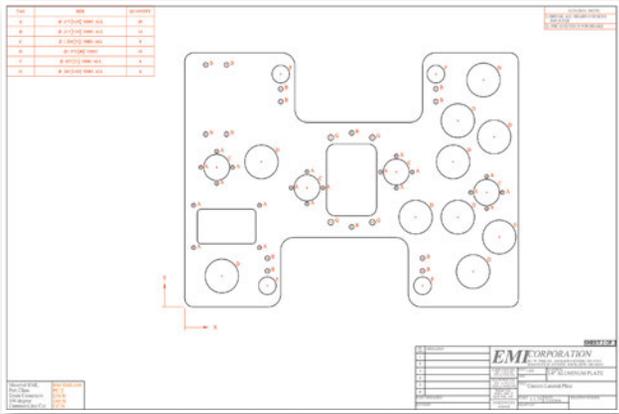


Custom Made EOAT Plates

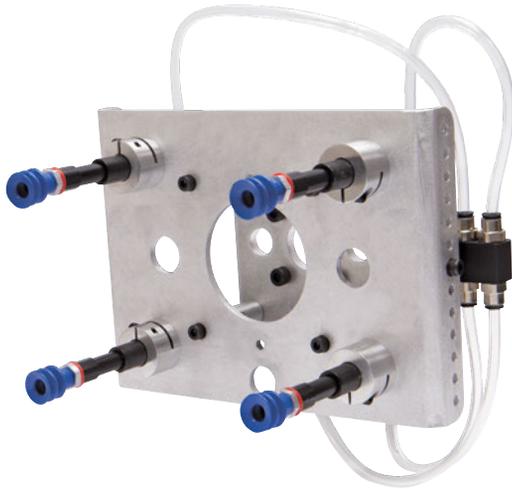
EMI has laser-cutting machinery in our own manufacturing plant that allows us to make plate-based EOAT fast, accurate, and at a low cost.

Typical plate-based EOAT is laser cut from 1/8", 3/16", or 1/4" aluminum or 12-gauge stainless steel—standard materials in our inventory. Shown on the following pages of examples, excess weight is removed by material cutouts. Thinner, lighter material can be strengthened by incorporating reinforcing bends.

Call our EOAT engineering department to discuss custom EOAT plates for your application.



Considering Plate-Based EOAT



Profile-based EOAT is great for some applications, but sometimes a lower cost, lighter weight, and easier to assemble option can be used. To suit these needs, EMI also offers plate-based EOAT.

	Plate-Based EOAT	Profile-Based EOAT
Cost	Lower Cost	Higher Cost
Weight	Lighter	Heavier
Adjustability	Limited	Easy
Opinion A	I don't want to be locked into a fixed design. I want the option to tweak and adjust the EOAT easily. I want a profile-based EOAT.	
Opinion B	The EOAT is designed well and it works. I don't want anyone making "adjustments" and potentially causing damage. I want a plate-based EOAT.	
Common Applications		
Flat parts	★★★★★	★★★
High number of cavities	★★★★★	★★
Deep-core parts	★★	★★★★★
Small parts	★★★★★	★★★
Large parts	★★	★★★★★
Insert loading EOAT	★★★	★★★
High-speed molding	★★★★	★★
EOAT for sprue pickers	★★★★★	★★
Degating	★	★★★★★

EMI's 3D Printing option allows for internal porting, built-in clamps and pressed inserts help keep it a lightweight, low-cost solution. See page 108 to compare 3D printing to Laser-cut plate.

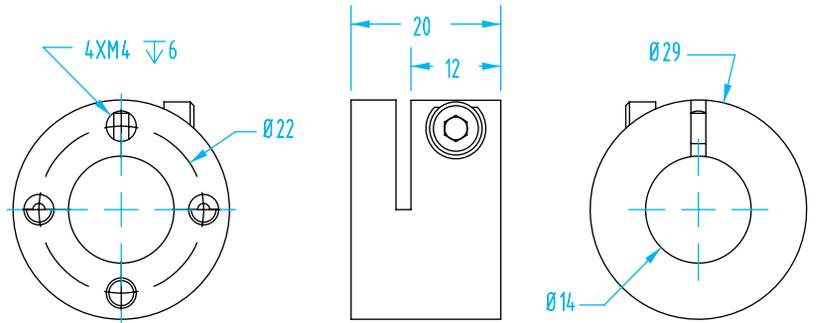
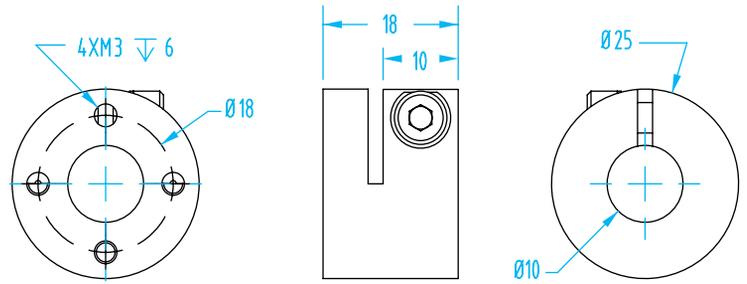
Clamps for Plate EOAT

(Dimensioned drawing shown full scale)

