

EXCLUSIVE DISTRIBUTOR IN BRAZIL

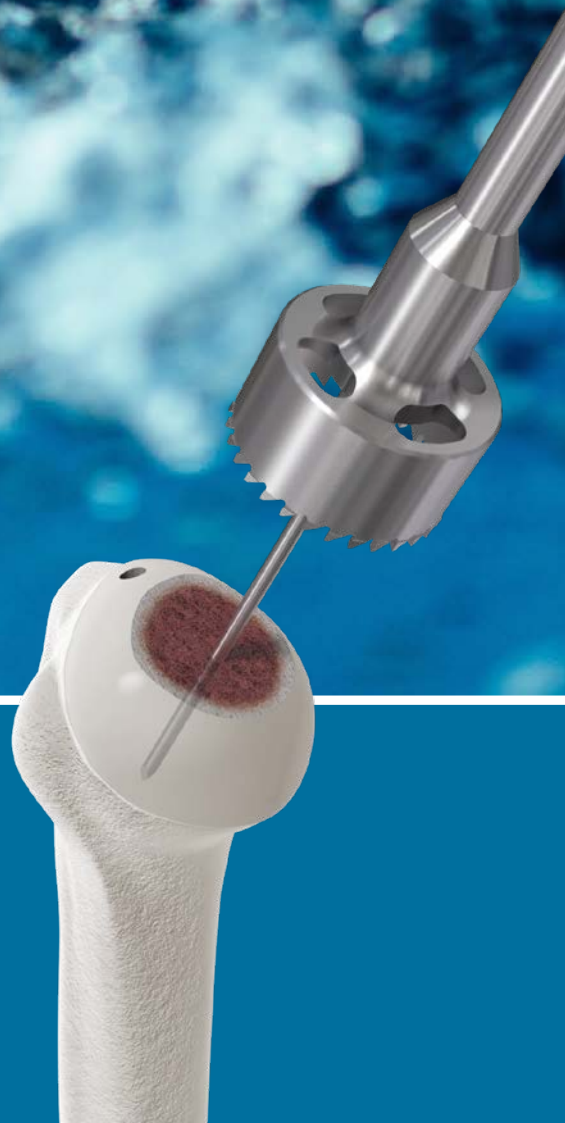
ATTIS
MEDICAL

MATHYS 
European Orthopaedics



Preservation in motion

Affinis Inverse
Bone Grafting Instruments



*Building on our heritage
Moving technology forward
Step by step with our clinical partners
Towards a goal of preserving mobility*

Preservation in motion

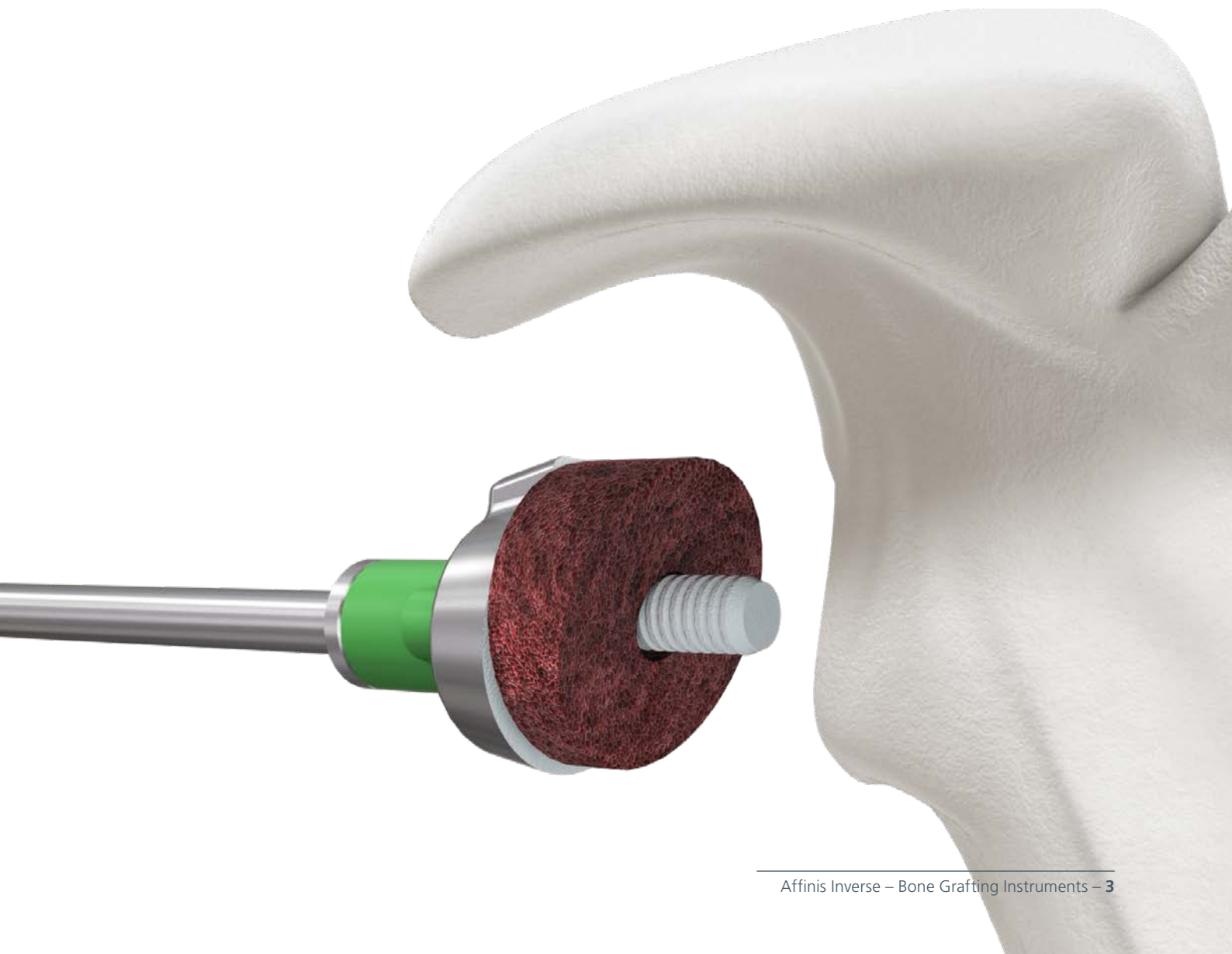
As a Swiss company, Mathys is committed to this guiding principle and pursues a product portfolio with the goal of further developing traditional philosophies with respect to materials or design in order to address existing clinical challenges. This is reflected in our imagery: traditional Swiss activities in conjunction with continuously evolving sporting equipment.

GUIDED, EFFICIENT AND RESULT-ORIENTED

The Affinis Inverse Bone Grafting Instruments were developed in close design matching with the Metaglene CP for combined implantation of a bone graft with an inverse shoulder prosthesis. The fully guided surgical technique supports the harvesting and creation of a total of six differently shaped bone grafts from the humeral head. This allows the joint line of the glenoid to be corrected after glenoid erosion and osseous defects.

The Affinis Inverse Bone Grafting Instruments allow for easy handling with simple and logical workflows. In this way, the prosthesis can be implanted efficiently.

The instruments replenish the Affinis Inverse Shoulder System portfolio with an additional option for the treatment of patients with more complex glenoid morphology in cases of rotator cuff defect arthropathy or proximal humerus fracture.



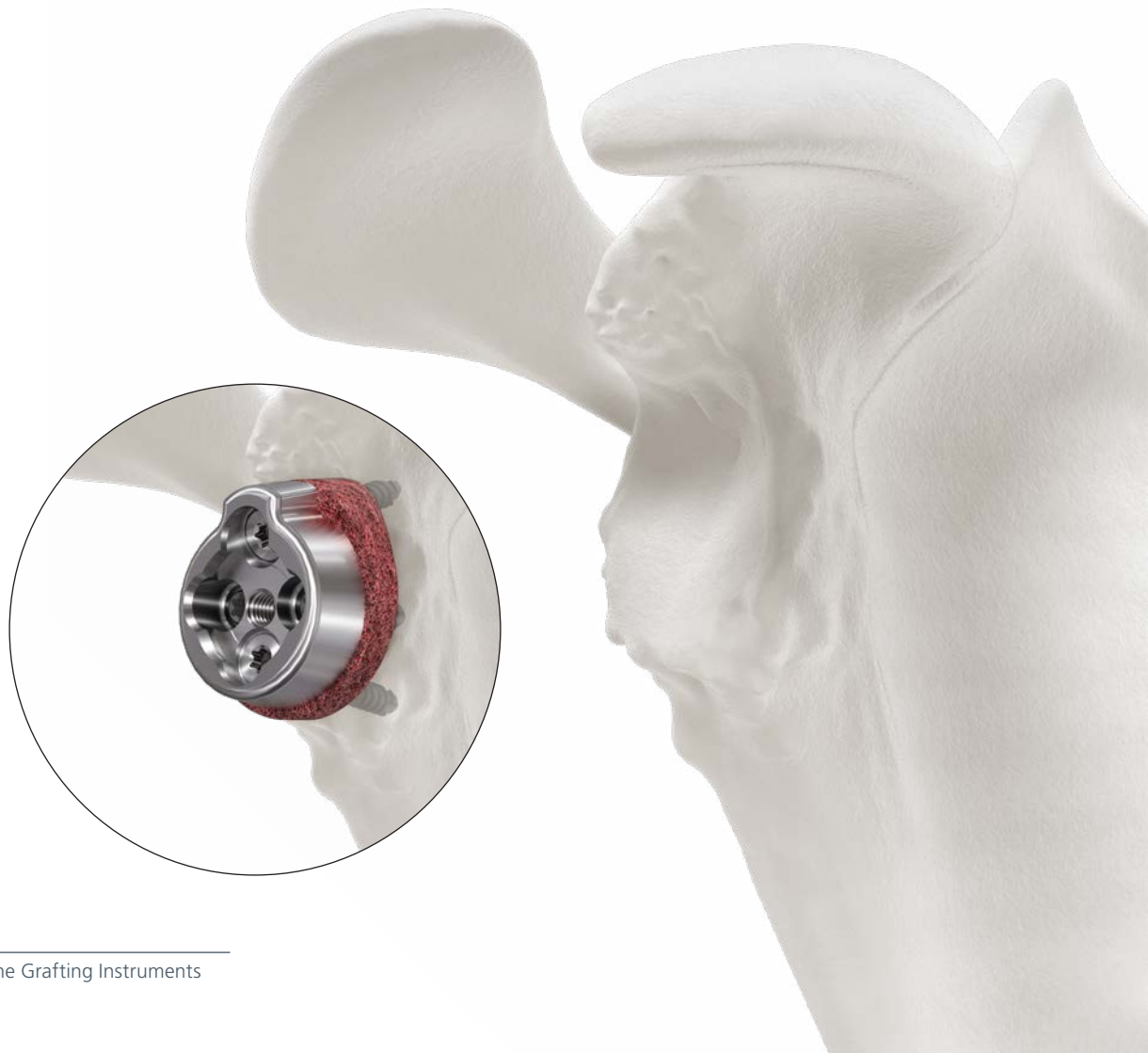
CLINICAL NEED

Patients with glenoid defects and simultaneous inverse shoulder prosthesis implantation account for a significant proportion of difficult-to-treat surgical patients.

For glenoid defect compensation, the Affinis Inverse Bone Grafting Instruments offer a fully guided surgical technique that supports harvesting of bone grafts from the humeral head. The Affinis Inverse Metaglene CP with its longer central peg can accommodate the bone graft and allows reconstruction of the anatomical joint line after glenoid erosion and osseous defects using an inverse shoulder prosthesis.

Biological reconstruction of the defect using autografts has proven a suitable technique to compensate for bone loss at the glenoid – especially in single-stage procedures, if adequate fixation of the central metaglene peg and good fixation with fixed-angle screws in the native scapula are possible. ¹

According to a retrospective study by Harmsen et al., in cases with pronounced glenoid bone deficit excellent clinical and radiological results with low complication rates can be achieved in the short to medium term with individually adapted autologous glenoid reconstruction and inverse shoulder prostheses. ²



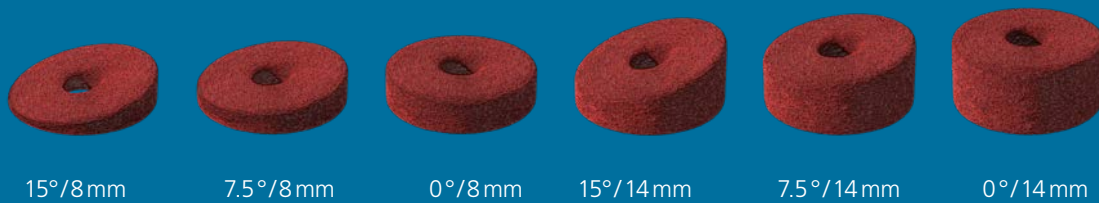
PLANNING

For preparation of a surgery with the Affinis Inverse Metaglene CP in combination with a bone graft, Mathys offers the 3D planning by MediCAD and Affinis Architec. Both support the operating surgeon in visualising the planning of the required bone graft as well as the placement of the implant, and increase the efficiency of the procedure.

