Your process. Improved
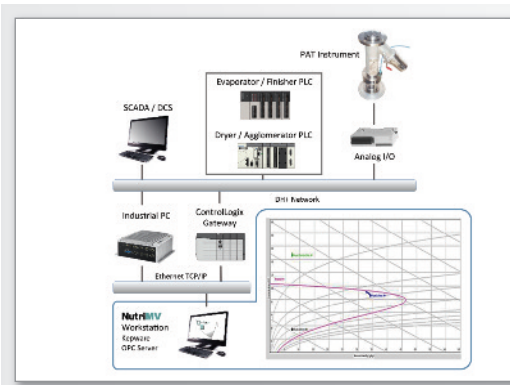higher throughput from your existing assets more consistent product quality increased yield, lower energy

nutriMV

PROCESS EFFICIENCY AND PRODUCT QUALITY

Perceptive Engineering is a company at the leading edge of process innovation. Using a unique combination of powerful statistical monitoring, robust data validation and advanced predictive control tools, **NutriMV** lets you get the most out of your existing production assets.
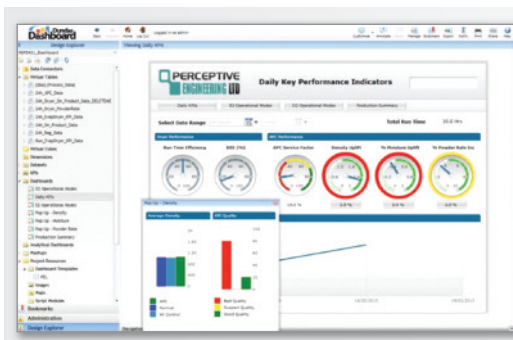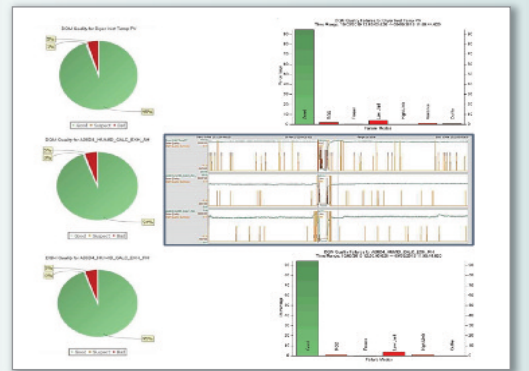
ADVANCED MONITORING AND CONTOL – PLUGGED IN

- **NutriMV**™ runs on a Windows™ platform. This can be a dedicated industrial PC connected to your network, or a virtual machine within your server.

- **NutriMV** runs a digital model of your plant, built from your own process and quality data to reflect your real-world operation.

- **NutriMV** identifies how to better manage process disturbances and reduce variability, then makes the coordinated control moves needed to push and aintain your plant closer to optimal, all the time.

DATA RELIABILITY – BUILT IN

- To provide robust control at all times, NutriMV analyses the quality of data from all critical sensors in your process.

- A series of statistical tests is performed in real time to ensure that the data is reliable enough to be used in control.

- If not, **NutriMV** automatically switches to an inferred value instead, so that process operation remains optimal.

- The faulty signal is displayed on the SCADA so that the operator can schedule maintenance.

PROCESS QUALITY – INTEGRATED

- **NutriMV** provides robust continuous assessment of your plant's manufacturing efficiency.

- Using proven statistical tools, **NutriMV** calculates in real time the Key performance Indicators for yield, powder rate, cost of manufacturing, time on production. All are exportable to a dedicated dashboard.

PERCEPTIVE ENGINEERING LTD

www.perceptiveapc.com/nutri
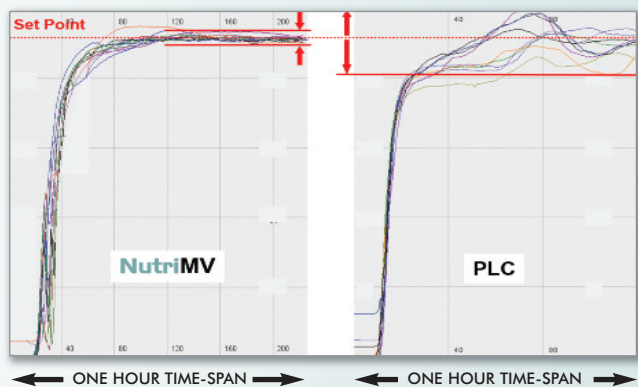
Efficiency Quality Agility

nutriMV

INCREASE THROUGHPUT WITHOUT INCREASING CAPITAL INVESTMENT

- Predictive control enables **NutriMV** to **simultaneously** optimise evaporator efficiency, control buffer tank levels, and push dryer feed rates.

- Typical **powder rate increases of 7-10%** are achieved, providing very fast return on investment.

- Mean moisture (yield) is increased and variability significantly reduced.

- Process disturbances, such as tank or batch changes, are automatically managed. Impact on process and product quality is minimised.

FASTER START-UP, MORE ON-SPEC PRODUCTION

- **NutriMV** offers unique optimisation of process start-up and shut down.

- Reduce variability in evaporator / finisher solids by 65% and reduce time to stable operation by 30%.

- Speed up dryer starts and shutdowns, for more agile manufacturing.

- Humidity and glass transition constraint control pushes the dryer close to its safe operating limits, under all conditions.

ONE HOUR TIME-SPAN   ONE HOUR TIME-SPAN

WHAT OUR CUSTOMERS SAY

Abbott Nutrition Engineering Manager
– Perceptive's approach to humidity control is being adopted as our global standard.

Arla Process Improvement Manager
– Perceptive is now part of our team delivering increases in yield and profitability to multiple sites.

Danone Production Manager
– The Perceptive system has given us a significant improvement in control and efficiency of our finishers and we are now planning to implement the same technology on our dryers.

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