Over 600 chemical reactions have been optimised or developed by Buss ChemTech AG during the last years for industrial scale processes, saving millions for the benefit of our clients. The main focus is on plant safety, process intensification, reliability of scale-up and guaranteed plant performance, means value for money.

**Experience**
Our wide practical experience in the fields of

- Aminations
- Alkylations
- Carbonylations
- Chlorinations
- Ethoxylations
- Hydrogenations
- Nitrilations
- Oxidations
- Phosgenations

combined with state-of-the-art process simulation tools and our laboratory and semi-technical pilot facilities allows us to find the most favourable and economical conditions for your process in the shortest possible time. Our service covers:

- the optimisation of catalytic gas/liquid or liquid/liquid reactions
- the development of a specific process according to a client’s need
- the marketing of owned processes on a global basis

This allows you to get the maximum of information about your potential savings with a minimum of costs as well as the expected performance of an industrial plant. It allows us to offer you a plant with full performance guarantees in respect of utilities, product quality and productivity. The table to the right shows you a typical example of such a result.

**Advanced Buss Loop Reactor**
The advanced Buss Loop Reactor is characterised by large quantities of gas being introduced into the reactor as a very fine dispersion. This mixture including the catalyst circulates by a special pump throughout the entire volume of the reactor system and permits maximum possible mass transfer rates.
The Buss Loop Reactor operates as batch, semi-batch or continuous system and can be used to condensate intermediate products out of the system (Châtelier reactions) in a simple and very elegant way.

**Laboratory and Pilot Plants Facilities**
Several laboratory reactors and 3 pilot plants for batch, semi-batch and continuous processes, operating at temperatures of up to 300 °C and pressures of up to 100 barg are available including requested filtration technology to simulate the industrial process.
Industrial Plants

We design your industrial plant and take full responsibility for its performance. We offer you a single source responsibility from the development stage through design, construction and delivery of the plant. We further train and assist your staff during start-up and performance tests. We are your reliable partner during the whole process.

Safety

Safety first is not just a buzzword, it is our commitment to you, the environment and our both staff. Safety analysis during the design stage combined with monitoring of all operational sequences during operation including safety shutdowns and the avoidance of any explosive mixtures during all operational stages gives you an intrinsically safe plant.

References

Clients like AKZO, BASF, Clariant, Degussa, Dow, DSM, LG Chem, Honam, Teijin, Roche and many others have decided to work with us, as they have valued our experience and reliability. We would also be pleased to support you to optimise or develop your process to the highest performance. Please do not hesitate to contact one of our specialists.
Buss ChemTech is recognised as one of the leaders in the design of high-performance plants. It stands for

- Guaranteed scale-up
- Inherence safety
- Excellent product quality
- Lowest operational costs

Buss ChemTech is a technology and engineering provider in the field of chemical reaction technologies, fluorine chemicals and the production of anodes for the aluminium industry. It also has its own development centre open for client-specific developments.

Buss ChemTech offers the full range of services as

- Feasibility studies and site assessments
- Conceptual design
- Process hazard analysis
- Basic and detail engineering
- Process automation
- Material or total plant supply
- Project management
- Commissioning and training
- After-sales service