

Pneumatic Gripper

for pickin-up and assembly the
behind the steering wheel
plastic screen protector

Solution

Another EOAT application designed to enhance Continental's manufacturing and assembly robotic systems, is the gripper used to pick up the speedometer needle from its blister, and position it into its final place on the vehicle's dashboard.

Prototype

The initial prototype was fabricated as a single part, and the gripper functionality was achieved by inflating the air pressure-driven fingers to perform the opening and closing actions. However, during testing, they observed that the gripper's closing was not 100% accurate or symmetric.



Final Part

Taking advantage of the AM design freedom, the 2nd iteration of the gripper's design incorporated an integrated guiding mechanism. This improvement allowed the gripper fingers to close accurately and uniformly.



3D Printer

 HP MJF 5200

Post-Processings

 Abrast - Sandblasting

Material

 HP - PA 12

Software

 Materialise - Magics