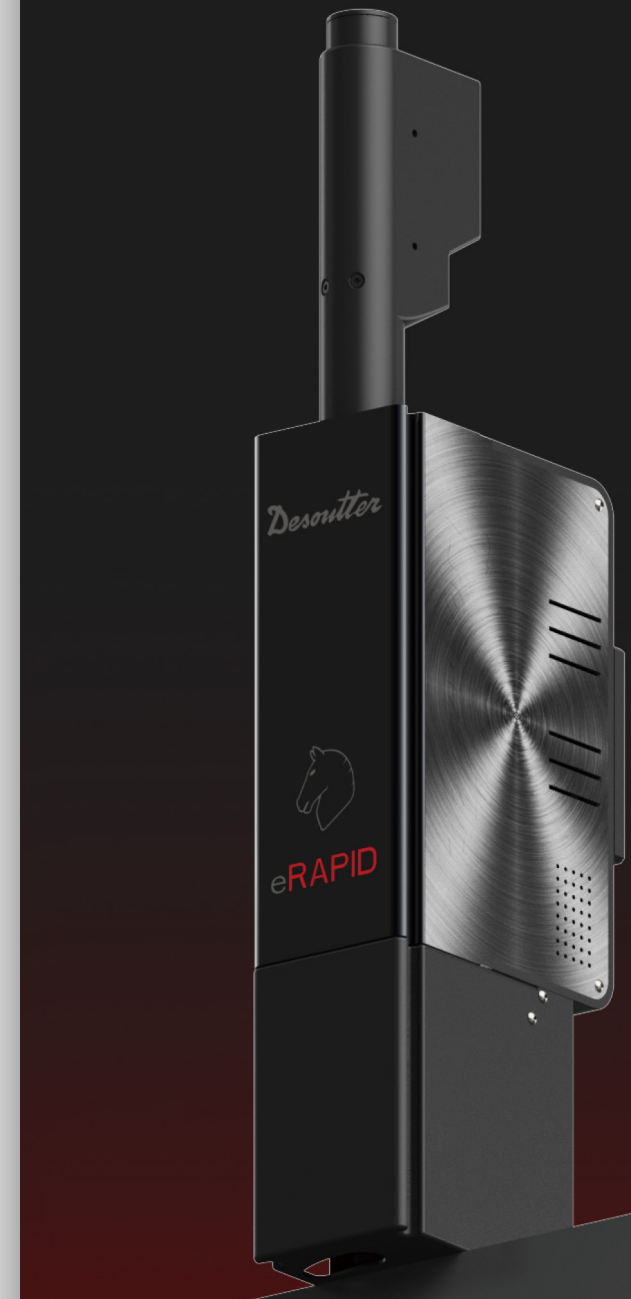
Desoutter

Industrial Tools

RAPID
Desoutter

eRAPID
Electric Tightening Module



More Than Productivity

eRAPID

Next-Generation Electric Drive Tightening Module

Desoutter's next-generation tightening module uses electronic control instead of conventional pneumatic cylinders to carry out screw-tightening operations.

- Compactness
- Precision enhancement
- Digitalization
- Shorter cycle time
- Greater flexibility
- Superior quality

ERA - S60 - SM

1 2

1.Stroke module

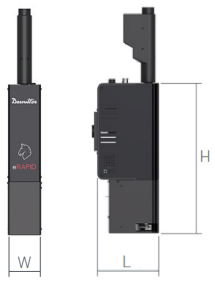
	Max. torque (Nm)	Max. stroke (mm)	Dimensions (W × L × H) (mm)	Weight (kg)	Max. screw head diameter (mm)	Screw range
S60	12	60	93.5×148×400	3.5	13	M3-M6
⋮						
More stroke options coming soon						

2.Feeding approach

	Hose feeding
SM	 with screw management

	Pick & place
P	 w/o screw management

Diamention diagram:



Working principle:

1. Init: A screw is sent by screw feeder

2.The gripper moves from the feeding point to the pickup point

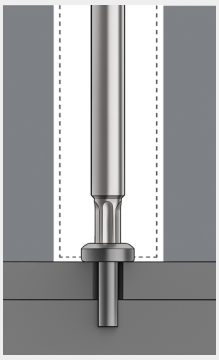
3.The tube lowers to pick up the screw by suction, the gripper opens, and returns to the feeding position

