

MICROMATE

# Tomorrow's medical robot today



INTERVENTIONAL  
systems



#### SPOT-ON, EVERY TIME

Live-imaging allows for full-body, sub-millimetric accuracy



#### YOUR STEADIEST HAND

Table-mounted to increase stability and avoid breathing-induced deviations



#### IN THE BLINK OF AN EYE

Reduces intervention time by up to 66% and alignment time by up to 27%



#### AN ALL-ENCOMPASSING AIDE

Holds small needles and heavy instruments with the same accuracy



#### UNLIMITED ACCESS

Up close or from an unrestricted 360°surgeon access (even inside the gantry)



#### SECURE AS CAN BE

Eliminates 100% of user radiation and up to 84% of patient radiation



#### END-TO-END TURNKEY SOLUTION

Requires 1 hour of training, 5 minutes for setup and no hospital support at all.



Micromate solves the four essential problems all medical robotics should tackle: ease of use, accuracy, consistency, and affordability

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# Seamless workflow integration with no missing features



## SETUP

Micromate can be mounted to any table in less than 5 minutes

Fits to any standard table



## GROSS POSITIONING

Position Micromate fast and easily in the surgical area, using a multi-functional arm

Easy and fast positioning and locking under the drape



## FINE POSITIONING

Align Micromate remotely to your surgical plan with sub-millimetric precision using live imaging

Artifact-free, radiolucent end-effector enables full targeting control



## INSTRUMENT INSERTION

User-controlled percutaneous instrument insertion under live imaging

Disposable needle-guide with play-free guidance and haptic feedback

<b>Movement Range</b>	± 40 mm and ± 30° from center position Pre-positioning with Positioning Arm with 7 DOF and 40cm range
<b>Clinical Accuracy*</b>	Average accuracy of alignment to the trajectory: 0.43 ± 0.50mm Average angular deviation to the trajectory: 0.79 ± 0.41 degrees
<b>Mechanical Accuracy**</b>	Relative: Better than 0.03 mm Absolute: Better than 0.2 mm
<b>Maximum Load</b>	Robot: Instruments up to 2kg without interruption of motion (halt at 40N) Positioning Arm: 5 kg without slippage when fully extended
<b>Compatible Image Modalities</b>	Fluoroscopy, Cone-Beam CT and Fluoro-CT Ultrasound, Spiral CT
<b>Navigation Capabilities</b>	Yes, through disposable tracker No need for dynamic referencing
<b>Guided Instruments</b>	Needles from 10G - 21G Other instruments up to 14mm (on demand)
<b>Weight</b>	Robot: 2kg Total system weight: 18kg
<b>Integration into 3rd party navigation systems</b>	Yes, through released proprietary INS-Link library
<b>Product Classification</b>	EU: Class I, per the Medical Device Regulation (MDR) 2017/745 US: Class II, 510(k) pending

\*Measured based on clinical data from Micromate™ usage in the field for interventional radiology procedures

\*\*Measured by commanding the Targeting Platform to a determined location on free air.

Stay in touch:

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