

Efficiency and automation with AI DRIVEN, Artificial Intelligence applied to dental manufacturing.



Artificial Intelligence in Dental Manufacturing



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MillBox's inherent A.I. saves you time and energy as it automates feature identification and performs many setup operations that you as the user would normally have to manually perform. This allows you to produce the same quality of work, but at a much higher capacity.

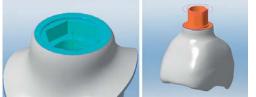
A.I. simplifies your daily workflow and flattens the learning curve for new technicians. In today's day and age where seemingly every different machine can come with different CAM solutions – MillBox can not only consolidate those manufacturing solutions into one nesting CAM, but with A.I. we can simplify your workflow steps by automating repetitive workflow tasks like margin / prep-line detection or automatic undercut designation. A.I., as it exists within MillBox is ever-evolving through continuous software updates.

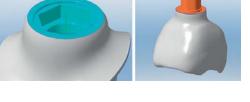
Utilizing feedbacks and techniques shared by manufacturing experts throughout the industry, here's how Artificial intelligence has enhanced and improved your MillBox CAM Experience to-date:

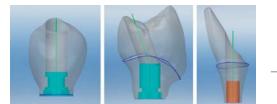




# A.I. makes dental CAM more intuitive







- During the import process, A.I. automatically recognizes each restoration's prep-line and path of insertion, regardless of the CAD used to create 3, 4 or 5-axis designs. Automatic Margin-Line detection is significantly improved over competitors – even on lower quality meshes (STL Files).
- Finding the ideal orientation of the restoration during nesting by detecting external undercuts and rotating the part in a manner that minimizes undercuts (if the material is thick enough).
- Automatic recognition of different types of implant abutment connections (Internal vs External). From this information, MillBox's A.I. can also automatically identify and replace any bad or low quality mesh in the interface utilizing a pre-determined library.
- For implant work, A.I. can automatically detect your Emergence Profile allowing for the CAM to isolate these surfaces during the machining process. This means that we can target these specific areas with special toolpaths to improve or adjust the final surface quality of the finished part.
- A.I. constantly analyzes your part to make sure that you're not exceeding the physical limitations of your machine – whether that's because of improper nesting or bad design, thus correcting these commonly made user errors.

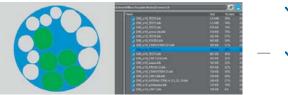


#### A.I. enhances dental CAM safety



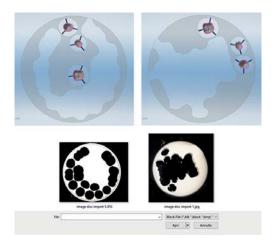
It automatically detects the area of the emergency contour with the possibility to select this part by means of a special feature and to carry out finishing operations designed to obtain an optimal result for this extremely important area in an implant work.

#### A.I. makes dental CAM more careful



- Automatic placement of the support pins on the equator line can be customized through MillBox's control panel and can vary by the type of object and material used.
- Al automatically detects insertion directions for the top-caps on abutments, telescopic crowns and bars.
- Automatic selects the most used blank based on the areas already used and the number of elements to be milled with automatic positioning of the objects.
- Depending on the different parts of the object, the work area is increased to allow the correct execution of the operation.
- Automatically identifies the number of elements in an object, allowing statistics to be consulted and to perform an ad-hoc cost assessment for milling centers.

# A.I. makes dental CAM more flexible



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It allows you to use residues from other CAM software as well. Importing a photo allows the recognition of already used areas and the contours are automatically reconstructed, stored as already used areas in the new blank.



This is the story of AI DRIVEN, the Artificial Intelligence applied to the world of dental manufacturing, because the A.I. is always at your side to guide you in the manufacturing process.

We constantly need your feedback, to improve our products and turn them into the best version, because we work for you, to save time, increase quality and dedicate yourself to other activities.

Make a smart choice with the A.I. and our dental solutions!

# **Company profile**

CIMsystem relies on its strong expertise in the manufacturing industry to fully support hundreds of customers.

Starting from the initial assessment of their needs, down to the implementation and customization of the right solution, we deliver high-quality, innovative, and powerful technical tools, with training from qualified individuals providing excellent after-sales service and support.





# www.cimsystem.com

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