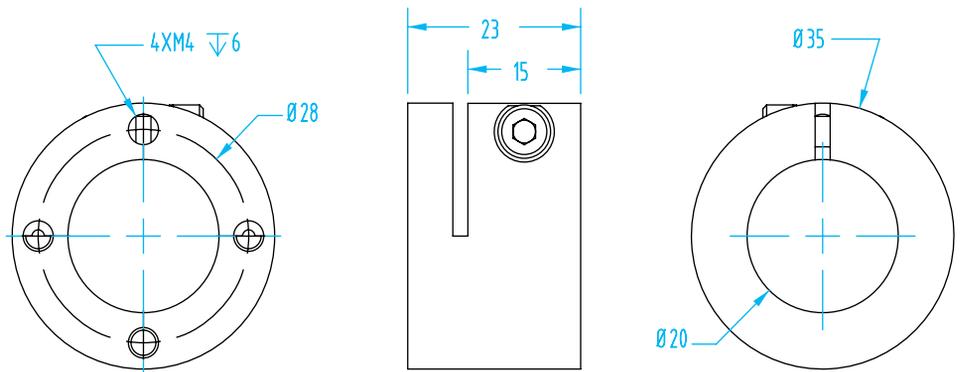


#5878

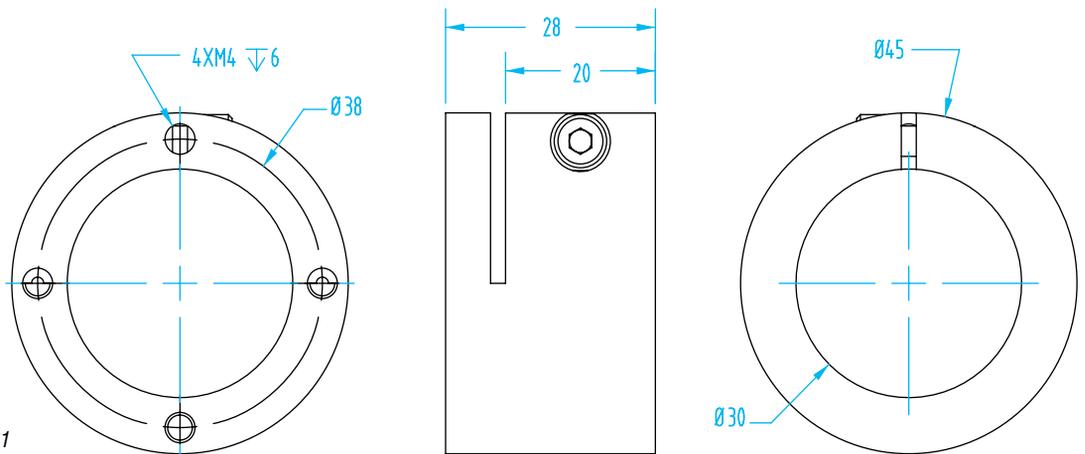
Ø10mm #5878



Ø14mm #5879



Ø20mm #5880



Ø30mm #5881

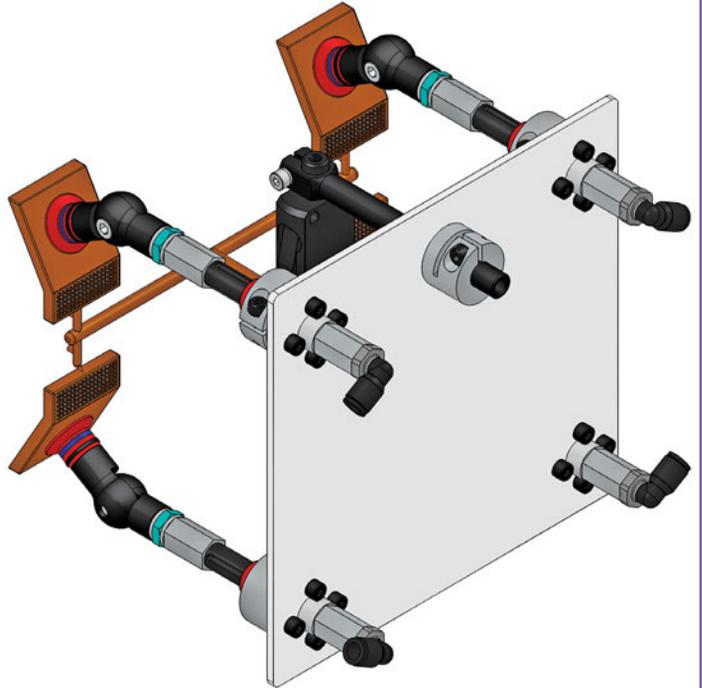
Plate Clamp Bracket

Quick#	Part#	Description	Price	Wt.
5878	PCB-10	Aluminum Plate Clamp Bracket 10mm	\$22.50	19g
5879	PCB-14	Aluminum Plate Clamp Bracket 14mm	\$24.00	26g
5880	PCB-20	Aluminum Plate Clamp Bracket 20mm	\$25.50	37g
5881	PCB-30	Aluminum Plate Clamp Bracket 30mm	\$29.00	63g

When ordering, use Quick#s to ensure order accuracy.

Clamps for Plate EOAT

Application Example



Clamps can be used on both front and back of plate.

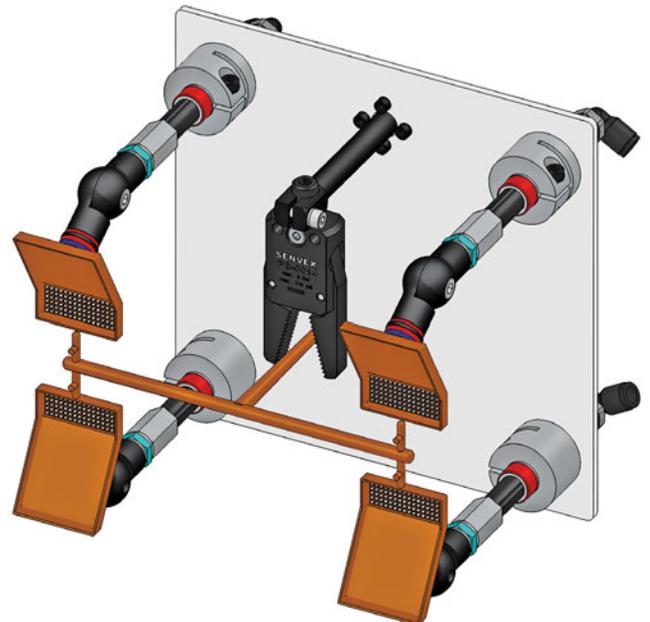
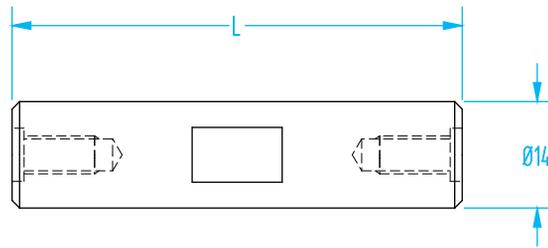
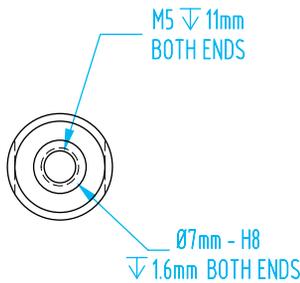
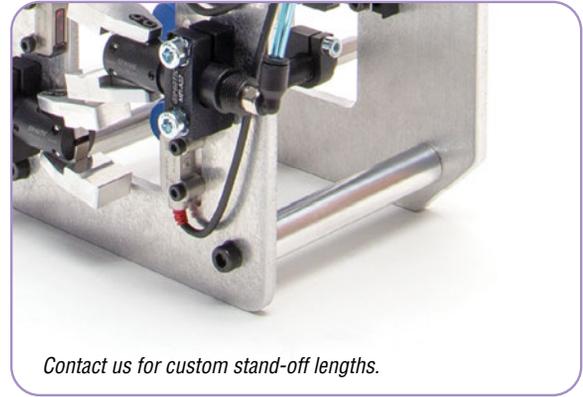
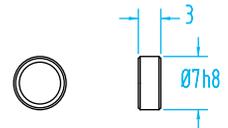


Plate Stand-Off

- Precision stand-offs mount with M5 bolts and optional centering sleeves.
- Centering sleeves should be used when a tighter tolerance is required. For instance, in insert loading applications and degate operations.
- Can be used without centering sleeves.



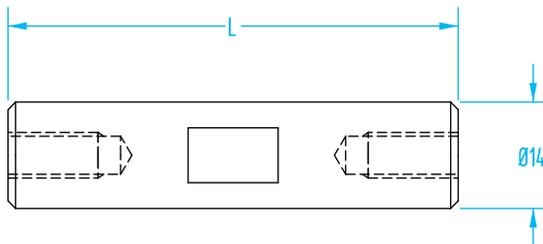
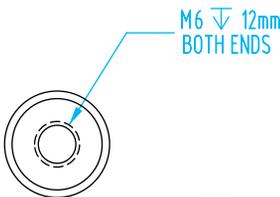
Centering Sleeve #6075



Precision Stand Off

Quick#	Part#	Description	Length	Price	Wt.
582	GSS-14P-30	With M5 Tap & \varnothing 7mm H8 C'bore	30mm	\$12.42	10g
589	GSS-14P-45		45mm	\$14.12	17g
590	GSS-14P-60		60mm	\$15.72	23g
591	GSS-14P-75		75mm	\$17.30	29g
Centering Sleeve - Sold Individually					
6075	ZBH-7	\varnothing 7mm-h8		\$1.56	1g

- Standard stand-offs require M6 bolts and do not accept centering sleeves.
- \varnothing 14mm clampable OD.