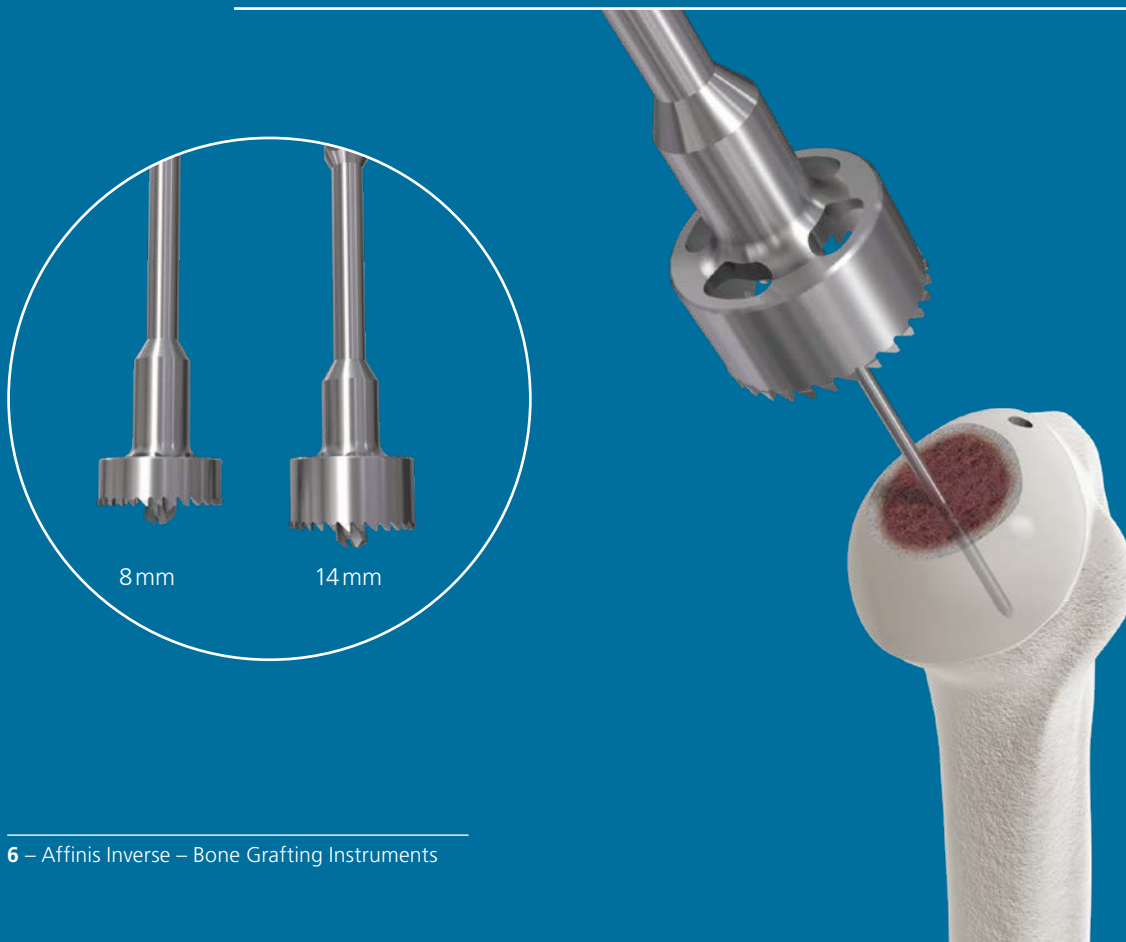


GRAFT HARVESTING

The fully guided surgical technique supports the harvesting and creation of a total of six differently shaped bone grafts from the humeral head. Neither allografts from the bone bank nor additional surgical steps for obtaining an autograft from the iliac crest are required. This reduces the operating time, the risk of infection, and the pain for the patient.



