## APPLICATION PROFILE

SURGICAL HAND TOOL -BIOPSY DEVICE

A vacuum-assisted breast biopsy, or VABB, is a newer option used by providers to test for breast cancer. In a VABB, an innovative, single insertion probe is utilized to collect tissue samples from the breast that are then checked for cancer; the tissue collected is from small lumps and lumps that are unable to be felt. The VABB differs from the traditional core needle biopsy, which involves several needle insertions through the skin.

A leading medical device manufacturer approached Portescap to replace the existing motor driving the needle mechanism in its biopsy device. Due to the sensitive nature of this procedure, a motor and gearbox characterized by reduced noise and a more compact design were requested. Portescap engineers met the customer's requirements by designing a custom configuration of the B0512N brushless DC slotted SMS motor with gearhead. This custom design decreased the motor gearbox noise by 62%, reduced the motor diameter from 16mm to 13mm and increased the torque output.

Motor Highlights

BOST 2M WITH CREATED TO

- Low noise
- Higher torque in smaller package
- Efficient and reliable
- Easily customizable
- Lighter weight

**Portescap**