Standard Stand Off

Quick#	Part#	Description	Length	Price	Wt.
5968	GSS-14-30	With M6 Tap	30mm	\$7.80	10g
5969	GSS-14-60		60mm	\$8.70	23g
5970	GSS-14-90		90mm	\$9.84	35g

Plate Stand-Off

Application Example

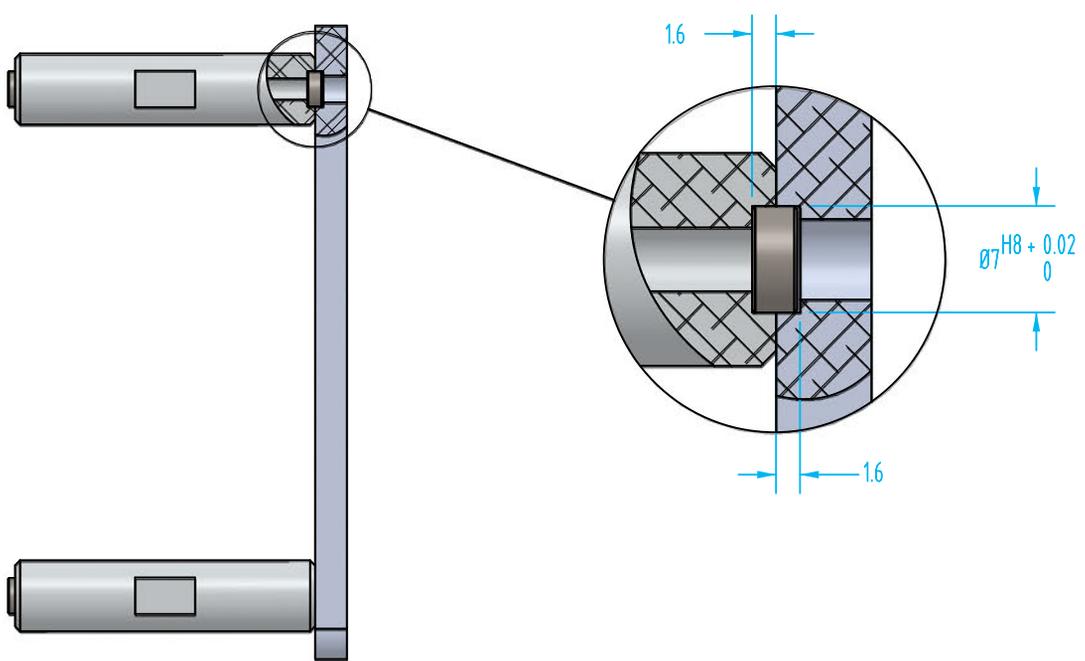
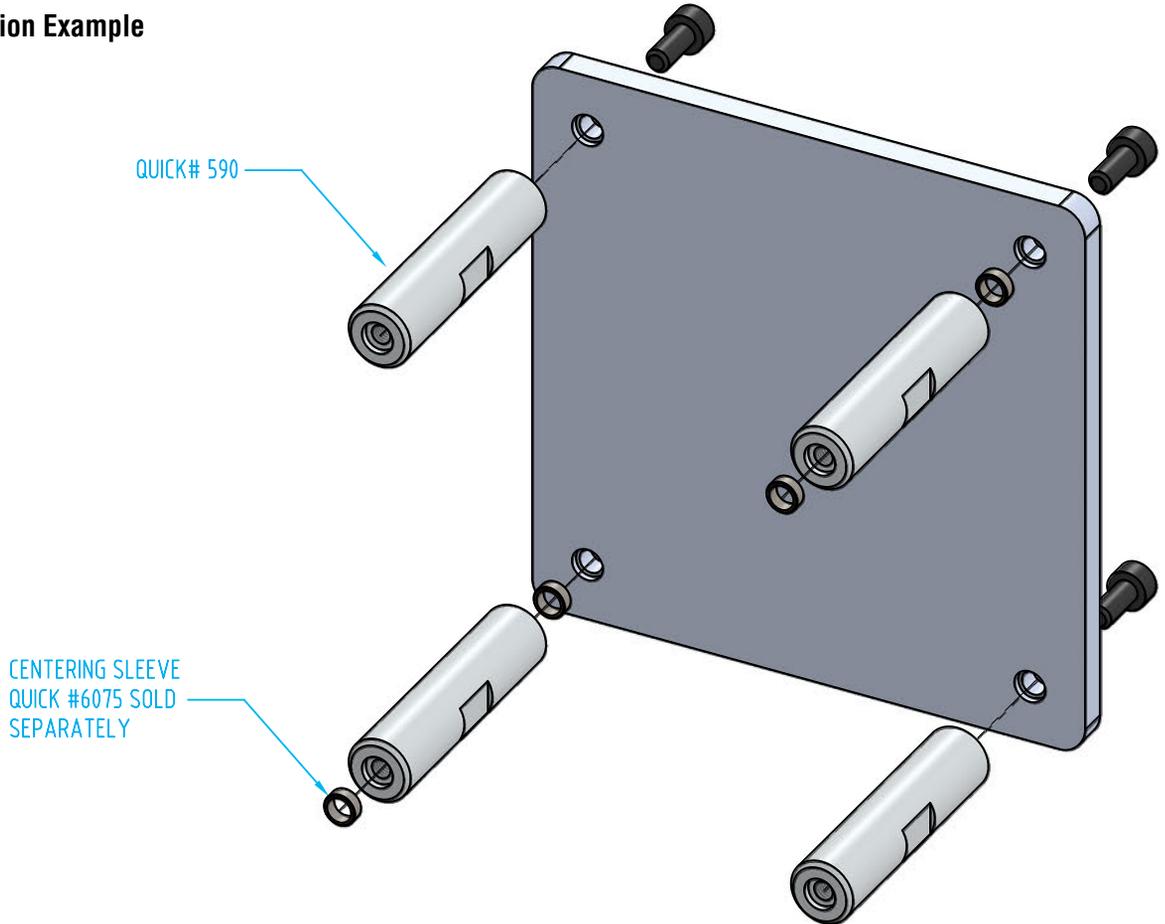


Plate-Based EOAT Examples

Custom Length Stand-Off's

We have a number of standard length plate stand-off's on page 90. Contact us if you require a custom length like those used on the EOAT shown here.

