



BLACK  
FOREST  
MEDICAL  
GROUP

# DORO®

CRANIAL STABILIZATION & RETRACTOR SYSTEMS



# CREATE A NEW WORLD IN NEUROSURGERY WITH US!

Each neurosurgical intervention means a new challenge. Every minute counts. Every step needs to fit. A smooth workflow is essential. The Black Forest Medical Group is proud to support you and your team with innovative solutions that make neurosurgical interventions safer and more efficient.

From our history to the present and turning into the future, we were and always will be driven by the desire to satisfy your needs. Together, we are able to multiply our strengths, making a lasting difference for the health of people worldwide.



Matthias Schüle  
Owner & Managing Director



Roman Maier  
Managing Director



Patrick Lux  
Managing Director



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# CRANIAL STABILIZATION

## Rigid & Non-Invasive Headrest Systems

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Firm positioning of the cranium is essential during neurosurgical procedures for patient safety and the overall outcome of the surgical approach, especially when using technologies like microscopes or navigation. We are driven to create solutions which ensure stability and safety, and provide the strength and flexibility to perform at your very best - whatever your next case might be.

# DORO® QR3 HEADREST SYSTEM

The DORO® QR3 Headrest System is developed for daily use in non-imaging neurosurgical applications. Features like built-in navigation adaptor interfaces and Mix & Match compatibility with DORO® Radiolucent products make it a time-saving and versatile device.

## DORO® QR3 Headrest System

Item no. 1001.100  
(shown with DORO® Skull Pins)

Included Items	Item no.
DORO® QR3 Skull Clamp	1001.001
DORO® Swivel Adaptor Aluminum	3002-00
DORO® Base Unit Aluminum	3001-00



## DORO® Storage Case Headrest System

Item no. 1001.030  
(optionally available).

## VERSATILE

With the DORO® QR3 Skull Clamp as a basis, you are free to enhance the set-up to what suits you best. Retractor arms, entire retractor systems or navigation adaptors – it all fits.

## INTUITIVE

Fast and easy mounting frees up resources for the rest of your surgery preparations.

## COMPATIBLE

Can directly be attached to an OR table via the neuro interface or mounted to its side-rails utilizing DORO® Side Rail Adaptors (page 10). You can also Mix & Match it with radiolucent DORO® products (page 23).



DORO® QR3 Headrest System  
Item no. 1001.100

# DORO® QR3 SKULL CLAMP

## EASY TO READ PRESSURE SCALE

Metric and imperial units.

## REDUCED RISK OF LACERATIONS

No play between archholder and skull base when locked.

## PRECISE NAVIGATION

Navigation tracking device adaptors (page 10) can easily be attached in close proximity to the surgical field.

## SPACIOUS

Due to its unique shape there is always free space to place the intubation tube, even in prone position.

## EASY, SAFE AND STABLE INTERFACE

Attach DORO LUNA®, DORO COBRA® or Quick-Clamp products to the form-fitting Quick-Rail® interface (Infobox below).



DORO® QR3 Skull Clamp  
Item no. 1001.001

## STABLE

Minimum play between the skull clamp base and the extension arm ensures high stability and a reduced risk to lost navigation.



## QUICK-RAIL® AN INNOVATIVE INTERFACE

The term QR3 refers to the 3<sup>rd</sup> generation of our innovative Quick-Rail® technology which is directly implemented in the extension arms of our aluminum skull clamps. Due to its unique shape it can easily be located, even when covered by multiple layers of sterile drape. The Quick-Rail® serves as a form-fitting interface, ensuring reliable attachment of DORO® Retractor Systems and accessories.

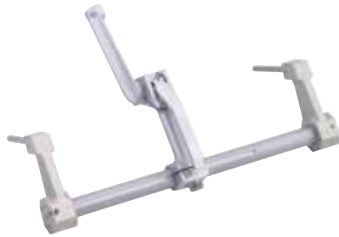


# DORO® ALUMINUM BASE UNITS

DORO® Base Units are individually designed for specific OR tables. Additionally, you can attach DORO® Base Units to virtually any common OR table with DORO® Side Rail OR Table Adaptors (page 10).



