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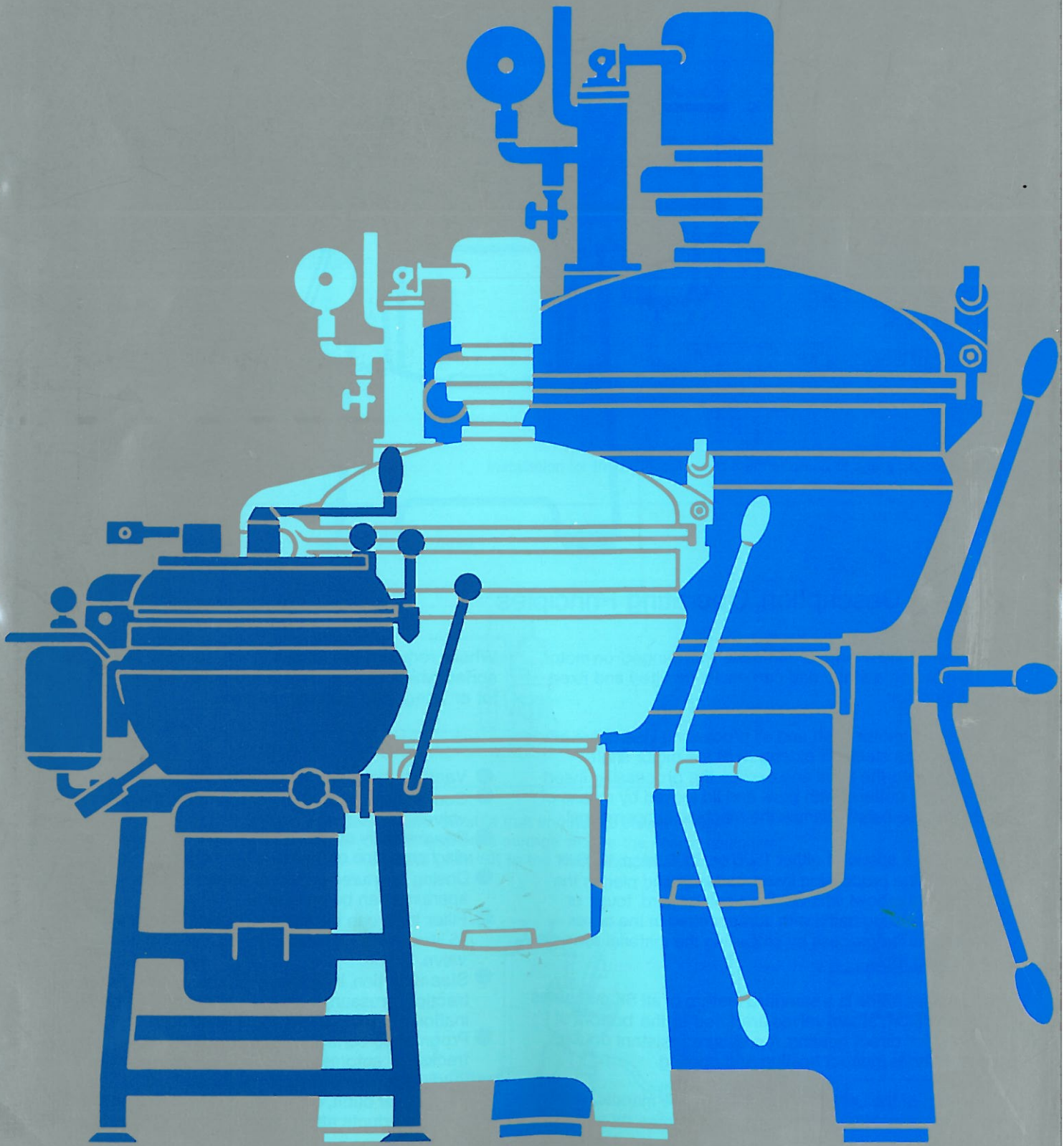
UMM/SK



