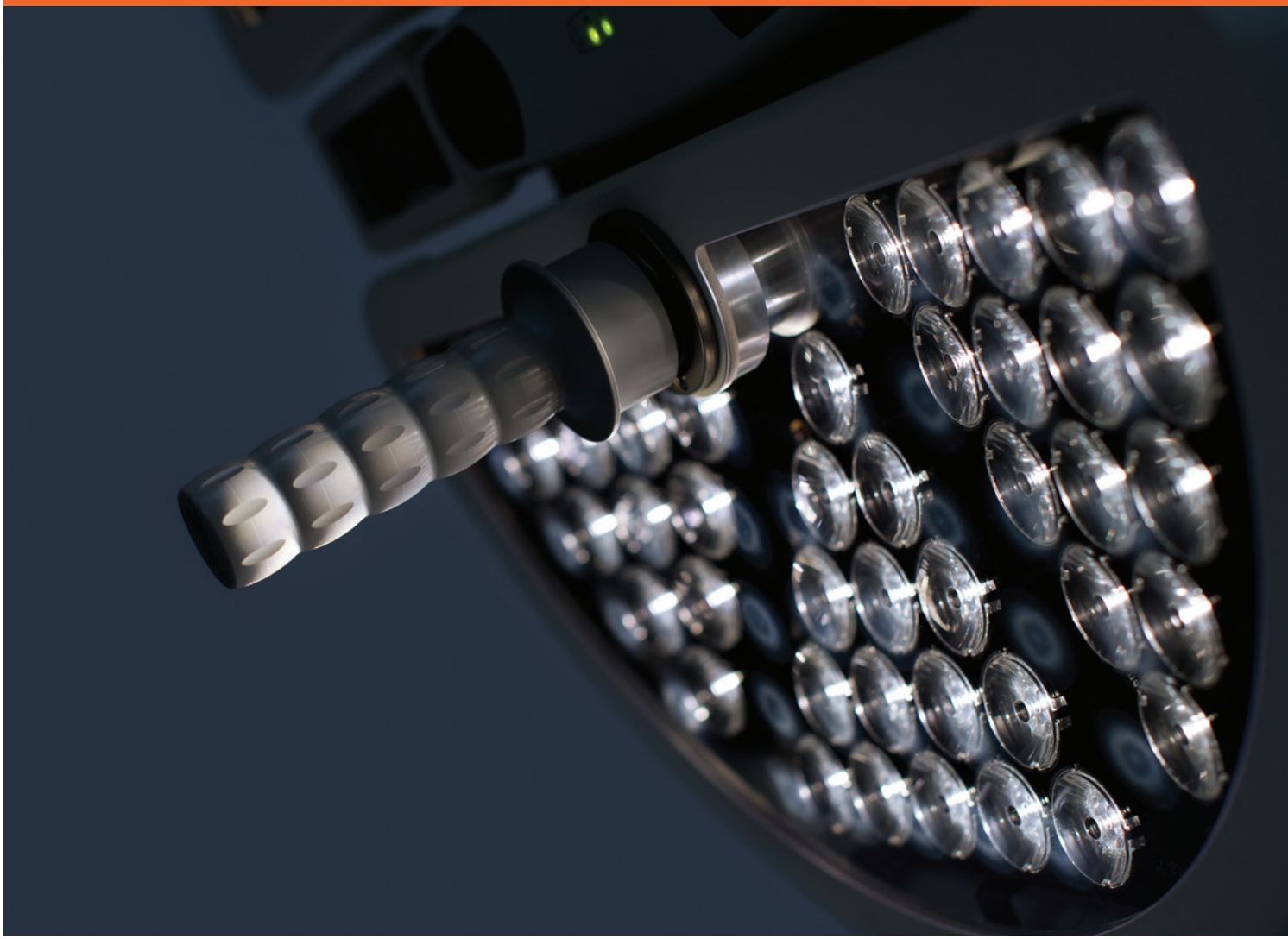
SeaSpine


# FLASH™ NAVIGATION SYSTEM WITH 7D TECHNOLOGY

**SPINAL NAVIGATION APPLICATION**
SALES BROCHURE



## RETHINK. REIMAGINE. REDEFINE.
## The next generation of image-guided navigation.

The FLASH™ Navigation System with proprietary 7D Technology has redefined image-guided surgery, delivering a navigation platform with unprecedented benefits. Perform fast, efficient, cost effective, and no intraoperative radiation spine surgery and eliminate the long-standing clinical frustrations and challenges of traditional navigation systems.

# FLASH™ NAVIGATION SYSTEM
WITH 7D TECHNOLOGY

## THE VISION IS CLEAR.
## Machine-vision Technology.

Developed by 7D Surgical, the FLASH™ Navigation System utilizes Machine-vision Technology to deliver a registration method in less than 30 seconds. Similar to technology found in self-driving cars, the FLASH Navigation System uses special cameras to quickly analyze surface anatomy using only visible light. This creates a full-color, 3D image reconstruction consisting of nearly 1,000,000 data points used for surgical navigation. This proprietary Machine-vision Technology allows for the fastest image reconstruction for surgical navigation, all through the flash of a light.

