AUTOMATIC CAD DESIGNER

Make product data searchable, accessible and reusable in CAD

KEY BENEFITS

Streamline the product development process in CAD;

Minimize non-value added work;

Reduce errors;

Seamlessly access ERP and PLM data from within CAD solutions

Utilize and leverage already existing product data.

KEY FEATURES

Search by related parts;

Search by geometric similar items;

Search by classification;

Search by attributes;

Automatic mating by geometric position;

SUPPORTED CAD SYSTEMS

SOLIDWORKS 3D CAD products;

SOLID EDGE 3D CAD products;

INVENTOR 3D CAD products;

CREO 3D CAD products;

The Bluestar Automatic CAD Designer application, is an advanced add-in design tool for CAD solutions that helps you become more efficient with your CAD designing efforts. It leads to fewer mistakes and allows you to spend more time on innovative and value added design processes.

Fully integrated with Bluestar PLM embedded in Dynamics 365 & AX, the Bluestar CAD Designer tool allows you to easily find and reuse existing product data by seaching by parameters such as classifications, attributes, item relations and geometric similiarities.

Do not waste time and money on trivial design tasks in CAD

Engineers designing new innovative products in CAD, often rely on re-using structures and items from already existing product designs. However, actually finding and generating existing product data in CAD can be a challenge, when the data is scattered accross different applications, poorly connected with one another.

On average, engineers use about a third of their working hours on communication, support, administration and documentation. This leaves for less time spent on actual engineering work: to develop innovative products.
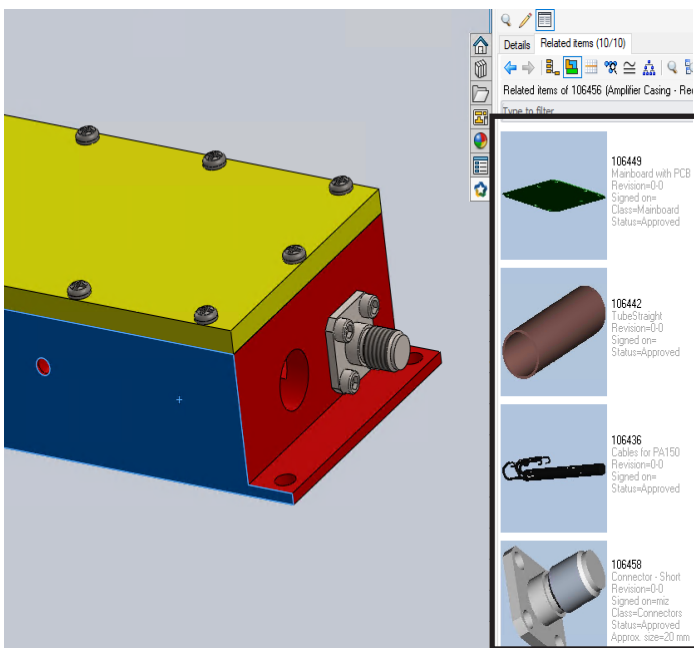
When product data is not seamlessly shared between systems, engineers will end up performing manual processes such as searching for or recreating product data that may be lost or is outdated.

Manual documentation work has become a major bottleneck in todays market because businesses are being pushed to respond faster to market changes and develop custom and complex products. As a result, it becomes harder for engineers to manage product information, and consequentially the product development process becomes slower, costlier and more error-prone.

Streamline the product development process

Bluestar CAD Designer provides design teams, with an advanced and intuitive tool that gives them instant and seamless access to ERP and PLM data from within CAD solutions. By utilizing the Bluestar CAD Designer add-in tool in your CAD-solution, you can fast and easily request and find any already approved item from the D365 & AX database. Bluestar synchronises every bit of data in real-time, making the data instantly accessible.

From within CAD, the Bluestar CAD Designer allows you to search for items from ERP, according to properties such as physical and geometric relatabilities between them. Bluestar CAD Designer is capable of automating the repetitive tasks of manually positioning and inserting components into the CAD model you are currently developing. This makes engineers far more efficient in their work by allowing them to share and reuse product data seamlessly, so your design teams can focus on what matter - developing innovative products.

