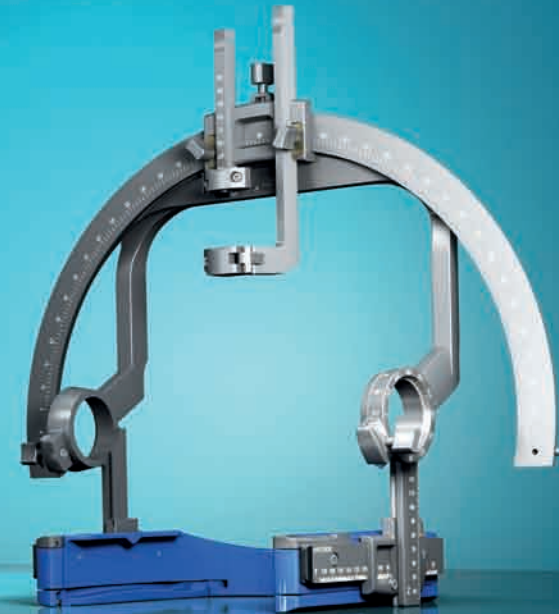


Leksell® Vantage™ Stereotactic System



Uncompromised accuracy
in neuroimaging and treatment



Helping clinicians
improve patients' lives.



Innovation built on strong foundations

Since the founding of our company by Lars Leksell more than 45 years ago, Elekta has delivered more than 1,800 stereotactic arc systems and more than 4,000 coordinate head frames to leading neurosurgical clinics around the world. The constant search for the very best treatments places new demands on the equipment used for these procedures.

The Leksell Vantage Stereotactic System, which builds on our strong principles and foundations, provides clinicians with another powerful and versatile tool to ensure a high level of user confidence and a greatly improved patient experience.

New non-metallic material in the head frame and accessories allow clinicians to see more anatomy without artifacts or distortion in imaging as well as shorten treatment times.

“The tools used by the surgeon must be adapted to the task and, where the human brain is concerned, they cannot be too refined.”

The late Professor Lars Leksell

Elekta Founder

1907-1986



Based on proven principles

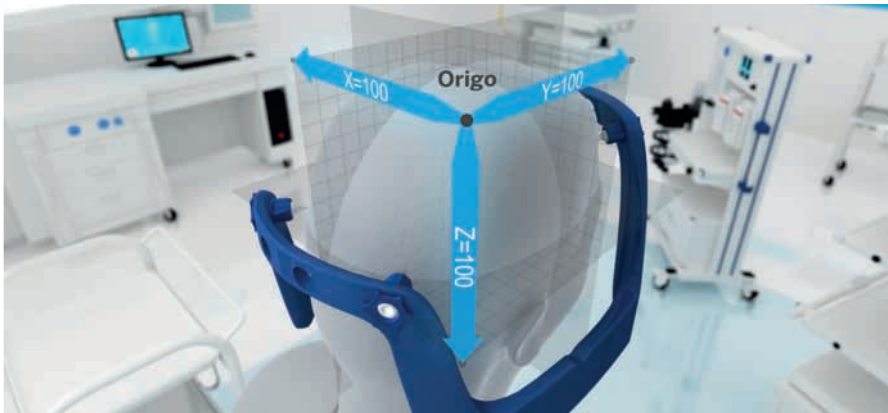
The Leksell Vantage Stereotactic System is based on the proven and well-known Leksell® coordinate system and center-of-arc principle. These principles are implemented in an even more intuitive and user-friendly workflow.

“Mounting the arc feels solid and robust—it is beautifully engineered!”

