

# RAPIDSORB™ Cranial Clamp

Resorbable fixation of cranial bone flaps

## Surgical Technique



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 Image intensifier control

This description alone does not provide sufficient background for direct use of DePuy Synthes products. Instruction by a surgeon experienced in handling these products is highly recommended.

**Processing, Reprocessing, Care and Maintenance**

For general guidelines, function control and dismantling of multi-part instruments, as well as processing guidelines for implants, please contact your local sales representative or refer to:

<http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance>

For general information about reprocessing, care and maintenance of DePuy Synthes reusable devices, instrument trays and cases, as well as processing of DePuy Synthes non-sterile implants, please consult the Important Information leaflet (SE\_023827) or refer to:

<http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance>

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- Notes
- ▲ Precautions
- ▲ WARNINGS

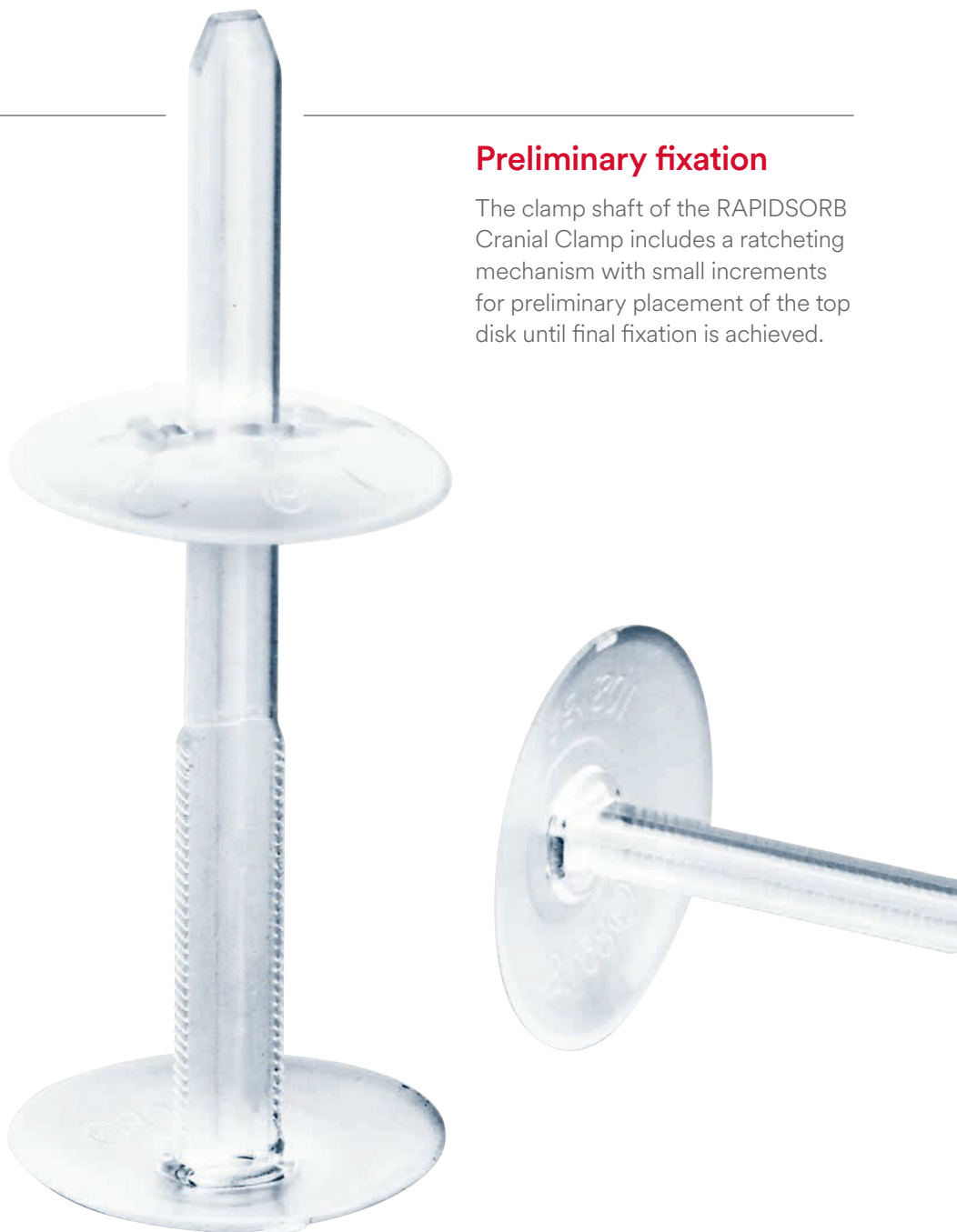
# RAPIDSORB™ Cranial Clamp Overview

## Application

The application is a three-step procedure in which the implant is positioned, then intermediately adjusted and finally fixated with the application forceps. For the implantation, only one instrument is required. RAPIDSORB Cranial Clamp is radiolucent.

## Preliminary fixation

The clamp shaft of the RAPIDSORB Cranial Clamp includes a ratcheting mechanism with small increments for preliminary placement of the top disk until final fixation is achieved.