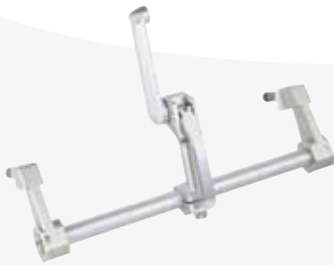
DORO® Adjustable Base Unit  
Item no. 3001-00



DORO® Adjustable Base Unit  
Mizuho  
Item no. 3001-002



DORO® Adjustable Base Unit  
Takara Belmont  
Item no. 3001-001



DORO® Adjustable Base Unit  
Eschmann T-Series  
Item no. 3001-010

# DORO® BASE UNIT PARKBENCH

The DORO® Base Unit Parkbench is the perfect solution for lateral patient positioning. Its design allows a safe and comfortable positioning of the patient's arm, resulting in a reduced risk of hematomas. The Base Unit Parkbench is adjustable in width and attaches to almost all standard siderails.



DORO® Base Unit Parkbench  
Item no. 3001-006



Trumpf Universal Side Rail Fitting  
Item no. 3007-50

Connects the Armrest Parkbench to the DORO® Base Unit Parkbench.



Stryker Armrest Parkbench  
Item no. 3001-007



# DORO® SWIVEL ADAPTORS

DORO® Swivel Adaptors are the connecting elements between DORO® Skull Clamps and DORO® Base Units. Versions offering pivoting features and additional starbursts are available.



**DORO® Swivel Adaptor**  
Item no. 3002-00

Provides 360° rotation for optimum flexibility in patient positioning.



**DORO® Ball Pivot Adaptor**  
Item no. 3002-50

Provides 360° rotation, pivoting and a unique horizontal inclination up to 90° for maximum flexibility in patient positioning.



**DORO® Swivel Adaptor Navigation**  
Item no. 3002-60

Provides 360° rotation and two additional starbursts for increased options in mounting navigational or similar devices.

# DORO® CROSSBAR ADAPTOR

The DORO® Crossbar Adaptor is the perfect solution for all approaches requiring the patient to be in sitting position. It can be mounted to the side-rails of virtually any standard OR tables and provides a stable interface for the DORO® QR3 Headrest System.



**DORO® Crossbar Adaptor**  
Item no. 3007-00

Needs 2x Universal Side Rail Fittings (item no. 3007-50, see page 8).



# DORO® ALUMINUM OR TABLE ADAPTORS



**DORO® Table Adaptor**  
Item no. 3010-00

Mounted on square receptacle of OR table.



**DORO® Side Rail OR Table Adaptor**  
Item no. 3011-00

Width-adjustable universal neuro interface, fitting OR tables with bars up to 70 mm.



**DORO® Side Rail OR Table Adaptor AMSCO®**  
Item no. 3011-10

Width-adjustable universal neuro interface, fitting OR tables with bars up to 125 mm.



**AMSCO® Headrest Adaptor**  
Item no. 3011-11

Fits 3080 & 3085 series.

# DORO® NAVIGATION ADAPTORS

DORO® Easy Connect Navigation Adaptors connect directly to the integrated navigation starburst on the Quick-Rail® of the DORO® QR3 Skull Clamp, DORO® Multi-Purpose Skull Clamp and DORO® Skull Clamp Teflon®. This provides a very stable and secure connection and allows positioning the navigation reference array close to the surgical target.



**DORO® Easy Connect Navigation Adaptor Stryker®**  
Item no. 1204.001

(Shown with Stryker navigation reference array).



**DORO® Easy Connect Navigation Adaptor Brainlab**  
Item no. 1204.002

(Shown with Brainlab navigation reference array).



**DORO® Easy Connect Navigation Adaptor Medtronic**  
Item no. 1204.003

(Shown with Medtronic navigation reference array).