### Integrated Surgical Lighthead

Machine-vision Technology is perfectly embedded into an optimized surgical light as part of the platform, eliminating unnecessary equipment and line-of-sight challenges.

### Tool Tracking System

Embedded camera in overhead light that recognizes tracked instruments in relation to surgical anatomy.

### Machine-vision Cameras

Advanced cameras and software algorithms instantaneously recreate a 3D image for surgical navigation in just seconds.

### FLASH Projection System

Visible light is projected onto the anatomy and a light pattern with nearly 1,000,000 data points is reflected from the anatomy's surface.

## WORKFLOW EFFICIENCY

### Near Instant 3D Registration

FLASH™ Registration in less than 30 seconds, providing a “Navigation-on-Demand” experience.

### Optimized Workflow

No altering or disrupting intraoperative surgical workflows.

### Surgeon-controlled

Complete control with foot pedal and sterile light handle; embedded technology directly overhead eliminates line-of-site challenges.

### Reduced Navigation Time

Studies have shown that registration time with FLASH Navigation is reduced up to 95%.

## HIGH ACCURACY

### FLASH™ Fix

Enables quick re-registration in less than 20 seconds to confirm and maintain accuracy.

### Real-time Navigation

Generates real-time correlation between surgical tool interaction and CT images.

### Machine-vision

3D image guidance with nearly 1,000,000 data points to provide additional information for informed decision making.

### Segmental Accuracy

Provides segmental accuracy at every level regardless of patient positioning or intraoperative movement.

## RADIATION-FREE*

### No Intraoperative CT

Eliminates the need for intraoperative radiation used for registration.

### No Fluoroscopy

Only utilizes visible light for registration, thus eliminating the need for intraoperative fluoroscopy.

### Reduces Radiation Exposure

Eliminates intraoperative radiation exposure to surgeon, staff, and patient typically required for navigation procedures.

### Improves Safety

Requires no intraoperative radiation for registration, thus improving safety and potentially reducing harmful side effects of radiation exposure.

*Preoperative radiation required

## COST EFFECTIVE

### Reduce Equipment & Support Staff

Eliminates the need for and reliance on intraoperative radiology equipment and associated personnel throughout the entire procedure.

### Reduced Operative Time

Significantly reduces registration time from 30 minutes to less than 30 seconds, resulting in faster operative times.

### Small, Portable Platform

Mobile platform with small footprint requires minimal space in operating room and provides ease of use and maneuverability in hospital.

### Cross-specialty

Platform is designed for use in multiple surgical specialties.

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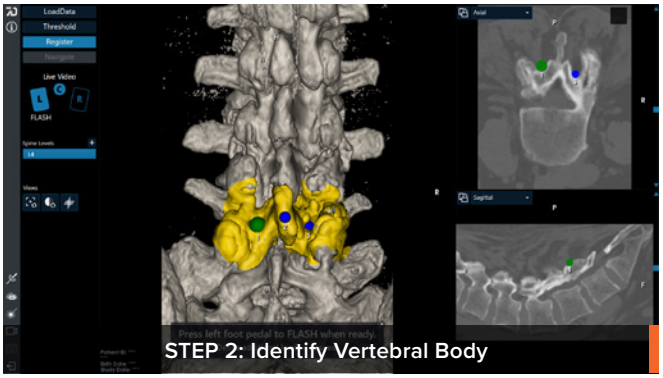
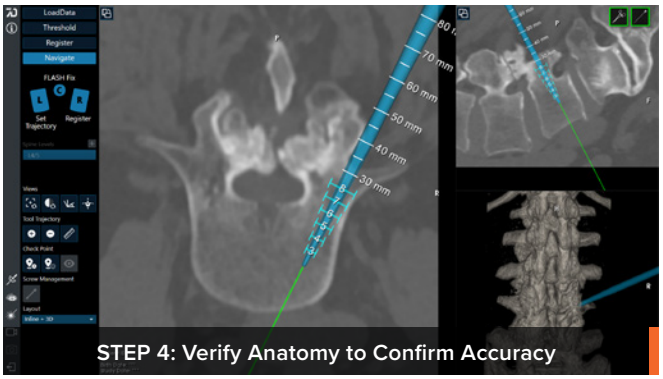
## SEE THE SIMPLICITY—
FLASH™ Registration in less than 30 seconds.


STEP 1: Attach Single-handed Reference Frame



STEP 2: Identify Vertebral Body


STEP 3: Flash of Light



STEP 4: Verify Anatomy to Confirm Accuracy


**FLASH Fix (optional):** If re-registration is needed at any point during the procedure, FLASH Fix allows for a fast, painless, and radiation-free re-registration method in less than 20 seconds.

