





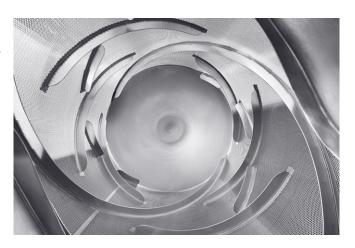
The Lödige LC - High-efficient processes and an attractive price

# Rapid coating processes with optimum mixing homogeneity

Optimal process control, easy handling and easy cleaning were the top-priority criteria for development of the new coater. Furthermore a cost reduction could be achieved by concentration on essential design characteristics.

The coating process can be divided into three sub processes: spraying of coating solution, drying of the tablets and mixing of the tablets. The LC coater series optimizes all three sub-processes by focusing on latest product and process requirements from pharmaceutical industries.

The totally perforated drum with a free surface of more than 40% allows a high air flow and hereby maximized spraying rates and rapid coating processes.



# Start

# New generation of mixing elements

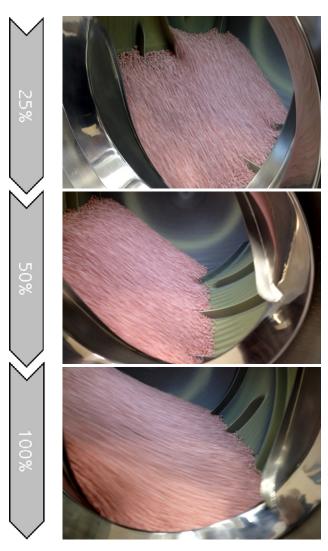
Basing on more than 70 years of experience in mixing technology a new design of mixing elements was developed. This new generation of mixing elements ensures a uniform and gentle mixing, which is the most important condition for best coating uniformity.

The fully welded hygienic design achieves ideal cleaning properties while a minimum in constructive height enables perfect coating performance even with low filling degrees.

By backwards rotation the tablets are completely discharged by the special designed discharge elements without any need for additional equipment.



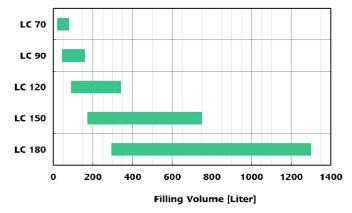
# Perfect performance at all filling levels creates a highly flexible system



For pharmaceutical companies with wide product range a maximum flexibility of machines and plants has a fundamental meaning for economical success. Basing on this approach the LC-series was developed to be used equally for tablets, capsules and dragees and to be operated with film- and sugar-coating processes.

The redesigned drum design combined with the stepless adjustable spray boom enables a machine operation with filling degrees in a range of 25% -100% with consistently good coating quality.

A stretched tablet bed allows the use of a maximum number of spray nozzles which leads up to 40% higher spray rates compared to conventional systems and hereby further economical benefits.



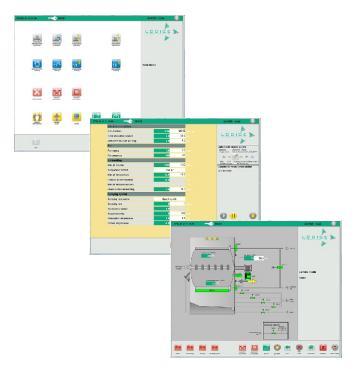
### New designed spray boom combines hygienic design with easy handling



The new spray boom design was developed with the spray nozzle specialist Schlick and is basing on the established PCA System. In order to limit the tubing in the internal machine within reasonable limits and to increase cleaning ability, supply lines for spraying-, pattern- and control- air are elaborated as boreholes through the arm.

For correct adjustment of the distance between spray nozzles and tablet bed as well as the spraying angle, the spray boom is turnable on two axes.

# New designed control system for intuitive machine operation



The new Lödige Coater series is equipped with a new control system which is optimized for easiest operation according to latest GMP-requirements.

All user interfaces are designed to be operated easily and intuitively. A full 21 CFR part 11 compliance is as well implemented as extended batch documentation and various interfaces.

All recipes for production and cleaning mode can be generated fully flexible according to product and process requirements. For a clear indication of operation mode (production or cleaning) resp. warnings and alarms the background of the screen is colored.



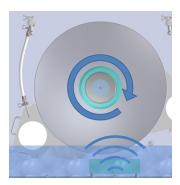
# WIP/CIP-Systems for enhanced cleaning

For meeting the increased cleaning requirements for Pharma industries the LC-series can be equipped with a redesigned modular WIP/CIP-System.

Options like rotating jet cleaners, detergent dosing stations, recirculation numbers, can be chosen.

stations, recirculation pump etc. can be chosen according to the level of pollution and solubility of products.

As new feature an ultrasonic generator is optional installed under the coating drum in order to speed up cleaning times especially in case of hardly soluble substances.





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#### Sizes and capacities

Due to the high variability of filling degrees only 6 sizes of coaters cover the range between 2-1000 kg of product.

	LC 40	LC 70	LC 90	LC 120	LC 150	LC 180
Max. filling volume [l]	10	80	160	340	750	1300
Min. filling volume [l]	3	20	40	80	20 <b>0</b>	300
No. of nozzles	2	4	6	8	10	12
Max air flow [m³/h)	500	2000	3200	5000	8500	12200

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