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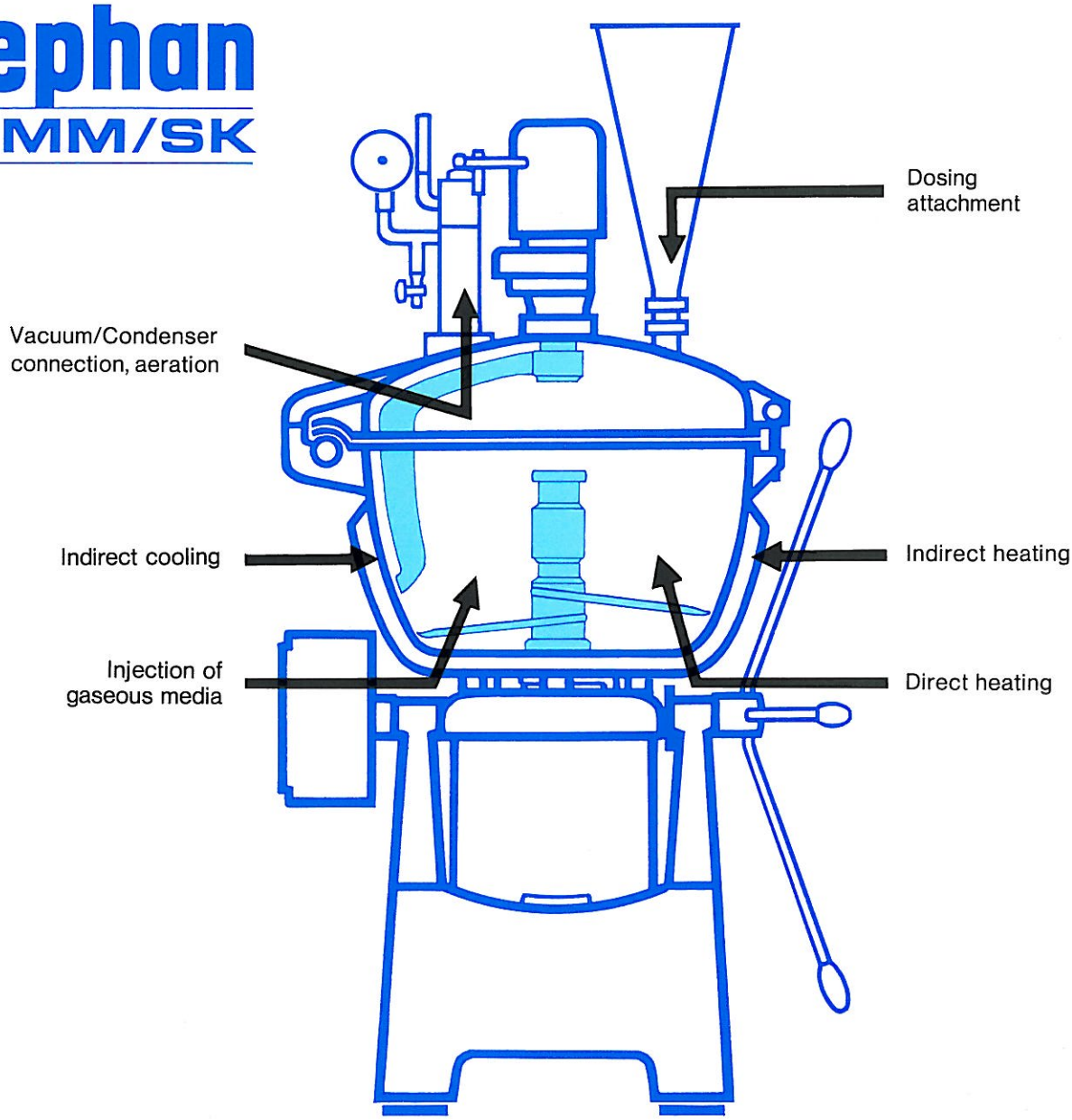

General Description, Operating Principles

The bowl of the machine, complete with flanged-on motor, is mounted on a stand and can easily be tilted and fixed in any position.

Bowl, cover, motor shaft and all processing inserts are made from stainless steel. An extension of the motor shaft protrudes into the bowl and carries the processing insert with its rigid cutters. With bowl and lid locked by means of quick-release safety clamps the machine is operational.

