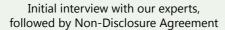
# TRANSFORMING YOUR LIQUID INTO PERFECT POWDER

# Why powder is often a better choice:

- Longer shelf life
- · Higher microbiological stability
- Easier production
- Better functionality (e.g. flowability)
- Less cost (storage, transport and production)



# FIRST STEPS



Questionnaire, samples and documents to collect all requirements

Document review and indicative pricing

Feasibility study, trial production and upscaling

Contractual agreement & commercial production

# **CONTACT US**

We have state-of-the-art production equipment and years of experience in developing and manufacturing ingredients. We are happy to share this know-how to make your project a success.

### **MEGGLE GmbH & Co. KG**

**Business Unit Contract Manufacturing** Megglestr. 6-12, 83512 Wasserburg am Inn Germany

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**BUSINESS UNIT** CONTRACT MANUFACTURING



Experts in **Spray-Drying** 

# **OUR COMPETENCE**



Founded in 1887 as a cheese dairy, MEGGLE Group has become a global brand with more than 2,500 employees, 20 locations worldwide and a turnover of 1.5 billion euros. Besides its well-known dairy products for consumers, MEGGLE manufactures high-quality pharmaceutical lactose, food- and feed ingredients and offers contract manufacturing services.

## **Business Unit Contract Manufacturing**

Our core competence in spray-drying is completed by agglomeration, evaporation and mixing services. We support our customers during development and production, offer tailor-made solutions and realize customer demands, no matter how unique they may be. Experience, long-term focus and intensive service from the very beginning ensure the success of your project.







We at MEGGLE have been producing spray-dried products since 1986 and have acquired a deep understanding of spraydrying processes. That's why we are your competent partner to realize your projects from the initial idea to the finished product.

# THE RIGHT EQUIPMENT FOR **EACH PROJECT**

### 3 SPRAY-DRYING TOWERS



# LARGE

### $(1.500 \text{ kg / h})^*$

- · High volume
- · Upfront evaporation
- Food and Feed Ingredients
- Pharmaceutical Excipients



# MEDIUM\*\*

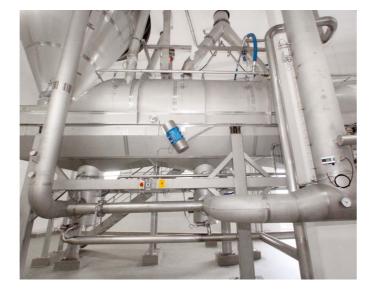
### (750 kg / h)\*

- Infant Dry Blend Ingredients
- Food Ingredients & Specialities
- Pharmaceutical Excipients
- Nitrogen filling



# SMALL / PILOT $(25 \text{ kg / h})^*$

- Product development & demo runs
- Functionality improvement
- Nitrogen filling
- Infant Dry Blend Ingredients
- Small volumes
- \* Water evaporation at a dry matter of 50%
- \*\*as of 2025



## **KEY FACTS**

#### PRODUCT RANGE:

- Food Ingredients
- Infant Dry Blend Ingredients
- Pharmaceutical Excipients
- Feed Ingredients

#### FILLING:

- Paper bags
- Big Bags
- Drums & Cartons

#### **EXAMPLES:**

- · Vitamins & Minerals
- Natural Extracts & Colours

- Proteins / Peptides / Enzymes / Collagen
- Oligosaccharides & **HMOs**
- · Co-processed Excipients

### **CERTIFICATIONS &** STANDARDS:

- DIN EN ISO
- IFS (International Featured Standard Food) incl. HACCP System
- FAMI-OS
- EXCIPACT
- IPEC GMP
- Halal / Kosher

# OUR SERVICES FOR YOUR PERFECT POWDER



### **DELIVERY (RAW MATERIALS)**

- Tankers
- · Intermediate bulk container
- Drums and canisters
- Flexible delivery times



#### **PROCESSING**

- Mixing (dry/liquid/paste)
- Heating
- Cooling
- Homogenizing
- Evaporation
- · Pre-treatment (e.g. pH adjustments, enzymatic modification)



#### SPRAY-DRYING

- High level of expertise in improving powder properties (e.g. particle size distribution, flow characteristics)
- Partial agglomeration possible
- Different spray tower capacities to realize small to large projects



### FILLING / PACKING

- Flexible packaging solutions
- Filling under a nitrogen atmosphere (e.g. to avoid fat oxidation)
- Flexible storage options



### **ANALYTICS**

- Chemical, physical and microbiological
- Specific analytics in-house or with external laboratories

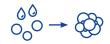


# REGULATORY / OUALITY SUPPORT

• Advice and assistance according to your needs

# **FURTHER CONTRACT** MANUFACTURING SERVICES

# **AGGLOMERATION**



### **Continuous wet agglomeration**

with downstream fluid bed drying for the production of agglomerated products

### Mixing of up to three powder substances possible

### PRODUCT RANGE:

- Food Ingredients
- Pharmaceutical **Excipients**

### FILLING:

- Paper bags
- Drums
- Big Bags

# **EVAPORATION**



# Falling film evaporator

from 10-55 MT of water evaporation per hour

### **EXAMPLES:**

- Milk
- Buttermilk
- Apple juice
- For a customer, we realized a very special project in an applerich harvest year. Several million liters of apple juice were evaporated to

70% dry matter in our plant.

# MIXING



# Mixing of several powder components

from 10 MT to 100 MT

#### PRODUCT RANGE:

- Food Ingredients
- Paper bags Feed Ingredients
  - Big Bags

FILLING: