

Clinical Efficacy

"Recent years have demonstrated clear patient advantages to stabilization of skeletal injury with percutaneous techniques. Navigation has taken this clinically proven technique and made it easier, safer and more accurate. The ability to work with multiple images simultaneously reduces radiation exposure and is a benefit to all."

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Chairman, Department of Orthopaedic Surgery
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Joint Replacements

Trauma

Spine

Micro Implants

Orthobiologics

Instruments

Interventional Pain

Navigation

Endoscopy

Communications

Patient Handling Equipment

EMS Equipment

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Navigation

Navigation System Image Guided Surgery

Guiding Better Outcomes



Trauma



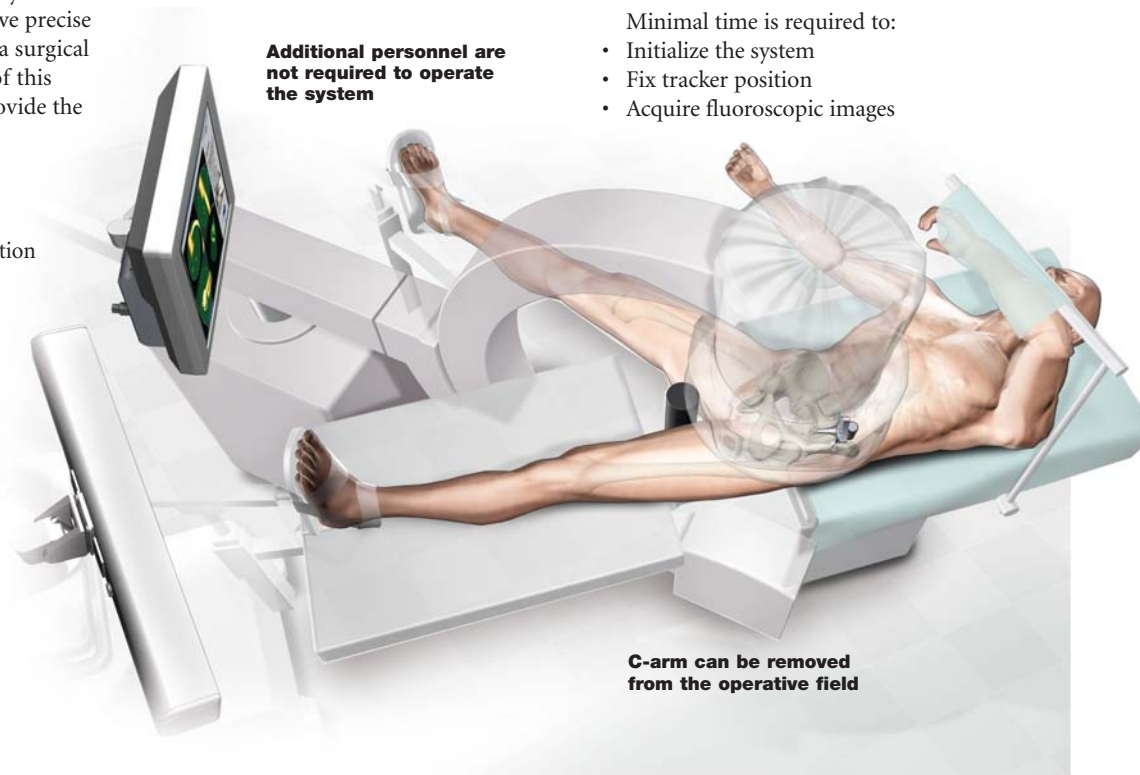
Trauma Navigation System

Simple, Accurate
and Reliable

Smart System

The Stryker® Trauma Navigation System was developed to help surgeons achieve precise implant placement during trauma surgical procedures. The initial benefits of this revolutionary new system can provide the user are:

- Consistent implant positioning through a smaller incision
- Minimized exposure of x-ray radiation to patient and OR staff
- Real-time navigation of basic trauma instrumentation on multiple fluoroscopic views



Additional personnel are not required to operate the system

Quick Set-Up Ready in no time...every time!

Minimal time is required to:

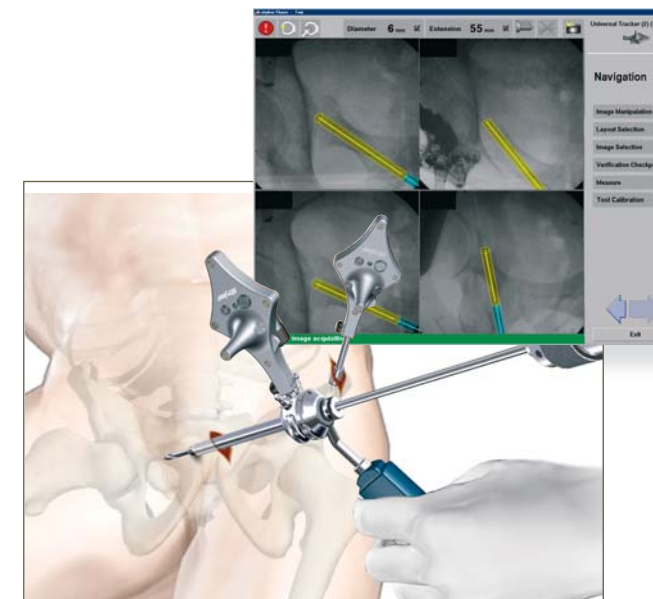
- Initialize the system
- Fix tracker position
- Acquire fluoroscopic images

C-arm can be removed from the operative field

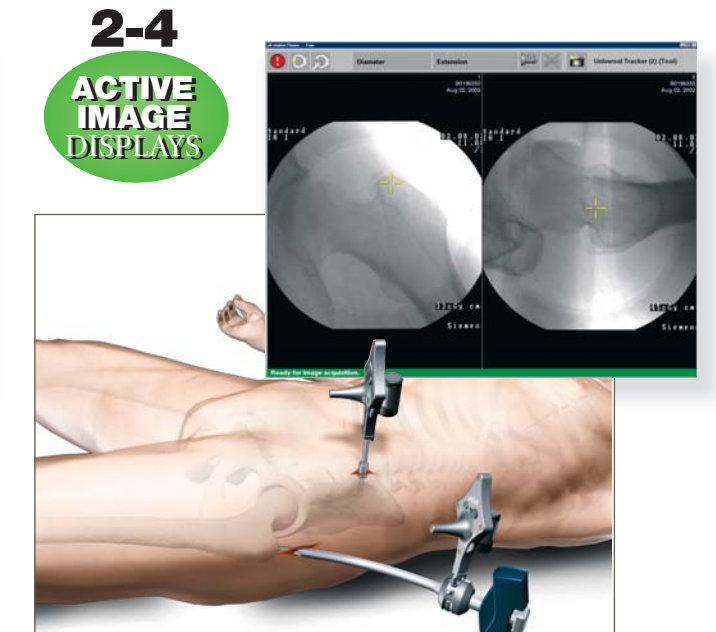
Real-time Navigation

The Tool Tracker is used to locate the position of the tip and axis of the tracked instrument. The tip and axis are both displayed in real-time on the fluoroscopic images. To assist with implant placement, the tip position and axis diameter can be adjusted to measure and reference the applied instrument/implant.

Navigated Trauma Applications



Screw placement for pelvic, femoral, and tibial fractures

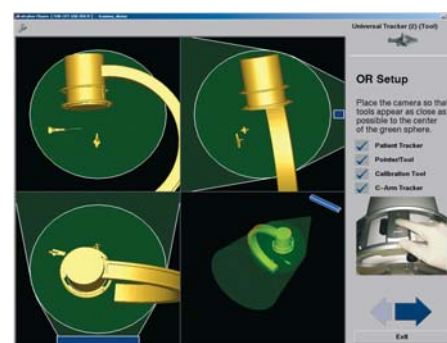


Entry point navigation for IM nails

Smart Instruments

The active wireless trackers utilize two-way communication with the computer system to accurately locate the navigated instrument. This active technology provides a user-friendly approach to navigation to assist with the surgical procedure. The following applications benefit most from navigation and are currently supported by the trauma system:

- Screw placement for pelvic, femoral, and tibial fractures
- Entry point navigation for IM nails
- Lag screw positioning
- Distal locking for IM nails



Fluoroscopy based application

Fluoroscopic Display

Image guided software can reduce x-ray radiation exposure by:

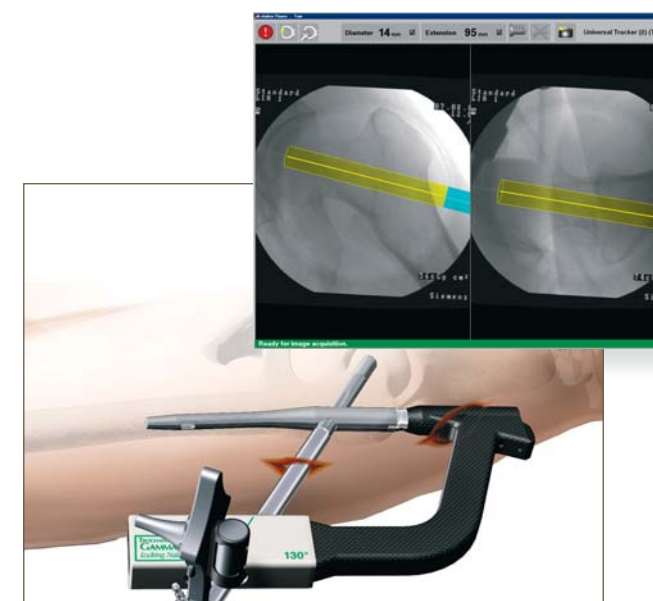
- Navigating c-arm to take more accurate images
- Using initial fluoroscopic images throughout the navigated application
- Up to four active navigation displays greatly improve visualization.



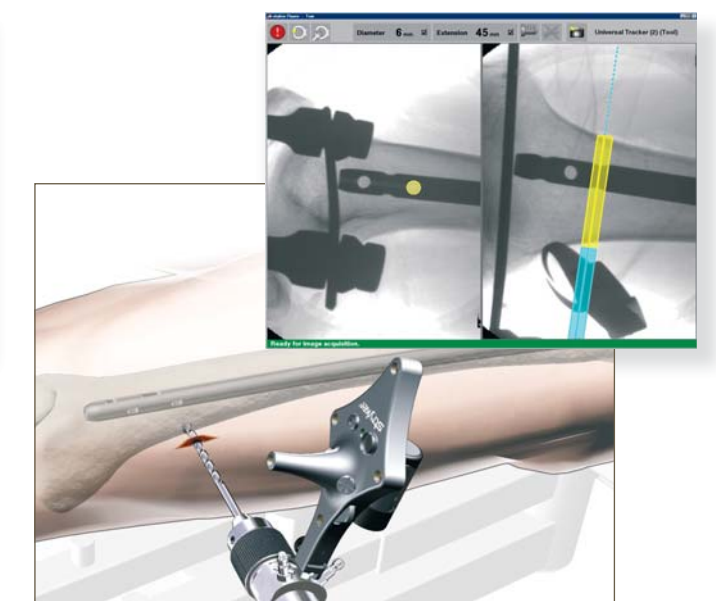
Confirmation of the navigated tip

Accuracy

Instrument calibration provides a precise image relation for all applications.



Lag Screw Positioning



Distal locking for IM nails