

## ***New Technologies for Pharmaceutical Hot Melt Coating Processes***

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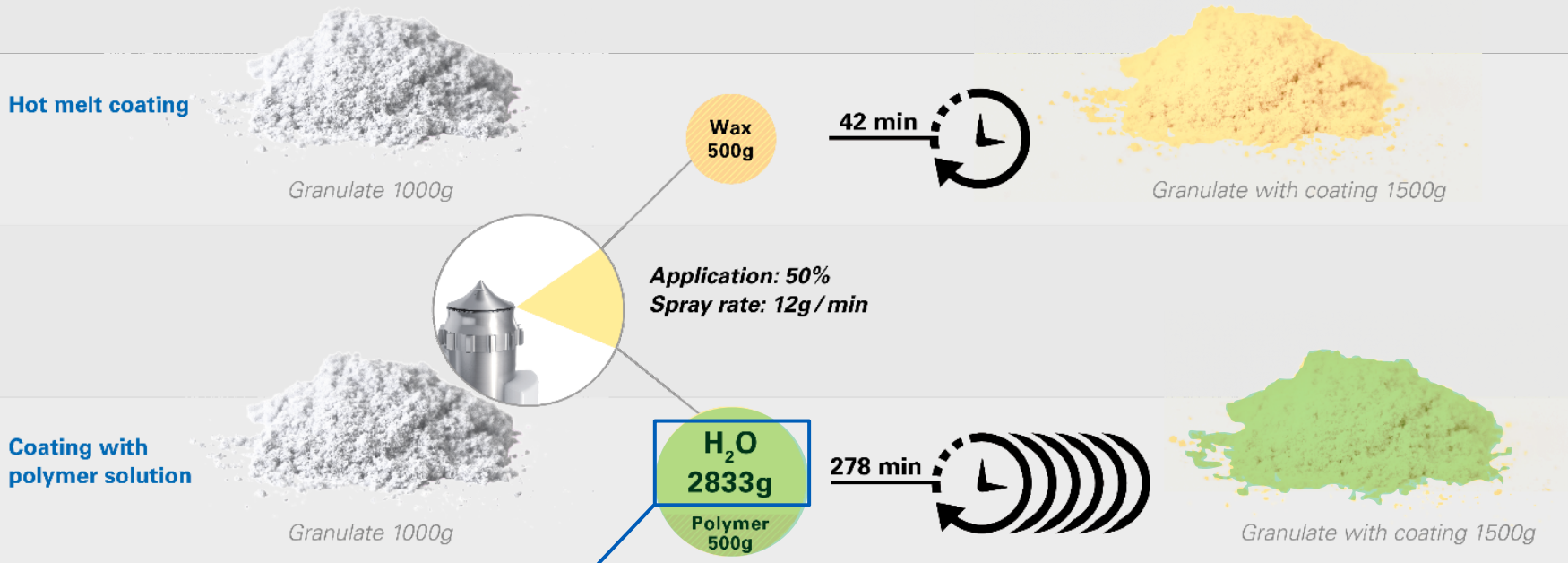
# Fluid Bed Coating

## Advantages of the Hot Melt Coating Process

### Case study:

#### Taste masking of granules

**85% shorter processing time** with hot melt coating compared to coating with a polymer solution



### Hot Melt Coating Advantages:

- Significant process time reduction
- Less energy consumption
- No solvents required

# Hot Melt Coating

## Conventional Production Concepts in the Food Industry

Conventional Hot Melt Systems are:

- Optimized for continuous and automated production
- Clean surfaces to the production room
- Stainless steel covered insulation



**BUT:**

- No access inside the tubing
- Cleaning validation not possible
- For mono products only



# Hot Melt Coating

## New Technology for Pharma Production

### Our solution for Pharma Applications

- GMP execution
- CIP cleaning function
- One common heating source
- Exact dosing function
- Compact unit – easy to handle
- Safety execution – fully covered and insulated
- Control system integration, data recording, CFR 21 Part 11 compliance



