





### APPI ICATION NOTE



# MAXIMISING DRYER PERFORMANCE IN THE DAIRY INDUSTRY

#### **CUSTOMER AIMS AND OBJECTIVES**

- $\sim$  Control of process
- $\sim$  Provide stringent control limits for process control
- > Provide closed loop feedback into Digital Control System (Automated Process Control Environment)
- > Eliminate process variations
- > Possible application/product development R&D

#### **CUSTOMER REQUIREMENTS**

- $\sim$  Control of process
- > Accuracy and Long Term Stability
- Sauge performance (i.e. Support seasonal variations in relation to dairy powders)
- $\sim$  Application and service support
- **&** Confidence in product
- > Possible application development









## Return on Investment Examples - WHEY PROCESSING (WPC)

- > Parameters to measure Moisture and Protein (single gauge installation)
- $\delta$  Annual Production yield of product 16,000 tonnes per year
- Average price of product at time of ROI model €1,200/tonne
- > ROI for Maisture
- Savings based on 0.2% WPC equates to €20,000 per year
- ROI for Protein
- Savings based on 0.1% WPC equates to €50,000 per year
- > Potential Annual ROI for WPC approximately €70,000

## Return on Investment Examples - FAT FILLED POWDER

- > Parameters to measure Moisture (single gauge installation)
- Annual Production yield of product 48,000 tonnes per year
- & Average price of product at time of ROI model €2,300/tonne
- > ROI for Moisture
- > Savings based on 0.15% Fat Filled Powder equates to €166,000 per year
- > Potential Annual ROI for Fat Filled Powder approximately €166.000

## Return on Investment Examples - CASEIN POWDER

- > Parameters to measure Moisture (single gauge installation)
- $\delta$  Annual Production yield of product 4,000 tonnes per year
- > Average price of product at time of ROI model €3,000/tonne
- ROI for Moisture
- Savings based on 1.5% Casein Powder equates to €180,000 per year
- > Potential Annual ROI for Casein Powder approximately €180,000