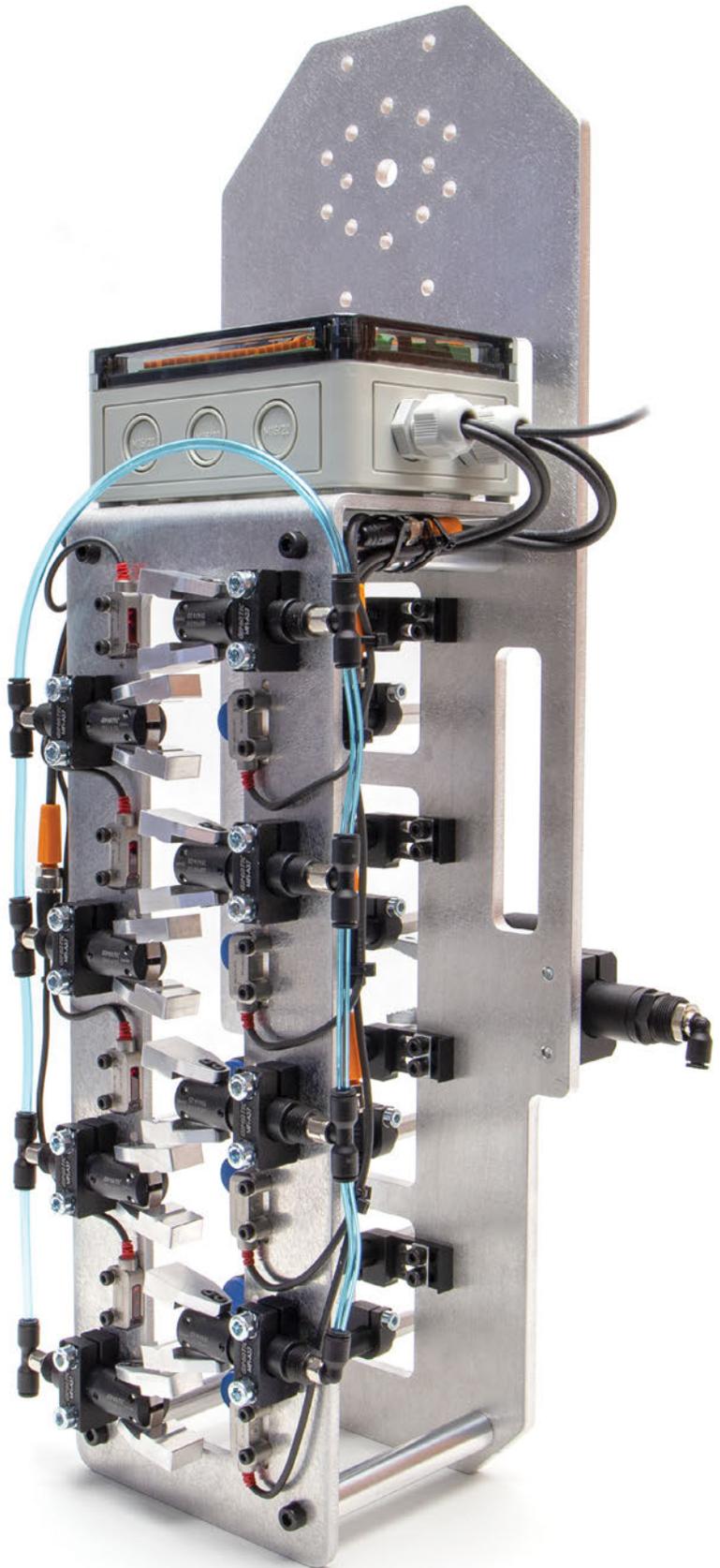
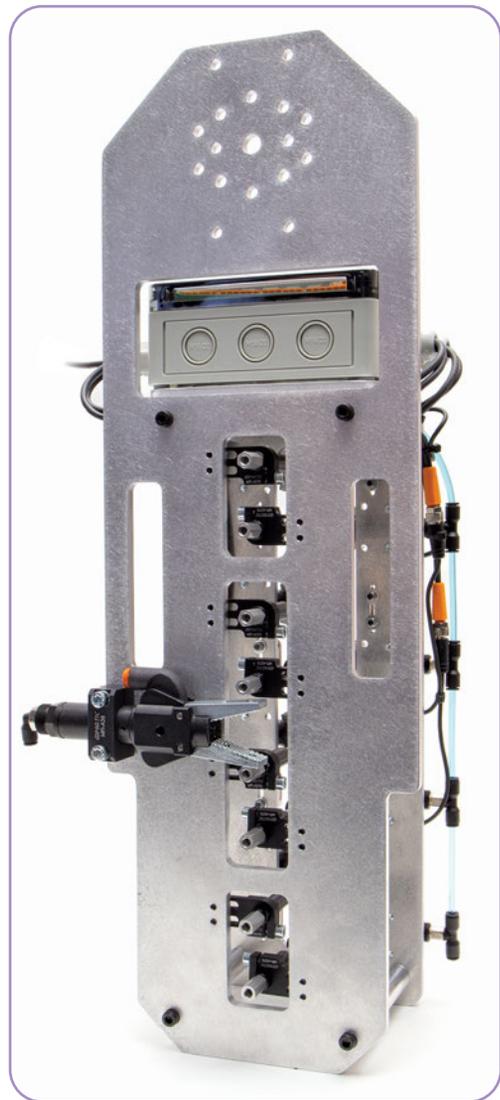


Plate-Based EOAT Examples

EOAT Frame with Suspensions

Smooth body suspensions can be mounted to plate EOAT with the clamps shown on page 88. Opposed to the fixed base on the previous page, these rotating suspensions can absorb full part ejection.

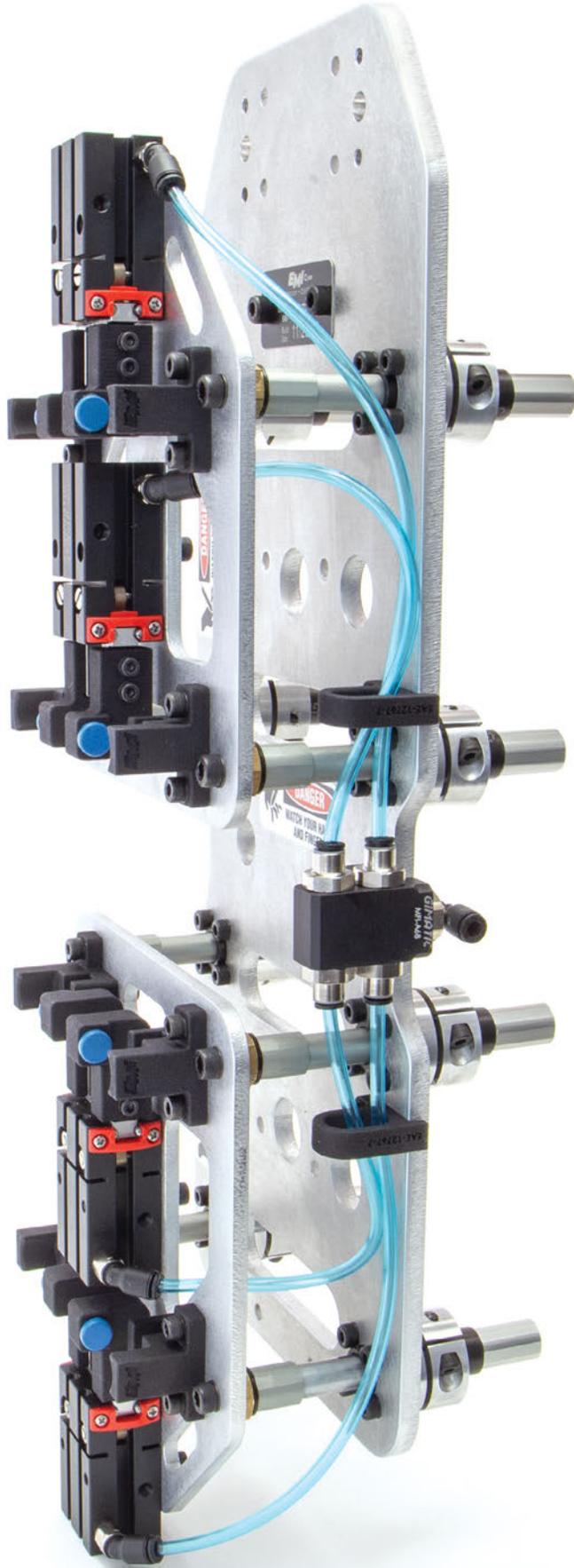


Plate-Based EOAT Examples



Find a Perfect Lightweight and Cost Effective Solution

EMI's in-house laser cutting and 3D printing service allows us to provide considerable time and cost savings without sacrificing quality.

