

CASE STUDY

Clean Air, Clear Data

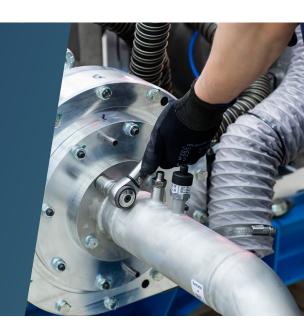
Product-related data is one of the most important components across many industries today. But often, they are not treated like that. Today, spreadsheets are still a significant part of everyday work life in engineering and manufacturing organizations across the world.

Many of these organizations arrive at a point where product data is stored in various systems with no interconnection. As a result, they struggle with data silos—and a lack of transparency and traceability. With the ever-increasing complexities of today's systems, organizations struggle to address the interdisciplinary collaboration across a product's entire lifecycle.

Unfortunately, many companies only think about professional data management long after they have lost a comprehensive overview of their data. But that's not the case at Tamturbo. From the very beginning, the Finnish compressor manufacturer chose to handle its product-related data professionally: by transferring it from Excel to the product innovation platform Aras Innovator.

"The Aras platform is our central station for all of our product-related data. At Tamturbo, we can't imagine being without it."

- Igor Nagaev, CEO Tamturbo



THE COMPANY

Just air

Tamturbo is among the smaller compressor manufacturers—at least for the moment. The company, founded in 2010 in Tampere, Finland, has grown exponentially over the years. The main reason is because of its products and their unique selling point which distinguishes them from the competition. All the company's compressors are fully oil-free—from mobile, container-based compressor rooms to multi-compressor control systems. This means there is no longer a risk that the air could be polluted.

In its compressors, Tamturbo offer customers from across the world the option of a more environmentally friendly alternative to traditional compressed air generation. And this comes with 24/7 remote monitoring and extensive servicing for the devices.

Tamturbo has another key difference from its rivals. In addition to actually purchasing and owning a Tamturbo compressor, it is also possible to implement the solution as an Air-as-a-Service business model, in which case the customer only pays for the compressed air they use with no need for capital investment. That is why all processes at Tamturbo are tuned for excellence.



"All data, documents and files can now be found within minutes in Aras Innovator.

This makes our work so much easier and reduces complexity."

- Kari Koskenjoki, Engineering Manager



THE STARTING SITUATION

Growing from Excel

Tamturbo products must work flawlessly at the customer's premises. It is critical to the company that any problems are detected early, and preventive measures introduced. The company is focused on perfectly functioning processes to ensure current, consistent product-related data is available at all times to employees.

The company management realized one thing early: the data needed to be transferred from the Excel environment to a professional product lifecycle management (PLM) platform. By working in Excel, many users couldn't sufficiently process the data. They would make copies, change information, or save new versions of documents. There was no longer a clear overview of who had made what changes and what had been adjusted.

As the company grew, structures became more complex, as did the file structure on the server. This compounded the problems. The actual data were becoming more difficult to locate, with employees uncertain they were using the latest version. This is a classic example of lack of transparency and data loss, a problem that is estimated to cost millions of dollars in lost revenue each year.

REQUIREMENTS OF THE NEW PLM PLATFORM

Flexible & Future-proof

When searching for the right PLM tool, Tamturbo had the following requirements:

Value-added

Tamturbo needed a solution to address their data challenges that would provide a strong return on investment.

Easy migration

Conversion from Excel to a PLM had to be simple and changes had to be easy to make.

High flexibility

The solution had to adapt to Tamturbo's processes. That is why, for Tamturbo, other providers' rigid solutions had to be ruled out.

A user-friendly system

As Tamturbo grew, their requirements expanded. The PLM system has to adapt so it can "grow alongside" the business. The ability to make customizations and upgrade frequently and easily are critical.

Broad usage

The PLM platform is the core system for the company's data and need to be accessible to all departments.



IMPLEMENTATION

Migration in three phases

Before the introduction of the Aras platform, data was maintained in Excel. Essential files containing product-related information were located in various parts of the company network, with modifications carried out in a decentralized way.

