

# **Modular Automation for Assembling Audio Devices**

Increase capacity with predictable output by quickly automating error-prone repetitive assembly and inspection tasks on your audio devices assembly line. Bright Machines Microfactories leverage pre-built, production-ready hardware building blocks which can be easily programmed and operated using pre-integrated software.

### **Bright Machines Microfactory**



#### Benefits of using a Microfactory

- Produce more units per hour
- Reduce cost per unit
- Improve product quality

# Skills that are factory-ready



















Screwdriving

Pick and place part assembly

Heat sink insertion

DIMM card insertion

Bar code

Labeling

Soldering

Dispensing

Inline testing

#### Ideal for product assembly and inspection of audio devices











#### **Example: Soldering tinsel wires on speaker**

Audio devices contain speakers which during product assembly need to have tinsel wires soldered onto their leads. Bright Machines Microfactories can be fitted with an end of arm tool to automate the soldering and trimming of the tinsel wires. And machine vision inside the microfactory can be used to verify that the trimming of the tinsel wires was accomplished correctly. In a microfactory consisting of one Bright Robotic Cell, it's possible to solder and trim tinsel wires on 514 units per hour.





End of arm tool for automated soldering and trimming of tinsel wires

# **About Bright Machines**

Bright Machines was born out of the desire to help manufacturers effortlessly and autonomously build the next generation of smart electronic products. Our global team consists of leading experts in applied science, software, automation, process engineering and factory operations, with deep experience in computer vision, machine learning and adaptive robotics. Together we are re-imagining what manufacturing will be in the future, grounded in the reality that exists on today's factory floors. We're proud to have been recognized by Forbes as one of America's most promising AI companies, by CRN as a top 10 Robotics startup, by IOT Analytics as a top 10 IoT startup, and by World Economic Forum as a Technology Pioneer.

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