# DORO® REUSABLE SKULL PINS



DORO® Reusable  
Skull Pins  
Stainless Steel  
Adult  
Color: Black  
Item no. 3005-00  
(3 pins)



DORO® Reusable  
Skull Pins  
Stainless Steel  
Pediatric  
Color: Black  
Item no. 3004-00  
(3 pins)



DORO® Reusable  
Skull Pins  
Titanium  
Adult  
Color: Blue  
Item no. 3005-50  
(3 pins)



DORO® Reusable  
Skull Pins  
Titanium  
Pediatric  
Color: Blue  
Item no. 3004-50  
(3 pins)

# DORO® DISPOSABLE SKULL PINS



DORO® Disposable  
Skull Pins  
Stainless Steel  
Adult  
Color: Blue  
Item no. 3006-00  
(36 pins), sterile



DORO® Disposable  
Skull Pins  
Stainless Steel  
Pediatric  
Color: Yellow  
Item no. 3006-10  
(36 pins), sterile



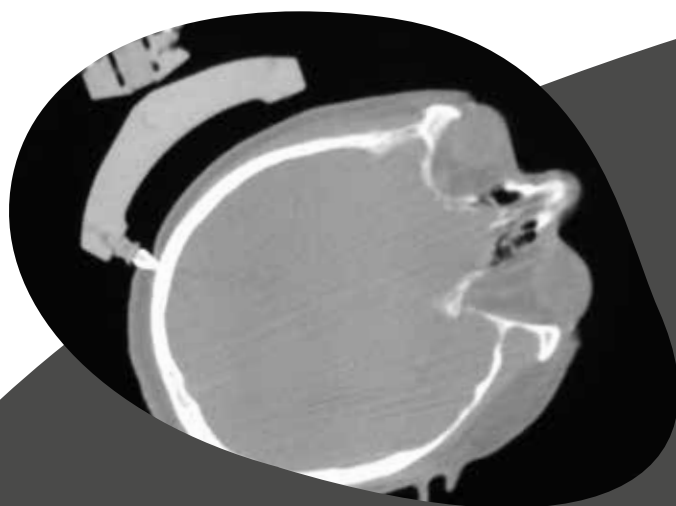
DORO® Disposable  
Skull Pins  
Titanium  
Adult  
Color: Turquoise  
Item no. 3006-20  
(36 pins), sterile



DORO® Disposable  
Skull Pins  
Titanium  
Pediatric  
Color: Green  
Item no. 3006-30  
(36 pins), sterile



DORO® Disposable  
Skull Pins  
Stainless Steel  
Adult  
Color: Black  
Item no. 3006-50  
(36 pins), sterile



## HIGH-END IMAGING

Perfect balance of imaging quality and pin stability. The DORO LUCENT® Disposable Skull Pin is specifically designed for intra-operative imaging applications using CT, MRI, X-Ray and Fluoroscopy. Imaging artifacts are reduced to a minimum while the composition of a titanium tip and high-performance reinforced polymer ensures a precise, secure and rigid fixation of the patient's head.



DORO LUCENT® Disposable Skull Pins  
Adult, sterile  
Color: Black  
Item no. 1106.003 (3 pins)  
Item no. 1106.103 (9 pins)



# DORO® QR3 HEADREST SYSTEM TEFLON®

The DORO® QR3 Headrest System Teflon® is the sterilizable counterpart of our well-established DORO® Headrest System Aluminum. Its autoclavability is a major plus when you are treating highly infectious patients.

## DORO® QR3 Headrest System Teflon®

Item no. 3003-100  
(shown with DORO® Skull Pins)

Included Items	Item no
DORO® Skull Clamp Teflon®	3003-009
DORO® Swivel Adaptor Teflon®	3002-009
DORO® Adjustable Base Unit Teflon®	3001-009

## PRECISE NAVIGATION

Navigation tracking device adaptors (page 10) can easily be attached closely to the surgical field.

## EASY, SAFE AND STABLE CONNECTION

Attach DORO LUNA®, DORO COBRA® or Quick-Clamp products to the form-fitting Quick-Rail® interface.

## AUTOCLAVABLE

The Teflon® coated surface of the DORO® QR3 Headrest System Teflon® makes it machine-washable and autoclavable.

It conforms to World Health Organization (WHO) Infection Control Guidelines for cleaning and sterilization.