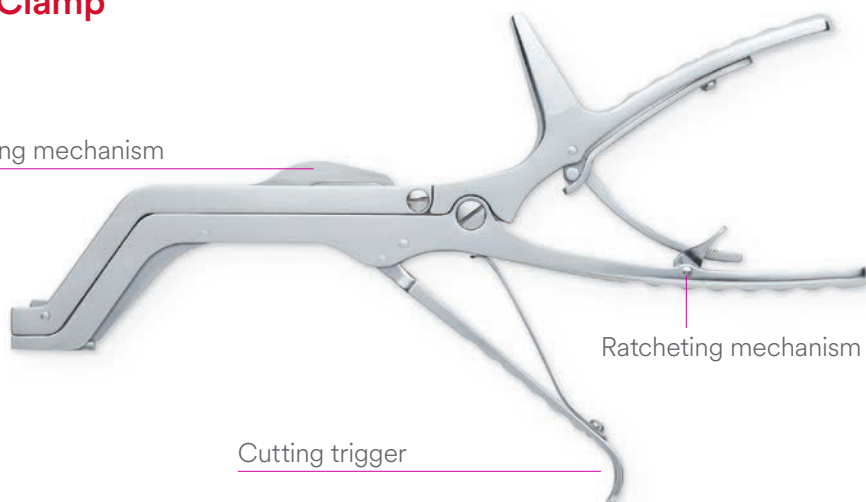
Please refer to the corresponding Instructions for Use for specific information on Intended use, Indications, Contraindications, Warnings and Precautions, Potential Adverse Events, Undesirable Side Effect and Residual Risks.

Instruction for Use are available at [www.e-ifu.com](http://www.e-ifu.com) and/or [www.depuysynthes.com/ifu](http://www.depuysynthes.com/ifu)

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## Application Forceps for RAPIDSORB™ Cranial Clamp

Force-limiting mechanism



# The AO Principles of Fracture Management

## Mission

The AO's mission is promoting excellence in patient care and outcomes in trauma and musculoskeletal disorders.

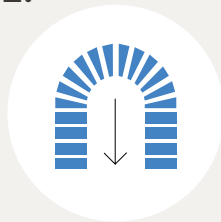
### AO Principles<sup>1,2</sup>

1.



Fracture reduction and fixation to restore anatomical relationships.

2.



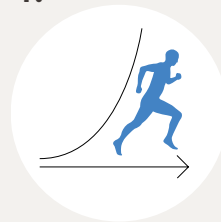
Fracture fixation providing absolute or relative stability, as required by the “personality” of the fracture, the patient, and the injury.

3.



Preservation of the blood supply to soft-tissues and bone by gentle reduction techniques and careful handling.

4.



Early and safe mobilization and rehabilitation of the injured part and the patient as a whole.

<sup>1</sup> Müller ME, M Allgöwer, R Schneider, H Willenegger. Manual of Internal Fixation. 3<sup>rd</sup> ed. Berlin, Heidelberg, New York: Springer. 1991

<sup>2</sup> Buckley RE, Moran CG, Apivatthakakul T. AO Principles of Fracture Management: 3<sup>rd</sup> ed. Vol. 1: Principles, Vol. 2: Specific fractures. Thieme; 2017.