Dr. Ludvic Zrinzo

National Hospital of Neurology
and Neurosurgery
Queen Square, London, UK

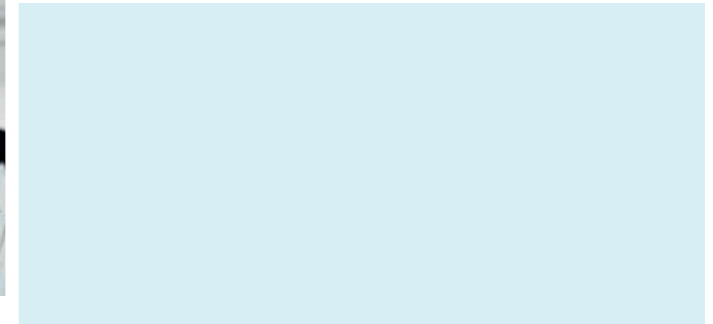




The proven Leksell coordinate system is applied to the Leksell Vantage head frame



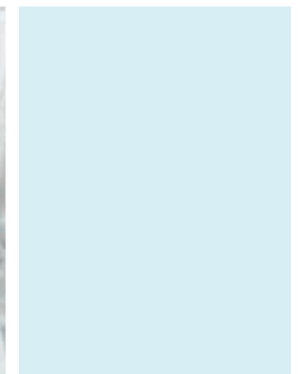
The intact sterile interface clearly separates the non-sterile head frame and its OR adapter from the sterile arc system



The system utilizes the established center-of-arc principle, for confidence in accuracy and ease of use



The click-on arc enables easy automatic docking to the rings of the Z-scales



Designed for excellence

Fewer components to keep track of during assembly helps shorten the time required to put it together and lessens the risk of losing parts during cleaning and sterilization.

The system consists of three key elements:

- 1. Leksell Vantage head frame**
- 2. MR accessories**
- 3. Leksell® Vantage™ Arc System**



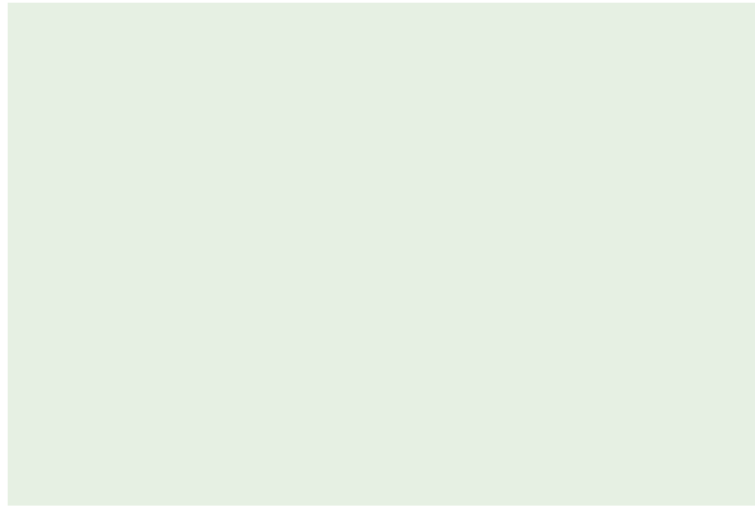
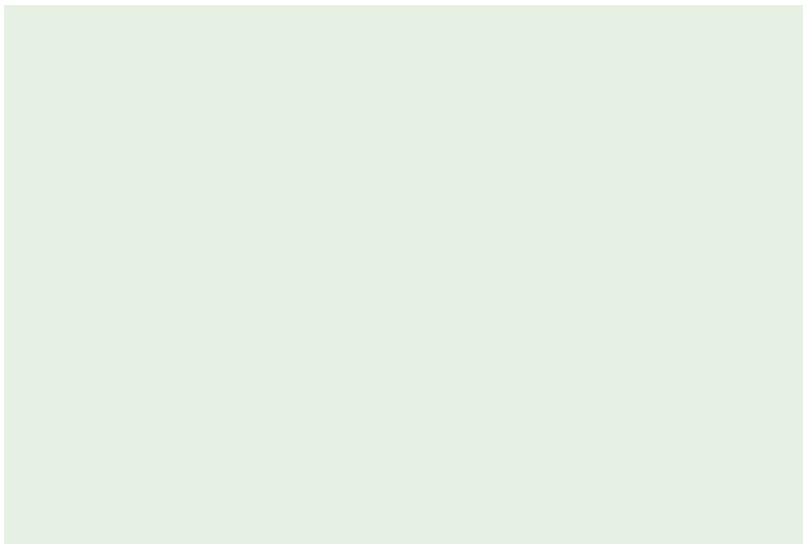
Leksell Vantage head frame

The Leksell Vantage head frame has an open-face design and is non-metallic, made of glass fiber reinforced epoxy. The innovative design makes it patient friendly and easy to use. Presterilized, disposable FirmFix™ head fixing pins are provided so the head frame can be fitted to different head shapes and sizes.

