Anhydro Nozzle Camera
Protect Plant Safety. 
Ensure Product Quality.

PLANT SAFETY IS PARAMOUNT IN THE PRODUCTION OF SPRAY DRIED POWDERS OF EVERY KIND

SPX FLOW has introduced an advanced early warning image recognition system for spray nozzles that adds an additional level of safety and process control. The state-of-the-art pre-warning system detects any abnormality such as powder build up that can cause dangerously high temperatures before it would be visible to the naked eye. The system constantly monitors the nozzles, preventing issues that might occur while the operator is busy with other tasks on the production line. Operators are able to guard against leaks or product build-up on the nozzles – ensuring the spray pattern of the nozzles into the drying chamber remains at optimum levels.

BENEFITS OF PREVENTATIVE DETECTION:
• Allows operators to take early action to avoid unnecessary shut downs
• Operational safety
• Increases production uptime
• Improves dryer efficiency
• Monitors primary targets including:
  - Leaking nozzles
  - Product build-up on nozzles
  - Reduced spraying capacity …
  … and other problems that can impact operational efficiency.

KEEP A CLOSE EYE ON PROCESS CONTROL

Multiple cameras show a continuous picture of the spray zone, allowing operators to check that the spray from the nozzles is being accurately dispersed. The software compares the actual spray with pre-defined parameters and an alarm is activated when a deviation is detected.

THESE STATE-OF-THE-ART CAMERAS OFFER:
• 360° view on nozzles
• Flush wall mounts in hot air ducts
• Continual visual access to clean air ducts
• No impact on air distribution

Leading global manufacturers of milk powders rely on the benefits of SPX FLOW’s image recognition system for plant safety.
ADDITIONALLY, SPX FLOW HAS DEVELOPED A NEW AIR DISTRIBUTOR DESIGN TO IMPROVE PRODUCT QUALITY WITH:

- Long guide vanes – controls flow for optimal processing parameters
- Tangential design - ensures high degree of flow mixing; not sensitive to uneven inlet temperature or uneven flow conditions from heater
- Flow aligned nozzle lances – incoming drying air is undisturbed, streamlining flow to the hot zone of chamber

GLOBAL SERVICES FOR INDIVIDUAL NEEDS

SPX FLOW strives to help you find the best solution for your processing needs. We work with you through every step of your spray drying process – from the initial needs analysis and planning stage through the long life of your system. Together, we develop the optimal process options based on your product and throughput requirements. Our Innovation Centers are available to run pilot tests and ensure that the process will meet your expectations on a production scale.

ENGINEERING STANDARDS

Environmental protection in your plant is a key factor in our system designs and is incorporated in accordance with local rules and regulations. Our manufacturing facilities are ISO 9001-2008 certified and meet the CE marking and ATEX requirements.

LONG TERM SERVICE AND SUPPORT

SPX FLOW’s worldwide service organization helps keep your plant up and running. We provide fast delivery of spare parts and our service technicians can be on site to help you solve production problems in order to minimize unscheduled downtime.

Service agreements are also available to support your plant’s individual needs with engineers ready to provide applications and development support.
**SPX FLOW** is a leading global supplier of highly engineered flow components, process equipment and turnkey systems, along with the related aftermarket parts and services, into the food and beverage, power and energy and industrial end markets.

**The Anhydro Technology Centre** in Soeborg close to Copenhagen in Denmark, is highly specialized in evaporation and drying technologies and work closely together with global customers for development of new products and processes, pilot testing and knowledge sharing.