

PROJECT

PolyHalter

Development of Polymer Halter for Oil Filters

Funding: European (Horizon 2020)

Duration: Jun 2015 - Nov 2016

Status: Complete with results

Total project cost: €724,550

EU contribution: €507,185



Call for proposal: H2020-SMEINST-2-2014

[CORDIS RCN : 196595](#)

Objectives:

PolyHalter project is a direct response to demands for innovative, cost-effective solution which would allow car manufacturers to install lighter, more efficient and lower-priced engine parts (with smaller number of assembly parts). Development of polymer oil filter halter represents significant technological advance in field of engine parts, giving Polycom access to still-developing niche market and significant advantage over competitors.

While aluminium has been gold standard in production of oil filter halter for over 70 years, new polymer oil filter halter will enable the combination of minimum noise level, maximum mass savings and maximum price reduction at a level which hasn't been achieved so far. Final product will be positioned as a better, cheaper and more eco-friendly alternative to aluminium oil filter halter which won't need high volume logistics and will be capable of multifunctioning. The number of components within the product will decrease, as well as possibilities of errors.

In order to bring the currently developed prototype of polymer oil filter halter from current TRL 6 to industrial and market readiness, key innovation and commercialisation activities still need to be implemented.

Additionally, the new process (and injection moulding tools) for injection moulding of polymer filter halter will be further optimized to allow manufacture of up to 20 different types of polymer halter in 5 years after completion of the project, for various industries (automotive industry, compressor manufacturing, electro industry, home appliances industry, aircraft industry and similar).

Proposed innovation business project is in line with the work programme topic IT-1-2014: Small business innovation research for Transport.

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

[H2020-EU.2.3. - Horizon 2020: INDUSTRIAL LEADERSHIP - Innovation In SMEs](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Polycom Predelava Plasticnih Mas Inorodjarstvo Skofja Loka Doo

Address:

POLJANE NAD SKOFJO LOKO 76
4223 POLJANE NAD SKOFJO LOKO
Slovenia

Organisation Website:

<http://www.polycom.si>

EU Contribution: €507,185

Technologies:

Road vehicle propulsion
Engine downsizing and turbocharging technologies

Development phase: Demonstration/prototyping/Pilot Production

Key Results:**Periodic Reporting for period 2 - PolyHalter (Development of Polymer Halter for Oil Filters)**

PolyHalter project was a direct response to demands for innovative, cost-effective solution which would allow car manufacturers to install lighter, more efficient and lower-priced engine parts (with smaller number of assembly parts). Development of polymer oil filter halter represents significant technological advance in field of engine parts, giving Polycom access to still-developing niche market and significant advantage over competitors.

Additionally, new process (and injection moulding tools) for injection moulding of polymer filter halters also needed to be further optimized to allow manufacture of up to 20 different types of polymer halters in 5 years after completion of the project, for various industries (automotive industry, compressor manufacturing, electro industry, home appliances industry, aircraft industry and similar).

PolyHalter project had three specific objectives:

1. To carry out all necessary innovation activities to bring newly developed polymer oil filter halter to industrial readiness (TRL 9);
2. To prepare and carry out all necessary commercialisations activities needed to bring newly developed polymer oil filter halter to market readiness;
3. To further optimize new process (and injection moulding tools) for polymer injection moulding of polymer halters.

All three objectives were successfully completed on time. Through visiting potential customers, we also got additional business opportunities, thus being able to present our company as a reliable supplier for other polymer components. With these parallel activities we already gained additional 300.000€ of turnover before the end of the project.

From the technical point of view the patent filing was the most important activity; during the project running we discovered a new way of fixing principle, which can be used for fixing the Halter or brackets to a housing or to car body. A patent pending is also a business asset, which is commonly used to establish a licensing deal, raise business startup capital, or enter into a joint business venture. Out of this reasons we found this application wary important and essential, to develop business in proper way in the future.

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Road transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Other specified

Geo-spatial type: Other