4. The screwdriver lowers to tighten, then rises. A new screw is fed during descent to cut cycle time

5.The cycle is complete. While the tube rises, the module can move to the next tightening point

Perfect for reaching hard-to-access areas

- Remains compact and lightweight even with long strokes
- The guide tube allows access to very tight spaces



Multi-stroke management

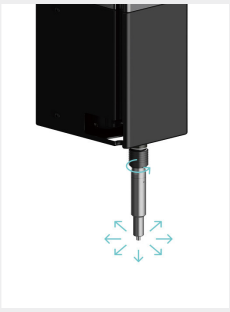
- Different strokes can be freely set for tightening position at various heights, saving Z-axis compared with traditional modules

Unseating screw detection

- Based on the tool's existing torque and angle monitoring, eRAPID's unique stroke monitoring can significantly improve detection rate

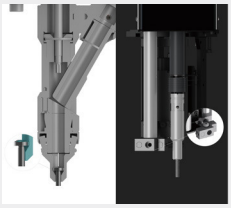
Floating head design

- eRAPID features a customizable floating structure, ideal for variable product positioning or screw consistency.



Improved screw compatibility

- eRAPID's screw management unit enhances head size compatibility and prevents stuck caused by large screw tolerance
- Supports screws with challenging length-to-diameter ratios



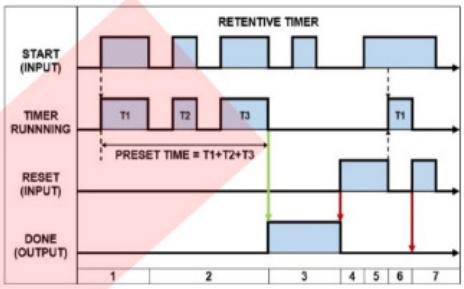
Cycle time improved

- eRAPID's unique screw management allows the tightening and screw-feeding processes to run in parallel, so feeding time is not counted in the cycle time.

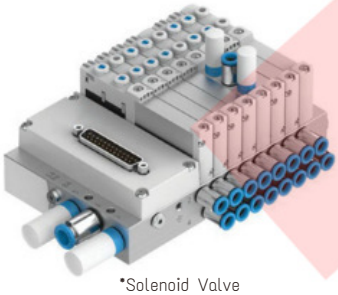
System integration

Compared with traditional tightening modules, eRAPID's topology is much simpler, making installation and layout extremely easy.

