

OPTIMIZED NAVIGATION FOR MINIMALLY INVASIVE SURGERY



FLASH™ PERCUTANEOUS

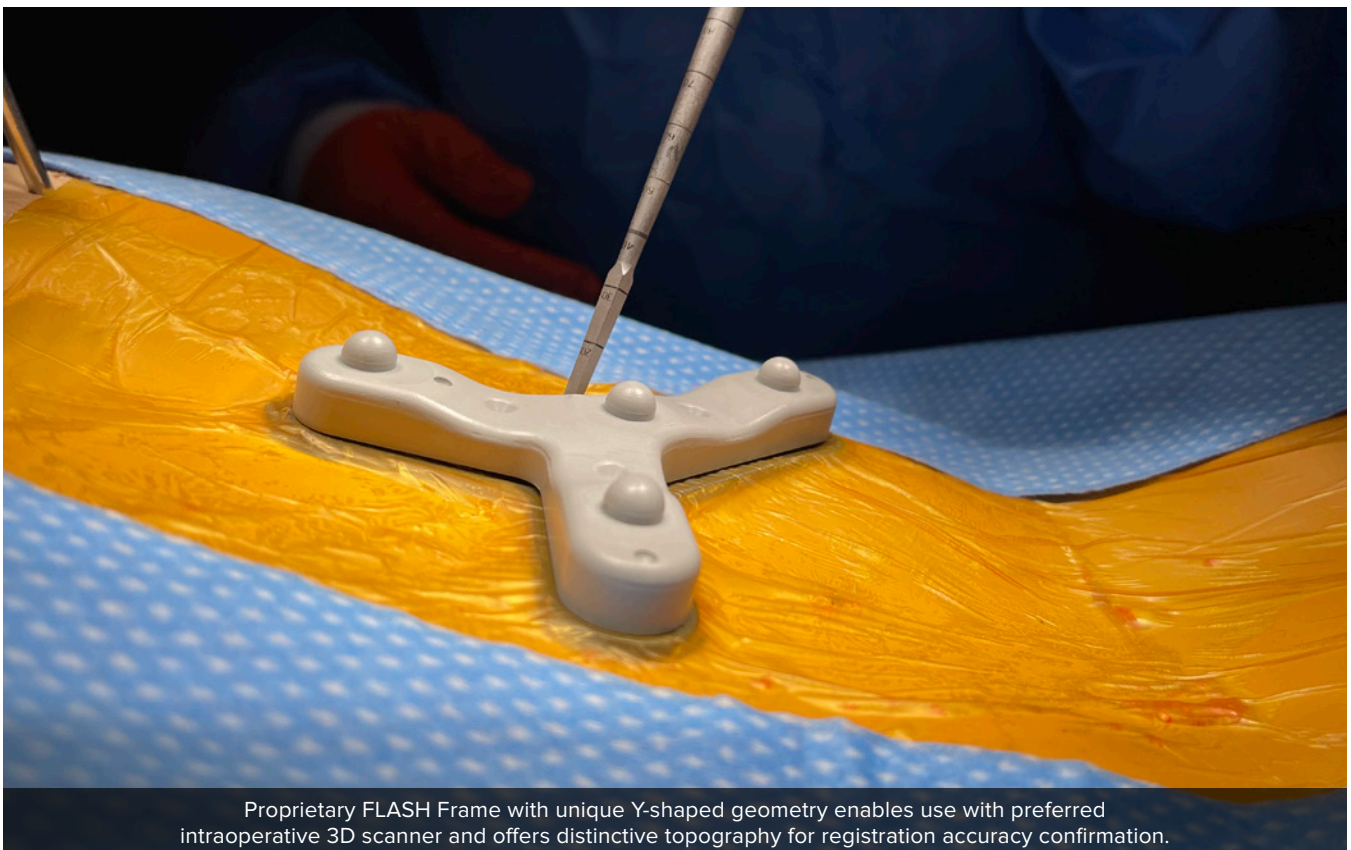
FLASH NAVIGATION SYSTEM WITH 7D TECHNOLOGY
SALES BROCHURE

OPTIMIZED NAVIGATION FOR MINIMALLY INVASIVE SURGERY

The FLASH[®] Navigation platform, offering both open and percutaneous spinal modules, is an intraoperative image-guided system designed to provide visibility during surgery for accurate screw placement and provide a fast, efficient, and cost-effective solution to surgical navigation.