The frame is easily positioned with a new biocompatible and comfort-supporting Velcro band.



Head frame with Velcro band



FirmFix lengths and ruler

Designed
for excellence



MR accessories

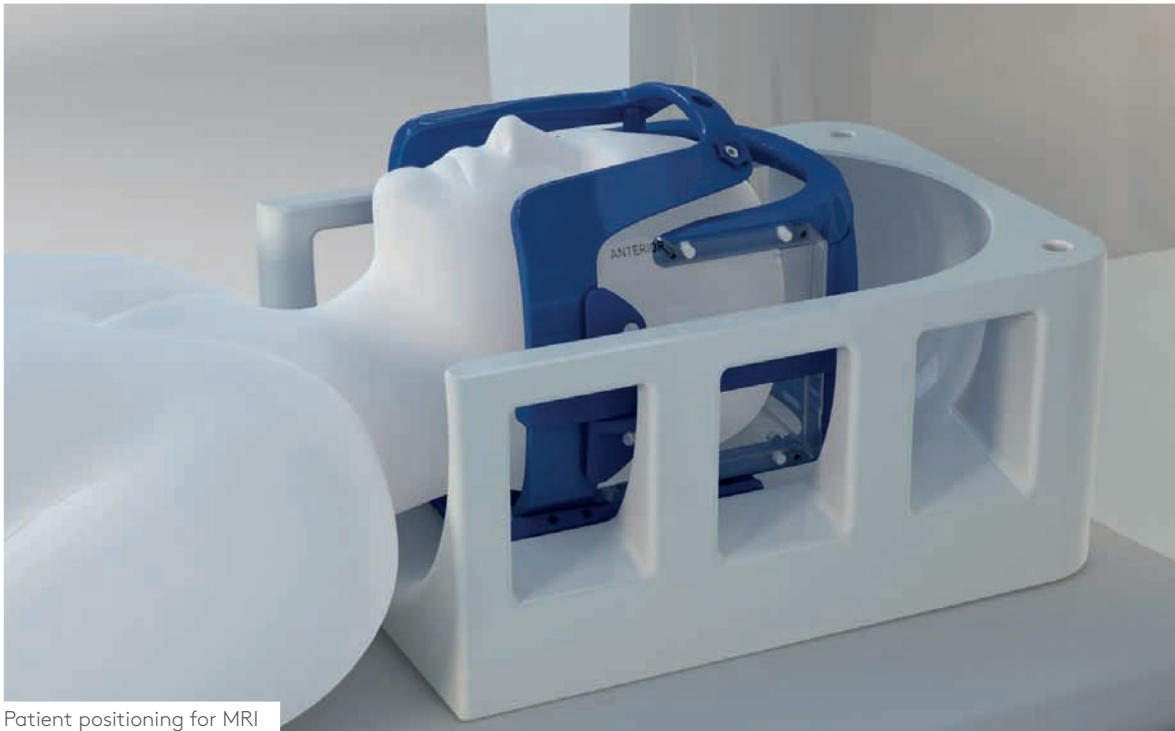
New user-friendly MR accessories and PEEK polymer fixation pins with a small aluminium tip provide fiducial-based MR imaging with fewer restrictions. This removes the occurrence of magnetically induced radio frequency heating during imaging. The MR accessories set includes a fiducial box and four coil adapters with different shapes.

The new MR accessories give the potential for higher resolution 3D stereotactic neuro imaging, visualizing more of the clinically relevant anatomy e.g. by potentially fitting inside multichannel coils.

MR conditional. A patient can be safely scanned in an MR system meeting the following conditions:

- Static magnetic field of 1.5 T and 3.0 T

No deflection, heating and artifact was observed during testing.



