

STAMI UREA

ADVANCE™ HSE

PRODUCTS & SERVICES

Stamicarbon offers products and services that can help improve the Health, Safety and Environmental conditions of your urea plant.

Stamicarbon B.V.
Mercator 3 - 6135 KW Sittard,
The Netherlands.
P.O. Box 53 - 6160 AB Geleen,
The Netherlands.

Tel. +31 46 4237000
Fax. +31 46 4237001

communication@stamicarbon.com
www.stamicarbon.com

The innovation & license company
of Maire Tecnimont.





ADVANCE™ HSE

PRODUCTS & SERVICES

In this brochure we present a selection of our Health Safety & Environment (HSE) related products and services.

HEALTH

ADVANCE COAT™

ADVANCE COAT™ is a urea coating for prills, or pastilles, which enhances the shelf life and prevents caking, maintains product strength and protects urea from moisture. Our harmless coating can be an excellent replacement for formaldehyde and during handling hardly any dust is produced.

ADVANCE™ HSE

PRODUCTS & SERVICES

SAFETY

Life Time Assessment (LTA)

for high pressure piping

Since regular inspections on high pressure piping is often neglected, a life time assessment by means of Risk based Inspection (RBI) is essential to help avoid catastrophic failures. All the components will be ranked criticality from both the process and the atmospheric point of view, using our in depth knowledge of corrosion and process knowledge in urea plants.

Urea design safety training

This training helps people to understand Stamicarbon's approach to process safety and to broaden the understanding of the typical design solutions to safeguard the most relevant risk scenarios in urea plants. Herewith we improve your hazard recognition skills and capability of identifying and controlling potential hazards.

Process safety plant review

The process safety plant review will facilitate a technical field review to be considered as a spot-check, comparing the plant design against internationally recognized engineering practices to obtain a safe operation. Using a project specific checklist and field verifications, including interviews with key contractor and client personnel, we evaluate the presence and adequacy of mandatory safety provisions.

Radar Level Measurements

The Radar Measurement device (RMD) is a proven and improved substitute for the common used Radio-active level measurement. The RMD has many advantages compared to radioactive level measurements:

- Accurate measurement (+/- 10mm)
- Made of Safurex® material
- Absolutely safe in use/handling (no radioactive-sources)
- Replacement of existing radioactive device by radar is possible

Leak detection monitoring systems

To ensure safe operation of lined HP equipment in a urea plant, a reliable leak detection monitor system providing short response time between the start of a leak and its detection is of the utmost importance. It can be used for both new and existing HP equipment.

- Potential leaks are continuously monitored and leaks activates an alarm in the control room
- The location of the leak can be identified easily
- It accurately detects and measures in ppm range

Safurex material

Safurex® was initially developed by Stamicarbon in a partnership as a super duplex stainless steel that has superior corrosion resistance properties. The Safurex® brand has expanded into a family of long-lasting solutions, in not only materials, but also products and services, which have optimized urea production and safety because no active corrosion takes place.

Plant inspection HP vessels

Stamicarbon performs inspections on HP vessels to warn or predict corrosion problems and repair or avoidance of it. Based on the results measured, Stamicarbon can determine the remaining life time of the plant and recommend when equipment needs to be replaced.

Ammonia storage tank inspections

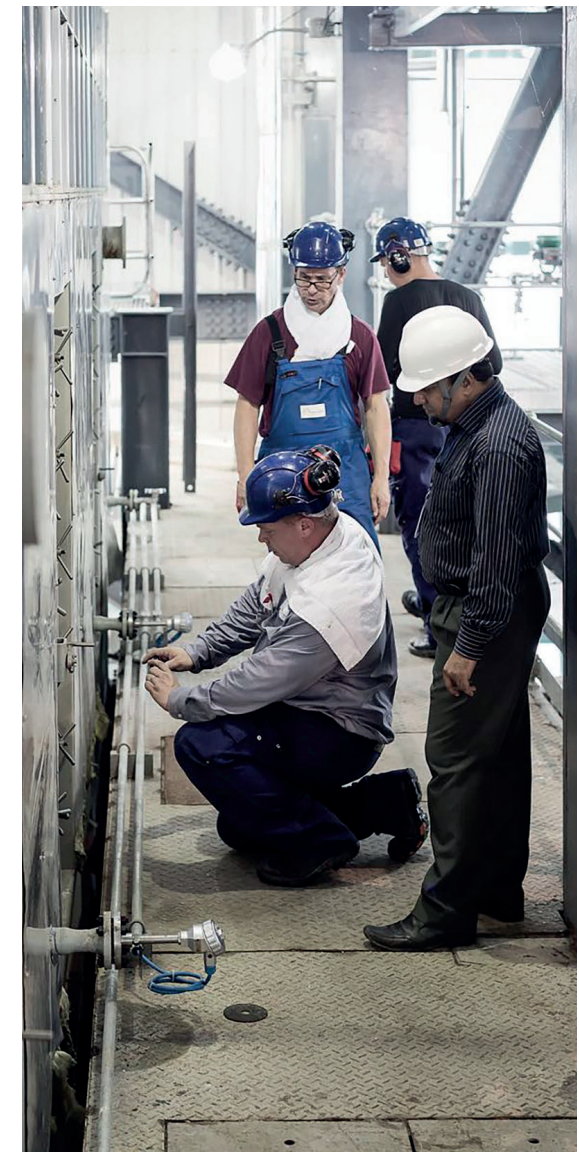
Stamicarbon is one of few companies who can assist you with ammonia storage tank inspection within a reasonable shutdown time. As an ammonia tank inspection is only required once every 15-20 years, special preparation and expertise is required to provide you with valuable advice based on the results of the inspection report. We offer the following benefits:

- Total inspection including de-commissioning and commissioning
- Short shutdown time because there is no need for scaffolding

Safety services

In addition to the presented safety services we have a long experience in the following:

- HAZOP support (management of change and/or projects)
- HSE management system assessment (OSHA/PSM)
- Major incident investigation





ENVIRONMENT

Plant performance assessment/study

Assessment on safe working limits of each critical process equipment item and the actual performance of the plant related to maximize efficiency of:

- Safety - energy - effluents / emissions - product quality - bottlenecks / capacity

Thermal treatment technology

Stamicarbon's thermal treatment technology is designed to incinerate the ammonia enriched off-gasses from the atmospheric absorber (to ~ 1 ppm), urea storage tank and ammonia water tank, while using the hydrogen rich off-gasses of the low pressure absorber as fuel for the incinerator.

- Guaranteed lowest NH₃ and NO_x emission
- Independent of melt technology
- Low consumption of gas and reuse of heat for steam production

For additional information on any of the presented products and services, please feel free to contact Stamicarbon's Advance Sales & Solutions department:

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