

# Productivity Study Highlights: AutoCAD® Mechanical toolset

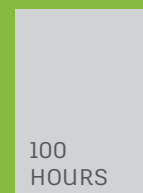
## STUDY SUMMARY

Autodesk recently commissioned a study comparing basic AutoCAD to the Mechanical toolset (previously known as AutoCAD Mechanical) for performing 11 common mechanical design tasks.

Results shows that the Mechanical toolset provided a **55% overall productivity gain\*** compared with basic AutoCAD when these tasks were performed by an expert level AutoCAD user.

## 55% overall productivity gain\*

basic AutoCAD



100  
HOURS

Mechanical  
toolset

45  
HOURS

Time to complete sample project

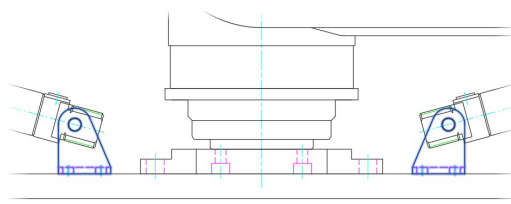
# Benefits of the Mechanical Toolset

AutoCAD 2019 includes access to all AutoCAD vertical industry functionality as specialized toolsets. Take your work with you with the AutoCAD mobile app and the new AutoCAD web app.

The Mechanical toolset brings dramatic timesaving and boosted productivity to common AutoCAD® mechanical design tasks.

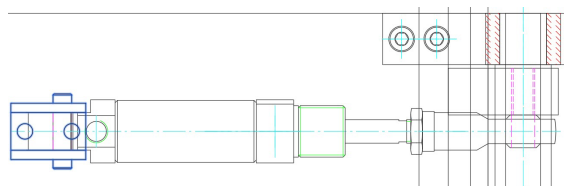
## 1 Design a New Robot Tray Clamp (*time savings = 45%*)

Intelligent layer management system places items on correct layer, color, and linetype as the drawing is created.



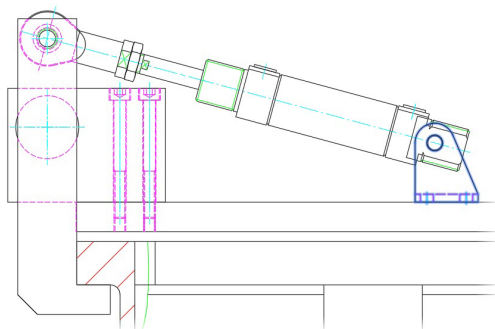
## 2 Detail and Optimize New Tray Clamp (*time savings = 46%*)

Enhance basic AutoCAD via additional options that save time.



## 3 Prepare Assembly with Details (*time savings = 86%*)

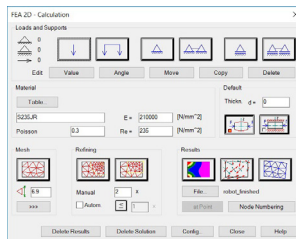
Recognizes identical parts in 2D, even when they're hidden.



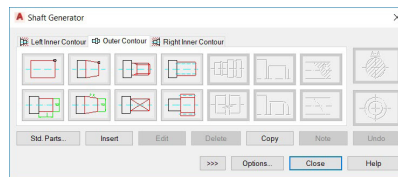
# Benefits of the Mechanical Toolset

The Mechanical toolset brings dramatic timesaving and boosted productivity to common AutoCAD® mechanical design tasks.

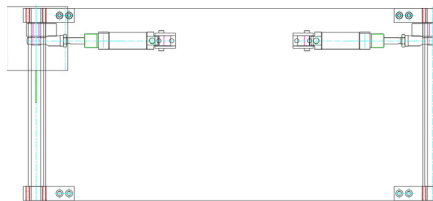
- 4 Calculate Forces in Mechanism (*time savings = 80%*)**  
More calculation functions, even for analyzing 2D geometries subject to static loads.



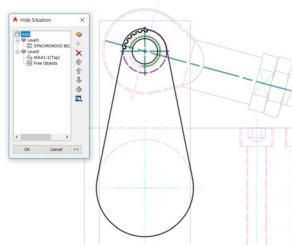
- 5 Connect Clamp with Shaft (*time savings = 71%*)**  
Creates parts with all project information, assisting in creating complete machine parts.



- 6 Complete Assembly (*time savings = 6%*)**  
Delivers additional value for drafting functions to basic AutoCAD's already highly sophisticated functionality.



- 7 Add Pulleys and Belt (*time savings = 70%*)**  
Parts are created to specs along with reports and calculations needed to analyze the design.

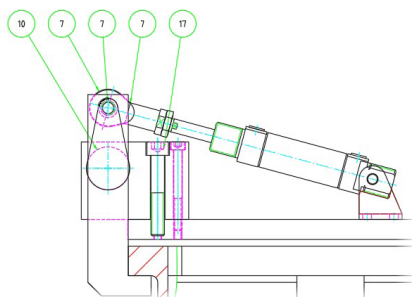


## Benefits of the Mechanical Toolset

The Mechanical toolset brings dramatic timesaving and boosted productivity to common AutoCAD® mechanical design tasks.

**Mount Clamp Fixture with Screws (*time savings = 77%*)**

Over 700,000 standard parts, 100,000 pre-drawn standard features, and over 8,000 pre-drawn holes available.

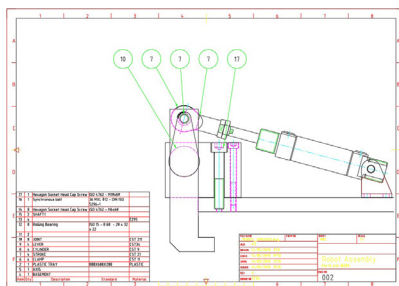


## Prepare Production Drawings for Assembly (*time savings = 68%*)

Create parts lists and bills of materials (BOMs) that update as the design changes.

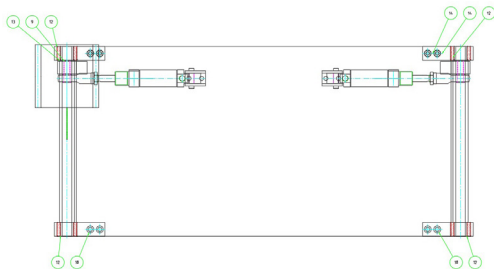
**10** Prepare Production Drawing for Clamp & Shaft (*time savings = 62%*)

Intelligent drafting tools help users re-edit features without having to remove and recreate the original.



## 11 Modify Shaft in Part and Assembly Drawing (*time savings = 44%*)

Power Commands use object information to accelerate user operations.



\*As with all performance tests, results may vary based on machine, operating system, filters, and even source material. While every effort has been made to make the tests as fair and objective as possible, your results may differ. Product information and specifications are subject to change without notice. Autodesk provides this information "as is," without warranty of any kind, either express or implied.

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