

RAMPF FlexSpeed – Halving Lead Times in Series Production

Patent application published for speed-dependent dispensing technology

© RAMPF Production Systems GmbH & Co. KG

Page 1 of 3

Zimmern ob Rottweil, Germany, August 11, 2021. RAMPF Production Systems' speed-dependent FlexSpeed dispensing technology cuts lead times for sealing, foaming, and bonding processes in series production by up to 50 percent. The patent application for the groundbreaking invention has now been published.



FlexSpeed technology from RAMPF Production Systems is based on forced volumetric dispensing and the direct linking of dispensing performance and axis feed rate, making the dispensing system extremely flexible and responsive. Whereas dispensing robots previously applied systems at constant speeds, this cutting-edge technology now enables them to reach up to 40 m/min in a straight line, while braking in a controlled way just before corners and curves down to 20 m/min, ensuring consistent seal cross-sections and minimal corner radii.

The advantages of FlexSpeed technology:

- > When **foaming seals**, speed-dependent dispensing significantly reduces cycle times. For large parts such as control cabinets, linear luminaires, stainless steel sinks, and battery trays for the e-mobility sector, lead times can be reduced by up to 50 percent. Considerable time savings are also achieved for smaller components that are manufactured in large numbers, for example hobs, control panels, electrical housings, and air filters. Despite different speeds, the seal geometry always remains constant.
- > When it comes to **bonding**, FlexSpeed provides automobile manufacturers, among others, with completely new opportunities to join parts more quickly, also because systems with a very short open time can now be used. Due to the faster build-up of adhesion, component handling time is

RAMPF FlexSpeed – Halving Lead Times in Series Production

Patent application published for speed-dependent dispensing technology

significantly reduced, also when bonding spoilers, tailgates, sandwich components such as fire doors, as well as windows and doors.

- > FlexSpeed also offers decisive advantages for the **mechanics of the dispensing system**. Operation at maximum loads are only short-term and hardly cause any wear. Furthermore, machine utilization can be increased enormously.

The patent application for RAMPF Production Systems' FlexSpeed technology has now been published with the international publication number WO2021/032521 A1.

RAMPF FlexSpeed – Halving Lead Times in Series Production

Patent application published for speed-dependent dispensing technology

www.rampf-group.com



RAMPF Production Systems GmbH & Co. KG develops and produces mixing and dispensing systems for sealing, casting, and bonding a wide variety of materials. The company also offers a wide range of automation skills relating to all aspects of process engineering.

With its more than 3,300 systems solutions on the market, RAMPF Production Systems, based in Zimmern ob Rottweil, Germany, is one of the world's leading suppliers of innovative systems for processing single, dual, and multi-component reactive resin systems.

In addition to the core competence of mixing and dispensing technology, customers are provided with a broad range of automation and conveyor systems for internal logistics, additional assembly and joining technology, as well as logistic and quality assurance solutions. The customer-specific solutions also include the integration of testing and measuring technology into production facilities to safeguard production processes.

This added value enables RAMPF Production Systems to supply its customers with holistic system solutions for their production facilities.

RAMPF Production Systems is a company of the international **RAMPF Group** based in Grafenberg, Germany.

Published by:

RAMPF Production Systems GmbH & Co. KG

Römerallee 14

78658 Zimmern o. R., Germany

T +49.741.2902-0

F +49.741.2902-2100

E production.systems@rampf-group.com

www.rampf-group.com

Your contact for images and further information:

Benjamin Schicker

RAMPF Holding GmbH & Co. KG

Albstrasse 37

72661 Grafenberg, Germany

T + 49.7123.9342-1045

F + 49.7123.9342-2045

E benjamin.schicker@rampf-group.com