Innovative drying technologies for maximum seed quality

Seed drying is a critical step in any seed processing operation. Whether you're working with vegetable seeds, flowers, or field crops, quality is at risk without controlled drying. During the Drying Seminar held in April 2025 at Seed Processing Holland, industry and academic experts shared their insights on how modern drying technologies contribute to optimal germination rates, extended shelf life, and reduced loss.

Why drying is essential

Improper drying can lead to serious quality issues, including:

- Cell and membrane damage
- Oxidative stress and RNA degradation
- Reduced vigour and viability

That’s why it’s essential to tailor the drying process precisely to the seed type, treatment, and processing stage.

From traditional to advanced

Where sun-drying or floor-drying once sufficed, the industry now embraces more advanced techniques, such as:

- Fluidized bed drying
- Air dehumidification with precise climate control
- Zeolite-based systems
- Heat pump dryers

These technologies offer greater control, improved energy efficiency, and enhanced protection of seed quality.

When does drying take place?

Drying is required at multiple stages throughout the processing workflow:

- Post-harvest
- After disinfection, priming, or film coating
- Before and after pelleting

Each step demands a specific drying protocol. The wrong approach can immediately affect the seed’s germination potential and overall vitality.

Choosing between fast and slow drying

Slow drying minimises cellular stress but carries risks of contamination and energy loss. Fast drying is more efficient, but requires highly precise control. Finding the right balance is critical—and was a key focus during the seminar.

SPH offers tailored drying solutions for every seed type

Seed Processing Holland designs and delivers advanced drying systems developed specifically for the seed processing industry. Our solutions provide maximum control over the drying process, helping seed companies worldwide meet the highest quality standards.

SPH Drying Solutions:

- Centrifuges for removing surface moisture
- Ventilation dryers with integrated humidity control
- Rotary dryers for seeds post-extraction or after wet/liquid treatments such as priming and disinfection
- Fluidized bed dryers for seeds and pellets

Our systems are scalable, energy-efficient, and designed to support diverse processing steps—from wet seeds to post-coating or disinfection drying.

🌱 Want to learn more about how our drying technologies can enhance your seed quality?

Join us at the next seminar in September!

📅 SPH Drying Seminar | Thursday 25 September 2025

🕙 10:00 – 13:30

📍 Seed Processing Holland, Enkhuizen