



Drying of Food Ingredients
NEFI Technology Talk, October 12th, 2023



FOOD DRYING: A MATTER OF TASTE AND WASTE



Preservation

Storage

WHY?

Quality

Safety

Energy Consumption

Costs

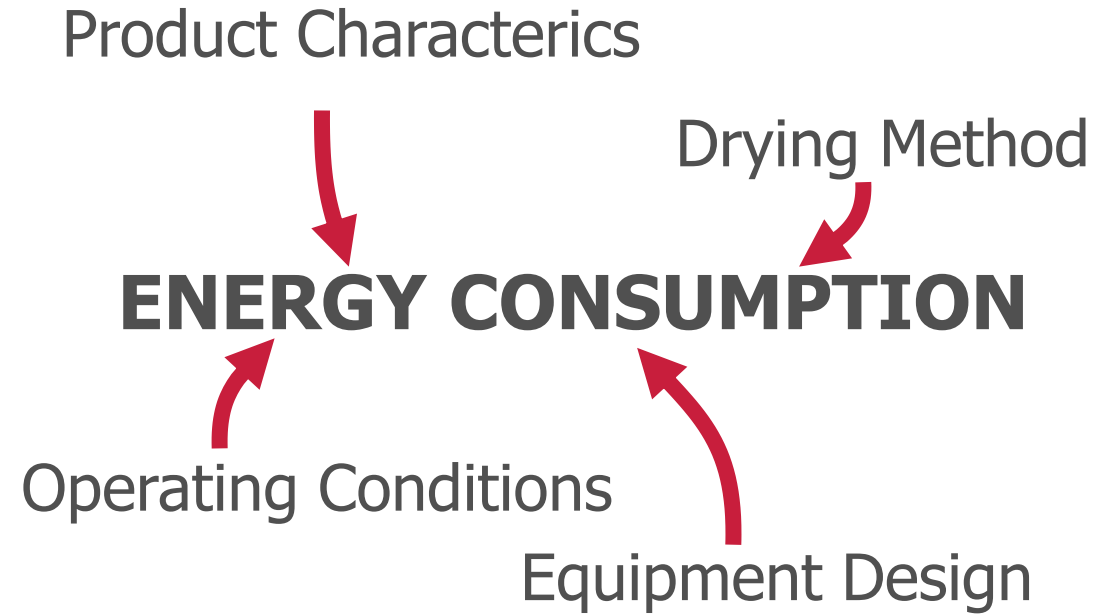
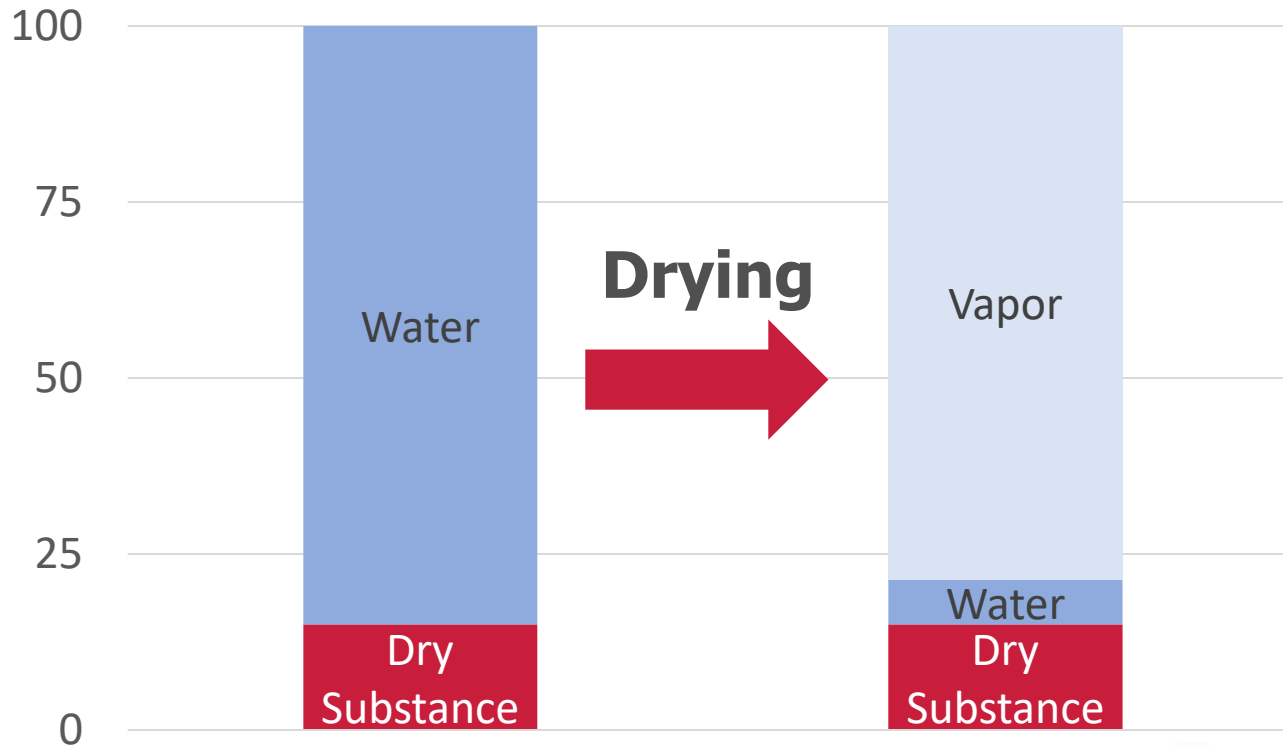
CHALLENGES?