Rotating at a speed of either 1500 or 3000, resp. 1800 or 3600 rpm, the processing insert reduces and blends the material in the bowl whether it be soft or hard, tough or brittle. The mixing baffle with scraper fitted in the cover accelerates the process by propelling the material towards the rotating tools.

Vacuum operation is a standard feature of all SK machines and non-return steam valves are fitted to the bottom of the bowl for direct heating. A pressure resistant double jacket permits indirect heating and cooling.

Operation of the UMM/SK machine can be manual, semi-automatic or to pre-determined programmes by punch-card control.

Where required the following are some of the accessories which can be connected either to the inlet or outlet or integrated with the machine.

- Vacuum pump, complete with motor.
- Compressor, complete, for operating the pneumatic valves.
- Pneumatically operated bowl valve for connection to discharge pipe of 65 mm I.D. in bottom of bowl.
- Dosing apertures on top of cover – a max. of 3 apertures can be provided.
- Filler tube can be fitted to dosing aperture, capacity 15 litres, with pneumatically operated slide valve.
- Steam station, individually adapted for moisture extraction, pressure control, purification and decontamination of steam under local conditions.
- Programme control, complete with 12 or 24 control tracks for automating operating sequences including loading and emptying of machine.
- Condenser outfit, complete, for drying out and thickening of products after pre-processing in the UMM/SK.

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Ideal Machines for the Dairy and allied Industries

Products	Processes
1. Processed chesse, spreading and slicing types 2. Cooked cheese 3. Quarg products with herbs or fruit 4. Fresh cheese preparations 5. Cream cheese spreads (low calorie creams) 6. Dessert creams 7. Blancmanges 8. Mayonnaise with reduced oil content, salad creams, ketchups etc. 9. Herbal butter, full or reduced fat content 10. Ice cream compounds 11. Fruit yoghourts, Kefirs, sour cream 12. Casein preparations 13. Milk shake concentrates 14. Salad dressings 15. Baby food	Size reduction Mixing Kneading Vacuum processing Thermisation Melting Pasteurizing Preparing Sterilizing Gas injection Automatic dosing Emulsifying Direct and indirect cooling Evacution all in one machine – in one operation! Composition of recipes is individually variable.

Output kg/h

The quantities shown are minimum values. The actual capacity of a machine will depend on the processing cycle as well as on the type and consistency of the raw materials used.

Type	Product number according to the above list														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
UMM/SK 25	80	150	150	150	150	150	150	150	150	150	150	80	150	80	80
UMM/SK 40 E	120	300	300	300	300	300	300	300	300	300	300	120	300	120	120
UMM/SK 40 E GNi-Pilot	120	300	300	300	300	300	300	300	300	300	300	120	300	120	120
UMM/SK 80 E-II	450	600	600	600	600	600	600	600	600	600	600	450	600	450	450
UMM/SK 130 E-II	500	700	1000	1000	1000	1000	1000	1000	1000	1000	1000	700	1000	500	500

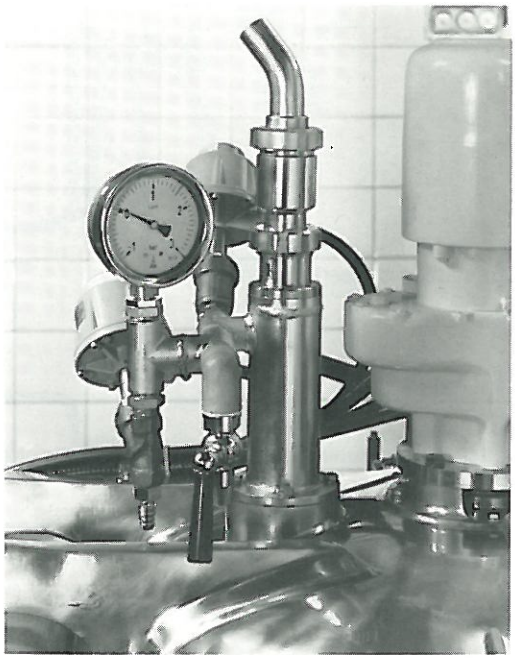
The UMM/SK 130 E-II machine has been specifically designed for processing sour milk products.