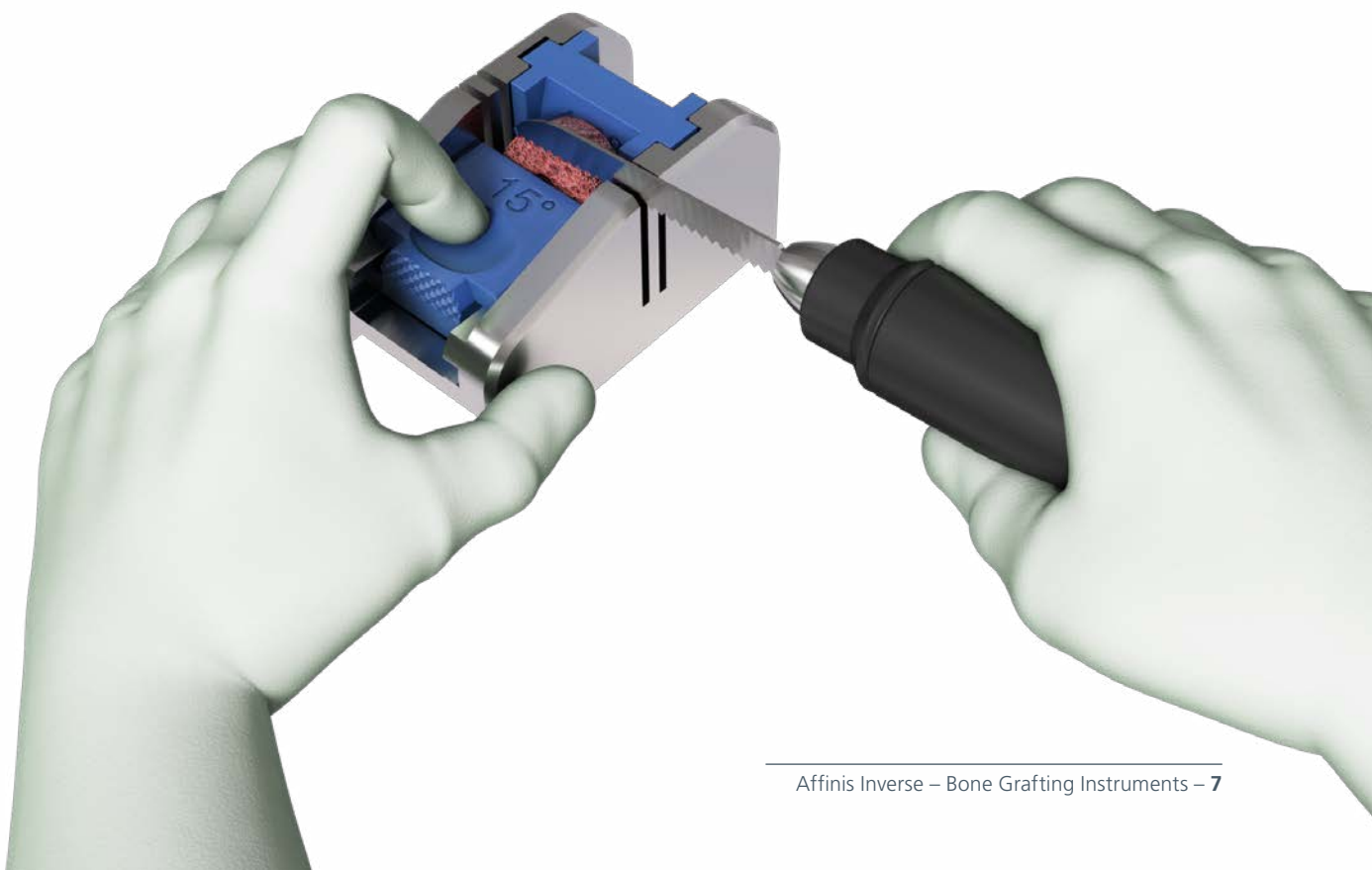
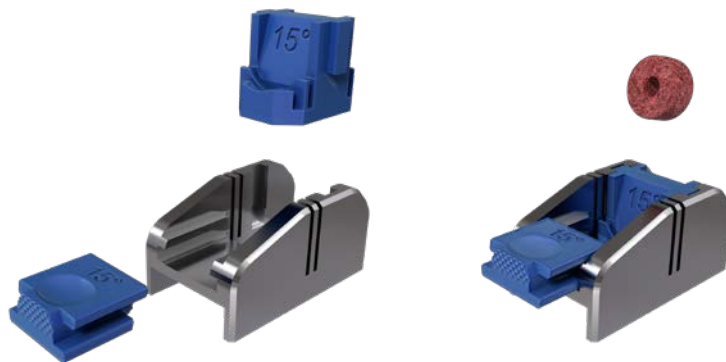
The bone graft is obtained during humeral head preparation by means of a core drill having a thickness of 8 mm or 14 mm. It is immediately available and allows bone augmentation for correction of the joint line of the glenoid as well as optimal soft tissue balancing after glenoid erosion and osseous defects.



