

Stephan Universal Machines

Economic Batch Production

Stephan Universal Machines are suitable for a huge number of working processes. The basic machine as well as a large choice of optional equipment offer a wide range of flexible systems for the food production. Special executions for the production of ointments and emulsions for the cosmetic sector complete this programme.

Applications:

- Mayonnaise
- Ketchup
- Dressings, Dips
- Baby-Food
- Ready Meals
- Fish Plates



Processes:

- Size Reduction
- Mixing
- Emulsifying
- Direct and indirect Heating
- Outgasing (Vacuum)
- Cooling



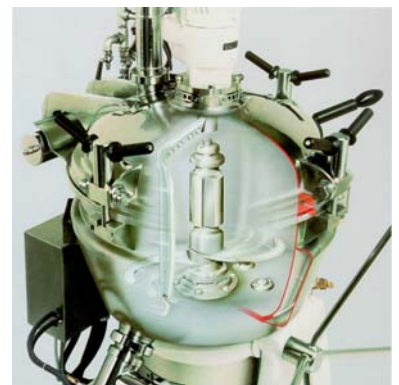
Advantages

- | | | |
|-----------------------------|---------------------------------------|----------------------------------|
| ■ Stable emulsions | ■ Optimal dispersing of solid matters | ■ Avoidance of oxidative damages |
| ■ Short batch times | ■ Homogeneous mixing | ■ Constant product quality |
| ■ Constant specific gravity | | ■ User-friendliness |
| ■ Constant specific gravity | | ■ Easy to clean |

Construction of the Universal Machine

The Stephan principal.

The extended motor shaft of a strong electromotor (e.g. with 1500/3000 rpm) leads into a specially formed bowl for receiving a working tool. This consists of sharp knives or other working tools. The working tools assure a systematic circulation of the product. As a result, the product inevitably has to pass the rotating tools and will be treated, i. e. comminuted, mixed, emulsified. This process will be repeated in a matter of seconds, depending on the raw materials and on the selected speed. An additional circulation will be achieved by means of a mixing baffle which especially removes viscous materials from the bowl edge and directs them to the centre. At the same time



– in addition to the mechanical processes - thermal processes can be started, too. All processes can be carried out under vacuum.

Line of Products



UMC
5 to 60 literes



UM
12 to 150 literes



UM/SK
5 to 150 literes

Technical Data

Type		UMC 5	UM 12	UM 44	UM 60 E	UM 80 E	UM 130 E	UM 150 E
Bowl Volume	[l]	5	12	40	60	80	115	150
Batch Size	[l]	2,5	7	30	40	70	90	120
Energy Requirement	[kW]	0.75	1.9	5.5	7.5	22	33	33
Options								
Double Jacket		<input type="checkbox"/>	+	+	+	+	+	+
Vacuum		<input type="checkbox"/>	+	+	+	+	+	+
Dosing		<input type="checkbox"/>	+	+	+	+	+	+
Discharge Valve		-	-	+	+	+	+	+
Steam Injection		-	-	only SK	only SK	- only SK	only SK	only SK

- Basic equipment
- + Optional equipment
- Not available

Additional options: motors with different operating voltages, speeds and motor outputs, vacuum pumps, temperature units, steam cleaners, charging systems belong to our large delivery programme.

Laboratory

The laboratory in our head office in Hameln can be used to demonstrate the functional principle of the Vacutherm system as well as to test new applications.