Patient positioning for MRI



Coil adapters



Frame with fiducial box



Frame with coil adapters

Designed
for excellence

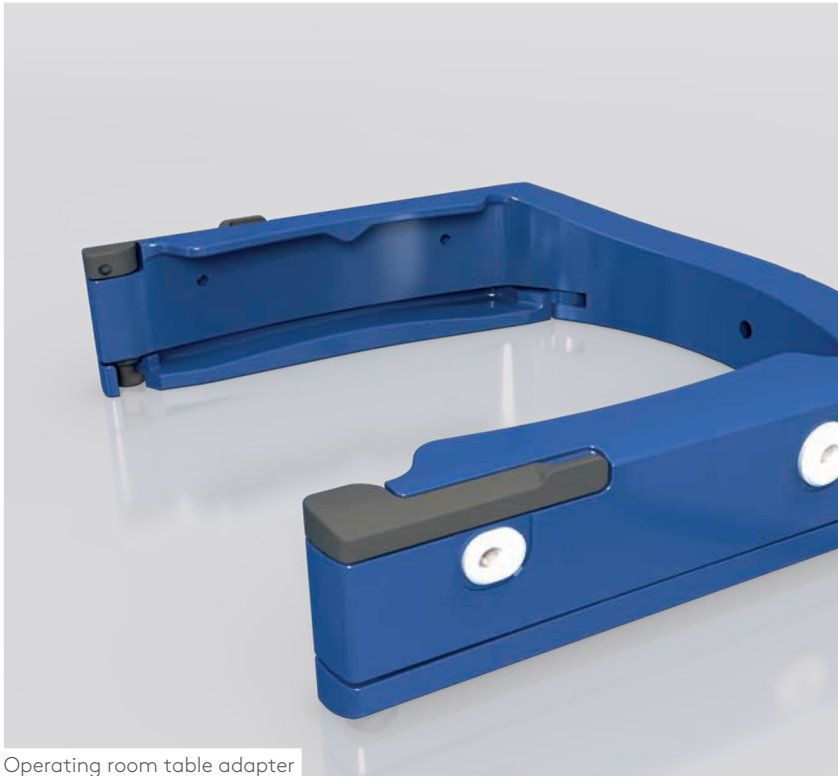


Leksell Vantage Arc System

The new Leksell Vantage Arc System is made of aluminum and has an elegant click-on mechanism for confidence and control during surgery. The X-scale is easily visible on the back and front of the arc, allowing for a smooth setting and use of the X-coordinate during surgical procedures. Vernier scales are added in the new design of arc and arc supports, enabling setting of target coordinates at decimal digits.

The new design placing all X-, Y-, and Z-scales sterile outside of draping enables smooth coordinate changes during procedures.

During surgery, Leksell Vantage Stereotactic System is fixed to the operating table by the Operating Room Adapter, which is made of glass fiber laminate with glass fiber-reinforced polyamide details.



Operating room table adapter



The X-scale is visible both on the front and back of the arc



Vernier Scales

“The Vernier scales provide extra clarity and precision”

Dr. Ludvic Zrinzo

National Hospital of Neurology
and Neurosurgery
Queen Square, London, UK



Clinician control and confidence

The new Leksell Vantage Stereotactic System is designed to meet the most exacting demands of today's clinicians, enabling a smooth workflow and offering a broad range of benefits.

- **Intuitive and user-friendly:** integrating proven and trusted Leksell principles with intuitive setup and operation make the system easy to use
- **Greater overall control:** reduced artifact and distortion in stereotactic images together with workflow enhancements support clinician confidence
- **Shorter treatment times:** easy to set up and operate means MR imaging can be done in a shorter time frame



Treatment planning

Metal-free head frame and PEEK polymer fixation pins with a small aluminium tip enable MR imaging so clinicians can see more clinically relevant anatomy and vasculature during treatment planning.



Reduced time

Fewer pieces enable shorter assembly times and reduced risk of losing parts during cleaning and sterilization. Non-metallic properties support reduced MR imaging time.