Console mounted control panel with operating push buttons and programme control unit, water dosing and temperature indicator

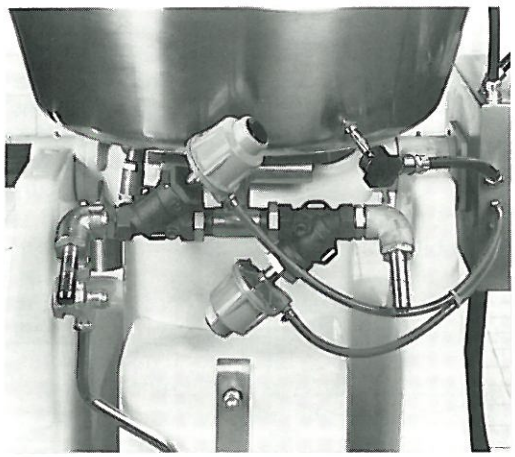
UMM/SK 25

UMM/SK 40 E – UMM/SK 130 E-II

Dosing funnel with level indicator and pneumatically operated slide valve on dosing aperture.
With union and union nut.



Pneumatically operated vacuum and ventilation valve, relief valve and vacuum/pressure gauge.



Connections for steam and water with pneumatically operated valves.
Sensor for electronic temperature measurement.

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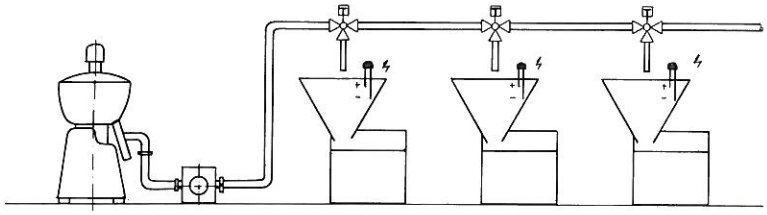
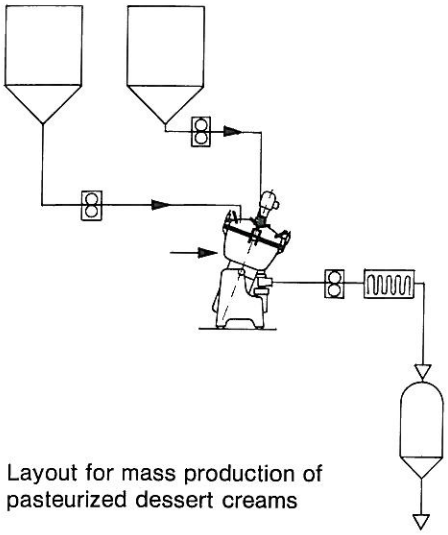
Project Examples

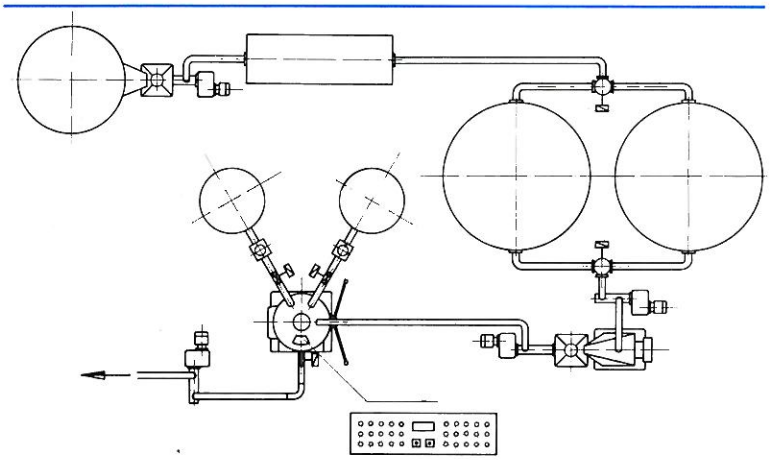
The Stephan Project Department can prepare scaled and realistic recommendations for installations, based on practical requirements. Manually fed and operated plants as well as fully automatic mass production lines can be individually designed by Stephan's engineers, and commissioned by Stephan's technicians and production specialists.