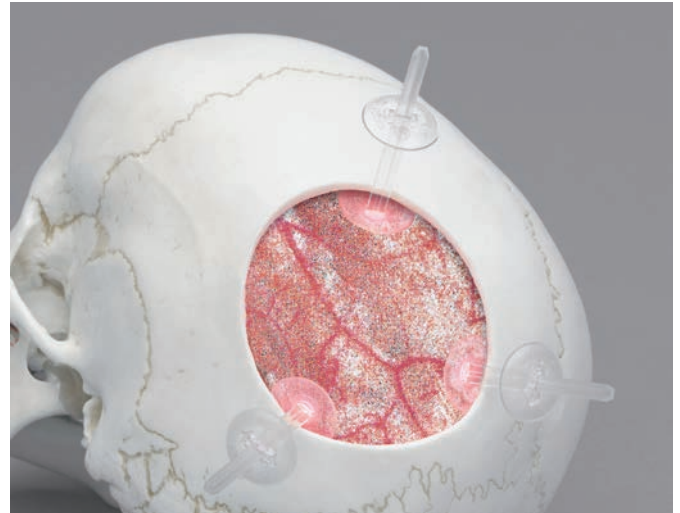
# Surgical Technique

## 1. Place clamps

With the cranial bone flap removed, position the cranial clamps equidistant around the opening. The bottom disk is to be between the dura and the skull.

### ■ Note:

A minimum of three cranial clamps is recommended for secure fixation of cranial bone flaps in pediatric patients; a minimum of four for adult patients. Depending on the patient, e.g. adult, and bone flap size, more fixation points are recommended.

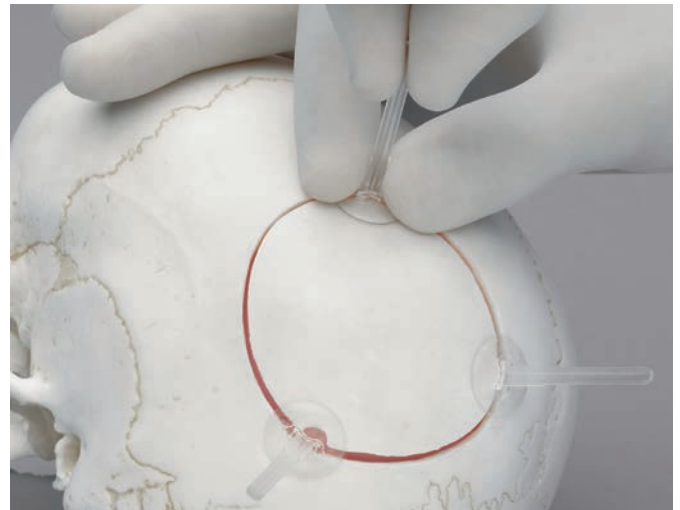


## 2. Replace the cranial bone flap

Replace the flap, ensuring the shafts of the cranial clamp remain vertical in the kerf.

Pretension each clamp by pressing the top disk to the cranial surface. A two-finger pinching technique is suggested.

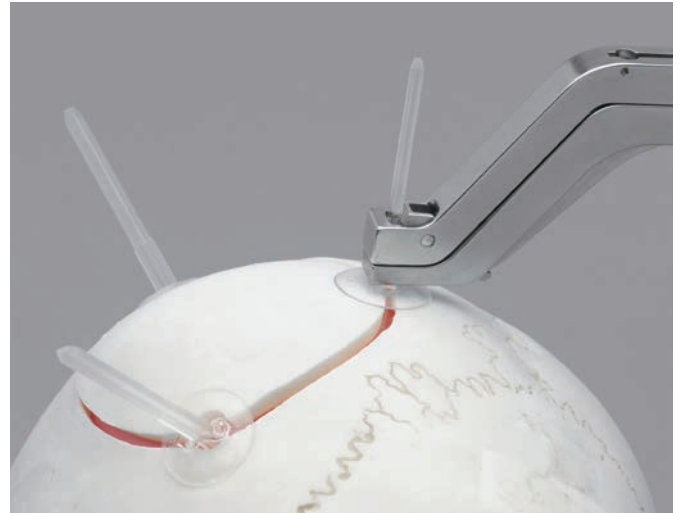
When using more than three clamps, tighten the clamps in a crisscross pattern.



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### 3. Engage application forceps

Flip the ratcheting mechanism forward to engage. Place the application forceps over a clamp shaft and lower the instrument to the top disk.