*Tangle Cables

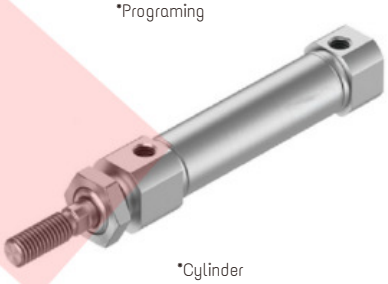


*Programing



*Solenoid Valve

*Magnet Sensor

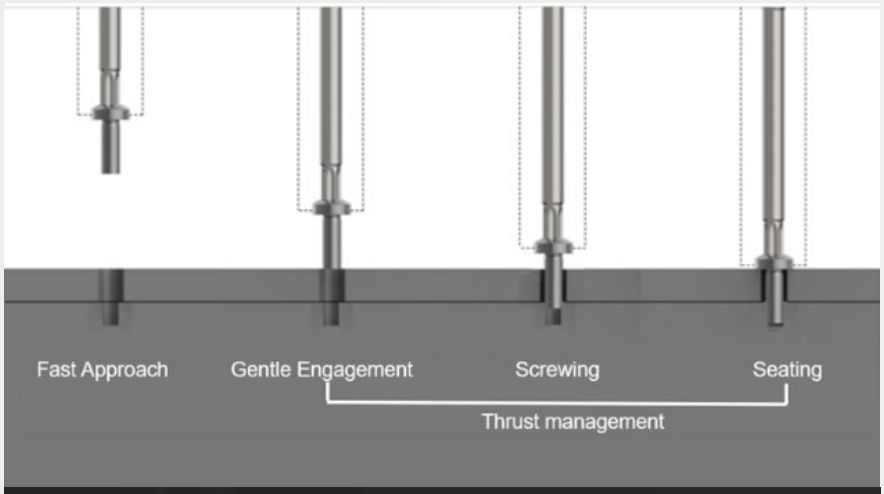


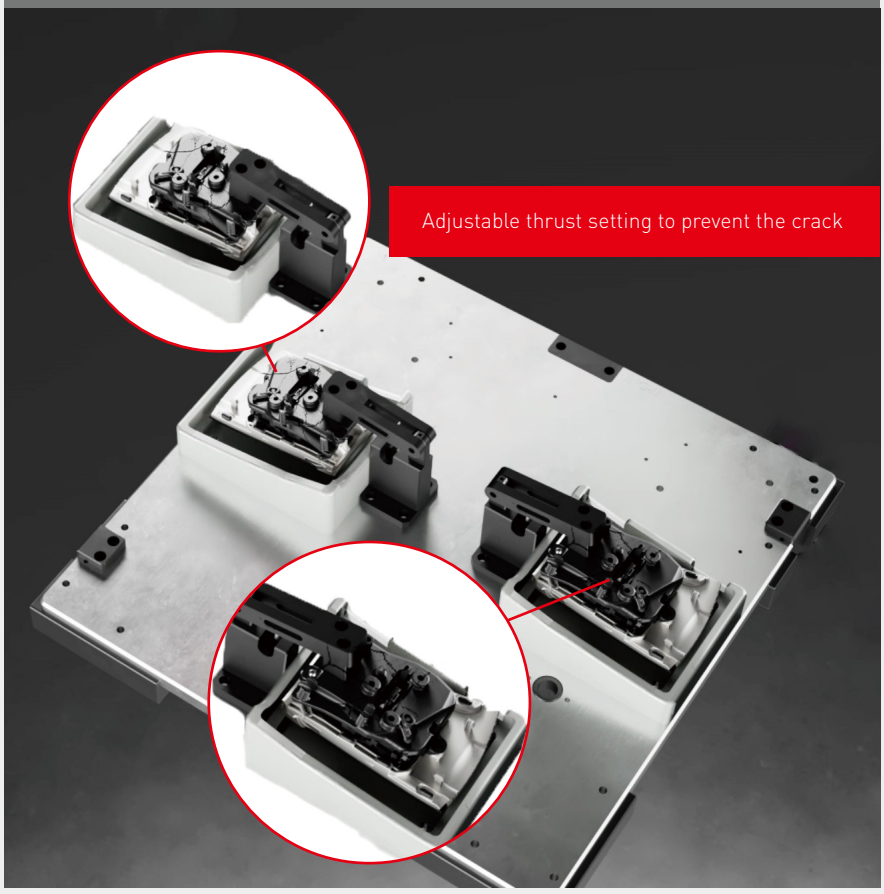
*Cylinder

*These images are AI-generated illustration for reference only and does not represent a real product.

