Continuous crystallization



Creates new opportunities on small scale

With the latest generation of small scale OMVE CRA226 Scraped Surface Heat Exchanger (SSHE) Systems you have even more flexibility and possibilities to simulate different kinds of industrial crystallization processes.

When using the CRA226 for crystallization of oil and fats the quality of product is based on consistency, structure, plasticity and hardness. Reaching these conditions is directly depending on the recipe and the process equipment. As the recipe and the process are different for each product, it is important to have the most flexibility. For the processing equipment, the cooling temperature capacity and control, the pressure in the system and the mechanical force/ shear during processing are determining the crystallization. The OMVE CRA226 can be supplied with multiple SSHE barrels, pinworker(s) and with different lengths of resting tubes at pressures up to 50 bar(g). The hygienic design of OMVE SSHE minimizes contamination during processing.

Unique Features

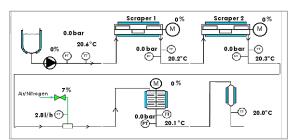
- Plug & Play
- Easy control by color touch screen
- Maximum flexibility in configurations
- System pressures up to 50 bar
- Hygienic design
- Integrated CIP mode
- Highest level of automation
- Easy dismantling on the SSHE

Applications

- Butter and butter blends
- Edible fats and oils
- Spreads and shortenings
- Bakery fillings
- Puffy pastry
- Cosmetics

Working Principle

The basic unit consists of a feed hopper, product pump (12, 25 or 40bar), touch screen, one cooling barrel and a resting tube. The basic unit can be extended with a pin worker, additional barrels and accessories enabling you to simulate any crystallization process. You can connect the OMVE or your own refrigeration system.



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Standard Accessories

- Mixer in the feed hopper
- Additional Barrel(s) and Pin worker(s)
- Double jacketed vessel, pin workers and resting tubes
- Flow meter (mass or electro-magnetic)
- Air-incorporation
- Upgrade to higher pressures
- Heat Tracing & re-melting
- Separate CIP pump
- Upgrade in automation

More accessories available.

Specifications

Service unit code	CRA226-20
Process flow rates	10 – 30 L/h
CIP flow rate	160 L/h
System pressures (max.)	40bar(g) [580psi(g)]*
Additional CIP pump (optional)	Up to 900L/h
Refrigeration system (external)	-25°C [-13°F]
Max particle size	4mm
Max rotating speed	715 & 2300 rpm
Dead volume per barrel	470ml
Pin worker rotating speed	1500 rpm
Air incorporation	Flow controlled
Overrun	Up to 200%
Product side	SS316
Blades	Peek (standard)
LxWxH	142x101x163cm
	[56x40x64"]
Weight	~450kg [990lbs]
Compressed air	4-7bar [87psi]
Compressed air /Nitrogen	Max.12bar [174psi]
(Injection) optional	
Water	2-4bar [29-58psi]
Electrical	370-400Vac /3ph+N+E /50Hz/ 32A or 200-240Vac /3ph+E /60Hz/ 63A

* higher on request

Why OMVE

- ✓ Since 1993, we have **specialized** in supplying manufacturing R&D and pilot-plant equipment.
- ✓ OMVE is a **preferred supplier** to leading multinationals worldwide.
- ✓ OMVE systems are designed and manufactured according to the highest industry standards.
- ✓ OMVE systems come with a **two-year** warranty.
- ✓ OMVE systems carry **CE certification**.
- ✓ OMVE offers the **most comprehensive service** available on the market.

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Lab & Pilot Equipment



Crystallization & Aeration

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