Production of processed cheese in blocks

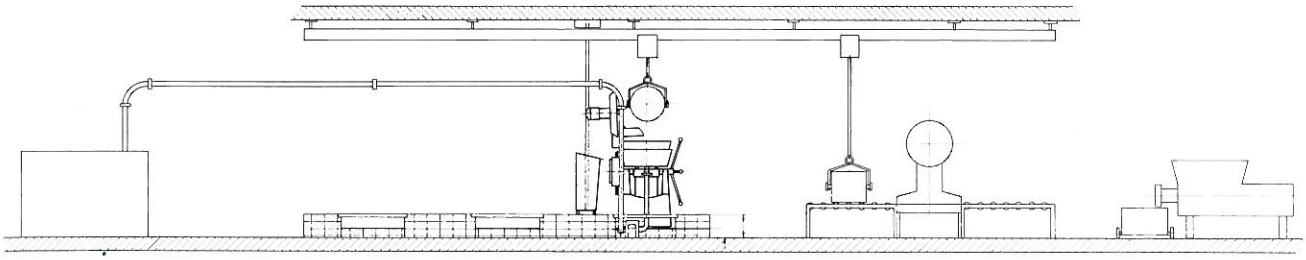


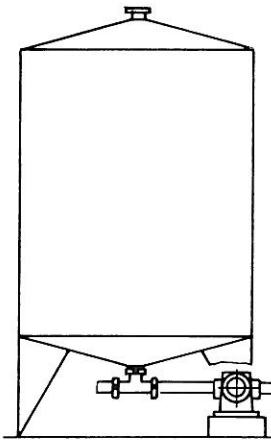
Layout for mass production of pasteurized dessert creams



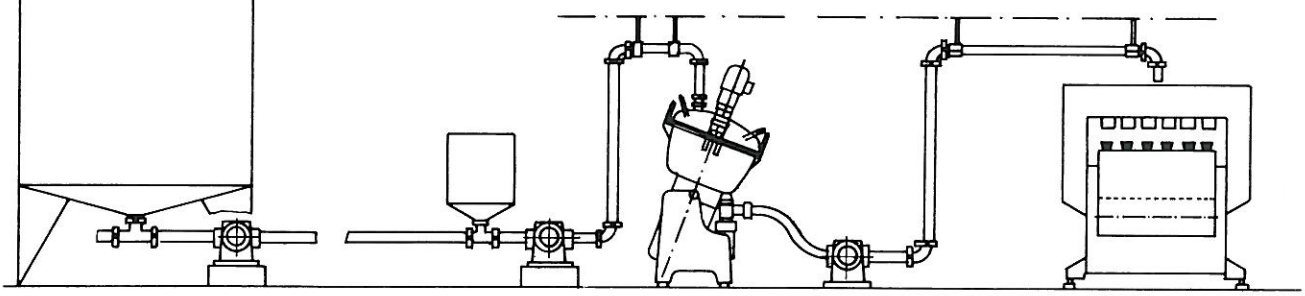
Installation for the production and thermalization of quarg products

Detail of a production line – processed cream cheese –





Production line: durable fruit and herbal cream cheese
Line = from the cheese storage silo via the dosing equipment and the UMM/SK to the filling and packing machine

