

# Application

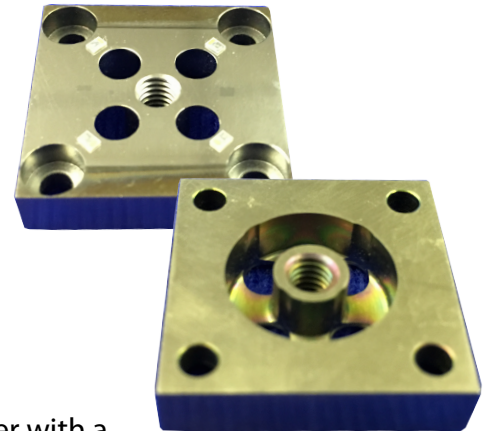
Market: Medical Device  
Product Line: Load Cells

## Birthing Simulator

**Application:** Simulator designed to train doctors the proper techniques to deliver babies under various birthing scenarios. Instructors demonstrate, and students practice the delivery of a baby model, with the primary function being to monitor the amount of force applied to the baby's head.

**Customer Challenge:** In need of a sensor to be placed in a model baby's head to detect the amount of traction force applied by students, then to be measured and plotted for various birthing scenarios. Users gain experience with both safe and excessive forces applied, the data then needs to be viewed during debriefing sessions.

**SMD Sensor Solution:** Strain Measurement Devices provided the customer with a **S415** load cell for the simulator, because of its low profile and high accuracy. Bluetooth wireless force monitoring is used on the Birthing Simulator to communicate and track the data. The **S415** load cell uses high technology sputtered thin film strain gauge to create a compact, rugged sensor with exceptional long-term stability. Available in a number of force ranges, providing a convenient means of monitoring forces for a wide range of situations.



### Related Products:

- S200 Load Cell
- S401 Stainless Steel Load Cell
- S402 Button Load Cell
- S415 Miniature Load Cell
- E110 Signal Conditioning Board
- E120 Signal Conditioning Board
- 4000 Panel Meter