

DEA310 & DEA320: Batch / Inline Deaerators

Deaerates and Degases

When low oxygen levels are important

In many production processes, the presence of air is inevitable. To attain a better quality product when pasteurizing, homogenizing or filling the product into containers, the presence of air must be avoided or minimized. During product preparations air encapsulation is common, especially on laboratory and pilot scale. A deaerator system optimizes conditions by the removal of air and gas using controlled vacuum and temperature.

Benefits of deaerated products:

- Improved product shelf life
- Increasing product stability
- Prevent product oxidation of constituents during heat treatment
- Avoid any impairment of constituents such as flavorings, colorants and nutritional compounds
- Increase carbonation consistency



DEA320



DEA310

Unique Features

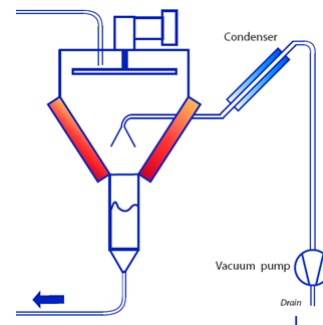
- Suitable for widest range of products
- Aroma recovery condenser
- Full integration with OMVE equipment
- Compact and mobile
- Minimum number of rotating parts
- Inclusive Aroma condenser

Applications

- Baby food
- Confectionery
- Desserts and puddings
- Fruit and vegetable juices & purees
- Health and nutritional product
- Dairy products
- Sauces and soups

Working Principle

The product enters into the vessel at the top. The complete vessel is under vacuum. When entering the vessel, the product surface is increased as much as possible by using a spray nozzle or letting the product flow over a (rotating) disc and along the vessel wall creating a thin product film. The evaporation rate can be improved by heating the product before entering.



Deaeration

DEA

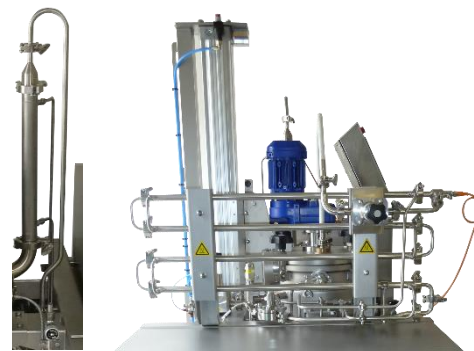


Kind of de-aeration methods:

- DEA-SN Spray Nozzle: in cases of particle free and low in viscosity.
 DEA-SD Static Disc: in case of small particles and medium / low viscosity
 DEA-RD Rotary Disc: in case of small particles and/or high viscosity

Standard accessories

- Different de-aeration methods like Spray nozzle, Static disc and Rotary disc
- Pump on the inlet or/ outlet.
- Aroma condenser to recover extracted "aromas."
- Pre-heat exchanger for faster evaporation of entrapped air
- Data logging
- Double jacketed vessel



Specifications

Type code	DEA320-50	DEA320-100	DEA320-200
Flow rates	30-80l/hr	50-150l/hr	100-300l/hr
Max. Pressure in chamber	3bar(a) [43,5psi]	2bar(a) [30psi]	2bar(a) [30psi]
Min. Pressure in chamber	100mbar(a) [1,45psi]	100mbar(a) [1,45psi]	100mbar(a) [1,45psi]
Max. temperature	80°C	80°C	80°C
Max. Pressure outlet pump	10bar(g) [145psi]	10bar(g) [145psi]	10bar(g) [145psi]
Max. viscosity	2500 cPs	1500 cPs	1500cPs
Particle sizes (disc)	3mm [0,12"]	4mm [0,16"]	4mm [0,16"]
Particle sizes (spray nozzle)	-	-	-
Materials			
Material product line	SS316		
Dimensions			
LxWxH (basic unit)	140x90x165cm [55x35x65"]	160x90x175cm [63x35x70"]	160x90x175cm [63x35x70"]
Utilities required			
Electrical supply	370-400Vac /3ph+N+E /50H or 200-240Vac /3ph+E /60Hz		
Water supply	2,5 bar(g) [37psi]		
Compressed Air	min. 6 bar(g) [87psi]		

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.