Downforce protection

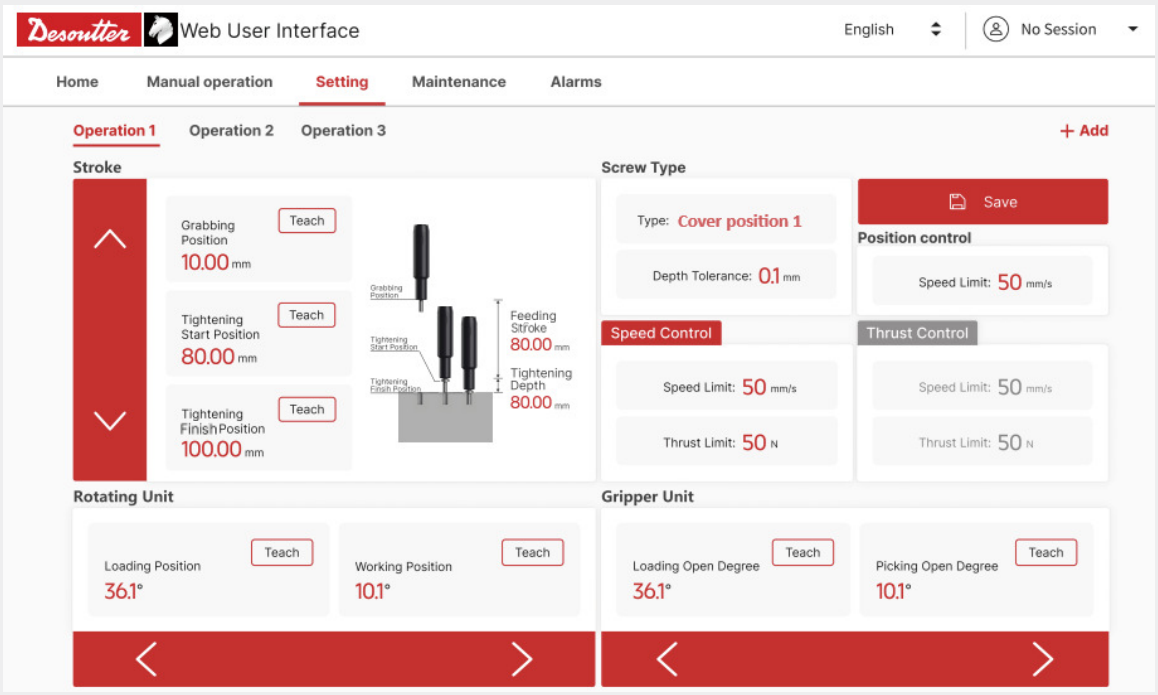
- Variable speed enables both cycle time improvement and surface protection, and setting a thrust limit helps safeguard product surface quality.



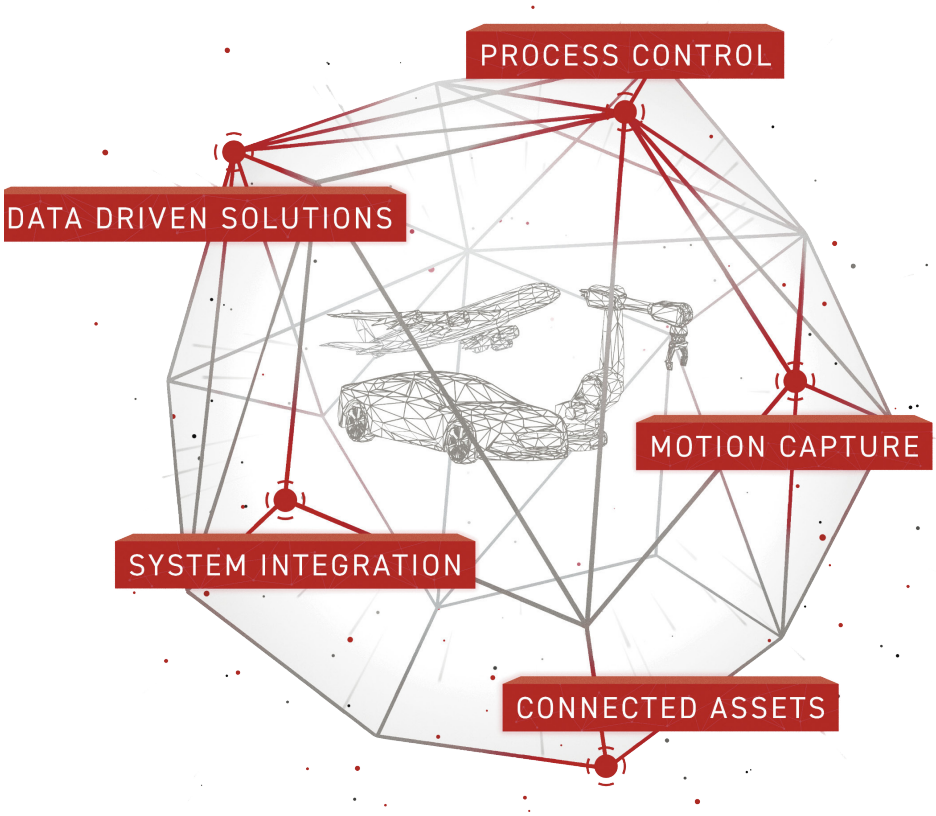


WebUI

WebUI:Parameters and settings can be adjusted via a tablet, laptop, or any browser-based device, such as stroke distance, speed, and downforce.



DESOUTTER ECOSYSTEM



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