What makes an **ADVANCED VISUALIZATION SYSTEM** the superior choice for minimally invasive spine surgery (MISS)

ENHANCED VISUALIZATION

Compared to the endoscope:

Stereoscopic magnification[1,2]

Superior illumination[1,2]

Longer focal distance with better depth perception[1]

BENEFIT
Clear visualization of all anatomies relevant to spinal surgery[1]

SUPERIOR ERGONOMICS

Compared to the loupe:

Better flexibility and maneuverability[2]

View-sharing for training and education[1]

Variable working distances possible[1]

BENEFIT
No neck/back strain because of upright working position[1,2]

DIGITAL DOCUMENTATION

Easy recording and documentation of surgical data including procedure images and videos

Integration within hospital infrastructure

Simple, secure data storage and back-up solutions

BENEFIT
Improved connectivity for communicating, sharing, learning, analyzing and archiving

CLINICAL OUTCOMES[3,4]

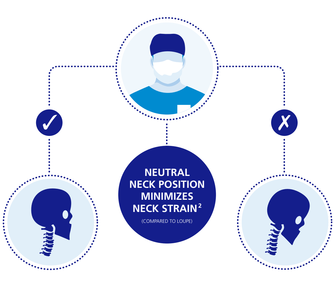
8% REDUCTION IN BLEEDING*
(COMPARED TO ENDOSCOPE)

20% MORE PATIENTS return to function in 3 months[4]
(COMPARED TO LOUPE)

1.4x IMPROVED RECOVERY RATE†
(COMPARED TO ENDOSCOPE)

4 REDUCTION **FOLD** IN NUMBER OF DURAL TEARS†*
(COMPARED TO ENDOSCOPE)

PERSONAL OUTCOMES



1. Wood M. Becker's Spine Review. 2016. Available at: https://www.beckersspine.com/spine/item/32515-the-role-of-the-surgical-microscope-in-modern-mis-spine-drs-k-d-riew-michael-mayer-roger-haertl-mohd-hisam-muhamad-ariffin-share-their-experiences.html.
2. Damodaran O et al. ANZ J Surg. 2013;83:211–214.
3. Zhang Y et al. BioMed Res Int. 2019. Available at: https://doi.org/10.1155/2019/5321580. The authors of the study conclude that: "This study provides evidence that tubular-based microscope-assisted surgery may relate to better recovery rate for LSS, less surgical time, and less intraoperative dural tear compared with endoscope-assisted tubular surgery."
4. Kumar SS et al. J Spinal Disord Tech. 2012;25:E235-239.

*Based on a sample size of 65 patients for laminectomy (35 patients treated with endoscope; 30 patients treated with microscope).

†Based on a sample size of 65 patients for laminectomy (35 patients treated with endoscope; 30 patients treated with microscope) and 242 patients for discectomy (127 patients treated with endoscope; 115 patients treated with microscope).

EN_30_065_05(00) SUR.11941