DORO® Storage Case Headrest System  
Item no. 1001.030  
(optionally available).



DORO® QR3 Headrest System Teflon®  
Item no. 3003-100

# DORO® HORSESHOE HEADREST ALUMINUM



## SKELETAL TRACTION OPTION

DORO® Horseshoe Headrests Aluminum are available with or without an Extension Bar.

## PROPER PATIENT POSITIONING

All DORO® Horseshoe Headrests are adjustable in width.

## ONE BASE FITS ALL

Mount adult or pediatric gel pads to the same horseshoe base.

## ADULT VERSION

### DORO® Swivel Horseshoe Headrest System, Adult with Extension Bar

Item no. 3009-00

Included Items	Item no.
DORO® Horseshoe Base	3009-01
DORO® Horseshoe Pad, Adult, right	3009-10
DORO® Horseshoe Pad, Adult, left	3009-11
DORO® Extension Bar Horseshoe	3009-25

### DORO® Swivel Horseshoe Headrest System, Adult without Extension Bar

Item no. 3009-02

Included Items	Item no.
DORO® Horseshoe Base	3009-01
DORO® Horseshoe Pad, Adult, right	3009-10
DORO® Horseshoe Pad, Adult, left	3009-11

## PEDIATRIC VERSION

### DORO® Swivel Horseshoe Headrest System, Pediatric with Extension Bar

Item no. 3008-00

Included Items	Item no.
DORO® Horseshoe Base	3009-01
DORO® Horseshoe Pad, Pediatric, right	3008-10
DORO® Horseshoe Pad, Pediatric, left	3008-11
DORO® Extension Bar Horseshoe	3009-25

### DORO® Swivel Horseshoe Headrest System, Pediatric without Extension Bar

Item no. 3008-02

Included Items	Item no.
DORO® Horseshoe Base	3009-01
DORO® Horseshoe Pad, Pediatric, right	3008-10
DORO® Horseshoe Pad, Pediatric, left	3008-11

# DORO® ACCESSORIES



### DORO® Cervical Spine Support

Item no. 3012-00  
Neck support for anterior spine surgery.



### DORO® Headrest Wall Storage Unit

Item no. 3013-00  
81 cm x 94 cm  
32" w x 37" h.



### DORO® Lubricant HP500

Item no. 1001.999

### DORO® Lubricant HP500 6-pack

Item no. 1001.998

Autoclavable and precise in its application due to its needle-shaped tip.

# DORO® MULTI-PURPOSE SKULL CLAMP

The DORO® Multi-Purpose Skull Clamp is our most versatile head positioning device. It offers all the beneficial features of the DORO® QR3 Skull Clamp and can be set-up for invasive or non-invasive procedures in adult as well as in pediatric cases. Since a children's skull is still growing and therefore very vulnerable, neurosurgical solutions are needed which fit their needs. The DORO® Multi-Purpose Skull Clamp provides different kinds of shapes and sizes of gel pads and pin holders. An extension bar with a force application specifically designed for pediatric cases ensures a safe immobilization of the child's head while providing additional control over the pinning force up to 90N.

**FLEXIBLE**   
A large variety of DORO® Gel Pads and Pin Holders is available to support optimal patient positioning (pages 16-17).

## PRECISE NAVIGATION

Navigation tracking device adaptors (page 10) can easily be attached in close proximity to the surgical field.

## SUPPORTS PEDIATRIC PROCEDURES

The DORO® Multi-Purpose Skull Clamp features specifically designed components like the 90 N/20 lbs Extension Bar or the head support.



DORO® Extension Bar  
90 N/20 lbs  
Item no. 3020-52

## EXTENDABLE

The Quick-Rail® technology enables you to attach accessories and retractor systems such as the DORO LUNA® Retractor System (page 38) easily, quickly, and securely to the skull clamp.

