PE43Dmolds

Printed Electronics for 3D printed molds

13

What challenge or problem are you addressing? What is the need for the project?

When performing injection molding or other forming techniques, molds are prepared applying costly and time-consuming techniques. Making these molds is useful when a large amount product has to be formed. However, when new molds must be made for small quantities, these expensive mold-preparing techniques are not the best option.

Additive Manufacturing is a suitable solution for this! One of the downsides of Additive Manufacturing however is the time spent and high workload needed for the post-treatment of the 3D printed mold to make it as smooth as possible.

Objective of the project:

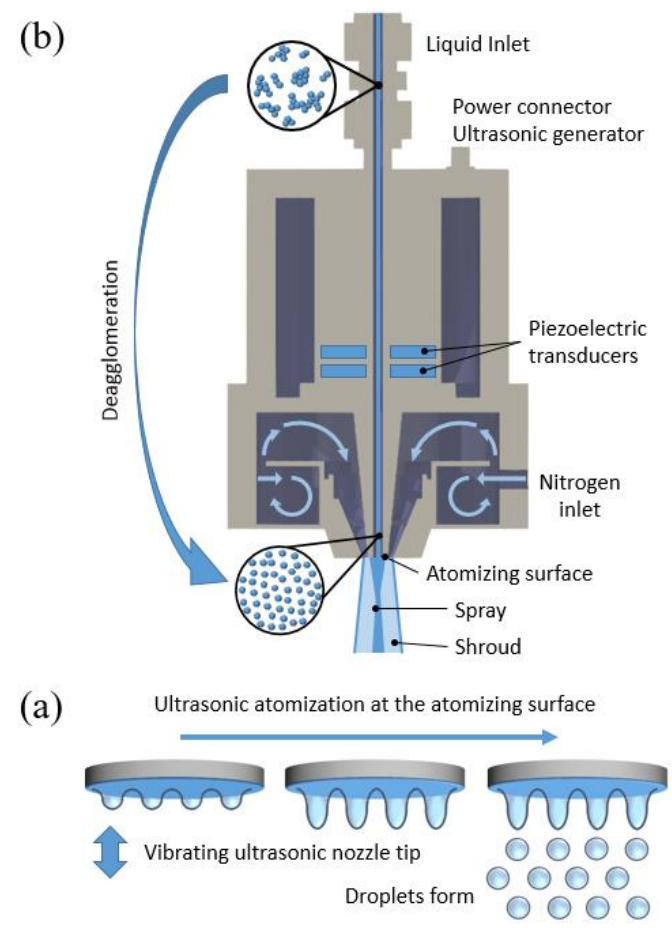
- Apply ultrasonic spray coating to reduce surface roughness of the 3D printed molds
- Apply other printing techniques to deposit conductive tracks on the coating
- Synthesize materials to have the coating detached from the mold after the molding process
- Upscale and integrate the printing and coating technologies into a 3D printing line

Why do you need transnational cooperation?

Additive manufacturing and coating activities are not all to be found in Flanders, e.g. materials, equipment, expertise for in line production and integration.

What kind or partners are you looking for?

- Research partners in the field of Additive Manufacturing and coating, ink formulations
- Companies, in casu SMEs but also large companies, in the field of materials, consulting, equipment of additive manufacturing and coating. Users of the technology. Production integration.



Your contact details

Name	Prof. Wim Deferme
Organisation	Hasselt University – IMO-IMOMEC
Region	Limburg - Flanders
Country	Belgium
Telephone number	+32 (0)11 268874
Email	Wim.deferme@uhasselt.be
Website	www.uhasselt.be/imo