

STAMI Urea™

Innovators in
fertilizer plant
technology

About NEXTCHEM

NEXTCHEM is MAIRE's company dedicated to Sustainable Technology Solutions. Leveraging our profound expertise in nitrogen, hydrogen, carbon capture, fuels, chemicals, and polymers, we deliver groundbreaking solutions and processes that fully enable the energy transition.

Building on the rich legacy of our group for over 70 years, we are dedicated to developing and offering technology solutions, processes, basic engineering designs, as well as proprietary equipment and catalysts, to drive global decarbonization efforts forward.

An end-to-end support to fertilizer producers anywhere

As the world market leader in design, licensing and development of urea plants for the fertilizer industry, we apply our expertise, knowledge and experience for many solutions; fertilizer production technologies, emission reduction technologies and all technologies for the integration of urea and adjacent processes.

We control the whole lifecycle of Urea plant

LAUNCHTM
ADVANCETM
EVOLVETM

LAUNCH™

Project development

Feasibility studies

Technical & commercial services

Process Design proposal

Basic design

Proprietary equipment

Procurement

Pre-commissioning

Training

Create a new plant

Our LAUNCH series of technologies, products and services helps ensure our clients' new urea plants are designed and built to optimal specs. Important economic and technical decisions need to be made right from the start.

We provide support in this vital exploratory phase and partner with our customers throughout the journey from process design and project management to plant start-up. We have the best-in-class Urea melt synthesis and Urea finishing solutions.

Melt technologies

- Maximize efficiency
- Reduce operating costs
- Minimize plant emissions.

Finishing technologies

- High-quality urea granules
- Prills and pastilles
- Liquids

ADVANCE™

High-pressure equipment replacement

Relining/repair

Emission reductions

Mechanical services

Lifetime assessment

Plant staff training

Troubleshooting

Process optimization tools

Additives/coatings

Plant inspections

High-pressure piping/fittings/valves

Process control equipment

Welding training & supervision

Spare parts

Optimize Urea plants

By fully optimizing a Urea plant, its life can be extended, its output boosted, and its energy efficiency increased. Optimized Urea plants will meet the highest safety standards and exceed all environmental regulations.

Our ADVANCE series provides a range of products and services that take urea plant performance to the next level. We help our customers advance their plant operations in five areas:

Inspections and plant maintenance

Improving product quality

Improving safety and reducing environmental impact

Optimizing plant output and operational control

Support and plant staff training

EVOLVE™

- Pre-feasibility study
- Feasibility study
- Process design package
- Basic engineering package
- Proprietary equipment design & delivery
- Contractor guidance & control
- Commission assistance
- Plant assessment

Upgrade urea plants

Our EVOLVE series provides the technology and solutions to upgrade urea plants when needed. This ensures your aging plant remains compliant with amended legislation and stays competitive by adapting to changes in market conditions.

To do so, EVOLVE includes such products and services as plant assessments, revamp studies, process design and debottlenecking. Our EVOLVE™ series offers three main revamp solutions, each of which can be tailored to our customers' specific needs.

EVOLVE CAPACITY™

Boost output of a urea plant by anything from 10% to 100%

EVOLVE EMISSION™

Reduce plant emissions in line with international standards

EVOLVE ENERGY™

Lower steam consumption and optimize feedstock use

