



**Stephan**  
food processing machinery

# STEPHAN UNIVERSAL MACHINES

More than universal batch cookers





## UNCOMPROMISING TOP-CLASS PERFORMANCE OF THE STEPHAN UNIVERSAL MACHINES

### MORE THAN UNIVERSAL BATCH COOKERS

STEPHAN stands for 60 years of experience in manufacturing plants and machines. In particular the STEPHAN Universal Machines have always impressed as flexible process units.

The STEPHAN Universal Machines handle almost all the tasks involved in the production of processed cheese, convenience products and confectionary: from mixing and chopping, emulsifying and vacuum deaeration to heating and cooling.

The STEPHAN Universal Machines all share one important characteristic: versatility.

These multi-functional batch machines, all of which following the unique STEPHAN principle, can be relied upon to carry out the entire process with all production steps.



## ADVANTAGES FOR YOUR PRODUCTION:

- /// EASY FILLING AND EMPTYING
- /// EFFECTIVE CUTTING AND MIXING
- /// INDIRECT AND/OR DIRECT HEATING
- /// HIGH HOURLY OUTPUT WITH SHORT BATCH TIMES
- /// EASY TO OPERATE
- /// EASY TO CLEAN
- /// COMPACT DESIGN





## APPLICATIONS AND PROCESSING STEPS

### APPLICATIONS: (SOME EXAMPLES)

- /// ALL KINDS OF PROCESSED CHEESE
- /// KETCHUP, MAYONNAISE
- /// READY MEALS
- /// SOUPS, SAUCES, DIPS
- /// ALMOND PASTE, MARZIPAN
- /// CONFECTIONERY FILLINGS

### PROCESSES:

- /// CUTTING
- /// MIXING
- /// EMULSIFYING
- /// VACUUM
- /// DIRECT HEATING
- /// HEATING AND COOLING (INDIRECT)

# DESIGN OF STEPHAN UNIVERSAL MACHINES

The STEPHAN Universal Machines are filled either via the open cover or via dosing valves. All processing steps are performed according to the proven STEPHAN principle: Each process is achieved in one machine (all-in-one), the power of the main motor is transferred directly to the knives – without gear! The rotating knives, reverse-acting scraper arm together with the interaction of the special bowl geometry achieve optimum processing of the product.

STEPHAN Universal Machines double up for many jobs. For example, if you want to produce processed cheese. STEPHAN UM processes pieces of butter and cheese up to a size of 2 kg without any problems. You don't need an additional grinder.

Also gentle treatment occurs when heating and cooling. The product may be heated indirectly with steam via a double jacket or fast and environmentally friendly by injecting direct steam via steam nozzles in the vessel bottom. But, don't forget you can use the cylinder jacket also to cool the product with cooling water.

The discharge of the product is made either via a discharge valve or by tilting the bowl through 90°.

## THE STEPHAN PRINCIPLE

Specially shaped working tools in combination with special bowl geometry results in a quick mixing of recipe ingredients and qualitatively reliable product results.





Loading position



STEPHAN UM 70

Discharge valve



Steam injection nozzles and knives



# TEST FACILITIES

The test facilities at our headquarters in Hameln (Germany) are available for feasibility studies and demonstration runs of the STEPHAN Universal Machines.



STEPHAN UM 130



STEPHAN UM 200

Type		UM 70	UM 130	UM 200
Batch size	l	55	90	170
Capacity (up to)	l/h	330	540	1020
Main motor	kW	20	30	50
Operating temperature	°C	95/125	95/125	95/125

The machines shown are for illustrative purposes only. Actual machine construction may vary by specification.