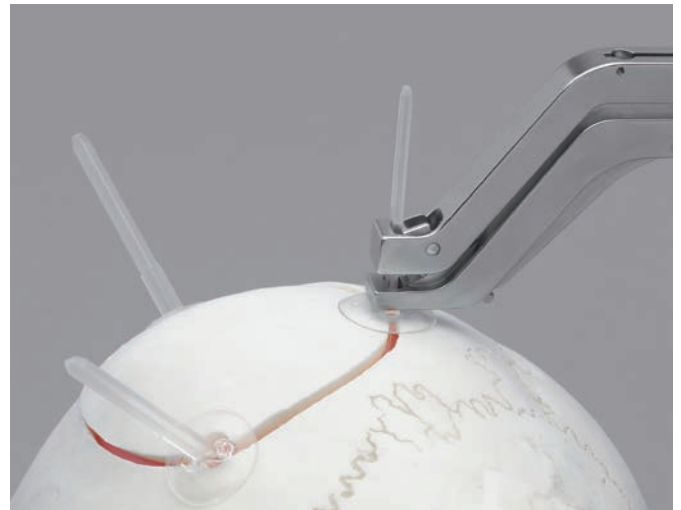
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### 4. Apply tension

Squeeze the instrument handles to tension the cranial clamp.

■ **Note:**

If clamps were not pre-tensioned as described in step 2, the tensioning step may be repeated to fully fixate the clamp.





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## 5. Cut the stem

While maintaining tension on the clamp, cut the stem by squeezing the cutting trigger. After cutting a stem, release the ratcheting mechanism on the instrument.

Repeat steps 3–5 until all clamps have been secured.



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## 6. Removal

In cases where postoperative re-entering to the cranium is required, free the top disk of the clamp and grasp firmly along the kerf. Release the disk by lifting and rotating it parallel to the kerf. Repeat this procedure with the remaining clamps. The bone flap can now be removed.

### ■ Notes:

- The RAPIDSORB Cranial Clamps are single-use only and must be discarded after removal. Use new clamps to reattach the cranial bone flap.
- The kerf must be perpendicular to the surface of the cranium for proper placement of the clamps.
- The clamps are not recommended for kerf widths less than 1.5 mm or greater than 4 mm. Clamps are not recommended for burr holes larger than 10 mm in diameter.



# Ordering Information

## Implant

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851.801.01S RAPIDSORB Cranial Clamp,  
18mm diameter, sterile, single pack unit

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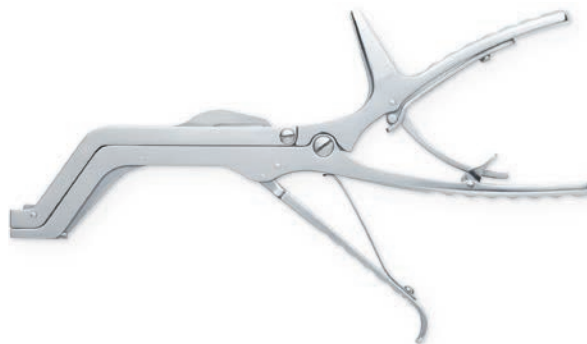


## Instrument

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329.317 Application Forceps for RAPIDSORB  
Cranial Clamp

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## Instrument Tray

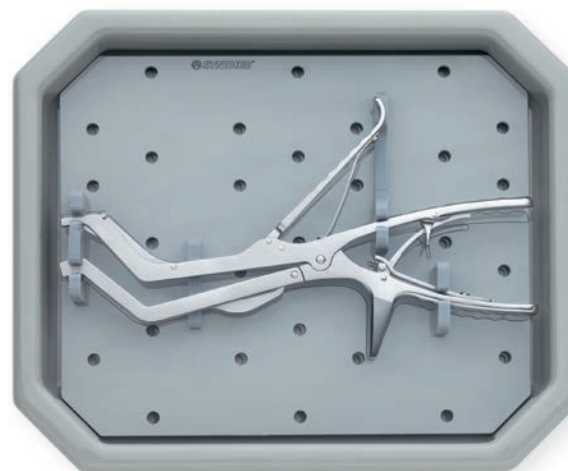
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305.880 Universal Instrument Tray, large,  
with Lid, with Insert

consisting of:

305.881 Lid  
304.686 Instrument Tray  
305.882 Insert

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Not all products are currently available in all markets.  
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