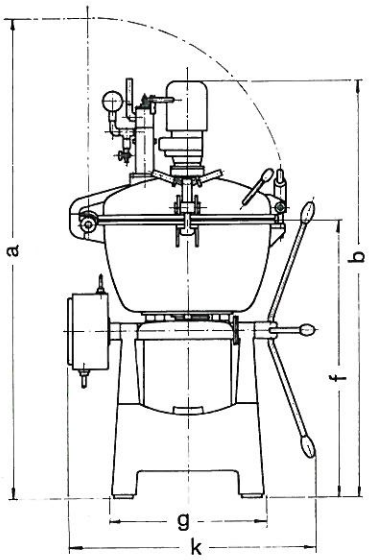


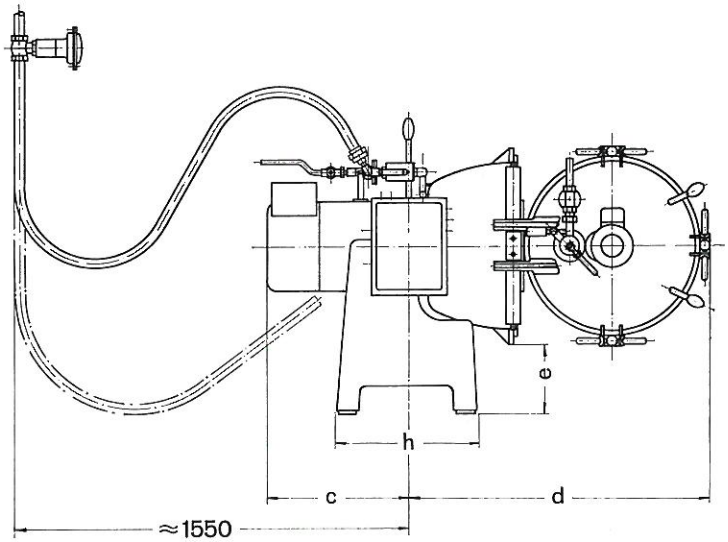
Technical Data

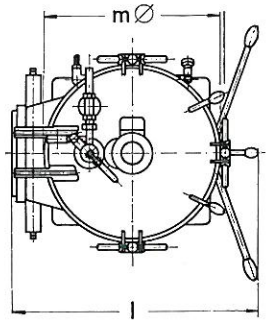
		UMM/SK 25	UMM/SK 40 E	UMM/SK 40 E GNi-Pilot	UMM/SK 80 E-II	UMM/SK 130 E-II
Bowl capacity	approx. l	25	40	40	80	115
Width x Depth x Height without control panel	approx. cm	80x60x120	90x65x130	90x65x130	100x105x165	110x110x175
Weight: Machine net/gross*	approx. kg	130/200	220/360	230/360	590/790	800/1000
Control panel net/gross*	approx. kg			70/105	115/160	115/160
Case measurements: Machine	approx. cm	100x80x130	140x110x130	140x110x150	170x130x130	180x150x140
Control panel	approx. cm			100x90x60	150x90x60	150x90x60
Hourly output, end product, minimum	approx. kg/h	80	120	120	450	900
Motor output 1500/3000 resp. 1800/3600 rpm	approx. kW	3.3/4	5.5/7.5	5.5/7.5	18.5/22	29/33
Motor output 1500/3000 resp. 1800/3600 rpm	approx. kW	–	4/5.5	4/5.5	15/18.5	20/28
Motor output 750/1500 resp. 900/1800 rpm	approx. kW	–	3.3/4	3.3/4	10/17	8.6/18
Motor output, mixing baffle	approx. kW	–	0.55	0.55	1.1	1.1
Connected fuses 380/220 V (delayed action)	approx. A	20/35	20/50	25/50	80/125	100/160
Steam connection (max. permissible pressure 4.0 bar)		½''	½''	½''	¾''	1''
Steam consumption/h at approximately 3.5 bar	approx. kg	30	30	30	120	150
at approximately 1.5 bar	approx. kg	20	20	20	60	80
Max. temperatures by direct heating	approx.°C	95	95	127	127	127
Vacuum pump with motor	kW	0.55	0.55	0.55	1.1	1.1
Volume of aspired air	approx. m³/h	4.4	4.4	4.4	13	13
Compressor motor output	approx. kW			0.37	0.37	0.37
Max. pressure	approx. bar			10	10	10
Aspired volume	approx. l/min			60	60	60

*ready for shipment

Subject to amendments without notice







Dimensions in mm – Subject to variations without notice

Type	a	b	c	d	e	f	g	h	k	l	mØ
UMM/SK 25	1400	1180	380	810	380	900	550	530	800	920	485
UMM/SK 40 E	1540	1300	440	910	320	930	530	520	850	1000	550
UMM/SK 40 E GNi-Pilot	1540	1300	440	910	320	930	530	520	850	1000	550
UMM/SK 80 E-II	1900	1610	575	1205	275	1075	616	580	1000	1450	710
UMM/SK 130 E-II	2100	1780	575	1360	380	1240	800	740	1100	1540	800

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Food Processing Technology

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