

Medical Instrument Contract Manufacturing

Background

In the late 1980's many common medical surgical procedures were moving away from invasive techniques, and towards using Laparoscopic methods. These new surgical methods required a new class of hand held instruments needed for working through thin tubes as access to the surgical site. Advent Design was approached by an instrument manufacturer to design and produce three main classes of reusable instruments.



Product Description

Advent designed and produces three families of instruments in response to our customer's need.

Trocar and Cannula

The cannula is the port through which Laparoscopic surgery is performed. The Trocar is a companion device that is used to make the incision through which the cannula is inserted into the body. Advent developed a new cannula design that incorporated an automatic valve instead of the customary manual valve that had to be activated when inserting an instrument into the main opening. Advent produced cannulas and trocars in the following sizes:

5mm, 7mm, 8mm, 10mm, 11mm, 12mm

5mm Insulated Suction/Coagulation Probe

This handheld instrument is used for coagulating bleeding blood vessels while evacuating the smoke through a center suction channel. This instrument is produced in 3 tip styles – blunt, hook, and spatula. Advent still produces 100's of these instruments per year.

3mm Insulated Microtip Coagulation Probe

This instrument was developed specifically to work in conjunction with another of our customer's products that used an extremely small opening through which to conduct a procedure. Advent developed 12 different versions of this instrument, and currently produces about 300 instruments per year. This instrument is produced in 6 different tip styles – blunt, hook, spatula needle, knife, and right angle hook.

Impact

Initially, our customer was experiencing a 6 to 8-month lead-time to purchase many of these instruments from a small group of overseas suppliers. Advent designed and started production of the 5mm instruments and reduced the lead-time to 6 to 8 weeks. Since then Advent has designed and produced a variety of custom instruments, and has a successful 14 year production history.



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