

Perfectly clean surfaces before injection moulding



Surface Cleaning Technology



WANDRES
micro-cleaning

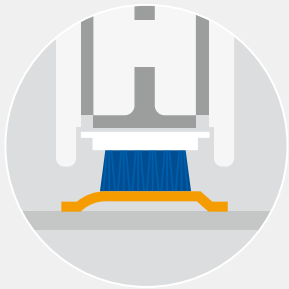
Efficient cleaning before moulding

The challenge

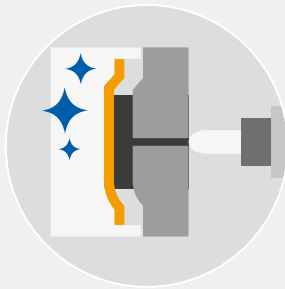
During the back-injection moulding of decorative or functional film, for instance for touch screen displays and controls, particles can become embedded. Even microscopic particles may cause clearly visible surface imperfections and a high reject rate.

The solution

Sword Brushes engineered by Wandres provide a reliable cleaning system for flat or pre-formed decorative film. The low-maintenance cleaning machines are easily integrated into the production process and improve surface quality while significantly reducing the reject rate.



Cleaning



Back-injection



Quality control

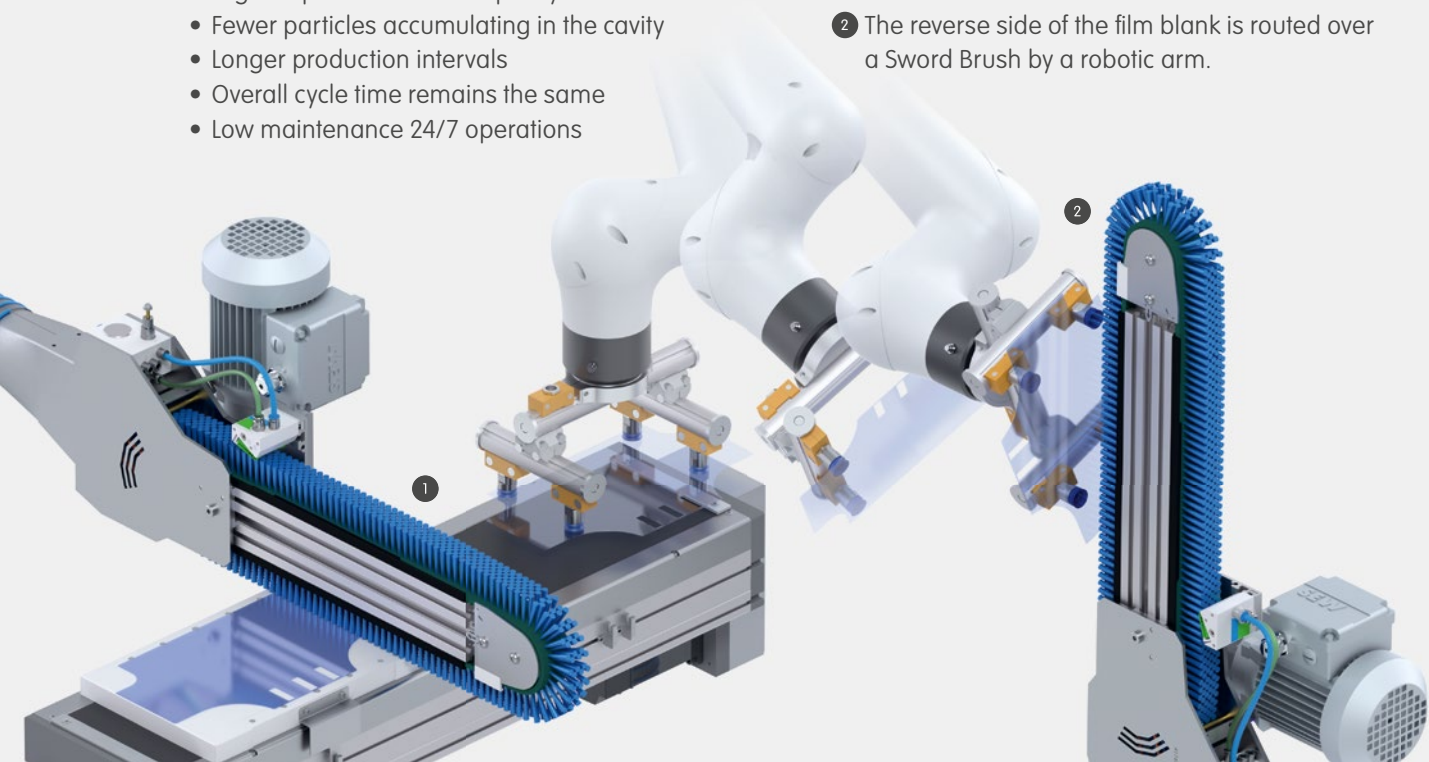
Higher quality and less waste

Advantages of cleaning with Sword Brushes

- Rejection rate reduced substantially
- Highest possible surface quality
- Fewer particles accumulating in the cavity
- Longer production intervals
- Overall cycle time remains the same
- Low maintenance 24/7 operations

Integration into the process

- 1 The pre-formed film is clamped to a preform-holding slide and fed under the Sword Brush.
- 2 The reverse side of the film blank is routed over a Sword Brush by a robotic arm.

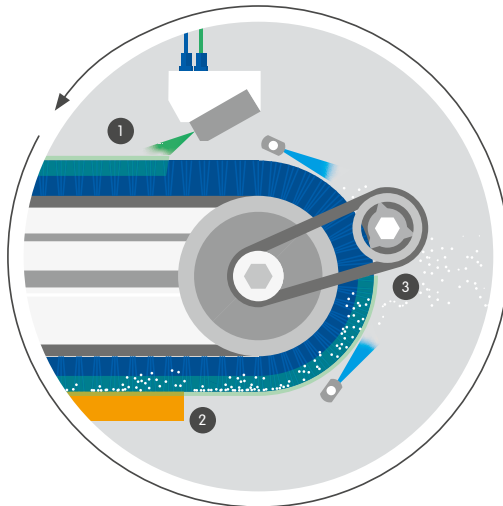


Patented cleaning technology

Clever brush technology for flawless film and foil

The filaments of the circulating brushes are micro-moistened with Ingromat® antistatic cleaning liquid and follow the lines of the film perfectly, removing even the finest particles. The surface remains dry and can

immediately proceed to downstream processing. The quality of delicate film material and degree of surface gloss is not impacted. A self-cleaning unit ensures the filaments are constantly refreshed by detaching the particles and disposing of them via vacuum extraction.



- 1 Micro-moistening of the filaments
- 2 Cleaning of the product surface
- 3 Self-cleaning and vacuum extraction

“Thanks to the integration of the Wandres Sword Brush into the production process, we have been able to reduce rejects significantly whilst increasing production capacity.”

Sebastian Holzeder, Product Manager Automation, KraussMaffei Technologies GmbH

Surface Cleaning Technology

When particles and dust on surfaces cause flaws and rejects during production, we provide the best cleaning technology. Our machines deliver outstanding cleaning results in 24/7 industrial production and are in action all around the world. We collaborate with an international network of sales and service partners in 46 countries and have subsidiary companies in the USA and China.

At our production site, located close to the city of Freiburg im Breisgau, a team of over 140 employees develop, produce and market our innovative cleaning machines. More than 80 % of the components for our machines are produced in-house here using cutting-edge technology and engineering. A high level of in-house production ensures we remain independent and guarantees short lead times and high quality standards for our clients.



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