



Projekt sufinancira
Europska unija iz
Europskog fonda za
regionalni razvoj



OrtoFLEX
ulaganje u budućnost



Title	OrtoFLEX - Flexible manufacturing of customized spinal orthoses
Beneficiary	Mechanical Engineering Faculty in Slavonski Brod J. J. Strossmayer University of Osijek
Contact persons	Pero Raos, Prof. Tomislav Galeta, Assoc. Prof.
Partners	Faculty of Medicine in Osijek, J. J. Strossmayer University of Osijek Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb
Associates	Industrial Park Nova Gradiška Ltd, Nova Gradiška, Croatia GIZ Grozd Plasttechnika (Slovenian plasttechnics cluster), Celje, Slovenia Faculty of Technical Sciences, University of Novi Sad, Serbia Faculty of Technology, Tomas Bata University, Zlín, Czech Republic Faculty of Manufacturing Technologies with a seat in Prešov, Technical University of Košice, Prešov, Slovakia
Responsible authority	Ministry of Science, Education and Sports, Republic of Croatia
Contracting authority	Central Finance and Contracting Agency (CFCA), Republic of Croatia
Date of contract	June, 10 th 2013
Total duration	24 months
Budget	578 359,77 EUR (466 562,83 EUR is co-financed by the EU under the European Regional Development Fund)
Objectives	<p><u>Overall objective</u></p> <p>To develop the concept of low-cost flexible manufacturing system for customized spinal orthoses.</p> <p><u>Specific objectives</u></p> <p>To transfer acquired knowledge to SMEs associated with the project</p> <p>To transfer the gained experience to further projects in domain of medicine technique</p> <p>To prepare ground for future laboratory of medicine technique (abbr. LaMeT) at the Mechanical Engineering Faculty in Slavonski Brod</p> <p>Estimated results</p> <p>Main activities</p> <p>Final beneficiaries</p>
Estimated results	<p>Expert software for custom modelling of orthoses</p> <p>Specialized software solution for digitalization of spinal region</p> <p>Software for numerical control of the machine tool</p> <p>Machine tool prototype for direct manufacturing of customized spinal orthoses</p>
Main activities	<p>Designing and testing of specialized software solution for digitalization of spinal region</p> <p>Designing and testing of the expert software for custom orthoses modelling</p> <p>Designing and testing of software for numerical control of the machine tool</p> <p>Design and testing of machine tool prototype for direct manufacturing of customized spinal orthoses</p> <p>Researching customization parameters for individual orthoses</p> <p>Defining procedure for production of prefabricated orthoses base</p>
Final beneficiaries	<p>Patients</p> <p>Physicians and clinical staff</p> <p>Orthotic laboratories</p> <p>Researchers and R&D institutions</p> <p>Health insurance companies</p> <p>State healthcare institutions</p>



Tomas Bata University in Zlín
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