With the migration, all data, change management, and further information were transferred to the Aras Innovator and linked together there.

The project began in November 2018 with the implementation of basic functions. In a second phase running from May to December 2019 the business-critical areas were added, with further extensions such as the integration of simulations finally following at the start of 2020.







During implementation, Aras' Finnish partner Fulvisol provided two employees to the compressor manufacturer. For CAD integration, a further expert from Focus PLM was engaged. Altogether, a very lean project with only three external consultants.

"The implementation of the Aras platform was a relatively smooth experience. The collaboration was excellent."



"We introduced Aras Innovator exactly at the point when we started to extend our production and shorten the times needed for orders and the supply chain. It played a critical role in supporting our company's growth."

- Timo Pulkki, Chief Growth Officer

LESSONS LEARNED FROM THE IMPLEMENTATION

Tamturbo's experiences

- Bringing people along with the changes
 - Users are always the main actors. Because Tamturbo's users were accustomed to changing data quickly with a habitual click in Excel, they needed a system they learn and use with quickly and easily, with proper training provided. Users were motivated and supported in deriving the maximum benefit from the system.
- Planning in time to upload design data
 Importing data from the old Excel system took place quickly and was easy to achieve.
 Implementation and conversion only needed two weeks' work from Tamturbo.
- Choosing a system that grows alongside the business
 - With growth, practically every company finds incorrect processes creeping into its data handling, alongside data errors. Even for smaller companies, it is worth using a flexible PLM system that can support the business as it grows.

OUTLOOK/RESULTS

High added value

Today at Tamturbo, nearly all employees work with Aras Innovator. For constructors and technical support, their contact is daily. They also use it for testing at the same time, so they can try new things without difficulty. This makes Tamturbo even more innovative.

"Before, searching for the right design data could take a few hours, sometimes even days.

Today, it takes a few minutes to retrieve the right design data and move on to do real work."

- Kari Koskenjoki, Engineering Manager

Other departments at Tamturbo also value the tool. Production employees check data and drawings. Sales and service can show customers the compressors and individual parts in much more detail than before, because 3D visualizations can be called up at the touch of a button. And if end customers desire modifications or need product information, they can receive it reliably and rapidly.

"Today, we can trust our data. It is stored in one place and not lying around somewhere.
Our knowledge is now visible to everyone in the company and very easy to retrieve. This saves us a lot of time – and a lot of money in the end."

Ossi Rintanen,
 ERP Solution Manager

Product visualization is a favored application among employees. Before conversion, only CAD users could work with it. Now, in Aras Innovator, product visualization is available to all. Any employee, even without CAD software installed, can rapidly look at the components, measure them, or visualize other product-relevant information, such as the product maturity or pending change requests. This distinguishes Aras Innovator from other PLM systems.

Tamturbo produces compressors for numerous sectors and must be ready to rapidly supply its customers with detailed information, including information regarding sustainability, such as data to track and measure carbon emissions. With the PLM platform, Tamturbo has an overview of the entire lifecycle of the compressors and can fulfill customer desires without additional expenditure. The platform also helps the company itself to be more efficient and environmentally friendly in its work.

ARAS PARTNERS DURING THE SWITCH TO ARAS INNOVATOR

Fulvisol was the central partner for Tamturbo during the introduction of Aras Innovator. Two employees of the Finnish IT service provider intensively supported the implementation process and ensured that everything went according to plan.

Focus PLM.

The company was responsible for CAD integration.

Both companies work closely together with Aras in Scandinavia and have extensive experience of introducing Aras Innovator.









Aras provides the most powerful low-code platform with applications to design, build, and operate complex products. It's technology enables the rapid delivery of flexible, upgradeable solutions that build business resilience. Aras' platform and product lifecycle management applications connect users in all disciplines and functions to critical product data and processes across the lifecycle and throughout the extended supply chain. Airbus, Audi, DENSO, Honda, Kawasaki, Microsoft, Mitsubishi, and Nissan are using the platform to manage complex change and traceability. Visit www.aras.com to learn more and follow us on Twitter and LinkedIn.

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