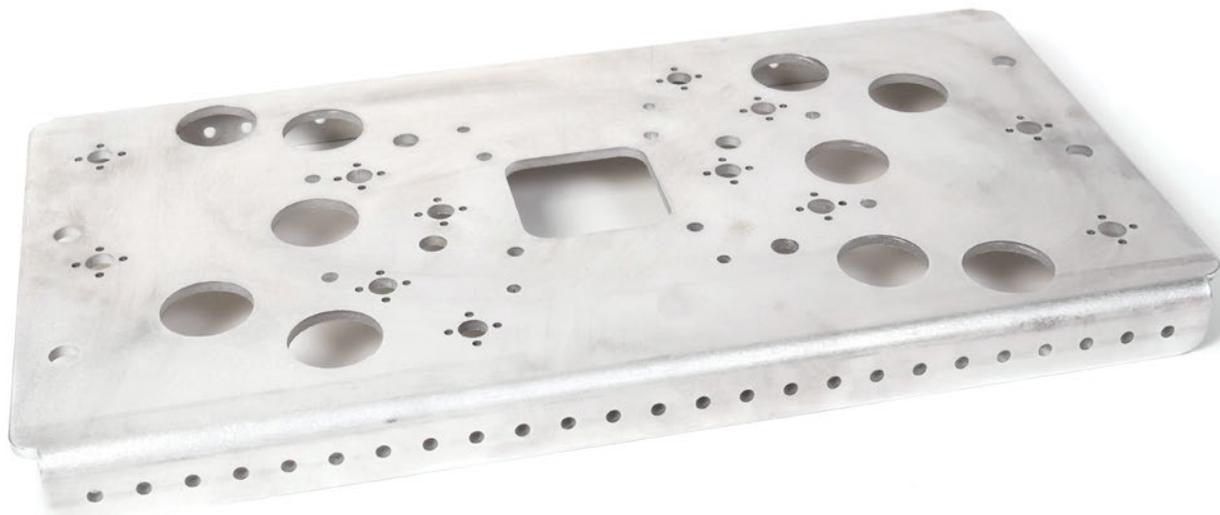
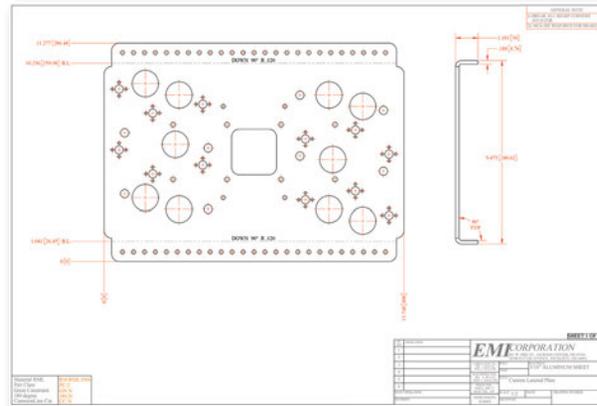


Plate-Based EOAT Examples

Single Panel EOAT keeps Tubing and Wires Separate from Gripping Area

Keeping tubing and wires from interfering with the gripping area significantly reduces the chance they could get snagged and become disconnected.

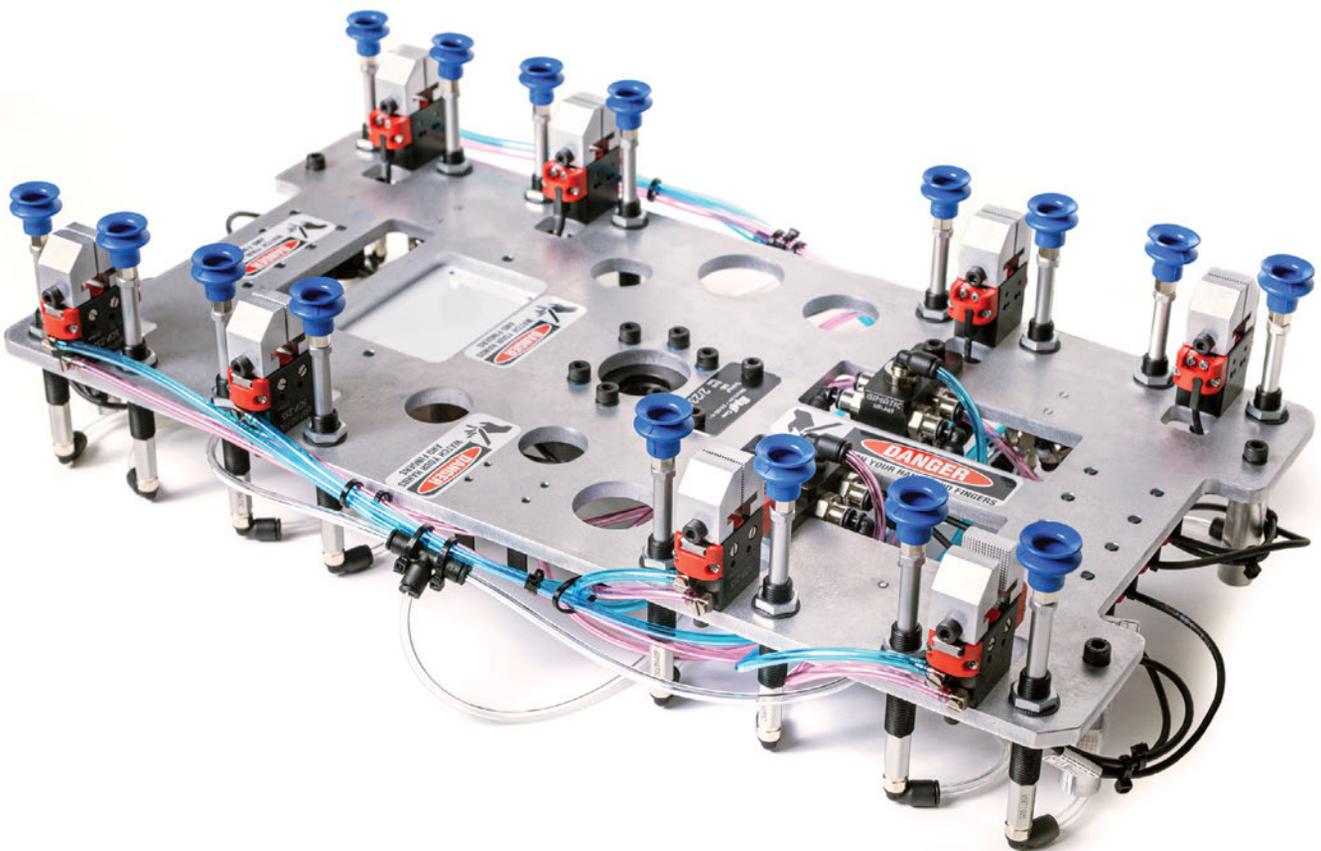
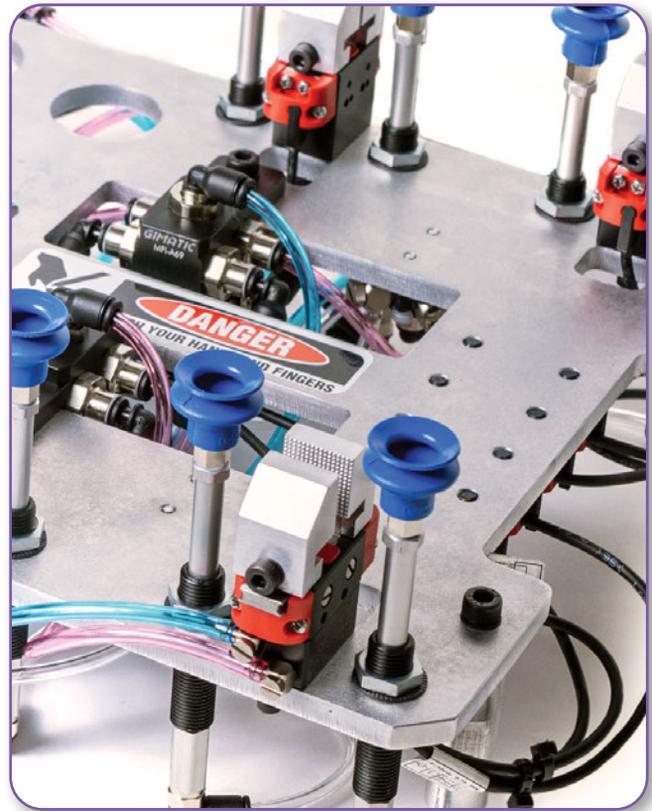


Plate-Based EOAT Examples

Degate Station Combines Profile and Laser-Cut Aluminum

Combine profile and flat-plate construction for an ideal EOAT solution. Here the plate is the base and the profile provides a compact mounting interface for degating.

