

Surgeons want better, SMARTer tools

2018 AAOS Annual Meeting Report

The America Academy of Orthopaedic Surgeons Annual Meeting - “*the world’s largest meeting of orthopaedic surgeons, researchers and allied health professionals*” – took place March 5-10 at the New Orleans Convention Center. The Meeting is where industry and healthcare providers meet to improve patient care.

The core mission of this impressive meeting is to provide continuing medical education to surgeons with exposures to new technology. SMD leadership strongly believes that education is the best way to change practices and when a better option for providing safer, smarter surgery is presented to surgeons they will adopt it to best serve their patients. SMD is a data driven company about improving lives for patients and healthcare providers.

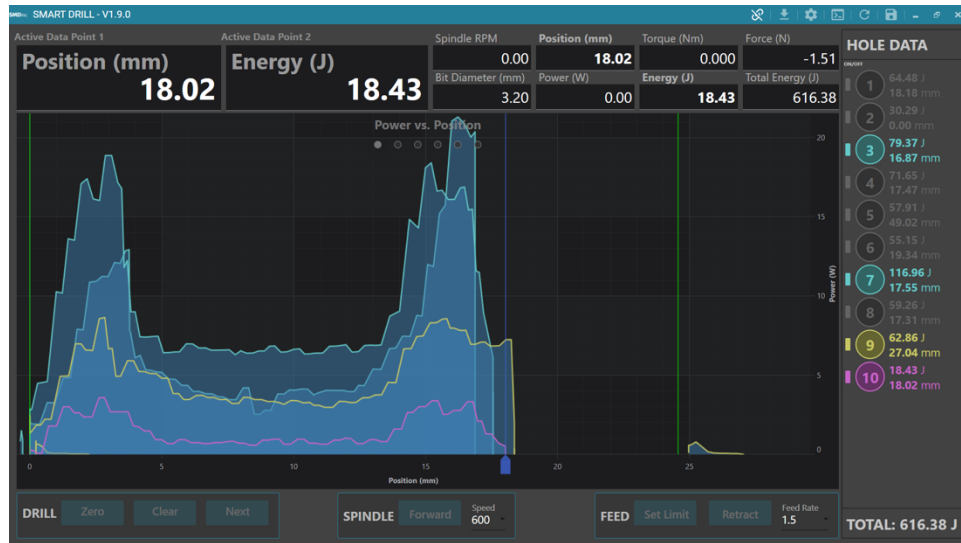
12,900 attendees enjoyed what New Orleans had to offer. 354 attendees passed through the SMD SMARTlab. Forty surgeons completed our survey. ***82% of those that completed the survey wished to be contacted by SMD when SMARTdrill comes to market*** which is very promising for early surgeon adoption of SMD technology. For three years SMD has polled surgeons at the annual AAOS meeting. From these 22 questions SMD’s Clinical Advisory Board (CAB) has validated the need for SMD technology in surgery. From the polls it’s clear surgeons want safer, smarter tools that provide data, or actionable intelligence affording them better choices for their patients.

Our 2018 AAOS surgeon survey revealed that surgeons aren’t given basic performance of the drill bits they use and lack industry support in objectively quantifying intraoperative drilling performance. Not knowing drill bit performance could lead to injury with high drilling temperatures to the bone and plunge events from dull, clogged, or poorly performing drill bits. Over 90 % of Surgeons polled would like to know the bone density and pullout strength of bone anchors. Possibly why 82% wished to be contacted when SMARTdrill comes to market.

Specifically, our survey revealed:

1. 83% thought that some nonmedical drill bits perform better than orthopedic production drill bits
2. Only 18% thought that manufacturers provided them with performance data on their drill bits
3. Only 18% thought that manufacturers could tell them when their drill bits are performing within specifications
4. 93% of surgeons would like to know real time bone density during drilling
5. 90% of surgeons if available, would use an intra-operative test to ensure the drill bit falls within manufacturers specification.
6. 88% of surgeons would like to know real time drill bit performance data during surgery
7. 97% would like to know the real time pullout strength of soft tissue anchors during surgery.

SMARTdrill co-inventors Dr. Wayne Anderson and Dr. Jack Perry demonstrated SMARTdrill to hundreds of surgeons to prove they can now operate with improved accuracy and safety. Thousands of holes drilled without a plunge. Even nurses that don't normally drill holes in bone tried the SMARTdrill and didn't plunge and seemed to easily interpret the Graphic user interface (GUI)(fig.1). Operating room personnel that visited SMARTlab liked the idea of using less radiation, less wasted time and implants while providing a higher level of safety for their patients.



The SMARTdrill provides the data that never before has been available. The SMARTdrill provides real time bone depth measurement, bone density, drill bit performance, screw pullout strength, total construct strength, and even prevents the plunge. The AAOS surgeons want performance data during surgery.

SMARTdrill is the tool that provides the data.

SMARTdrill is Data.