

# PIN PRESS APPLICATION

## Challenge

A customer in the heavy truck industry needed to press multiple pins into a turbo charger at different heights and locations using one actuator. The challenge for the customer was finding technologies that can work seamlessly together with accuracy, location flexibility and enough force to press the pins, without having to manually handle the part multiple times and relocate. In addition, force and position data on each pin press was a requirement.

## Solution

In order to avoid the custom science project approach, our solution was the Promess Gantry paired with a 20kN EMAP press. The Promess UltraPRO controller was used as the control platform to support each axis. This allowed one common software and controller to be used, which resulted in a simple, seamless solution that the customer could easily understand and support. The Gantry matched with the 20kN EMAP allowed for precise X, Y and Z motion control and up to 20kN's of precision force control. In addition, these are standard product offerings from Promess, so no real customization was required, which made integration simple and fast.

### **Result:**

With this fully programmable multi-axis solution the customer was able to press multiple pins into a turbo charger without physically removing the product from the table. The precise control and programmability allowed all the pins to be pressed individually to their required specification, fast and accurately. The force/position data from each part was useful in determining the quality of the product each time.

This solution proved to be a faster process for the customer, simplified the process by adding simple automation and gave them the quality assurance that each part would be made identical to the next with data to prove it.