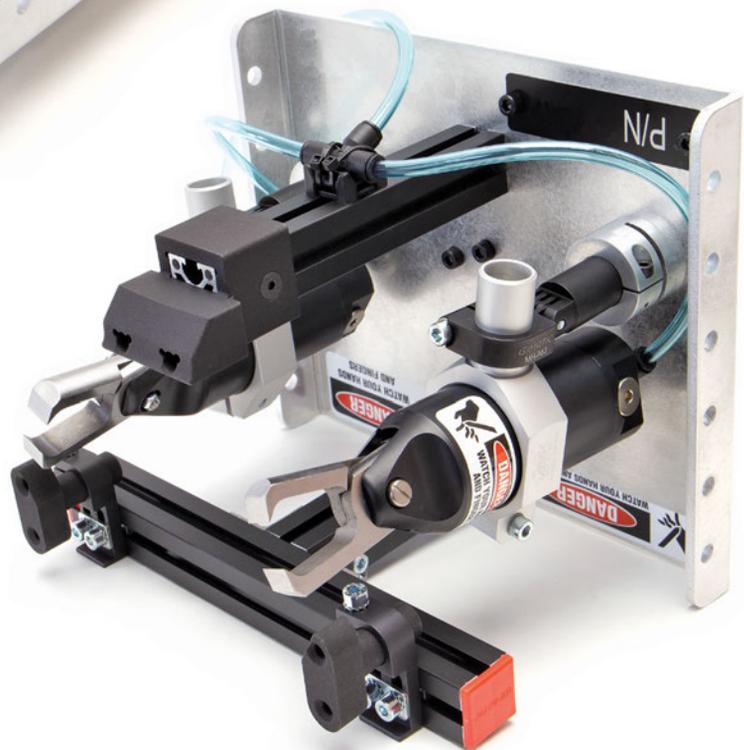
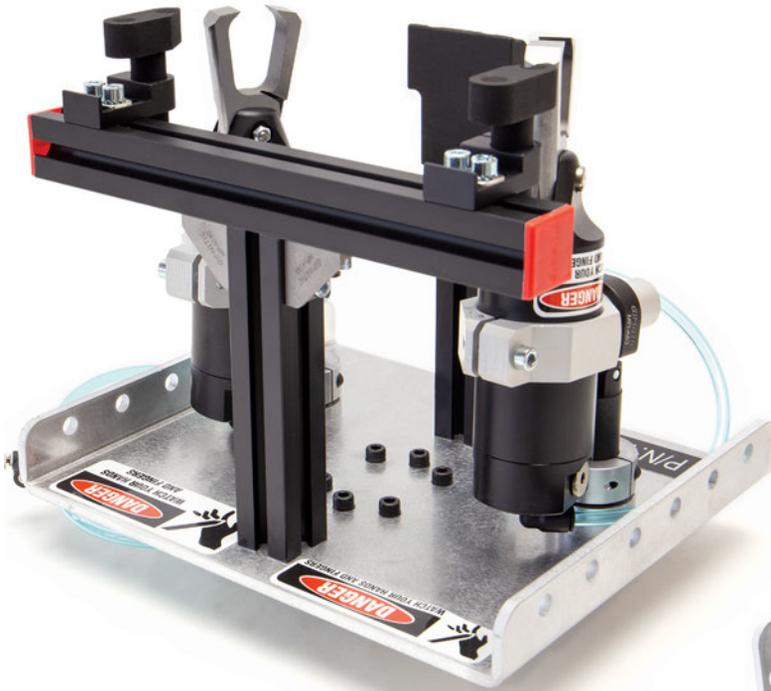


Plate-Based EOAT Examples

Adjustable Plate EOAT

Plate style EOAT can also incorporate extruded profile and angle clamps to offer adjustability during installation.

In this example, the aluminum plate incorporates slots that allow for some minor adjustments after assembly.

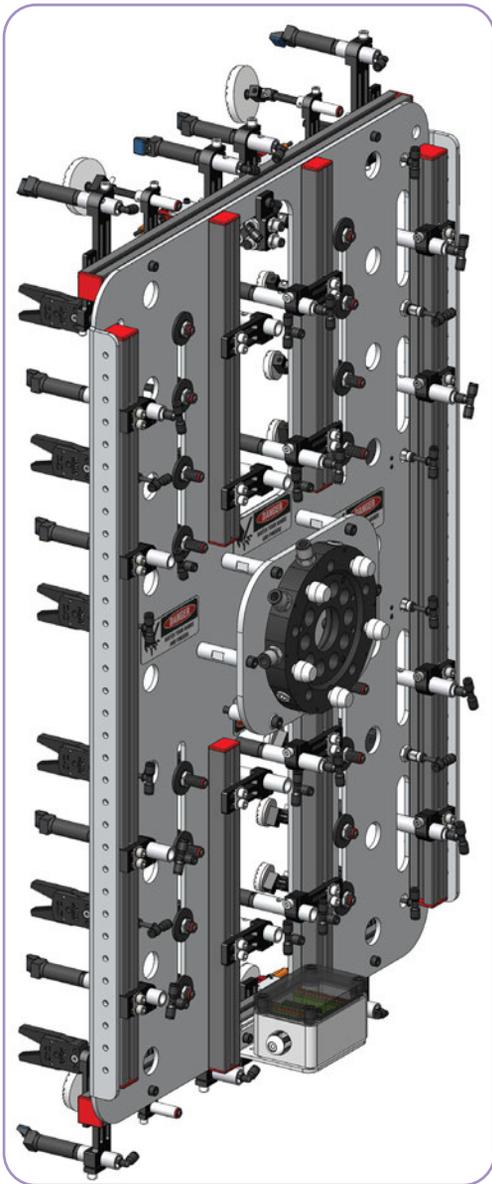


Plate-Based EOAT Examples

Lightweight Construction with Low-Profile Slides

Laser-Cut plate construction allows for a lightweight option for use with pneumatic mini-slides. ZE-P slides can be mounted on all four sides making it a great option.