The FLASH Percutaneous module is a valuable enhancement to the FLASH Navigation platform and addresses an important part of the minimally invasive spine surgery market. The camera-based technology coupled with machine-vision algorithms maintains the same fast, accurate, and efficient surgical workflow as the FLASH Navigation platform.

The increased functionality of the technology harnesses the true potential of image-guided surgery in minimally invasive procedures. FLASH Percutaneous may be used with a variety of 3D intraoperative imaging systems, provides multiple landmarks for registration accuracy confirmation, and eliminates the imaging calibration step by using a uniquely designed FLASH Frame during image acquisition.



SAME VISION, NEW VIEWS

Machine-vision Technology

Powered by 7D Technology, the FLASH™ Percutaneous platform utilizes machine-vision technology to enable a simple, streamlined, minimally invasive procedural workflow. Similar to the technology found in self-driving cars, the FLASH Percutaneous platform uses special cameras and visible light to quickly analyze the unique reference array topography. This creates a full-color, 3D image reconstruction consisting of nearly 1,000,000 data points used for surgical navigation.



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.



FAST, EFFICIENT, SIMPLE

FLASH™ Percutaneous utilizes the same machine-vision technology to complete the registration process. The surgeon maintains control with the foot pedal and sterile light handle; embedded technology directly overhead eliminates line-of-site challenges.



IMAGING AGNOSTIC

The FLASH Percutaneous Module remains imaging agnostic, allowing the surgeon and hospital to utilize the 3D intraoperative imaging system of choice, thus resulting in no requirements for calibration or hardware linkage during the procedure. This also eliminates camera alignment issues, as the FLASH Percutaneous Module does not need to track the intraoperative imaging system and patient at the same time.



OPTIMIZED PERCUTANEOUS WORKFLOW

Designed to create a reproducible, minimally invasive spinal navigation workflow. FLASH Percutaneous utilizes array technology that pairs with SeaSpine® and Orthofix® instrumentation for streamlined navigation. The system still remains open-platform with the ability to navigate other implant systems. This enables the surgeon to augment their procedure without disrupting their technique.



MULTIPLE LANDMARKS FOR REGISTRATION ACCURACY CONFIRMATION

The proprietary FLASH Frame allows the surgeon to verify registration accuracy on multiple checkpoints, eliminating the need to capture the reference post in the intraoperative dataset, creating an efficient procedural workflow.