Easily reuse items based on item-relatability

Whenever you select an item in your CAD-model, Bluestar CAD Designer is able to display a list of items related to the select part. This list provides CAD-users an overview of all approved items that have once before been used in the same type of structure which the user is currently working on.
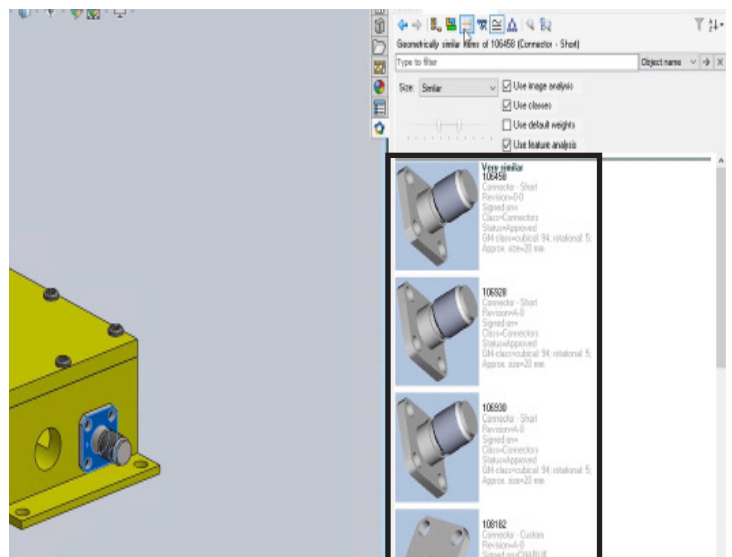
This is extremely valuable, as even in highly specialized engineer-to-order projects based on unique customer requirements, components and sub-assemblies are reused from existing products.

Bluestar CAD Designer allows you to have all these familiar components displayed within moments in your CAD. In turn you save precious time looking for data manually, when you are provided a list of already approved and revised items.

Find geometrically similar items

You can also search for items based on a select part's geometric properties. Select a component in your CAD-model and Bluestar CAD Designer will display all parts that have similar geomtric and physical properties with it.
The results will show from 'very similar' to 'less similar items'

You then have a complete list of options to choose from that fit the geometric requirements of your product. This saves you time and money on creating, approving and transfering data into CAD, which already exists in your product database.
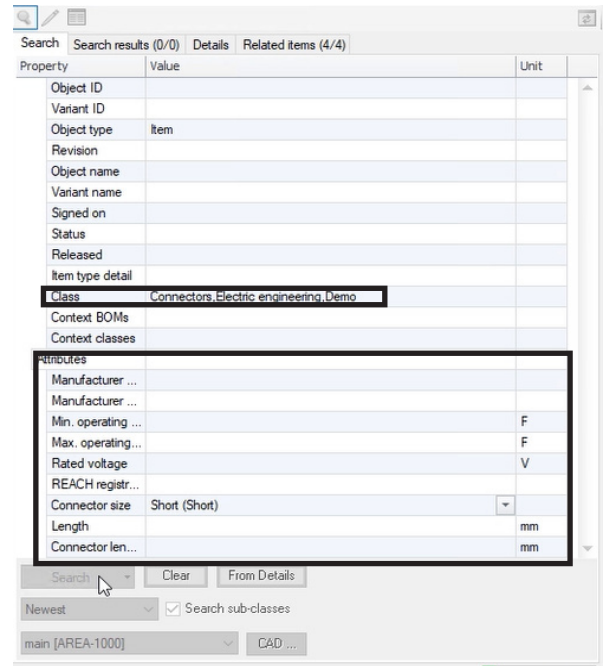
Search by Classification and Attributes

In Bluestar PLM all your products can be categorized into classes such as item types like amplifiers, screws and pipes and attribute values defining the classes, such as length, weight and color.

With the Bluestar CAD Designer add-in you can search for items by these predefined classes and attributes. For instance, you can have all your already released red amplifiers of a certain length displayed in CAD within moments.

This is extremely usefull when you want to narrow down a search for an item, first by class and then down one level further by attribute. You will then have a list of very specific components displayed that fits the exact requirements of the product you are currently developing.

