

# Smarter Factory Tool

Title	Smarter Factory Tool
<b>Description of the technology</b>	<p>Smarter Factory Tool (SFT) is a tool for optimization of factory chain production line in a sense of increasing productivity any quality of final products.</p> <p>The main idea of the presented approach is come from Industry 4.0 philosophy. To increase the productivity and quality come together with reducing of ecological footprint significantly. The root of the SFT is discrete time event simulator as in-house code developed by the authors, which can be easily adopted to any arbitrary production line.</p> <p>The simulator is further expanded by the supervision system which is based on the metaheuristic optimization technique provides to find an optimal production scenario in a real time. This approach can optimally scheduled the production maintains, finds production bottlenecks, optimally reacts on nonstandard or breakdown situation and finally increase overall productivity (reduce CO2 emission).</p>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Increase production effectivity</li> <li>• Increase product quality</li> <li>• Assistance systems to support humans decision making</li> <li>• Reduce ecological footprint</li> <li>• Solving urgent problems on short time</li> <li>• Create a virtual factory</li> </ul>
<b>Keywords</b>	Discrete event simulation, metaheuristic optimization, production chain, quality improvement, reduce CO2 emission
<b>Form of cooperation</b>	<p>Sale of licence</p> <p>Product available to use since 1.10.2018</p>
<b>Language of communication</b>	English, Czech
<b>Possible client</b>	Manufacturing companies, Industry companies, Factory
<b>Website</b>	For more information, click <a href="#">here</a>
<b>Contact point</b>	nemcova.m@fce.vutbr.cz
<b>Notice</b>	<i>Project co-funded by European Union funds (ERDF and IPA)</i>