Automatized Design of Injection Molds

Informe

Información del proyecto

AUTOMOLD

Identificador del acuerdo de subvención:
841775

DOI
10.3030/841775

Proyecto cerrado

Fecha de la firma de la CE
1 Marzo 2019

Fecha de inicio
1 Junio 2019

Fecha de finalización
30 Noviembre 2020

Financiado con arreglo a
EXCELLENT SCIENCE - European Research Council (ERC)

Coste total
€ 149 829,00

Aportación de la UE
€ 149 829,00

Coordinado por
INSTITUTE OF SCIENCE AND TECHNOLOGY AUSTRIA
Austria

Periodic Reporting for period 1 - AUTOMOLD (Automatized Design of Injection Molds)

Período documentado: 2019-06-01 hasta 2020-11-30

Resumen del contexto y de los objetivos generales del proyecto

During the ERC PoC “AutoMold”, the team investigated the commercial potential of automated mold design tools in various industries and laid the groundwork for a future spin-out company foundation with the acquisition of follow-up investments and awards.
Based on a novel computational method for the design of mold, AutoMold aims to substantially

increase the productivity of mold-based manufacturing – one of the most prevalent industrial production methods. Especially for small-series manufacturing, the initial expenses of mold design and mold making constitute cost barriers that interfere with the financial viability of such products. Here, AutoMold provides automated mold design tools, that considerably reduce the time and cost of this process. Thus, making industrial production more accessible and efficient.
The ERC PoC funding provided the resources to conduct in-depth studies of both the markets and industrial processes along the value chain of mold-based manufacturing. This allowed us to identify the concrete needs of various industries and identify the first two use cases that we will target: (i) mold insert design for rapid prototyping, (ii) mold insert design for small series manufacturing. For this, industrial partners were identified and successfully invited to a collaboration. Currently, several use case studies are ongoing.
At the same time, first industrial applications of the original research prototype identified current technological limitations of Additive Tooling (i.e. 3D-printed molds) and led us to focus on milling-based mold making – the adaptation to Additive Tooling is pursued in a research collaboration with industry.
The progress achieved during the ERC PoC enabled us to attract follow-up funding until the planned spin-out creation in 2021. Team members were awarded the free participation in an entrepreneurship summer school and for an extended mentorship program. In addition, AutoMold also won two awards from the economic chambers of Austria.

Última actualización: 6 Mayo 2024

Permalink: https://cordis.europa.eu/project/id/841775/reporting/es