

Manufactured by


materialise

Distributed by

MATHYS 
European Orthopaedics

For healthcare professional use only. The illustrated image does not represent a connection between the use of the medical device described, nor its performance.

3D planning & patient specific glenoid guide

Affinis Architec



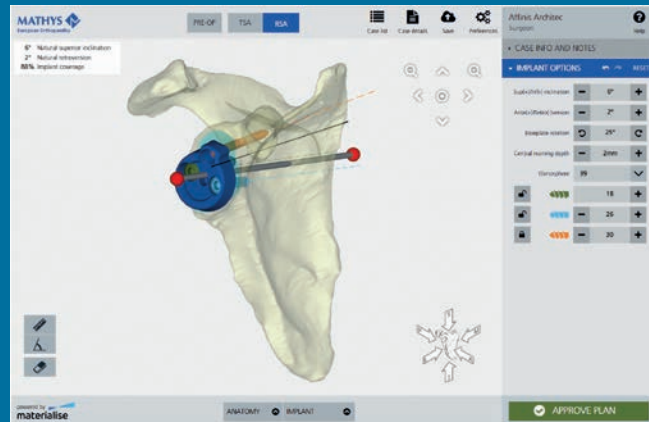
The Affinis Architec system features 3D planning and patient specific instrument (PSI) for the anatomic as well as the reverse Mathys shoulder portfolio.

Clinical challenges

- Few reliable bony landmarks to identify exact size and orientation of the residual glenoid vault¹
- Small surgical window and limited exposure
- Abnormal glenoid morphology in around 40 % of cases²
- Challenging glenoid component placement³ as malpositioning is linked to increased radiolucent lines and poor clinical performance⁴

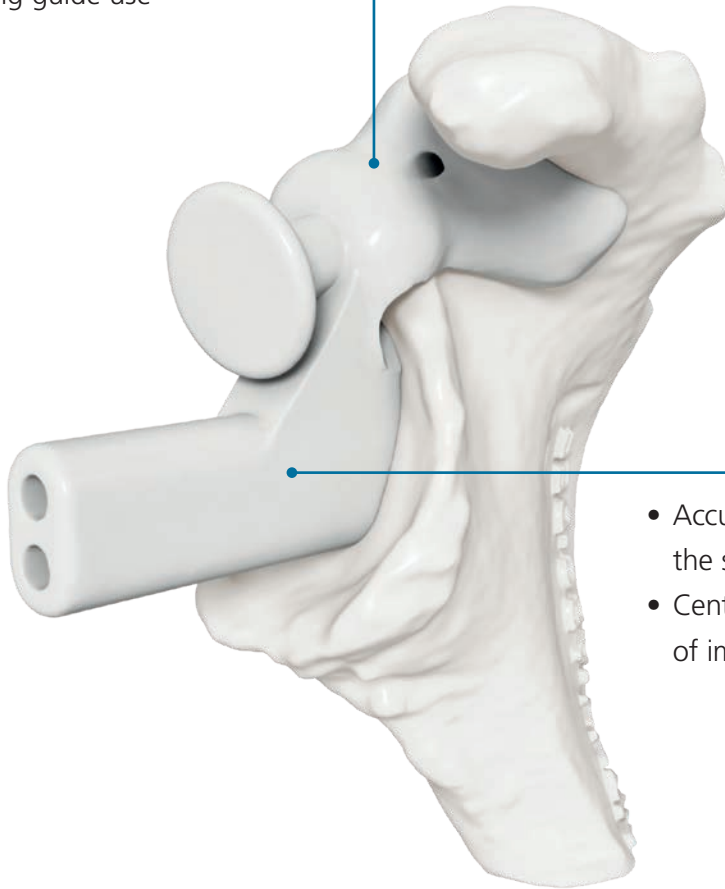
SurgiCase® online based 3D planner

- Adapt planning to your patients' needs and individual morphology
- CT based 3D remodelling to visualise bony anatomy and preferred implant position
- Planning of implant inclination, version, rotation & screw placement



Glenoid guide & bone model

- Patented coracoid clip referencing reliable landmark and insuring unique guide fit
- Small overall design allowing visibility on glenoid during guide use



- Accurate method in reproducing the surgical plan⁵
- Central pin guidance and indication of implant rotation

Sources

- ¹ Lewis, G. S., Bryce, C. D., Davison, A. C., Hollenbeak, C. S., Piazza, S. J., & Armstrong, A. D. (2010). Location of the Optimized Centerline of the Glenoid Vault: A Comparison of Two Operative Techniques with Use of Three-Dimensional Computer Modeling. *The Journal of Bone and Joint Surgery-American Volume*, 92(5), 1188-1194. doi:10.2106/jbjs.i.00131
- ² Frankle, M. A., Teramoto, A., Luo, Z., Levy, J. C., & Pupello, D. (2009). Glenoid morphology in reverse shoulder arthroplasty: Classification and surgical implications. *Journal of Shoulder and Elbow Surgery*, 18(6), 874-885. doi:10.1016/j.jse.2009.02.013
- ³ Dallalana, R., McMahon, R., East, B., & Geraghty, L. (2016). Accuracy of patient-specific instrumentation in anatomic and reverse total shoulder arthroplasty. *International Journal of Shoulder Surgery*, 10(2), 59. doi:10.4103/0973-6042.180717
- ⁴ Gregory, T. M., Sankey, A., Augereau, B., Vandebussche, E., Amis, A., Emery, R., & Hansen, U. (2013). Accuracy of Glenoid Component Placement in Total Shoulder Arthroplasty and Its Effect on Clinical and Radiological Outcome in a Retrospective, Longitudinal, Monocentric Open Study. *PLoS ONE*, 8(10). doi:10.1371/journal.pone.0075791
- ⁵ Levy, J. C., Everding, N. G., Frankle, M. A., & Keppler, L. J. (2014). Accuracy of patient-specific guided glenoid baseplate positioning for reverse shoulder arthroplasty. *Journal of Shoulder and Elbow Surgery*, 23(10), 1563-1567. doi:10.1016/j.jse.2014.01.051; a cadaveric study

