

## Newly developer types of turbocharger wheels are fading for world markets

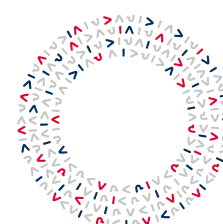
*Subsidies from the OP EIC (Operational Program Enterprise and Innovation for Competitiveness) for research and development increase the competitiveness of Czech companies on world markets.*

Prague, July 8, 2020 - Engineering plant Velká Bíteš (PBS), a manufacturer of power units and equipment for aeronautics and a leading European precision casting foundry, acquired advanced precision casting technology thanks to an innovative solution and introduced series production of newly developer types of turbocharger wheels. The new technology is completely innovative and unique in the Czech Republic and corresponds to research and development trends in the world. It arose from close cooperation between the manufacturing company and the Academy of Sciences of the Czech Republic using its state-of-the-art research infrastructure for the study and application of advanced materials (IPM infra). The whole progress then led to a substantial increase in production, exports and profitability of PBS production. The company drew subsidies in the Applications program, focused on industrial research and experimental development, from the Operational Program Enterprise and Innovation for Competitiveness (OP EIC).

The project focused on the development of solutions that, using more advanced technologies for precision casting of nickel superalloys, made it possible to purpose fully chase their structure and thus their mechanical properties. Thus, the utility value of the casting has increased without the need to chase the base material. The project thus comprehensively solid the interaction between the technological process of precision casting of nickel superalloys and the resulting structure and mechanical properties of the casting. "During the project, we developed 38 new types of castings, which were successfully put into series production based on successful development results. These were castings for foreign companies from Germany, Switzerland, India, Russia and the USA. We have also used new technologies to streamline and improve the existing production of radial Wheel of turbochargers and turbocharger blades. At the same time, we gained other important knowledge about the material properties of individual superalloys. All this brought a further increase in the prestige of our company and easier penetration in to new markets," says Professor Karel Hrbáček, manager of the PBS research project, adding: "The overall reset of the project was a significant increase in production, profitability, production and export."

PBS drew subsidies from the OP EIC Application support programs. "In the Applications programs, focused on industrial research and experimental development, 781 projects with a total value of over nine and a half billion crowns received support. And almost four billion crowns have already been paid in them. A new opportunity for companies to obtain support in this area will be in September, when a new call is planned in this program," says Lukáš Vymětal, Director General of the Agency for Enterprise and Innovation (API), which administers the OP EIC program and helps entrepreneurs with the application process.

**The Agency for Entrepreneurship and Innovation (API)** is a state-subsidized organization with nation wide competence established by the Ministry of Industry and Trade of the Czech Republic. It is an intermediary entity for subsidy programs to support the Operational Program Enterprise and Innovation for Competitiveness (OP EIC) 2014-2020 focused on the development of the manufacturing industry and related services. The main activities of the agency include the administrative of applications for subsidies and projects during implementation and sustainability, the provision of information and consulting services to applicants and applicants for subsidies or the organization of thematic professional seminars. More informational: [www.agentura-api.org](http://www.agentura-api.org)





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