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Melting vessel

Overhead stirrer

Dosing piston

Diaphragm valves

Heating block

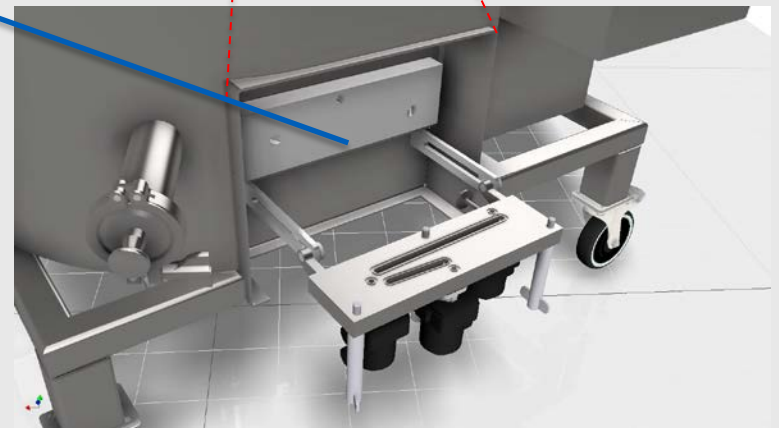
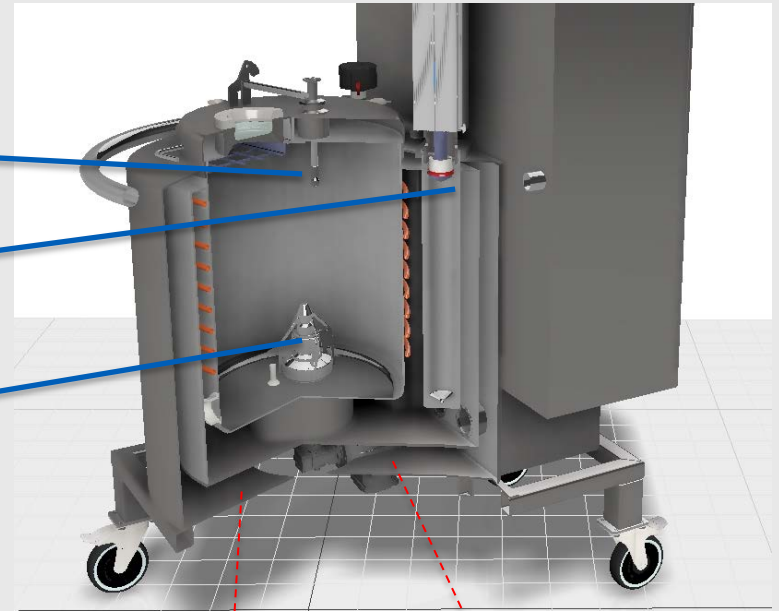


# Hot Melt Coating

## New Technology for Pharma Production

Scale-up step: 5 to 50 litres:

- CIP cleaning included – easy cleaning validation
- Piston drive is easily removable for inspection
- Magnetic driven bottom drive stirrer
- Valve block can be opened quickly for inspection
- Completely integrated in the Innojet VENTILUS® standard control system
- Finalization of the prototype – pharma project, FAT in April 2018



# Hot Melt Coating

## Pharmaceutical Applications



Granules  
Taste Masking

Seeds  
Protection

Pellets  
Moisture Barrier

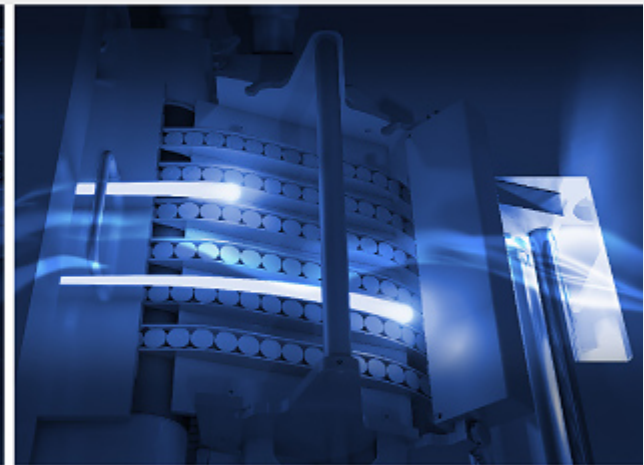
Tablets  
Swallowing Help

Crystals  
Thermo Stabilization

Powder  
Coating

And many others...

**Welcome to our ACHEMA Marktplatz Booth !**



**Thank you very much for your attention !**