

# An Overview of Advanced Process Control (APC) solutions for the fertilizer/syngas industry – Why some projects fail and others are successful

**Christiaan Moons, Ravi Guddeti**

Company: IPCOS

Email: [Ravi.Guddeti@ipcoss.com](mailto:Ravi.Guddeti@ipcoss.com); Phone: +1 832.724.5482

Mail: 1400 Broadfield Blvd, Suite 200, Houston, TX 77084

**Abstract:** Advanced Process Control (APC) systems have been around in the fertilizer/syngas industry for more than 20 years. Producers often started installing APC on ammonia plants. Some also went for APC on urea. Many APC systems do not run anymore after being in use for more than 3 years.

Producers like Yara have APC installed for many years on all their major ammonia, urea, nitric acid plants, ammonium nitrate, NPK, CAN, but also on all types of granulators. The oldest APC running 24/7 for almost 18 years.

Many producers however still struggle with APC. Is it beneficial or not? What units are the right candidates and what units suitable for APC? How to make sure APC generates benefits for many years? What are the best practices? Why do projects fail and are other successful?

Many questions that we would like to address during this presentation. Having done more than 200 control based optimization projects in the fertilizer industry around the world and for more than 20 years, we are happy to share our experiences.

This will help the producers to make good judgements for the use of APC in the future.