

Converting 80,000 Legacy Files with Automation

Transforming a tedious, costly challenge into a three-day success

The Client: Boart Longyear

Established in 1890, Boart Longyear provides drilling services, orebody data-collection technology and drilling equipment. It operates in three divisions, which include Global Drilling Services, Geological Data Services and Global Products.

The Challenge: Convert Legacy Data

Boart Longyear needed to convert 80,000 legacy AutoCAD drawings into Creo, extract key parameters, and vault them in Windchill.



The problem had been festering for years, and it was cost prohibitive to have an engineer perform the work. It was also a tedious task, better suited for a computer than an engineer. To add to the complication, the files were in nested directories, often hidden and difficult for the global

engineering team to find. The formatting also had inconsistencies, which seemed to make the task impossible for automation.

The Solution: SmartAssembly for Creo Parametric

SmartAssembly is an advanced automation and process-capture tool that empowers Creo Parametric users to focus on innovation instead of repetitive, non-value-added tasks. By embedding design and process rules directly into Creo, SmartAssembly ensures consistency, reduces errors, and accelerates the entire design-to-manufacturing workflow.

With SmartAssembly, organizations can:

Automate Design Processes – Replace manual tasks with automation to improve speed, quality, and agility.

Generate Deliverables Automatically – Create all required outputs (models, BOMs, drawings, DXFs, route sheets, and manufacturing data) optimized for production systems, regardless of methodology.

Drive Enterprise Data – Seamlessly connect Creo with Windchill and ERP systems such as Oracle and SAP, enabling configurations and rules to flow directly into engineering deliverables.

Build Parts on the Fly – Capture engineering knowledge and design rules to dynamically generate assemblies to align with company standards.

INDUSTRY

Drilling Equipment Manufacturer

CHALLENGES

- Convert 80,000 legacy AutoCAD drawings to Creo format, extract key parameters, and vault in Windchill
- Create more consistent formatting
- Save money over tedious, manual execution

SOLUTION

SIGMAXIM SmartAssembly

BENEFITS

- Exported 80,000 AutoCAD legacy drawings into Creo
- Achieved ability to scan for specific drawing text, and when detected, stored as metadata for search in Windchill with consistent formatting
- Cost of automation less than 1% of doing it manually

The result is faster completion of customer requirements, increased design agility, and streamlined delivery of downstream data for manufacturing and enterprise systems.

Automation with Flexibility

Boart Longyear partnered with SIGMAXIM automation experts to create an application robust enough to solve this complicated problem.

The resulting application searches for AutoCAD drawings, imports them into Creo, and scans for specific drawing text. Once text is detected, it is stored as searchable metadata in Windchill. This application also establishes the location of each source file, which is also stored as usable data.

During the implementation, multiple inconsistencies in legacy data were identified. SIGMAXIM quickly added logic to the application to address these issues.



Previously, if a title block was empty, the application could not automatically name the drawing. SmartAssembly-driven logic incrementally applied a number from an approved list of numbers to the drawings. For title blocks with non-standard titles, the application now asks the user if the title is acceptable, or if they would like to manually change it.

Value Realized in Three Days

The entire SIGMAXIM engagement took only three days.

"Compared to a manual process, this was a thousand times faster and cost less than 1% of the manual process," noted Steve Rodriguez, PLM & Configuration Control Manager for Boart Longyear.

Engineering is now able to use standard Windchill functionality to locate these once hard-to-find drawings.

SIGMAXIM Support

"Support from SIGMAXIM was fantastic. There were several spec adjustments incorporated on the fly," said Rodriguez.

SmartAssembly's robust logic allowed inconsistencies to be handled with little to no disruption to the project.

Ready to achieve similar results?

Contact info@sigmaxim.com to learn more about our Creo automation platform or to schedule a free demo.

Let SIGMAXIM help you realize the full potential of your Creo design process.

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Steve Rodriguez
PLM & Configuration Control Manager
Boart Longyear

ABOUT SIGMAXIM

SIGMAXIM has been the leading global expert in Creo automation solutions for over 20 years. We partner with companies of all sizes to deliver low risk, efficient automation solutions for both standardization and product configuration initiatives.

CONTACT US

Learn how SIGMAXIM's Creo Automation platform can help optimize your unique design process.

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