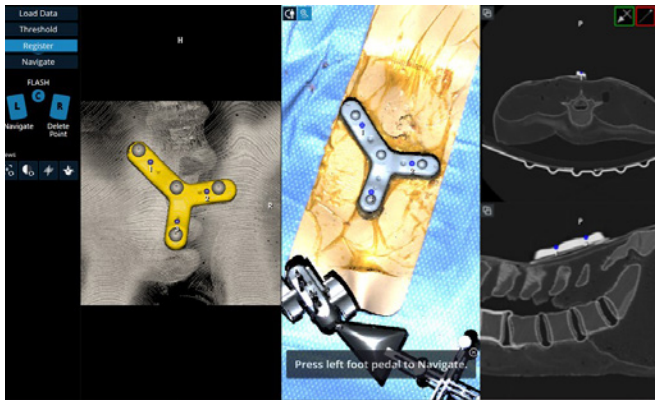


FLASH™ PERCUTANEOUS

FLASH NAVIGATION WITH 7D TECHNOLOGY

SEE THE SIMPLICITY

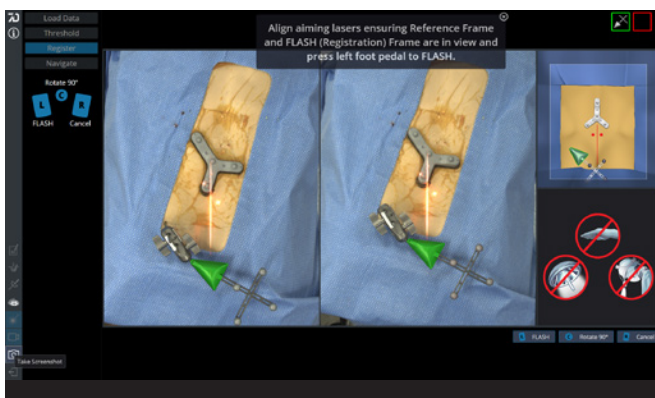
FLASH™ Percutaneous Workflow



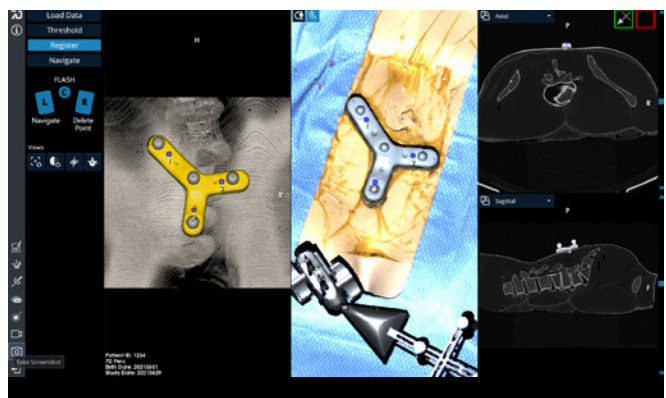
STEP 1: Place FLASH Frame and reference array



