

STAMI UREA

EVOLVE™

Solutions to upgrade
your aging urea plant

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The innovation & license company
of Maire Tecnimont.



EVOLVE™

The challenge

Although the technology of your plant may be state-of-the-art at the time it is constructed, during its lifetime there are likely to be changes in the market and legislative environment or simply advances in technology and materials. Plants are always subjected to wear and tear which will lead to increased maintenance projects and equipment replacements. This is the moment to get your plant up-to-standard again. You may not realize it, but you could be performing several, smaller maintenance operations that are totally unnecessary. Years of experience has taught us that it is more cost-effective to have a thorough assessment and a potential revamp of your entire plant, instead of doing multiple quick fixes.

The solution

Stamicarbon's EVOLVE solutions provides you with the means to upgrade your plant to the next level. Our EVOLVE solutions ensures that your aging plant complies with changes in legislation and stays competitive by adapting to changes in market conditions. Our EVOLVE series contains solutions on all relevant areas such as:

1. Capacity increase to compete with current world standards
2. Reduction of emissions to the latest standards (gaseous & liquid)
3. Reduction of energy and feedstock consumption figures to the current world standard or better.
4. Upgrade of equipment & piping design with the newest insights and materials
5. Use of advance information technology to operate the plant and train staff and operators
6. Any combination of the above

Stamicarbon has successfully completed more than 90 revamp projects at all types of urea plants. Thanks to a combination of state-of-the-art technologies and expert know-how, we can dramatically improve plant performance and/or capacities. Our revamp projects, both big and small, have proved to reduce total fixed and operating costs per ton of urea and thus to improve profitability.

Revamp approach

Based on your individual requirements, we can create a unique process design, based on our proven technology solutions, which perfectly matches your needs and your plant's specifications. Due to our extensive knowledge of urea technology we were able to assist multiple owners of numerous urea technologies to improve their plant- from small improvements such as operations consultancy, up to major capacity upgrades. Do not underestimate the benefits Stamicarbon can provide for you. Try it for yourself and invite Stamicarbon to give you a free plant analysis- even if only to validate that the maximum potential has been reached (Please note: this is valid for any urea plant and not limited to Stamicarbon plants only).



Evolve solutions

We offer multiple revamp solutions, if needed tailored to the specific needs of the customer, which can be classified as follows:

1) EVOLVE CAPACITY™: Significantly increasing your plant output, from 10% up to 100%.

Stamicarbon is able to offer a whole range of Technology Designs in order to reach required capacity, as depicted here:

EVOLVE CAPACITY™ Designs	Expected capacity increase (%)
EVOLVE CAPACITY™ More-in More-out Design	10 - 30
EVOLVE CAPACITY™ Double Stripper Design	30 - 40
EVOLVE CAPACITY™ MP Add-on / Mega Design	30 - 50
EVOLVE CAPACITY™ Pool Reactor / Pool Condenser Design	50 - 100

2) EVOLVE ENERGY™: Significantly lower steam utilization and optimal use of feedstock consumption.

3) EVOLVE EMISSION™: Reducing emissions according to international standards.

