Our Process Monitor is a steady state on-line process model that includes Stamicarbon's state-of-the-art H&M balance, thermodynamic and kinetic urea models.
The challenge:
Optimal plant operation depends on the proper functioning of equipment and instrumentation and on optimal settings of plant parameters, many of which cannot be measured continuously.

Our solution:
The STAMI DIGITAL Process Monitor provides real-time and continuous insights in equipment and instrument performance and produces soft-sensor information using real-time DCS data and a first principles-based process model that is fitted to your historical plant operation. In this way, our process design know-how is available for your day-to-day process optimization.

The first step in installing the STAMI DIGITAL Process Monitor solution is performing an advanced assessment of your plant condition, process control and process dynamics. During the assessment a process plant model is built and tuned specifically to your urea plant.

The model results are validated during the assessment, taking into account a wide range of operating conditions.

Why the STAMI DIGITAL Process Monitor?
The model allows for real-time calculation of key process parameters, equipment and instrument performance parameters and ammonia emissions.

This information can be used to improve the performance of the plant (throughput, energy consumption, emissions) or prevent degradation of plant performance by initiating and directing trouble shooting and maintenance activities.

The STAMI DIGITAL Process Monitor will:
- Calculate key process parameters
- Compare expected and actual plant behavior
- Monitor equipment performance
- Monitor instrument performance
- Monitor ammonia emissions