

# Flexible Implementation and Increased Efficiency

A medical technology provider looks back on an eventful history. The pre-treatment and powder coating plant of a machine manufacturer has been a constant over the last 20 years. When the company moved, the machine builder supplied a new plant – and demonstrated a high degree of flexibility and spontaneity.

Medikomp GmbH was founded in 1999 from the prefabrication of Maquet GmbH, a supplier of medical systems. The company's name and ownership have changed over the last 20 years – from Medikomp GmbH via Stahl Metall und Medizintechnik GmbH to Medifa Metall und Medizintechnik GmbH. What remained was the Noppel pre-treatment and powder coating plant. It worked reliably, was productive and easy to maintain.

When the medical technology specialist decided in 2021 to leave the rented site in Rastatt (Germany) and move to its own premises, it even considered moving the existing plant with it. Due to the result-

ing interruption in production, the decision was made in favor of a new, modern plant. Since they were completely satisfied with the existing pre-treatment and powder coating system throughout its entire service life, the decision to choose Noppel as the supplier of the new system was an easy one.

When designing the new plant, the opportunity was taken to integrate energy and resource efficiency measures.

## Efficiency and sustainability

Among other things, the spray pumps of the pre-treatment plant were equipped

with high-efficiency motors and frequency converters for spray pressure control. Long intermediate drip-off zones and the cascade rinsing system reduce the fresh water requirement and the amount of waste water to such an extent that there is no need for a separate waste water treatment system. The rinsing concept is supported by the softening and reverse osmosis system, which provides fresh deionized water for optimal final rinsing.

Where there used to be only an automatic powder booth with small openings for recoating, there is now a modern Gema powder booth for automatic operation



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The efficiency of the pre-treatment plant was increased by equipping the spray pumps with high-efficiency motors and frequency converters for spray pressure control.



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The modern powder booth for automatic operation features workpiece recognition and cyclone powder coating recovery as well as a large manual coater area.

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In addition, a separate manual powder booth is integrated for individual parts, small batches or for additional recoating of workpiece areas that are particularly difficult to access.

Adhesive water dryer and powder incinerator are arranged and assembled as a block dryer to reduce the dryer surface area. Together with the effective A-locks for heat retention and the Isoplus insulation, the heating energy requirement is significantly reduced.

Retrofitting options for electric heating coils for hybrid heating systems are also provided, in addition to options for heat recovery from the hot exhaust gases.

An inverse circular conveyor technology with conveyor rails open at the top and closed at the bottom prevents contamination from getting from the rails onto the workpieces.

### Insolvency in the Corona crisis

Unfortunately, in the middle of the Corona crisis, the Medifa Group had to file for insolvency at the end of 2022. The new

location in Steinbach near Baden-Baden (Germany) was also affected. Until the overall situation was clarified, commissioning had to be stopped. The insolvency administrator of Schulze & Braun, Dr. Dirk Pehl, commissioned the company sy.con GmbH to continue operations. This company appointed Klaus Bretz as plant manager. Bretz quickly recognized Medifa's potential. He contacted existing customers and also started looking for new customers. Thus, a longer-term order was received for the supply of housings for charging stations, and follow-up orders were promised. Now the business could continue under its own steam with good prospects for further growth in turnover. After the old plant was no longer available, the new pre-treatment and powder coating plant at the new location had to go into production promptly in order to be able to carry out the powder coating of the workpieces.

### Short-term commissioning

The Sinsheim plant manufacturer Noppel pooled its personnel capacities at short notice. The remaining work was completed in a very short time. The plant was put into operation together with the powder technology supplier Gema. Within 14 days, the plant was completed and put into operation. After commissioning, production started immediately. Right from the start, the required high pre-treatment and powder coating quality and the necessary throughput were reliably achieved. Medifa praised the entire Noppel team for their professional commitment at short notice. Thanks to their support, all promised delivery dates could be met.

The efficiency measures installed to reduce energy and fresh water requirements also have a lasting effect and noticeably reduce operating costs. //



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### Kontakt

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