GRAFT PREPARATION

The Affinis Inverse Bone Grafting Back Table Instrument was developed for preparation of the harvested bone graft. The smart instrumentation allows guided preparation of the autograft with a few simple and logical steps if angulation is desired. After harvesting, the bone graft can be left cylindrical at 0° or adapted to 7.5° or 15°, depending on the desired lateralisation, retroversion or inclination of the reconstruction.

All steps for bone harvesting and preparation of the bone graft are fully instrument-guided, which obviates the need for freehand manipulation and allows reproducible results.





AFFINIS INVERSE METAGLENE CP

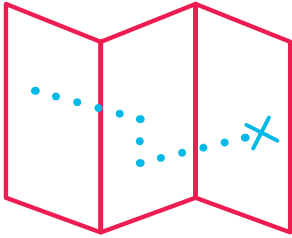
The Affinis Inverse Bone Grafting Instruments were developed for compatibility and application with the Affinis Inverse Metaglene CP. The Affinis Inverse Metaglene CP with its longer central peg allows stable primary fixation in native bone, is suitable for use in rotator cuff defect arthropathy as well as for proximal humerus fractures, and allows reconstruction of the anatomical joint line after glenoid erosion and osseous defects using Affinis Inverse or Affinis Fracture Inverse. This gives the operating surgeon more treatment options for a wider range of glenoid morphologies.



