White Paper – Xpediter for SOLIDWORKS Automation Benefits

CAD Xpediters
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How productivity software Xpediter for SOLIDWORKS is helping company StanTech to increase productivity?
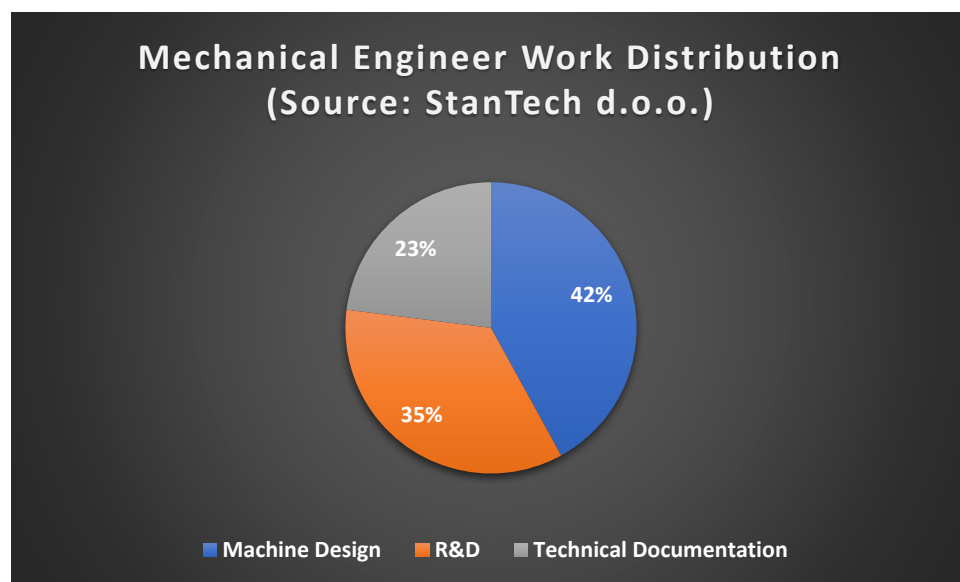
Companies

StanTech d.o.o. www.stantech.rs is a manufacturer of packaging equipment and packaging automation solutions, present globally with its solutions. Efficient machine design and manufacturing is a backbone of all activities, and a key to business success.

CAD Xpediters www.cadxpediters.com is a software solution provider, founded by an multifaceted group of engineers which combines software writing skills with mechanical engineering, to automate 3D CAD processes in SOLIDWORKS to international clients. Alongside standardized software, custom tailored SOLIDWORKS solutions are available on a project basis.

Business Problem

StanTech does complete mechanical design in SOLIDWORKS. Team consisting out of 10 mechanical engineers is facing a constant pressure of aggressive deadlines, with very limited people, time, and budget available. For that reason, StanTech is always on the lookout for the efficiency improvement solutions. Analysis clearly showed that there is a great use (23%) of engineering time, after mechanical design completion, towards shop drawings, enumeration of assemblies and individual parts, and similar operations which are necessary, repetitious, time consuming, and carry increased error margin due to processes repeatability.

Mechanical Engineer Work Distribution
(Source: StanTech d.o.o.)

42% Machine Design
35% R&D
23% Technical Documentation

![XPEDITER logo]

Business Solution

Beginning of 2019, by having a conversation with Mr. Predrag Jeremic, StanTech Engineering Manager, CAD Xpediters team has created a productivity software tool Xpediter. Xpediter through custom macro routines, automates 7 functionalities used when preparing technical documentation in SOLIDWORKS, in a very fast and user-friendly way.

Batch Print	Custom Properties	Barcode	Flat Patterns	Multibody	Renaming	Auto QTY

1. **Batch Print** – prints shop drawings of assemblies/parts with only a few clicks

2. **Custom Properties** – assigns custom properties to all assemblies/parts

3. **Barcode** – dynamically attributes bar codes to all parts within assembly

4. **Flat Patterns** – generates DXF files in developed format, which can be loaded into CNC machine.

5. **Multi Body** – dissembles i.e., welded parts (Multi Bodies) into parts.

6. **Renaming** – renames all parts

7. **Auto Quantity** – counts quantities of all assembled parts

Result

During first 12 months of using Xpediter, StanTech (according to internal research) has achieved direct reduction of engineers' time, needed to process technical documentation, by 50%, with 7 automated features. By using Xpediter, engineers are more satisfied, focused on creative work, and less pressured from tight project deadlines. Overall result was significantly improved effectiveness and efficiency of the whole engineering department. Based on extensive user experience, mutually was identified need for system memory monitoring, which is implemented in the latest version of Xpediter, resulting in additional stability when working with complex assemblies.

Mechanical Engineer Work Distribution (Source: StanTech d.o.o.)

- Machine Design: 49%
- R&D: 41%
- Technical Documentation: 10%

Xpediter Implementation Effects (Source: StanTech d.o.o.)

	before Xpediter	with Xpediter
Efficiency	15%	75%
Satisfaction	22%	67%
Savings	5%	88%