

# 3D Printing Service for EOAT

*Fast and Economical 3D Printing Service from EMI.*

*From 1 part to 100 parts, simple or complex, get the custom item you need for your EOAT from EMI.*

**Gripper fingers**



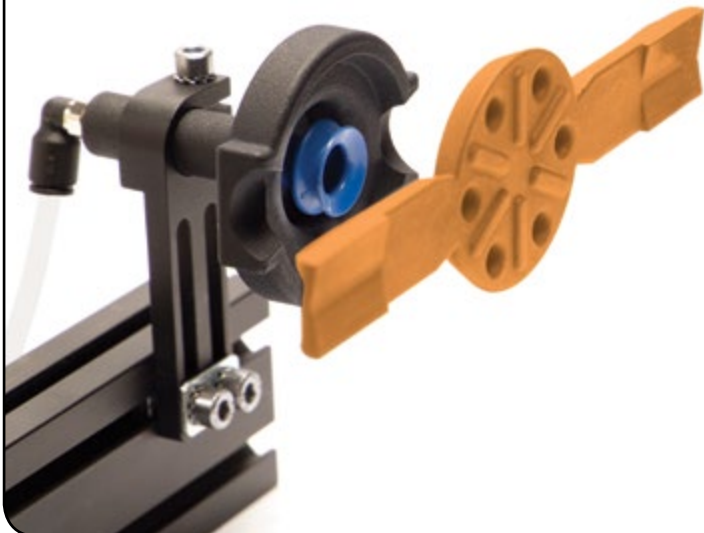
**Fingers with air ports for vacuum**



**Fingers with soft-touch HNBR pads**



**Parts Nests**



**EOAT Structure**



*From gripper fingers, to part nests, and complete EOAT structures, these 3D printed components perform tasks with excellent quality, speed, and precision.*

*Compared with machining end-of-arm components from aluminum or metal, 3D printing saves time and expense while producing lighter-weight part.*

*More information on back.*



Contact us to learn more about our 3D printing service:

**EMI Corp.**  
**216-535-4848**  
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**About EMI’s 3D Printing Service:**

EMI employs an HP Multi-Jet Fusion 4200. The MJF printer is a powder based machine that has the ability to print components in PA-12 (nylon) and provide functional components with isotropic mechanical properties. The nylon that our components are printed in is a suitable material for end-of-arm tooling in the injection molding industry. Heat deflection temperature gives a good look at the temperature that our parts can withstand, keeping in mind that these values are measured when the entire plastic sample is saturated at the tested temperature. Tensile strength and elongation values help quantify that the material is both strong and to some degree flexible, these are beneficial properties for gripper fingers that have to withstand many cycles and still retain their precision.

**Material Specs:**

Melting Point	187°C / 369°F
Part Density	1.01 g / cm <sup>3</sup>
Tensile strength, XY	48 MPa / 6960 psi
Tensile strength, Z	48 MPa / 6960 psi
Elongation at break, XY	20%
Elongation at break, Z	15%
Heat deflection temperature (@ 0.45 MPa, 66 psi), XY	175°C / 347°F
Heat deflection temperature (@ 0.45 MPa, 66 psi), Z	175°C / 347°F
Heat deflection temperature (@ 1.82 MPa, 264 psi), XY	95°C / 203°F
Heat deflection temperature (@ 1.82 MPa, 264 psi), Z	106°C / 223°F