



GÉNIE DES PROCÉDÉS

ON-LINE POWDER MEASUREMENT – SESSION IN ENGLISH

OBJECTIFS

- Identify and integrate suitable in-line measurement tools into powder-based processes.
- Interpret and exploit real-time data to stabilise product quality and reduce variability.
- Apply Industry 4.0 strategies to decrease energy consumption and improve efficiency.

CONTENU PÉDAGOGIQUE

Industry 4.0 Applied to Powder Processing

In powder-based processes, even minor variations in material or parameters can significantly affect product quality, energy consumption or productivity. Without real-time monitoring, these changes often go unnoticed.

This training shows you how to integrate suitable in-line measurement tools into your processes, enabling you to :

- › Support the development of new products and processes by understanding how each parameter affects final material properties, supported by real-time monitoring of grinding, sieving, mixing and granulation operations,
- › Improve product quality and consistency by detecting and correcting deviations immediately, stabilising output despite raw material variability, and reducing non-conformities.
- › Decrease energy consumption by 10 to 50% by avoiding over-grinding
- › Increase operational efficiency by automating process settings, reducing downtime, improving traceability and enhancing reactivity

Through concrete case studies from a variety of industries, you will learn how to select the right technology, interpret data, and apply it to achieve effective plant control.

/ PROGRAM CONTENT

Introduction to Industry 4.0 in powder processing: opportunities and challenges

Key parameters influencing powder processes (grinding, sieving, mixing, granulation)

In-line measurement technologies: principles, selection criteria, and integration

Using real-time monitoring to:

- › Support product and process development
- › Improve quality and consistency
- › Reduce non-conformities and material variability impacts

Process optimisation through automation and data-driven decision making

Energy savings through smart monitoring (avoiding over-grinding, stabilising operations)

Traceability, reactivity, and productivity gains enabled by digital tools

Case studies from various industries demonstrating practical applications



DURÉE

1 day – 7 hours



SESSIONS

December 16 2026



FRAIS D'INSCRIPTION (DÉJEUNER INCLUS)

€ 810 (Excl. VAT)



PRÉREQUIS & PUBLIC CONCERNÉ

R&D scientists and technicians, Process and production engineer

Coordonnées

CPE Lyon Formation Continue

41 rue Garibaldi – 69006 LYON

04.72.32.50.60