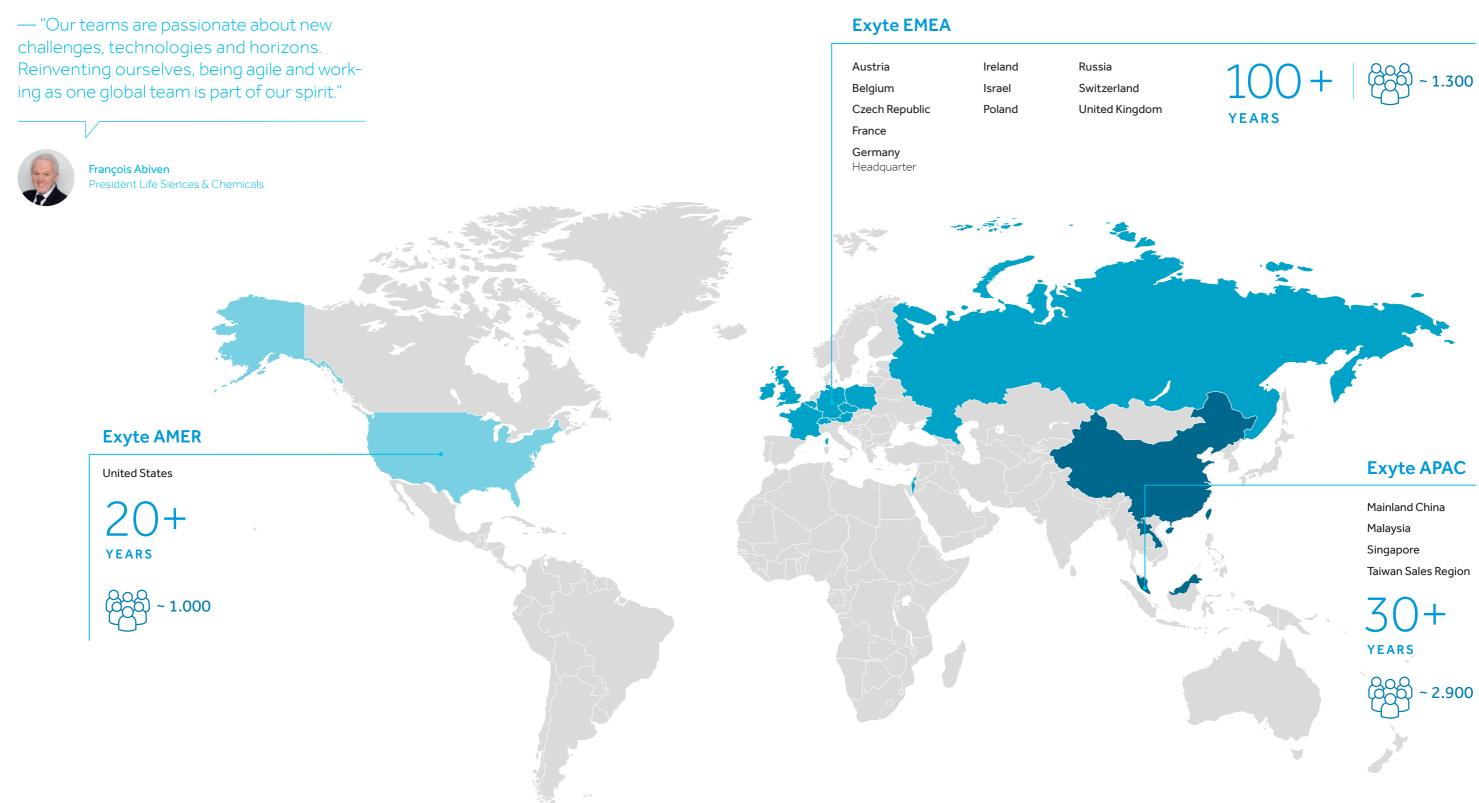
Denmark

Process technology, process equipment, electrics, piping, process unit operations: solid handling, FM mixer, mixing tanks, UHT plant, fermenter, homogenizer, cryogenic tank, CIP, eluate, utilities.



Our Global Footprint





Exyte Group

Life Sciences & Chemicals Loewentorbogen 9B 70376 Stuttgart Germany Phone:+49 711 8804-0 info.lsc@exyte.net

Exyte AMER (Americas)

Life Sciences & Chemicals 285 Summer Street, 3rd Floor Boston, MA 02210 United States Phone:+1 617 4788700 info.us@exyte.net

Exyte EMEA (Europe)

Life Sciences & Chemicals Loewentorbogen 9B 70376 Stuttgart Germany Phone:+49 711 8804-0 info.ce@exyte.net

Exyte APAC (Asia-Pacific)

Life Sciences & Chemicals 16 International Business Park Singapore 609929 Singapore Phone:+65 6725-9500 info.sg@exyte.net