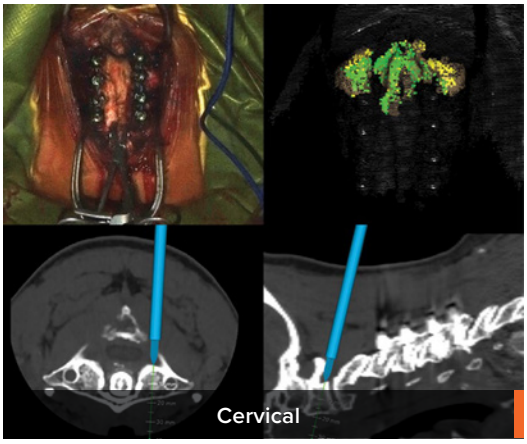
OPTIONAL STEP

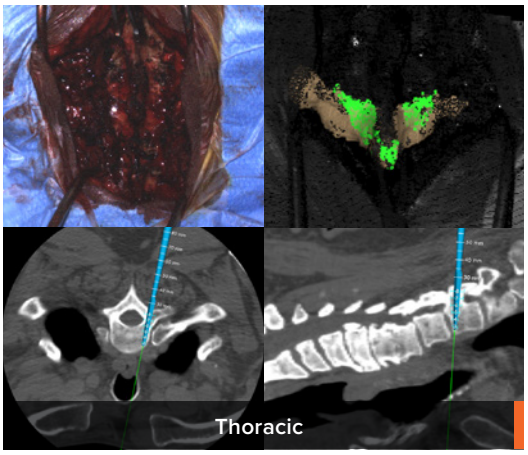
### FLASH Navigation Animation

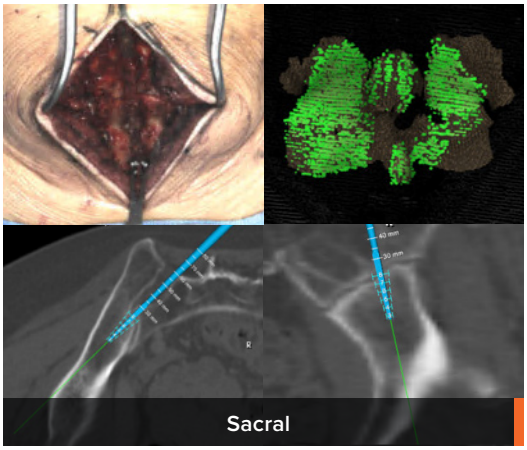
Scan the QR Code to see the simplicitity of FLASH Navigation in action.

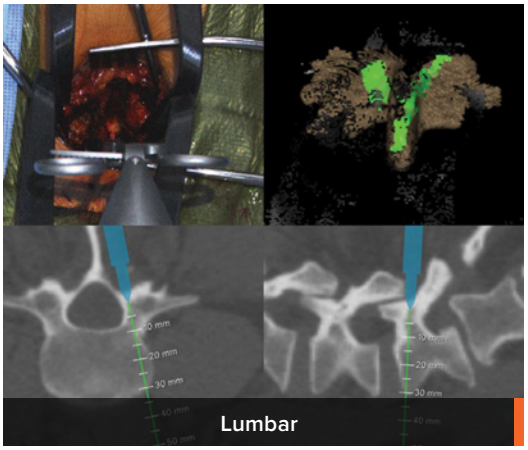
# PROCEDURAL CONFIDENCE **AT EVERY LEVEL**

Seamlessly integrated with the SeaSpine® Posterior Fixation Portfolio, the FLASH™ Navigation System has the ability to segmentally register at each individual level, capturing nearly 1,000,000 data points and driving extreme accuracy.



# FLASH™ NAVIGATION SYSTEM
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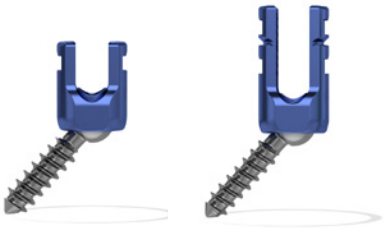
## NORTHSTAR® OCT
### Posterior Cervical Fixation System

The NorthStar® OCT System was designed to be the complete posterior cervical fusion solution. NorthStar OCT combines a comprehensive implant selection, with thoughtful instrumentation, and applied system versatility to provide surgeons with safe and effective tools to simplify the most complex procedures.



## DAYTONA® & DAYTONA SMALL STATURE
### Deformity Systems

The Daytona® and Daytona Small Stature Deformity Systems, which utilizes implant-based reduction technology, is designed to address standard to complex deformity cases.

## MARINER® & MARINER MIS
### Pedicle Screw Fixation Systems

The Mariner® Thoracolumbar Fixation Systems feature modular threaded technology with thoughtfully designed instrumentation, packaged in a streamlined offering.

# FLASH™ NAVIGATION SYSTEM

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## SURGEON TESTIMONIAL

SPINAL NAVIGATION

“The FLASH™ Navigation System with 7D technology paired with the SeaSpine® implant portfolio is an incredibly powerful combination in my practice. The clinical versatility and strength of the Mariner Fixation System, when complimented with the 7D radiation-free navigation, allows me to treat a wide spectrum of complex spine pathologies without disrupting my existing workflow. I’m now able to easily address intraoperative challenges safely and without compromising the way I like to operate.”

**Pawel Jankowski, MD**
Hoag Hospital, Department of Neurosurgery | Newport Beach, CA


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