Powered surgical instrument

Powered surgical instruments include devices such as surgical lasers, electrosurgery devices and heavy cutting instruments..

The market has demonstrated significant technological innovations such as surgical robotics and a focus on minimally invasive procedures.

Time-saving innovations have been introduced with the adoption of powered tools. Key application areas include cranial, and spinal procedures.

Increased spending on health care, longer life expectancies and improving standards of living are the main drivers of growth in this market. Other factors include growing number of health care centers, increasing demand for outpatient surgery and an increasing preference for minimally invasive surgeries. Further, growing volumes of procedures that use powered surgical instruments such as spinal surgeries.

The demand for battery-powered surgical instruments providing remarkable freedom of movement to surgeons has increased the average cost of systems and fueled overall market expansion. In order to encourage equipment purchases, leading players in the market have been using innovative financial incentives, such as product bundling, no levying of charges on capital equipment as part of multi-year consumables contracts, etc.

Productivity and the quality of patient care in hospitals are largely affected by the choice of optimal devices and maintaining them in terms of cost efficiency. The economic crisis of 2008 and 2009 significantly affected the global market. Compliance with ever-tightening hospital budget constraints can be a restraint to the growth of this market. Hospitals usually opt for the purchase of instruments that can be used efficiently over a long period of time to help cut costs. High start-up costs, strict product regulations and need for highly-specialized technical knowledge are some of the challenges faced by this market. Issues regarding proper sterilization of surgical equipment in developing nation also pose significant challenges to this industry.

The market is characterized by extremely limited product differentiation. Hence the unique selling proposition (USP) of these products is pricing and branding.

Pneumatic high speed power system

Universal electric power system

Key vendors include

Anspach High Speed from DePuy Synthes

microspeed uni, HiLAN XS from B.Braun

Primado2 from NSK-Nakanishi

Synvasive, De Soutter Medical, Madrimed,

Stryker

Terumo Cardiovascular Systems, KOMET, Zeppelin Medical Instruments, Bien-Air Medical

Technologies, MicroAire Surgical Instruments, ConMed Linvatec, Brasseler USA, Vilex

Midas Rex Legend

OsteoMed, SoPlus and Triton Surgical Technologies among others.