Wanzl speeds up the design process of shopping carts thanks to PARTsolutions

Case Study
With PARTsolutions, Wanzl shortens research and design times for the development of a new product by more than 2 hours

With Strategic Parts Management of CADENAS even faster to the trolley and shopping cart of the future

Wanzl is a global leading shopping cart manufacturer - over 2.5 million new carts are placed on the market annually and provide for every service needed in numerous variations. The presentation and transportation of goods are the key topics for Wanzl. To expand its position as a leader of innovation for convenient shopping and selling, the company makes use of the Strategic Parts Management PARTsolutions of CADENAS at four locations in Germany and the Czech Republic. PARTsolutions offers the engineers and designers of the Wanzl product development central access to manufacturer catalogs with intelligent 3D CAD engineering data and thus minimizes unnecessary research and design times for the whole development of a new shopping cart by more than two hours. By labeling preferred parts, the CADENAS software solution also reduces the diversity of parts at the company.

The German Wanzl company is especially known for the manufacture of shopping carts and presentation systems for supermarkets and discounters. Wanzl has also made a name for itself in the area of baked goods presentation. Moreover, airport and access solutions as well as hotel services are also divisions of Wanzl.

Initial situation: Over 2 hours effort for the search & new design of each purchased part needed

Before the implementation of the Strategic Parts Management PARTsolutions, the search for suitable components and needed CAD engineering data had cost the engineers in product development at Wanzl considerable time and effort. It usually involved long searching times at manufacturers, followed by downloading the respective CAD model manually and integrating into the CAD design. In case the suitable engineering data was not found, in spite of long searches at the manufacturer as well as on diverse portals, the component in question ultimately had to be designed manually. Long research times and unnecessary work for the new designing of components in more than two hours were common as a rule. “In order to reduce long search times, we looked for uncomplicated and central access for our engineers to 3D CAD engineering data from as many well-known manufacturer catalogs as possible,” says Ralf Müller, CAD/PDM administration at Wanzl Metallwarenfabrik GmbH.

Changeover to a central CAD system & introduction of PARTsolutions

Wanzl has the goal of using only one CAD system for the entire product development worldwide, so as to simplify the matter. Since 2015, SOLIDWORKS of Dassault Systèmes is used by Wanzl as the company-wide CAD system, ensuring that Wanzl assemblies can be used in all sectors of product development at all sites worldwide without data loss that could come about by changing CAD systems. In the course of changing to SOLIDWORKS, their partner Solidpro brought PARTsolutions of the German software manufacturer CADENAS to Wanzl’s attention. Werner Meiser, CEO of Solidpro Informationssysteme GmbH, explains: “We recommended the software solution PARTsolutions to Wanzl because the SOLIDWORKS Toolbox is cost-effective and economic in cooperation with the CADENAS solution and standard parts are depicted in various materials with large amounts of data.”
Seamless integration into the Wanzl system landscape enables a closed loop

The software solution PARTsolutions was introduced at Wanzl in 2015 and is completely integrated into the CAD system SOLIDWORKS 2015 as well as the PDM system SOLIDWORKS Enterprise PDM 2015. There are currently 100 workstations at 4 Wanzl sites equipped with PARTsolutions licenses. The seamless integration of the CADENAS Strategic Parts Management into the existing system landscape is especially an advantage for Wanzl. “Our developers can call up all the important functions of PARTsolutions directly in SOLIDWORKS during their design process without changing systems. Integration into our company’s own CAD system gives us a closed loop,” Carsten Glogger, CAD/PDM Administration at Wanzl, explains.

Streamlined design process speeds up product development

PARTsolutions has been the central tool in Wanzl product development for access to 3D CAD engineering data from more than 700 manufacturer catalogs since 2015. The parts management enables design engineers to find the components they are searching for quickly and easily, to configure them with just a few clicks and then integrate directly into the SOLIDWORKS CAD system. “All major standard parts suppliers, which are important for us, are represented with their products,” says Dirk Webert, Head of Technology and Development at Wanzl. “The download of 3D engineering data in the form of clear 3D PDF data sheet from manufacturer catalogs also offers us high added value. The fact that the data sheet does not have to additionally be requested from the manufacturers saves a lot of time.”

Avoiding new creation of components & limiting diversity of parts

Although access to intelligent engineering data of various manufacturers is easy, it’s important not to create too many unnecessary or duplicate components within the company as this could bring about extensive costs over the entire life cycle. PARTsolutions makes a defined process for creating new components possible for Wanzl, which have not yet been used in the company. The various catalogs and components are depicted with the help of a traffic light system. A sensible selection of available components are displayed in PARTsolutions for Wanzl’s engineers and designers, defined beforehand by purchasing. So-called preferred parts to be used by product development are, for example, marked by a green bullet. Catalogs and components shown in red, on the other hand, are not to be used by product development. The marking is visible for all Wanzl sites with PARTsolutions working stations.

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Carsten Glogger
CAD/PDM Administration
Wanzl Metallwarenfabrik GmbH

Caption 1
The software solution PARTsolutions by CADENAS provides Wanzl direct access in SOLIDWORKS to 3D CAD engineering data from over 700 manufacturer catalogs.
Around 100 of the company’s own components, such as screws, nuts and rivets are managed in PARTsolutions. “We want to keep the number of single parts as low as possible,” Carsten Glogger explains. “It makes more sense for us to work with purchased parts due to the high costs of self-produced parts.” This way, Wanzl’s product development can entirely focus on its own core competencies, instead of investing so much unnecessary time in the development of the company’s own single parts.

Future development: PARTsolutions for further subsidiaries & consistent use of GEOsearch planned

Further Wanzl sites in Europe, USA and China are to have access to the CADENAS Strategic Parts Management in the near future, in order to optimize product development worldwide. “As soon as new design engineers are hired by Wanzl, they will automatically receive access to PARTsolutions regardless of his location,” according to Carsten Glogger and Ralf Müller. Furthermore, the company has the goal of extensively using the intelligent search methods of PARTsolutions, such as the Geometric Similarity Search GEOsearch, thus avoiding the creation of any more duplicates and further consolidating the diversity of parts.

Caption 2
Defined process for creating new components at Wanzl directly from PARTsolutions

The software PARTsolutions enables us to centrally generate standard parts and all variants of standard parts regardless of the CAD software. Subsequently, the components used in SOLIDWORKS assemblies are linked with one another. This process enabled us to depict our applications more quickly.

Ralf Müller
CAD-/PDM-Administration
Wanzl Metallwarenfabrik GmbH
**Wanzl Metallwarenfabrik GmbH**

Wanzl, founded in 1947, is a pioneer of self-service and a pacesetter for international trade. Today, Wanzl’s business areas include retail systems, shop solutions, logistics + industry, airport, access solutions and hotel service. As an innovation leader, Wanzl develops, produces and sells products, systems and individual solutions for customers in premium quality all around purchasing and sales, goods presentation, transport and security. The company stands by its customers with over 4,900 employees, 13 production sites in nine countries, 27 of its own sales offices and around 50 representations.

**CADENAS GmbH**

CADENAS is a leading software manufacturer in the areas Strategic Parts Management and parts reduction (PARTsolutions) as well as Electronic CAD Product Catalogs (eCATALOGsolutions). With its customized software solutions, the company acts as a link between component manufacturers with their products and the buyers.

With its 380 employees in 19 locations worldwide, the name CADENAS (Spanish for “chains”) has stood for success, creativity, support, and process optimization since 1992.