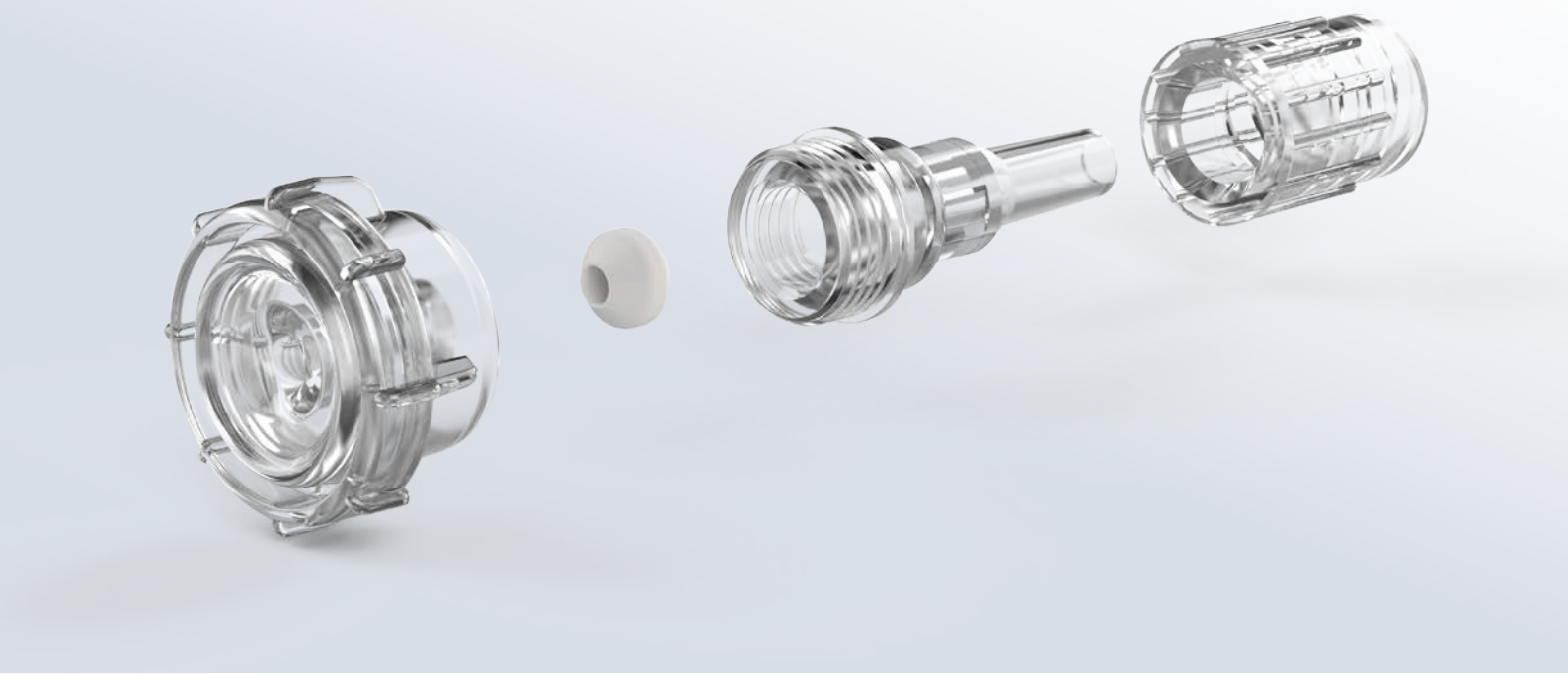
PROMEPLA

TUOHY BORST ADAPTER

CASE STUDY



CHALLENGE

Minimally invasive surgical procedures have multiple advantages over open surgery, including the need for smaller incisions, shorter recovery times and reduced pain and discomfort. Such minimally invasive procedures often involve endoscopy and the introduction of catheters through small incisions. For example, such minimally invasive procedures are used to address a wide variety of vascular problems, including atherosclerosis, aneurysms, varicose veins, vascular malformations, blood vessel blockage due to stroke, etc. Many of these treatment procedures involve the use of catheters, including, but not limited to, angioplasty with balloon-tipped catheters, vascular stenting, and embolization. The introduction of catheters and endoscopic devices pose the issue of the backflow of body fluids. Furthermore, some of these procedures require the simultaneous infusion of saline and the insertion of the catheter. These concerns are addressed using a Tuohy Borst adapter that allows the introduction of various devices of different girths and prevents backflow by forming a hermetic seal.

DESIGN

Tuohy Borst adapters are medical devices used for the advancement of catheters or optical fibers from 0 to 6 FR while preventing the backflow of body fluids. Tuohy Borst adapters form a leak-proof seal around instruments like catheters and optical fibers, making them suitable for a wide variety of interventional and diagnostic procedures. Promepla's Tuohy Borst adapter has a cylindrical shape, and the body of the adapter is manufactured from polycarbonate. The adapter is composed of 4 different components: a nut, connector, ring, and a seal. The rotating lock nut located on the proximal side is used for tightening the seal around the catheter or optical fiber and helps to secure the device position. The seal is composed of thermoplastic elastomer and the polycarbonate ring is capable of being deployed for static or dynamic applications. The elastomer seal prevents the backflow of fluid by rapidly forming a hermetic seal around the optical fiber or catheter. The adapter has a male Luer lock connector located on the distal end and a female Luer lock on the proximal end. The adapter is available both with and without a side port. The side port allows the infusion of solutions like saline along with the insertion of the catheter. All the Tuohy Borst adapters manufactured by Promepla can be sterilized using gamma irradiation and are single-use devices.

Promepla is a well-established OEM that specializes in single-use devices like the Tuohy Borst adapter. The Tuohy Borst is one of Promepla's best-selling devices with around 10,000 units produced every month. The entire manufacturing process, including the manufacture of the mold, injection molding and assembly, is conducted on-site by Promepla. This allows Promepla to offer customizable adapter designs for the desired medical applications. Promepla's Tuohy Borst adapters are designed to allow easy manipulation of the catheter without backflow of bodily fluids. The Tuohy Borst adapters are versatile and are commonly used in urology, angiography and to provide epidural anesthesia. The instrument that passes through the Tuohy Borst can be varied from an optic fiber, a catheter tipped with an angioplasty balloon, or a ureteroscope with an extraction basket to remove kidney stones.

Promepla is ISO9001 and ISO13485 certified and its quality control department is committed to maintaining the highest standards of safety for its products, and ensuring their reliability.

Le Copori
9, avenue Albert II • 98000 Monaco

Tel. +377 97 98 42 32
e-mail: contact@promepla.com
www.promepla.com