Affinis Inverse

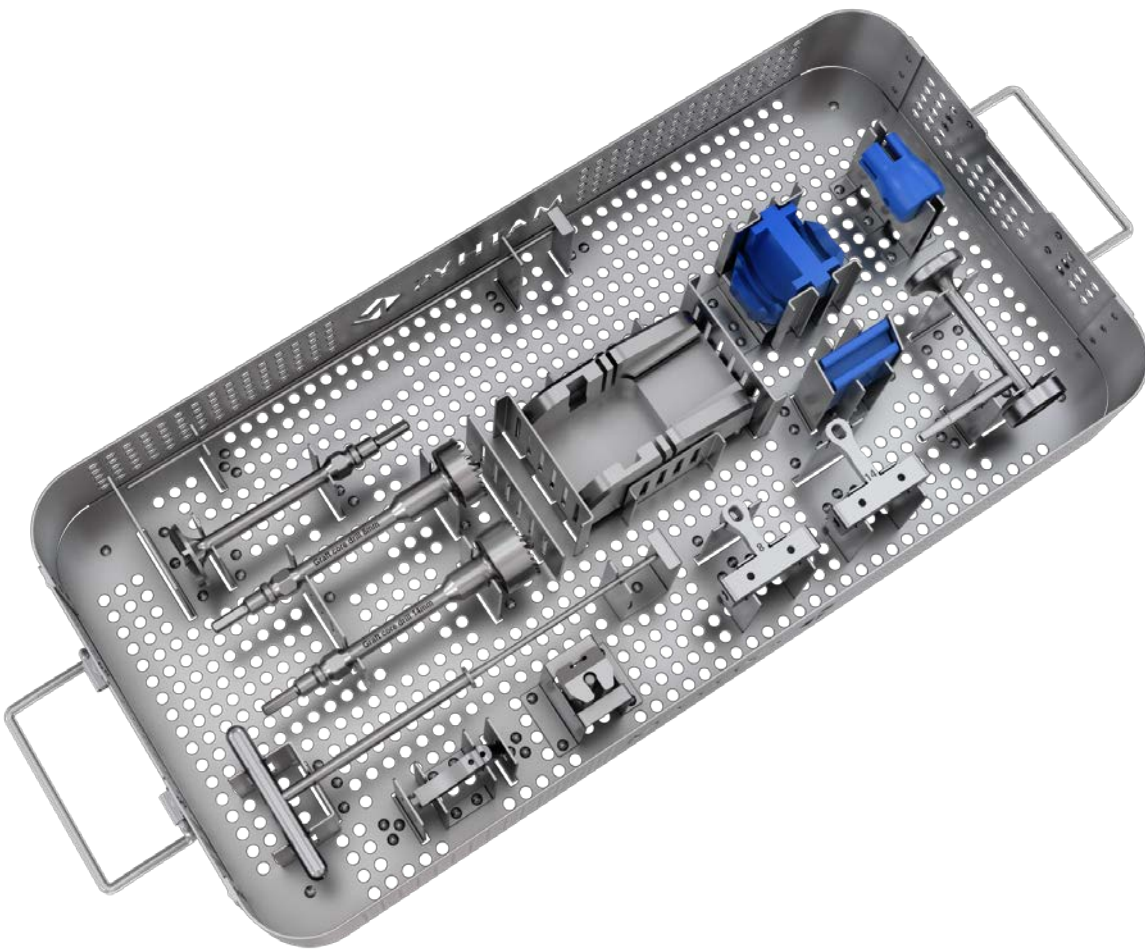
Affinis Fracture Inverse

SMART INSTRUMENTATION



The Affinis Inverse Bone Grafting Instruments allow simple and logical workflows as well as efficient implantation of the prosthesis thanks to its easy handling.

The bone grafting instruments are arranged in their own clearly laid-out tray, which can be seamlessly integrated into the existing tray landscape for Affinis Inverse or Affinis Fracture Inverse if desired, in order to keep an overview of the entire instrumentation at all times.



REFERENCES

- ¹ Seebauer L, Ekelund A L. Management of glenoid bone loss in primary and revision reverse total shoulder arthroplasty. *Obere Extremität.* 2017;12(1):6-15.
- ² Harmsen S, Casagrande D, Norris T. «Shaped» humeral head autograft reverse shoulder arthroplasty: Treatment for primary glenohumeral osteoarthritis with significant posterior glenoid bone loss (B2, B3, and C type). *Der Orthopäde.* 2017;46(12):1045-54.

Australia	Mathys Orthopaedics Pty Ltd Artarmon, NSW 2064 Tel: +61 2 9417 9200 info.au@mathysmedical.com	Italy	Mathys Ortopedia S.r.l. 20141 Milan Tel: +39 02 4959 8085 info.it@mathysmedical.com
Austria	Mathys Orthopädie GmbH 2351 Wiener Neudorf Tel: +43 2236 860 999 info.at@mathysmedical.com	Japan	Mathys KK Tokyo 108-0075 Tel: +81 3 3474 6900 info.jp@mathysmedical.com
Belgium	Mathys Orthopaedics Belux N.V.-S.A. 3001 Leuven Tel: +32 16 38 81 20 info.be@mathysmedical.com	New Zealand	Mathys Ltd. Auckland Tel: +64 9 478 39 00 info.nz@mathysmedical.com
France	Mathys Orthopédie S.A.S 63360 Gerzat Tel: +33 4 73 23 95 95 info.fr@mathysmedical.com	Netherlands	Mathys Orthopaedics B.V. 3001 Leuven Tel: +31 88 1300 500 info.nl@mathysmedical.com
Germany	Mathys Orthopädie GmbH «Centre of Excellence Sales» Bochum 44809 Bochum Tel: +49 234 588 59 0 sales.de@mathysmedical.com	P. R. China	Mathys (Shanghai) Medical Device Trading Co., Ltd Shanghai, 200041 Tel: +86 21 6170 2655 info.cn@mathysmedical.com
	«Centre of Excellence Ceramics» Mörsdorf 07646 Mörsdorf/Thür. Tel: +49 364 284 94 0 info.de@mathysmedical.com	Switzerland	Mathys (Schweiz) GmbH 2544 Bettlach Tel: +41 32 644 1 458 info@mathysmedical.com
	«Centre of Excellence Production» Hermsdorf 07629 Hermsdorf Tel: +49 364 284 94 110 info.de@mathysmedical.com	United Kingdom	Mathys Orthopaedics Ltd Alton, Hampshire GU34 2QL Tel: +44 8450 580 938 info.uk@mathysmedical.com

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