

Surgical Driller

Pneumatic Surgical Drills

- A pneumatic surgical drill uses a pneumatic motor for its high-speed rotations. A pneumatic motor operates by expanding compressed air. Pneumatic surgical drills are commonly used for oral surgery and other dental procedures. The benefit of using this type of motor for a surgical drill is that it offers superior torque as compared to a battery-powered drill, and this makes it easier and faster to drill. This can mean less time under anesthesia and an overall safer experience.

Electric Surgical Drills

The main alternative to pneumatic surgical drills is electric surgical drills, which use an electric motor. Electric Drills generally use battery power, although they also may be plugged into wall sockets. An electric drill does not offer as much power as a pneumatic drill, but it can come at a lower cost than its pneumatic counterparts.

Type of Drill Bit , Description , Common Use

Standard

- Helix edge with solid center
- Wide range of procedures that require general drilling

Cannulated

- Helix edge with hollow center
- Procedures that require the insertion of a wire or pin, including surgery on the anterior cruciate ligament

Calibrated

- Helix edge calibrated to check drill depth
- Wide range of procedures where soft tissue damage is a concern

Surgical Drill Attachments

- Drill bits of various shapes and sizes are the most commonly used drill accessories, but other attachments may also be useful when performing surgery. In some instances, drilling a hole is too simple for the type of surgery that needs to be performed, and a different type of drill attachment may be used.

Telescoping Drill Attachments

- A telescoping drill attachment can be made longer or shorter during the course of surgery. This makes it possible for the drill to be used in surgically tight spaces without creating a larger hole than is necessary. These types of drill attachments come in a variety of shapes, including angled attachments, curved attachments, and hooded attachments.

Footed Drill Attachments

- A footed drill attachment may also be referred to as a craniotome. It consists of a drill bit as well as a guard device. These types of drill attachments are mainly used when performing surgery on the skull. The guard is situated against the inner part of the skull and is used to keep the soft tissue and brain matter out of the way of the drill itself. This allows areas of the skull to be cut away without damaging delicate brain tissue. This is clearly an important drill attachment in cranial surgeries.