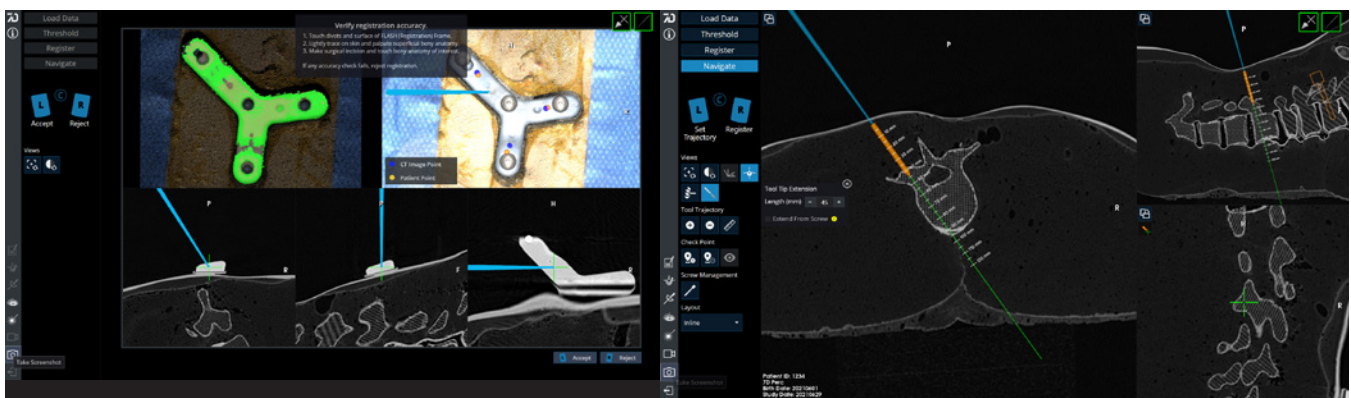
STEP 2: Acquire intraop 3D imaging



STEP 3: Initiate FLASH Registration

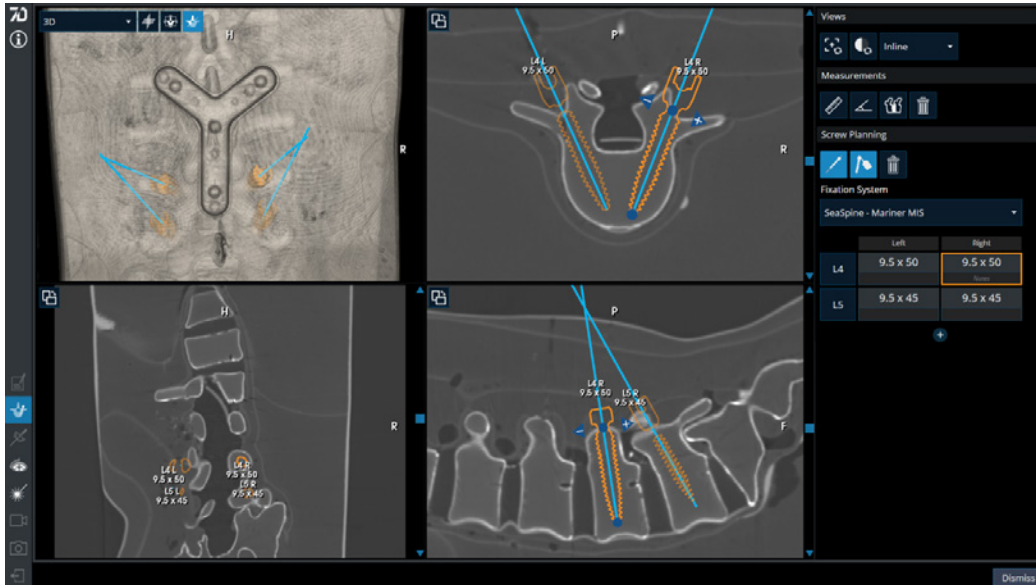


STEP 4: Match points on FLASH Frame to intraoperative dataset with touchless registration



STEP 5: Verify accuracy and navigate

SOFTWARE FEATURES



Planning Workspace
Streamline procedures by pre-planning SeaSpine® or third party implants within the Planning Workspace. Accurately size and measure spinal anatomy to achieve preferred procedural outcomes.



ENHANCED PROCEDURAL SOLUTION

Driving Value Through Integrated Sophistication & Differentiation

FLASH™ Percutaneous integrates seamlessly with SeaSpine® Navigated Instrumentation to enhance procedural workflows. The navigated array technology applied with the Mariner® MIS Posterior Fixation System streamlines minimally invasive procedures.



MARINER® & MARINER® MIS Posterior Fixation Systems

The SeaSpine Mariner MIS system is a powerful, efficient, and elegantly designed posterior fixation system developed to enable the robust stabilization of simple and complex constructs through a tissue-sparing, minimally invasive approach. The Mariner system's clinical applications are expanded by combining modular threaded technology, procedure-specific implants, and streamlined instrumentation. Together, with the SeaSpine interbody and orthobiologics portfolio, this provides an excellent minimally invasive procedural solution.



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SURGEON TESTIMONIAL



The addition of FLASH™ Percutaneous to the SeaSpine® FLASH Navigation system has enabled me to incorporate minimally invasive techniques efficiently and effectively into my practice. FLASH Perc has allowed me to provide optimized surgical navigation to my patients, tailoring my procedures to their unique needs and providing them with the benefits that are associated with minimally invasive spine surgery. The streamlined instrumentation of SeaSpine's Mariner® MIS pedicle screw system combined with FLASH Percutaneous has simplified the complexities associated with MIS procedures, without compromising my technique.

Ryan Martyn, MD
Spine Colorado | Durango, CO

Percutaneous Animation



Use qr code to link to
FLASH Percutaneous animation

For support, please contact:
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