Click-on arc

The well-engineered and fast arc docking system is efficient and reduces the risk of human-induced forces applied to the arc.



Flexibility

The frame is suitable for some multichannel neuro head coils, allowing clinicians additional flexibility and confidence.



Open-face design

Patient facial expressions are continuously visible and airways are accessible should intubation be required.



Easily visible X-scale

Clearly visible on the back and front of the arc, setting and use of the X-coordinate during surgical procedures is easy, offering control and confidence.



Less distortion

No material induced limitations in 1,5 and 3 Tesla imaging enabling less distortion in MRI and higher signal-to-noise ratio by using more powerful MR sequences.



No sterilization needed outside of draping

In the operating room, the sterile interface is secured by the draping and the disposable pins are delivered sterile.

In addition, the setting of the X-, Y-, and Z-scales is done outside of the draping, enabling smooth coordinate changes during procedures.

“Lars Leksell would have liked this.”

**Professor Emeritus
Björn Meyerson**

Karolinska University Hospital
Stockholm, Sweden

Patient comfort and reassurance

The new Leksell Vantage Stereotactic System was designed keeping the needs and treatment experience of the patient in mind.



Setup

Easy mounting of the frame on the patient's head supports a positive patient experience



Treatment time

Fewer frame components with easier assembly and disassembly support shorter overall treatment times



Comfort

New smaller adapters support patient comfort



Reassurance

Open-face design exposes the patient's eyes, nose and mouth for unrestricted visibility and access



Compatibility supports seamless integration

Leksell Vantage Stereotactic System is fully compatible with Elekta neurosurgical instruments.

1. Injection/Aspiration needle kit

The kit contains a set of neurosurgical instruments designed for injection as well as for diagnostic and therapeutic punctures, aspirations and evacuations. The cannula is equipped with a Luer lock connector to accommodate the use of auxiliary components.

2. Biopsies

Leksell Vantage Stereotactic System provides the neurosurgeon with reusable and disposable biopsy instrumentation.

3. DBS implantations

A variety of instruments are available for DBS electrode implantation. The Elekta MicroDrive™ provides exact positioning of electrodes in the brain when performing Micro Electrode Recording (MER), macrostimulation and lead electrode implantation.

4. Insertion cannula kit

The insertion cannula kit is designed to obtain safe, accurate guidance of implants, electrodes or catheters using stereotactic technique. A stylet is used to seal the inner cannula during insertion in the patient's brain.

5. Salzman Twist Drill kit

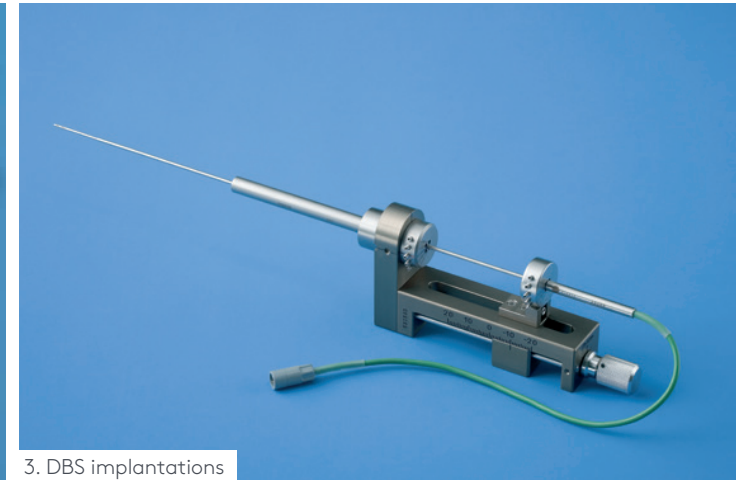
The Salzman Twist Drill kit enables the surgeon to place a twist drill hole with a suitable diameter at a predetermined place and angle. This may be useful for taking multiple biopsies from different targets in one trajectory, electrode implantation in a specific pattern, etc.



