"I have used many different navigation systems over the years and have found the Stryker Navigation System to be the most superior in three critical elements essential for neuronavigation: reliability, accuracy, and minimization of line-of-sight blockout."

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The information presented in this guide is intended to demonstrate the breadth of Stryker product offerings. Products may not be available in all markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

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Optional Features

Microscope Integration
- Compatible with microscopes from major manufacturers
- Zeiss, Toa, and a few others
- Laser 395M/520M Dual imaging

Frameless Guiding System (FGS)
- The Stryker Navigation System can be used to guide frameless procedures
- Works with major manufacturers of frameless systems
- Works with major manufacturers of frameless systems including: Zeiss, Toa, and others

Skull Post Kit
- The Skull Post Kit is designed to support the navigation of a patient tracker in the skull and can be used in a variety of procedures
- Works with a wide range of frameless systems

Integrated, Intuitive Software and Hardware Solutions

Software and Hardware Solutions:

Parts List

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<td>Long Pointer</td>
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<td>6001-390-000</td>
<td>Communication Unit</td>
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</tbody>
</table>
Stryker Technology

The Stryker Navigation system has a digital camera system that is designed and manufactured by Stryker. The accurate and reliable digital camera gives users extraordinary control of the software in the sterile field.

- **Digital interface for maximum accuracy and reliability.**
- A large field of view for tracking the patient and instrument validity.
- Allows set-up and patient positioning flexibility in the OR.
- Two-way communication between the camera and the instruments.
- High control of design and quality.

Stryker Smart Instrumentation

Stryker Navigation’s unique two-way communication between the computer and the instruments provides multiple benefits in the OR.

- Instrumentation developed specifically for image-guided surgery.
- Active tracking (LED based) for higher accuracy.
- Two-way communication between the instrument and the system enables the surgeon to control the software remotely (from the OR console).
- No additional personnel are needed to run the system.
- No additional peripheral input devices such as touch screens or footswitches.
- Stryker Navigation’s instruments are fully autoclavable.

Stryker Software

The software is the interface that links the surgeon to the navigation system. Stryker Navigation’s software engineers have years of experience developing surgical planning software and have created a package that is designed to be versatile and user friendly.

- Windows operating system.
- Familiar, easy to use interface.
- Modular system allows for easy upgrades.
- Advanced user interface.
- Advanced segmentation capabilities.
- Unique perspective view to see 3D image of patient anatomy.

Planning

Stryker offers many advanced features to increase the accuracy and functionality of the software. All surgical software suites is available for preparation, planning and navigation for the individual patient. This system can import multiple image sets, including CT, CTA, MRI, MRA, fMR & PET scans, and automatically correlates each together to enhance visualization. Anatomic structures can be easily segmented to highlight specific areas of interest through an automatic segmentation. These segmentations can be stored in a composition and viewed during navigation to highlight these areas. Specific targets and approaches can be planned prior to surgery with the software and used during surgery for guidance to a particular area.

- **Automatic Image Fusion**
- **Automatic Segmentation**
- **Functional Atlas**
- **Target Planning**

Registration

The Stryker Navigation System is designed to simplify the registration process by offering an intuitive and unique registration options including an autoregistration option, allowing the surgeon to perform registration with a surface matching feature.

- All registration functions are accomplished using the feature which provide full software control from within the sterile field.
- You choose the registration schemes
  - **Mask Registration** (fiducials no image add ons)
  - **Point Registration** (using fiducials or anatomic landmarks)
  - **Mask Registration & Stryker Matching** (fiducials no image add ons)
  - **Point Registration & Surface Matching** (using fiducials or anatomic landmarks)

Navigation

The surgeon can control the advanced navigation features and view from the sterile field using the Pointer or Shunt Placement Tool. Stryker Navigation is committed to delivering the most accurate navigation system to our customers. Every aspect of design and manufacture is meticulously monitored to ensure that you get the most accurate and reliable navigation system available.

Review

Review surgical information for preoperative review and analysis.

- **“Snapshots”** capability allows surgeons to take screenshots of specific highlights during a case.
- These images are available for surgeon review and archiving postoperatively.

Stryker has been engaged in neurosurgical navigation since 2000 and continues to change the market with innovative designs including the Autoregistration Mask and Shunt Placement Tool.