This makes for faster and smoother designing that saves you time and money when developing or changing product designs.
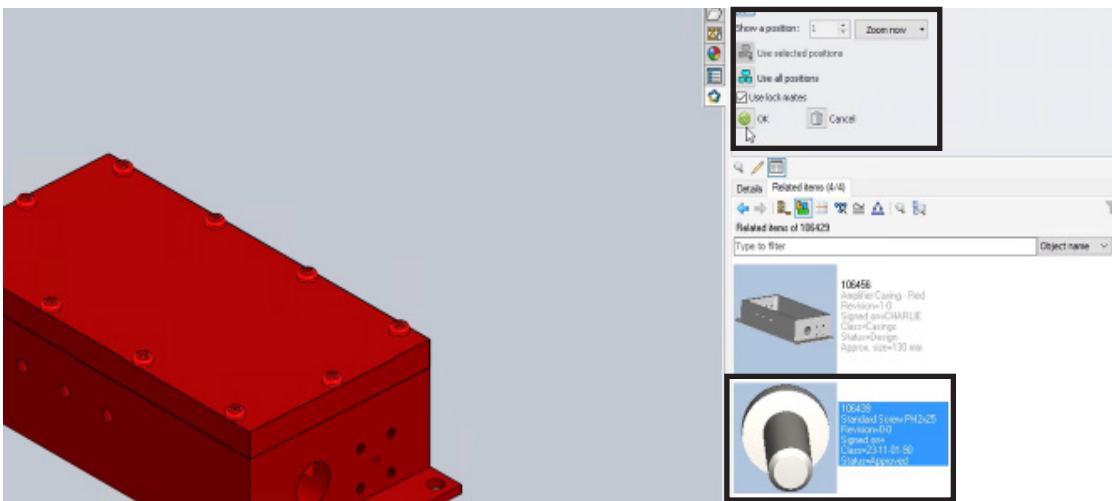

Eliminate trivial engineering tasks through automatic product mating

Puting together parts manually and alligning them perfectly in a 3D assembly model in CAD can be a burdensome task.
Especially when you develop new products that are partially based on reusing and connecting the same components over and over.

In CAD, whenever you want to insert a part into a specific position in your 3D model, Bluestar CAD Designer will suggest where the part should be inserted, based on how the part has been used and connected in other designs similar to your current model. This is made possible through the power of Machine Learning that recognizes touchpoints between items and remembers what items have previously been mated together.

With the click of a button, Bluestar CAD Designer will then automatically insert the item into one or several of these recognizable positions. As a result, you will save time and money and reduce mistakes made in your design processes, when CAD-users are relieved of monotoneus assembly tasks.

KEY BENEFITS	
Become more efficient when designing new products in CAD	Achieve shorter lead times and reduce errors;
Minimize non-value added work;	Reuse of existing data reduces repetitive engineering work, making your engineers more efficient and gives them more time to develop innovative products;
Seamlessly access ERP and PLM data from within CAD solutions;	Aviod bottleknecks by giving all users instant access to ERP and PLM data from within CAD solutions, for faster lead times and time to market;
Utilize knowledge already existing in your product database.	Streamline the product development process by reusing components, items and structures from your products. Avoid dupliacte data and work, saving you time and money.

FEATURES	
Search by related parts;	Bluestar CAD Designer provides an overview of parts that have previously been physically connected to one or several select parts in the CAD model;
Search by geometric similar items;	Gives you an overview of all parts that have similar geometric properties with items in a CAD model;
Search by classification;	Initiate a structured search for items, according to given product classes. Narrows down a search by providing you with a list of items that fit your requirements. makes for easy reuse of certain structures and assemblies from your existing designs;
Search by attributes;	Search by product attributes such as hight, length or material. This search allows you to find the exact items you need when you have very specific requirements for your product;
Automatic mating by geometric position;	Identifies and automatically inserts parts into the CAD model. Applies to the known locations of a component based on where it was previously located in your existing designs. Saves you the time of manually assembling models in CAD;
Where-used analysis	Reveals which of your existing designs that use items you have inserted into your CAD model currently in development;
Blueview	Export your CAD model into an interactive 3D project viewer that serves as a great visual tool for not only your Engineers but also Operation teams to understand the physical product. Blueview allows users to virutally disassemble and assemble the product with an explode view, and access real-time ERP data on inventory, on-hand and transactions for each part of the product. This is an easy-to-use product viewer that improves collaboration between Engineering and Operations;
BOM Builder	Intuitively build a top-to-bottom level BOM structure from scratch or continue working on the design of existing BOMs. the newly created BOM can be inserted into CAD or checked into Bluestar PLM with one click. Allows you to create a BOM and instantly transfer it to CAD as 3D model or as a BOM record in your PLM database. This saves you the time of manually designing a BOM in CAD, which reuses product components and structures already existing in your product portfolio.
BOM tree display	Bluestar CAD Designer displays the entire BOM structure and each line from top to bottom level, as well as revision count, quantities, approval status and more.