



IMPeek

IMPeek rods offer surgeons unique solutions to complex fractures

What if hitting the pin during a plate rod repair was a good thing?

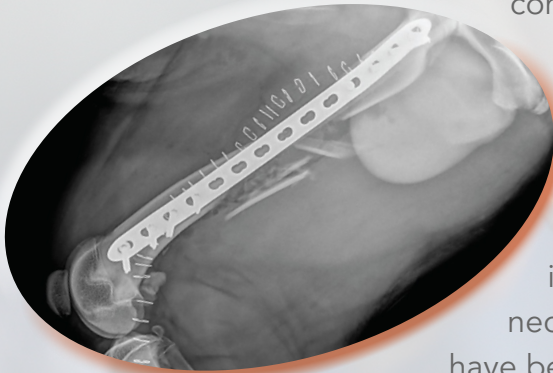
The addition of an intramedullary rod to a diaphyseal fracture repair imparts a huge mechanical advantage. In both plate rod

constructs and ESF repairs, the addition of an implant resisting bending, to the centre of the load bearing axis can improve the environment for bone healing and protect against implant failure.

However, the competition for territory between the intramedullary and cortical implants has, until now, always necessitated a compromise. Because of this, many studies have been undertaken to examine their interaction, including questioning appropriate intramedullary rod diameter and the effectiveness of monocortical screws.

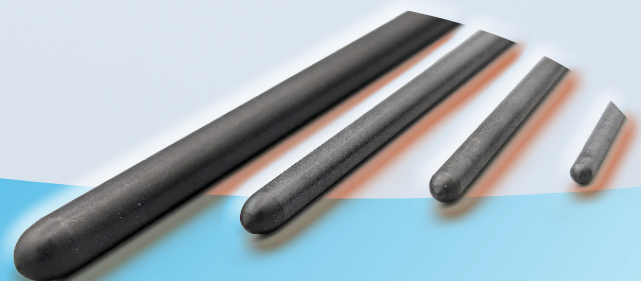
With IMPeek the largest possible rod diameter may be inserted. Screws or pins are placed where they are intended without the need to consider the position of the rod. If the IMPeek rod is in the way it can be drilled and screwed through to achieve bicortical fixation and a interlocking rod construct!

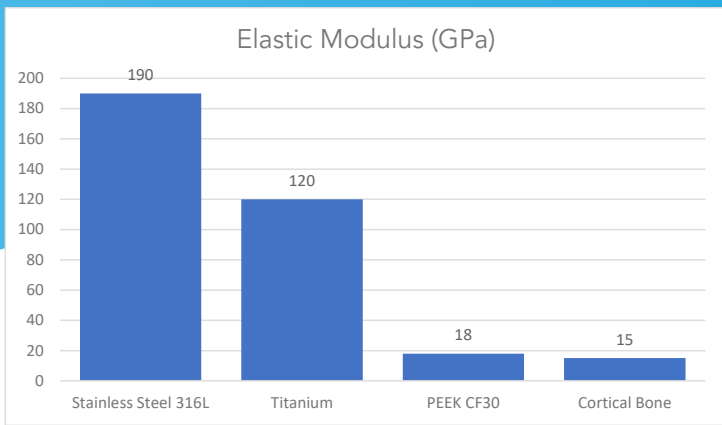
- Cuttable | Drillable | Screwable
- Bicortical Screws
- Interlocking
- Autoclavable
- Radiopaque



Carbon-Fibre PEEK Intramedullary Rods

Ordering Code	Product Description
CIMP2228	IMPeek Rod 2mm x 230mm
CIMP3228	IMPeek Rod 3mm x 230mm
CIMP4228	IMPeek Rod 4mm x 230mm
CIMP5304	IMPeek Rod 5mm x 305mm
CIMP6304	IMPeek Rod 6mm x 305mm





IMPeek

impeek.com

PEEK (Poly-Ether-Ether-Ketone) is a biocompatible, inert thermoplastic used in millions of implantable medical devices every year in humans and animals.

Carbon-fibre reinforced IMPeek rods have a modulus of elasticity and stiffness comparable to healthy cortical bone.

Easily differentiate the density of bone, metal and IMPeek on radiographic images, with minimal artefact on CT and MRI



BICORTICAL | LOCKING | INTERLOCKING

- The blunt tip design allows for distraction of the fracture.
- The IMPeek rod is flexible meaning over-reduction is less of an issue in long bones.
- The large rod is not an impediment for bicortical screw purchase.
- Cost effective, inexpensive rod, with no special equipment or aiming devices needed.

A biomechanical study by Beierer et al (Vet Surgery, 2014) found that LCP plate rod constructs with a 6mm PEEK rod (75% medullary fill) were significantly stiffer and stronger than constructs using a 2.4mm Steinmann pin (30-40% fill)

Mean (95%CI) Stiffness and Failure Load of 8 Paired Canine Tibia with a mid-diaphyseal 10mm Osteotomy Stabilized with a 3.5mm locking compression plate and a 6mm intramedullary PEEK-rod or a 2.4mm intramedullary Steinmann pin

Construct	Lateral-Medial Bending Stiffness (N/mm)	Cranial-Caudal Bending Stiffness (N/mm)	Torsional Stiffness (Nm/°)	Axial Stiffness (N/mm)	Failure (N)
PEEK-rod construct	567 (518-616)	763 (714-812)	0.532 (0.48-0.58)	604 (501-707)	1202 (1046-1358)
Steinmann pin construct	349 (272-425)	737 (705-769)	0.464 (0.42-0.51)	260 (88-433)	361 (361-387)
P-Value	<0.001	0.32	<0.031	<0.001	<0.001



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