Process Engineering

New technology, innovation and quality by design are fundamental to deliver the most complex and technically challenging projects. Whatever your bespoke needs, our specialist knowledge of a wide range of different product forms, processes and unit operations ensures that we design and deliver world-class process engineering and integrated facility solutions.

With significant experience at laboratory, development and industrial scale, we develop our process engineering solutions based on decades of investment appraisal, ensuring we deliver the best solutions both in the short and long term across the lifecycle of product development and manufacturing strategies.

Continuous improvement methodologies combined with cutting edge innovative form the core platform of our process engineering excellence, delivering process plants utilising both conventional methods and modern modular prefabrication methodologies.

The integration of science and engineering is the latest rhetoric within the new competitive world economy, but at Bouygues Energies & Services we have been transforming ideas into commercial reality for decades within the science, biotechnology, speciality chemicals, pharmaceutical, health care and novel advanced manufacturing industries.

Our expert skills:

- Manufacturing capacity planning
- Process development, scale up & technology transfer
- Process mass & balances
- Hazard Studies HAZOP/ DSEAR / FMEA
- Manufacturing process equipment integration
- Development of novel process and reaction technologies
- Process debottlenecking & optimisation
- Advanced process control (DCS, SCADA, ERP/MRP)

Clean utilities

Our in-house expertise covers **every client requirement**, from high purity water, pure steam and bio waste through to sterile gases, cleaning and sanitisation in place.

Expert in energy efficiency

Waste reduction [1] and sustainability are at **the heart of what we do**. Cleaner, greener processes based on either green chemistry, innovative biotechnology, biomass-based or novel materials, batch, semi-batch or continuous processing are key areas of our truly world-class expertise.