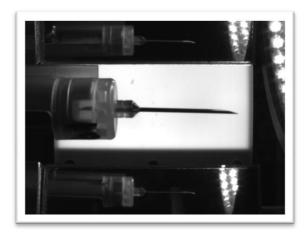


# **Leading Medical Utilities Manufacture Commissions Needle Assembly System**



## **Main Objective:**

The purpose of this project was to assemble a needle hub device.

#### **Customer Results:**

The assembly system was able to produce over 31 parts per minute. Production yields during final runoff of 94% yield and OEE of 91%, exceeding customer specifications

### Overview:

- The customer required an assembly line to manufacture a new needle hub assembly. The process required to assemble the device included the following steps:
  - Surface treatment of hub.
  - o Installation of cannula.
  - o Glue cannula base.
  - o Cure glue in UV oven.
  - o Lubricate cannula surface.
  - o Inspect assembly with machine vision station.
  - o Install cannula sheath.
    - Cannula sheath to be assembled offline by additional station.
    - Sheath install to include insertion of sheath plug in sheath tube to 0.001" tolerance.
- ❖ The customer required a production rate of 30 parts per minute with a yield of greater than 90% and an OEE of over 85%.
- The equipment designed and provided by Outbound Technologies consisted of an assembly line of (10) stations using pallets connected by a conveyor system and an offline sub-assembly indexing dial station with (6) stations.
- ❖ The stations performed the (7) steps as outlined previously in addition to load & unload stations and a part reject station. The offline station included (6) stations for dispensing sheath tubes, dispensing sheath plugs, LVDT verification of plug location, reject station, transfer to main line station and a spare station.

Every owner, manager, and key decision maker is an engineer. They have all been through the ranks and learned this business before they were given the responsibility to manage it. Diversity is also a key to our success. From a technical standpoint specific areas of expertise include: High Temperature applications, Automotive Paint Finishing, Pharmaceutical Automation, Web Handling Applications, Custom Software Solutions, and Safety. As a Systems Integrator, we are a 50/50 split between Continuous Process and Discrete Automation expertise.

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