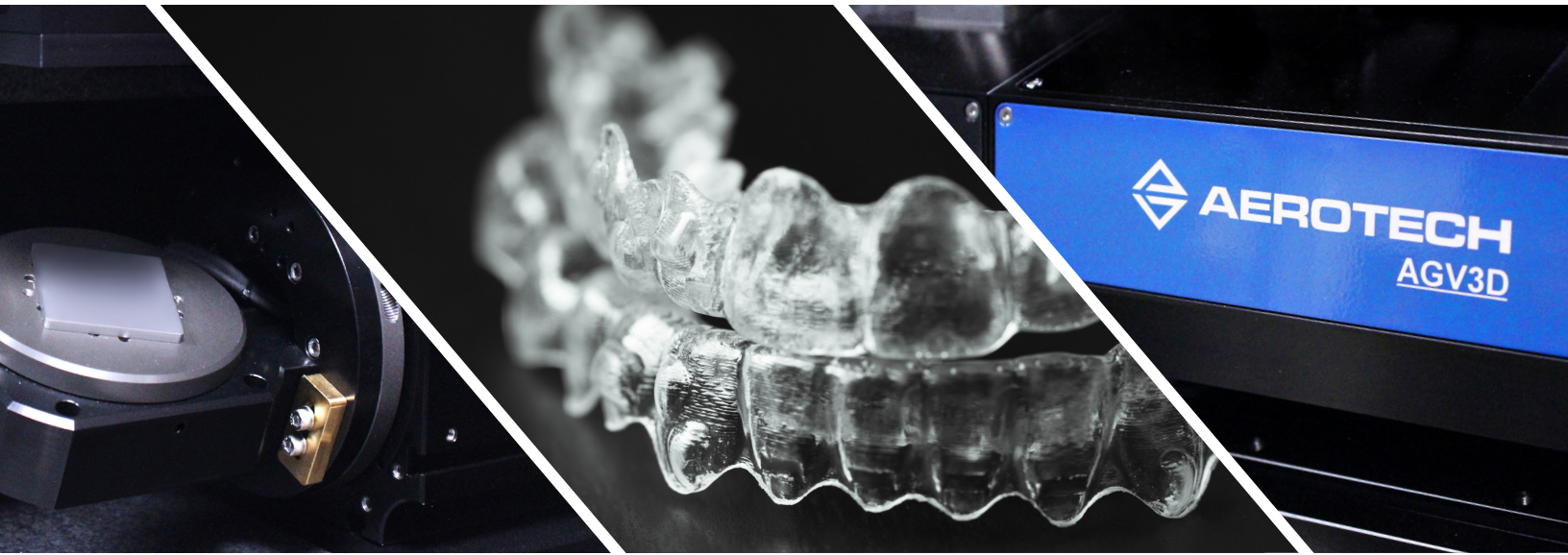




# Orthodontic Aligner Trimming

## Increased Throughput & High Precision When Performance is Vital

The orthodontic aligner market is booming. To stay competitive and keep up with demand, a major orthodontic aligner brand asked Aerotech to help them deliver high-quality personalized products at top speed.



### CHALLENGE

Create a motion system that would make it possible for an orthodontic aligner device manufacturer to accomplish all of the following at once:

- ◆ Produce the highest quality personalized aligners
- ◆ Increase production speed & throughput to meet high global demand
- ◆ Integrate the necessary data systems required to generate unique cut profiles

### SOLUTION

Aerotech's engineering team created a successful solution by:

- ◆ Working closely with the device manufacturer to map out their ideal manufacturing process from end to end
- ◆ Conceptualizing & producing a custom motion system that integrates with their business systems; part conveyance, robotic load & unload systems; & trim aligners at their desired rate
- ◆ Enabling the device manufacturer to streamline the ingestion of patient-specific data all the way through their manufacturing process—including unique RFID detection, part serialization & trimming—with very limited operator intervention



### LEARN MORE

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Aerotech's Automation1 motion control platform has the software and hardware power to manage a high volume of patient data and meet the market's throughput demands.

## High-performance Computing & Control Systems

Aerotech's Automation1 motion and control platform is open and flexible, so this customer easily integrated it into their operational software workflow. It's also powerful enough to execute all the control functions required to command part conveyance and robotic part load/unload, precision laser trimming operations and the marking and maintaining of unique parts.



Automation1 Motion Control Platform



Pre-engineered component solutions: ADRS, ADRT & AGV3D



## Your Application-specific Needs, Our Application-specific Solutions

Working closely with our customer, Aerotech custom configured a 3-axis laser scan head with a precision 2-axis rotary to trim aligners in record time. All motion was coordinated in the same control environment, enabling highly optimized part manufacturing.

## Worldwide Support

The customer needed fast, global system deployment to rapidly gain market share. To help make that possible, Aerotech provided customized user interfaces—complete with localized languages—and shipped roughly one system a week. When the systems were in production and the customer's needs changed, Aerotech global support was there—in every location—to support machine upgrades in the field.