1. Injection/Aspiration needle kit



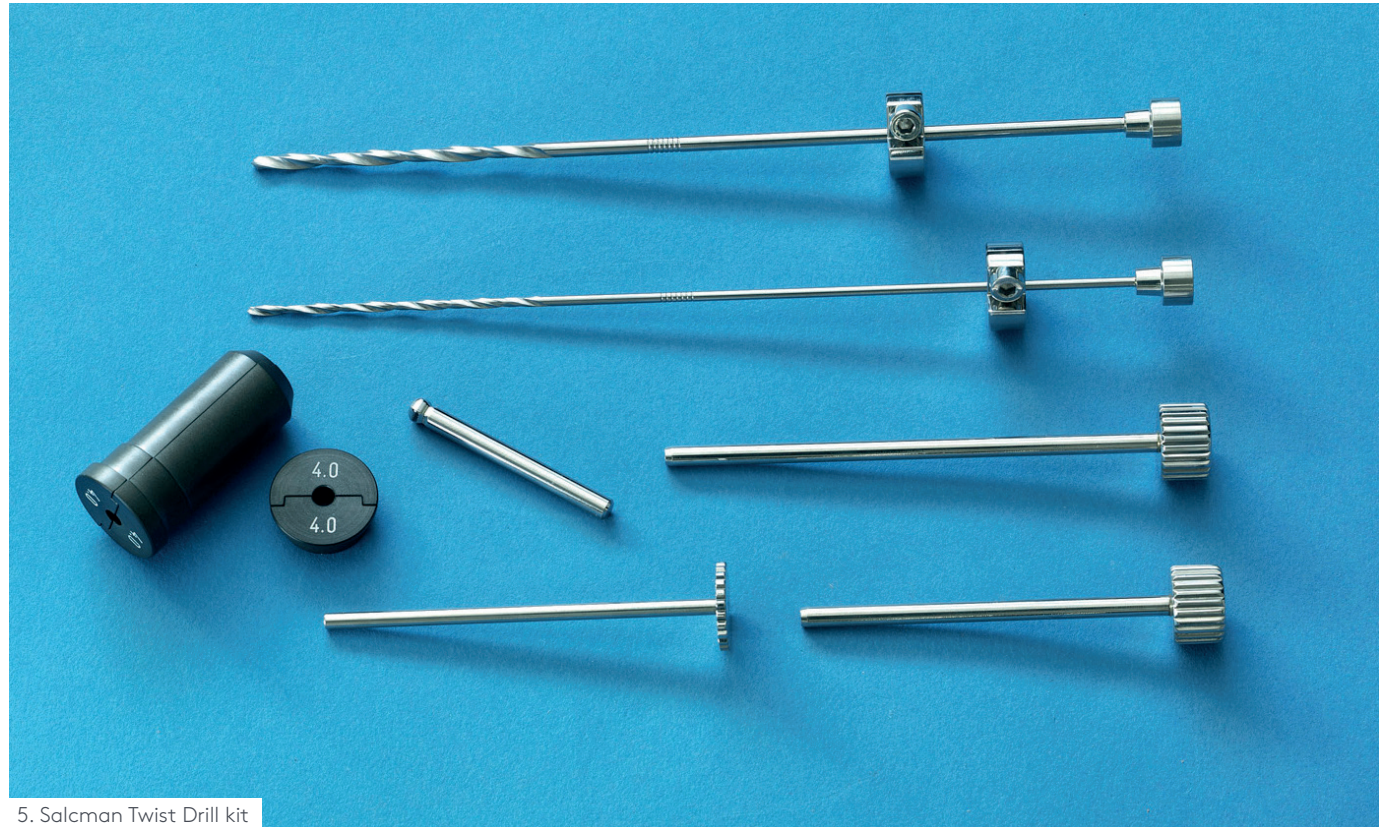
2. Biopsies



3. DBS implantations

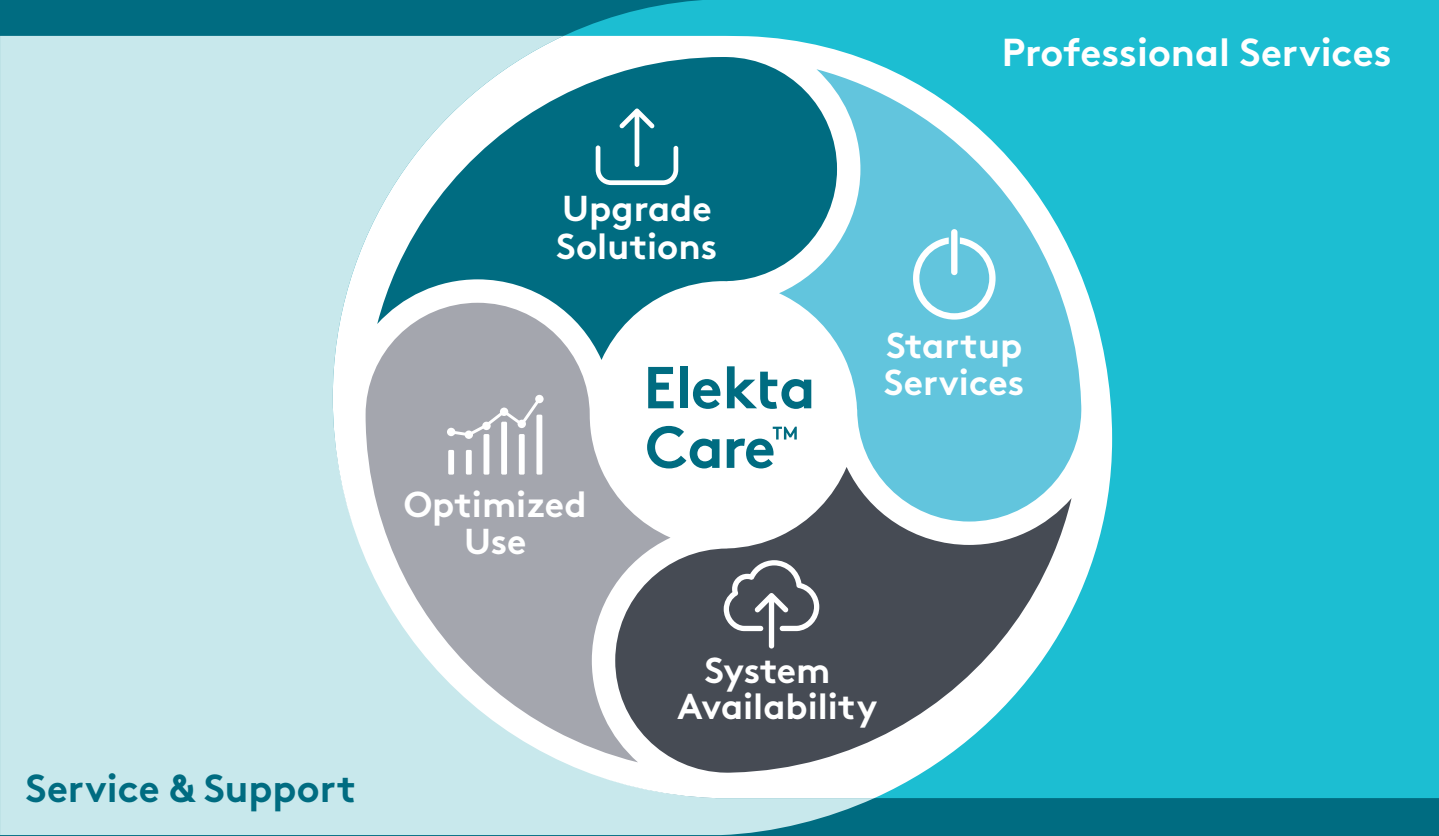


4. Insertion cannula kit



5. Salcman Twist Drill kit

Elekta Care™ supports you from startup through your product's lifecycle with comprehensive options from education, training and upgrades to solutions allowing you the highest uptime and improved operational efficiency.



**We are healthcare technology innovators,
specializing in radiotherapy treatments
for cancer and brain disorders.**

**We help clinicians to improve patients' lives
through our forward-thinking treatment
solutions and oncology informatics,
creating focus where it matters to achieve
better outcomes.**



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