

**Research and development of a new generation automatic machine
for the production of self-supporting bobbins**

The aim of the project is research and development of a new generation of an automatic-machine for the new progressive production of self-supporting lower bobbins into industrial sewing machines with the knotted stitch. This technology significantly improves the quality and productivity of the sewing process, and its self-supporting bobbin product, in conjunction with the new type of lower thread gripper, offers new utility properties for end-users. The intention is to research and optimize new mechanical and mechatronic systems of the automatic-machine. The purpose of the financial aid is to increase competitiveness and export to foreign markets. Results of the project will contribute to the strengthening of the position of the Czech industry, which is engaged in the production of automatic-machines for the consumer industry and the production of sewing threads, by launching the new automatic-machine for the production of self-supporting lower bobbins. This machine makes their production more efficient and will further increase the productivity and quality of the sewing process by reducing the proportion of manual work while changing bobbins. All the work will lead to the strengthening of the production of sewing threads in the Czech Republic and the expansion of the production of automatic machines with higher added value. The project follows the aims 2.2.2 and partly 2.1.2 in NPOV in the field PO1. Its solution will strengthen the competitiveness of sales of sewing threads in the form of self-supporting bobbins with new utility properties through developed automatic-machines.

Code	FV30091
State providing funder	Ministry of Industry and Trade of The CR https://www.mpo.cz/en
Programme	FV – TRIO (2016-2022)
Total eligible costs	9 590 000 CZK
Total project subsidy	6 858 000 CZK
Subsidy FME TUL	1 908 000 CZK
TUL project number	17066
Contractor	JiKoN – nástrojárna s.r.o. http://www.jikon.cz/uvod
Project participant	TUL, Faculty of Mechanical Engineering
Principal investigator TUL	doc. Ing. martin Bílek, Ph.D.
Department	Department of Textile Machine Design http://www.kts.tul.cz/en/uvod
Period	2016-2019

<https://www.rvvi.cz/cep?s=rozsirene-vyhledavani&ss=detail&n=0&h=FV30091>

Costs (year) TUL	2018	2019	2020	Total
Non-investment (CZK)	1 044 000	642 000	222 000	1 908 000
Investment (CZK)	0	0	0	0
Total (CZK) TUL	1 044 000	642 000	222 000	1 908 000

Project results EN

2018	Research report	RIV/46747885:24210/18:00006009 - Výzkum a vývoj nové generace automatu pro výrobu samonosných cívek - DÍLČÍ VÝZKUMNÁ ZPRÁVA ZA ROK 2018 (2018)
------	-----------------	--