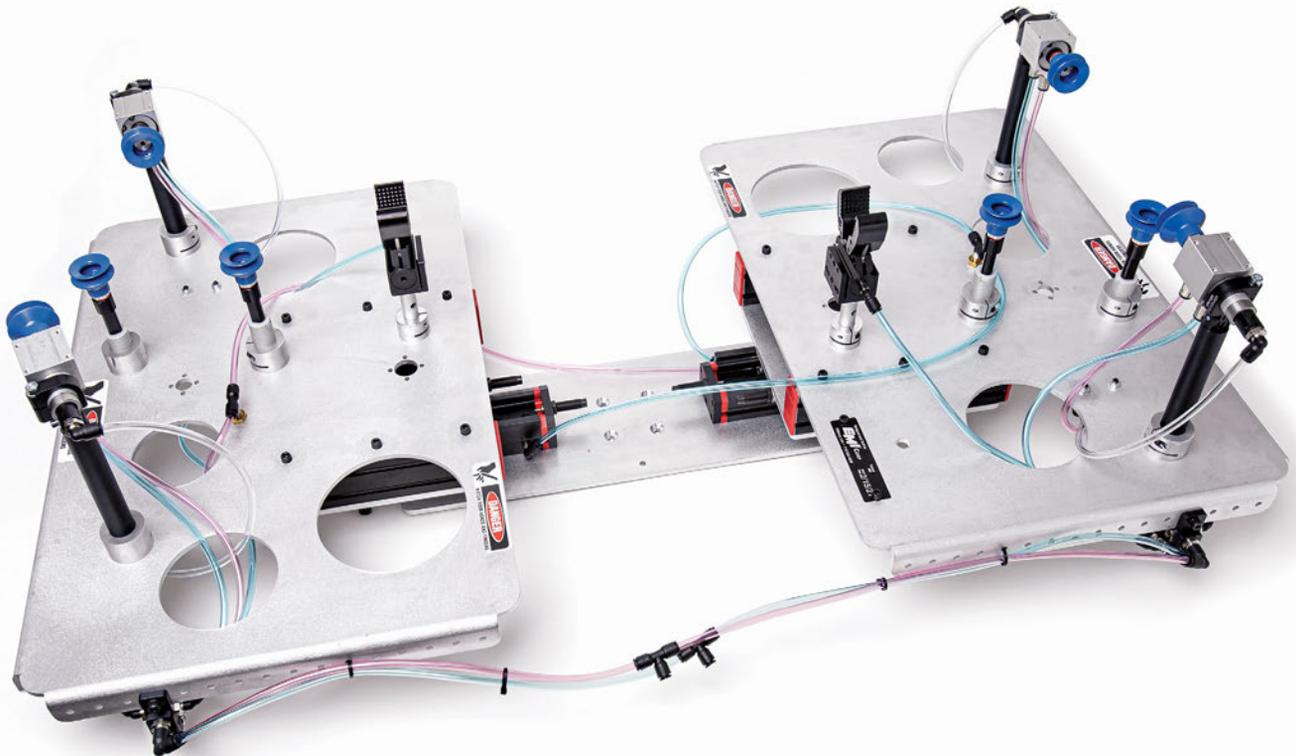
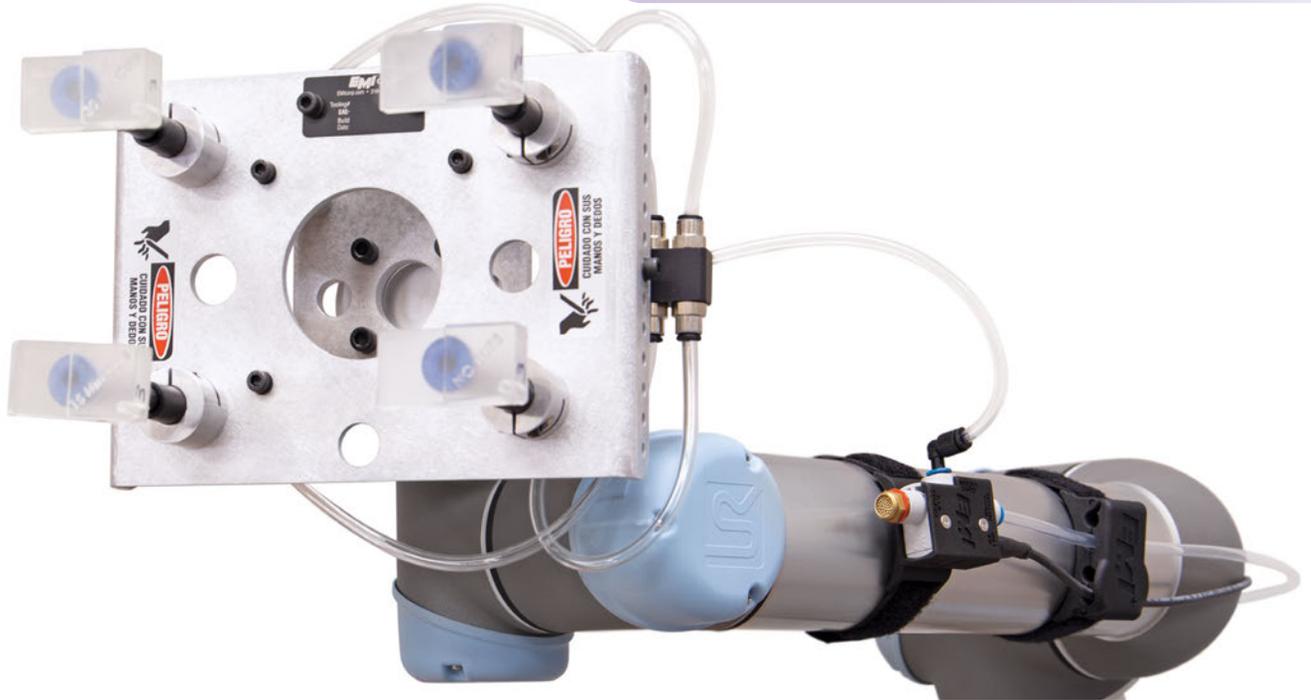


Plate-Based EOAT Examples

Use Laser-Cut Aluminum EOAT for Cobot Applications



From Simple..

..To Complex!