Consistency

Decarbonization



ENERGY CONSUMPTION: WATT YOU NEED NO NOW



**Water Evaporation:
627 kWh/t**

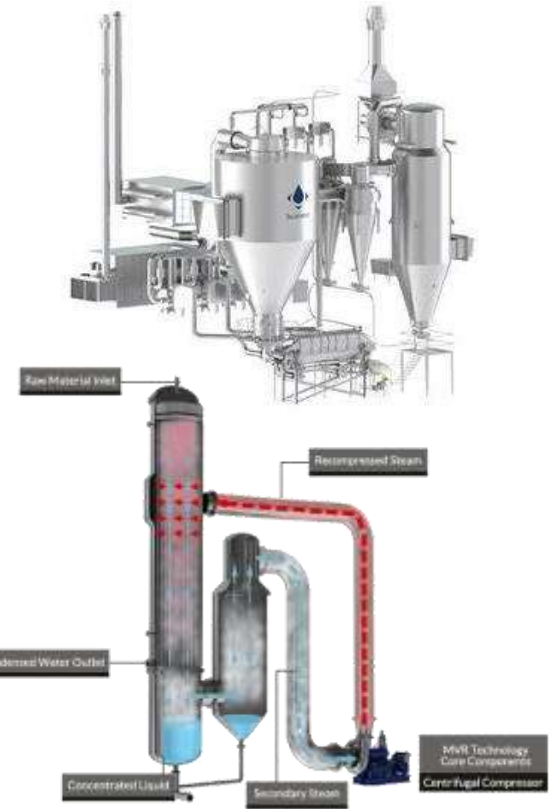


REDUCING ENERGY DEMAND: TRIANGULATING THE OPTIONS

Drying Technology



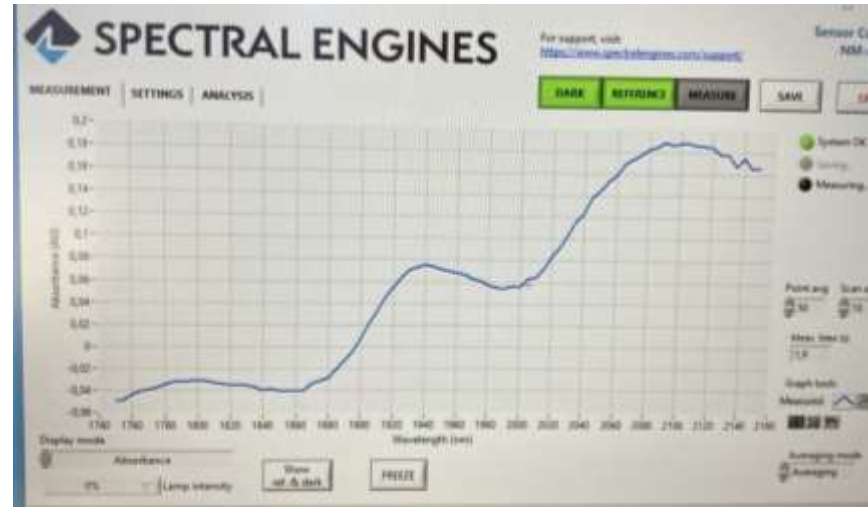
Heat Recovery & Electrical Efficiency



Drying Conditions "EDDY"



EDDY @ AGRANA



- Optimization of energy consumption / water content on an AGRANA spray dryer
- Sensor + Digital Twin in an industrial environment
- AGRANA joined project due to alignment with multiple strategic working fields



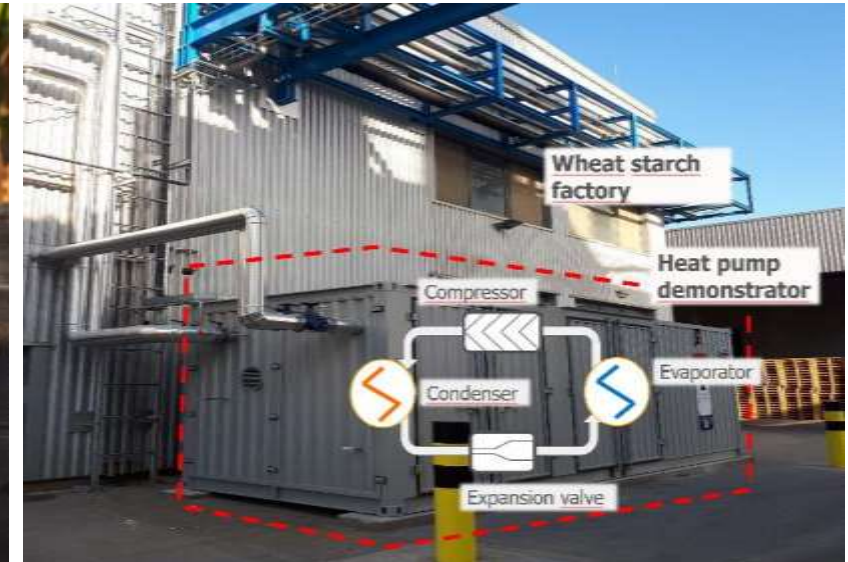
DECARBONIZE @ AGRANA: THE BIGGER PICTURE

- AGRANA Group Emissions:
~0,9 Mio t CO₂ per year (Scope 1+2)
- AGRANA Targets:
Zero CO₂ in 2040 with linear reduction path



Our Toolbox:

- Efficiency
incl. advanced processing technologies
- Renewable Energy
incl. energetic side stream utilization
- Electrification
incl. heat pumps





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