Project update (July 2016)

Bicarbonate project ready for transfer to production

This project, in which we capture CO_2 from our flue gases to produce bicarbonate with it for scrubbing flue gases in our own plants, can be transferred to Production.

The extraction of CO_2 from the flue gases of line 3 had already been running for a long time non-stop and fully satisfactorily. The slurry we produce also conformed precisely to the theory and met the specifications. During the maintenance downtime of line 3 this spring, modifications were made to overcome the last obstacles:

- Injection in the reactor / the flue gas system
  We used CFD modelling – a computer model – to find the solution to this problem. We modified the injection system on that basis during the Line 3 downtime. Thus far this system has been working without any difficulty.
- The CO_2 slurry was caking on the heat exchangers of the reactors. By heating and cooling the pipes using a valve system and by installing a flushing system, we have made significant progress. Since the downtime, the system has been operating almost non-stop and most blockages could be solved 'online'. Temperatures, flow and flushing programs are currently being fine-tuned to solve the last problems with crystallisation.

Project leader Andy Roeloffzen is satisfied: 'the people in our project team have put all their knowledge, skills and energy into this, leading to this wonderful result. We can now integrate a cost-saving CO_2 system in the flue gas scrubbing of line 3. This makes a real contribution to long-term cost control.'