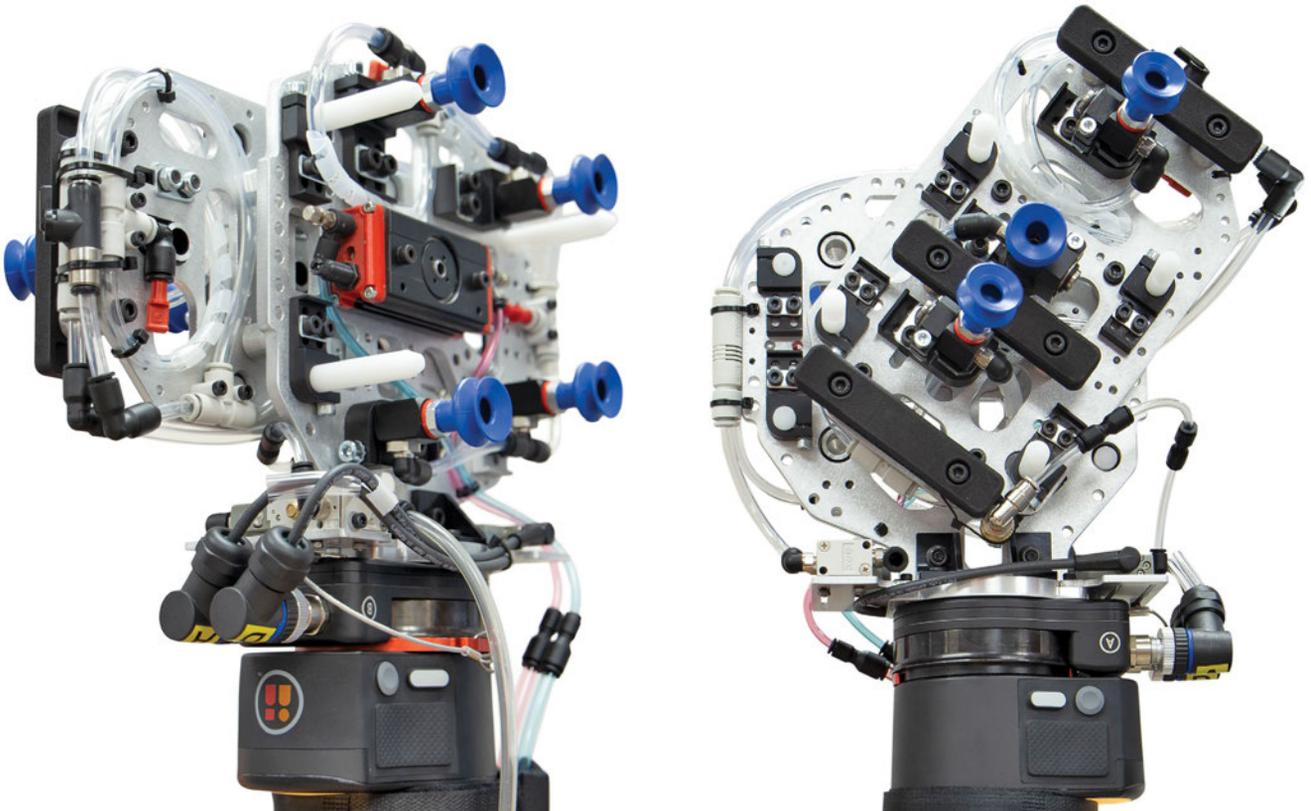
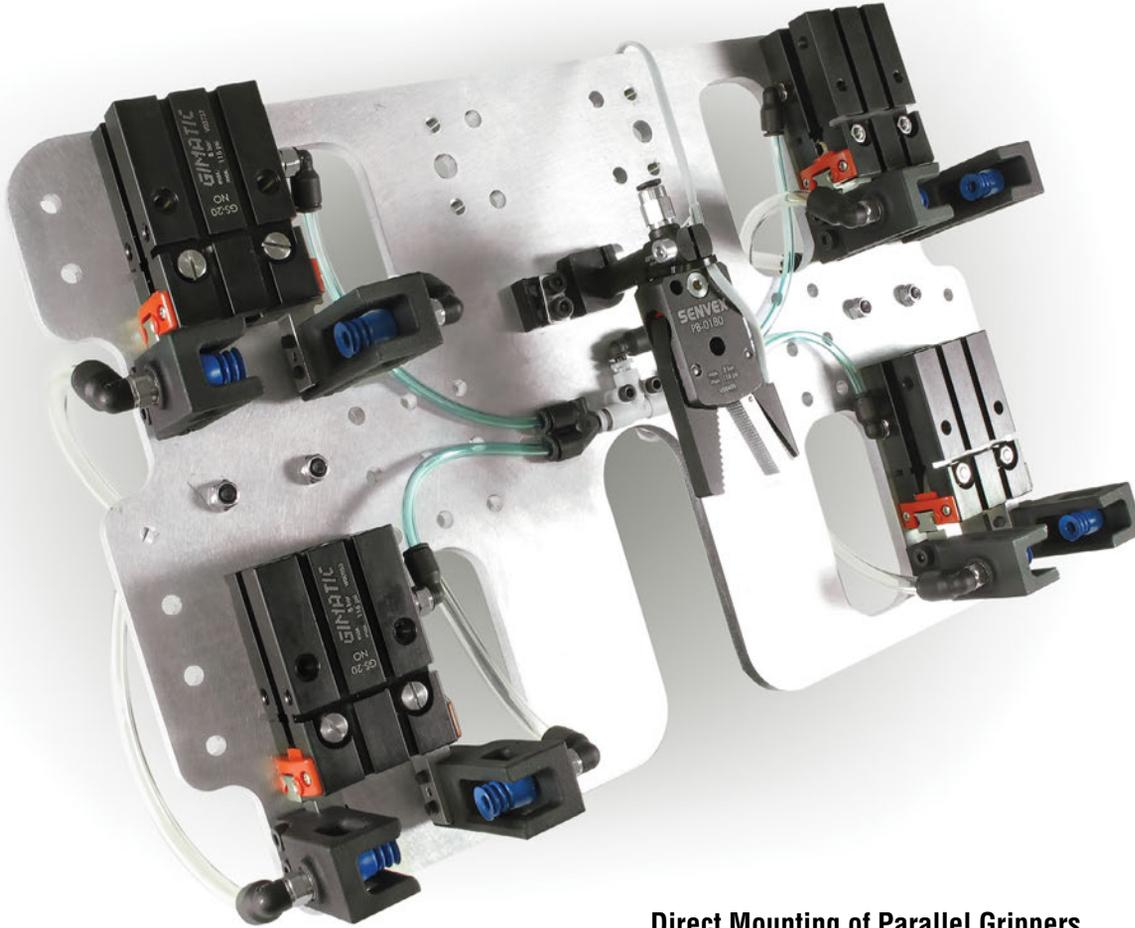


Plate-Based EOAT Examples



Direct Mounting of Parallel Grippers

Grippers are easy to mount on Flat-Plate EOAT's with as much or little adjustability as you need.

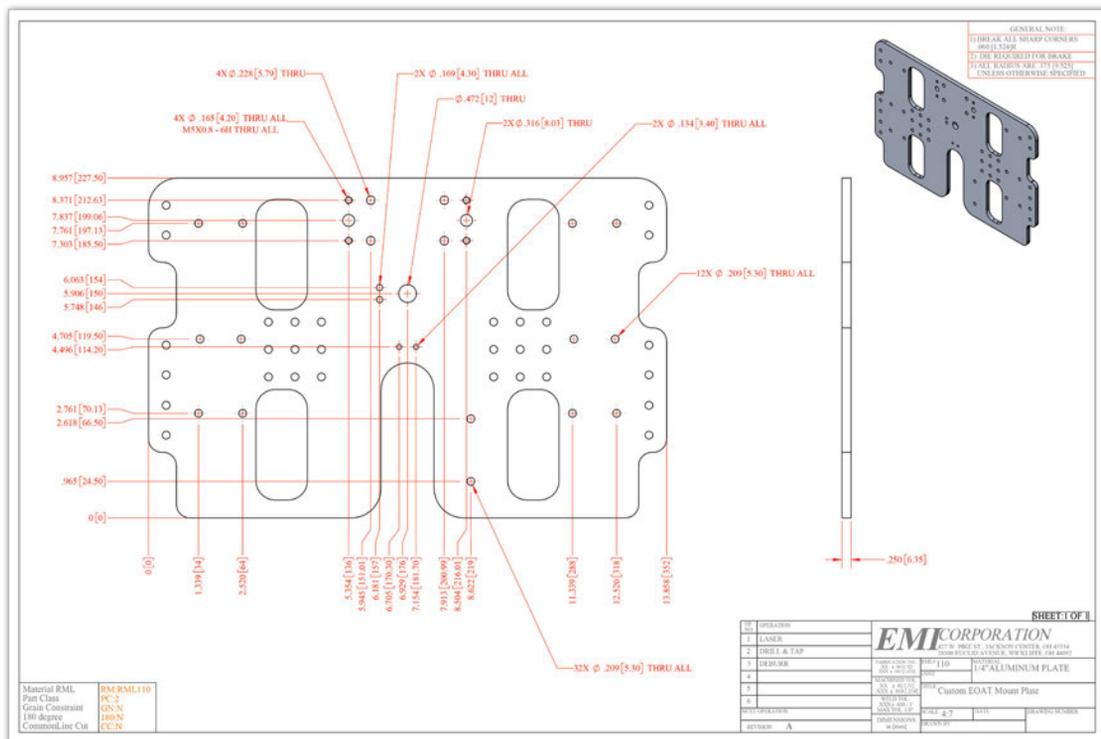


Plate-Based EOAT Examples

Ideal for Multi-Cavity Molds with 3D Printed Nests

A key advantage of laser-cut flat-plate tooling for multi cavity molds is precision positioning. It would be very difficult to assure precision positioning using profile and clamps for this EOAT.