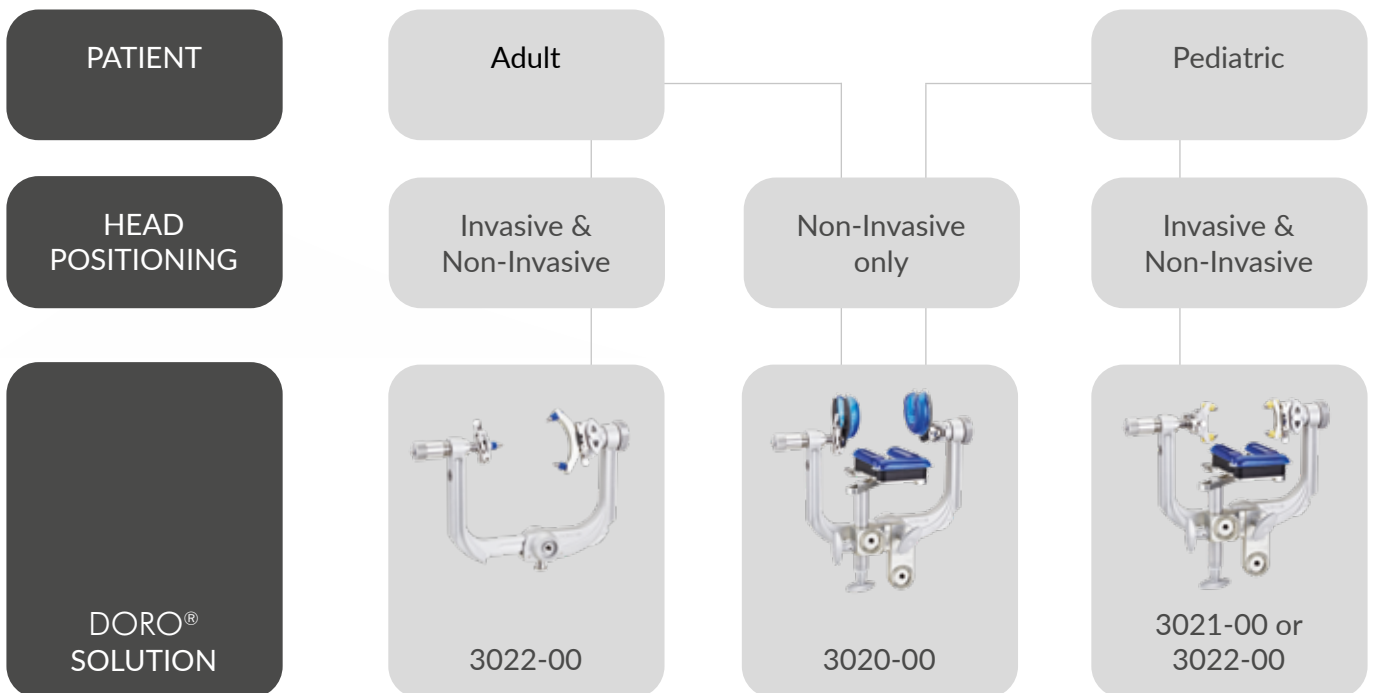
## MIX & MATCH

Combine the DORO® Multi-Purpose Skull Clamp with a radiolucent base unit and swivel adaptor (page 23).



# Which DORO® Multi-Purpose Skull Clamp System works for you?

That depends on the required head positioning method. Check below for guidance. The complete system configurations can be found on the following pages.



# DORO® MULTI-PURPOSE – INVASIVE SET-UP

Set-up the DORO® Multi-Purpose Skull Clamp as a classic 3-pin skull clamp for adult patients or apply the dedicated 90 N /20 lbs extension bar, head support and dual pin holders on both sides when treating pediatric patients. An interface for the direct connection of the PMT® Halo System is also available.



## DORO® Abbott Multi-Purpose Skull Clamp System Pediatric

Included Items	Item no.
DORO® Disposable Skull Pins, Pediatric (36pcs)	3006-10
DORO® Pin Holder Pediatric	3020-01
DORO® Head Support (w/o Gel Pads)	3020-03
DORO® Multi-Purpose Skull Clamp	3020-50
DORO® Extension Bar 90N/20lbs	3020-52
DORO® Single Pin Holder	3020-55
DORO® Gel Head Ring w/ Base 90 mm (3pcs)	3020-61
DORO® Pin Holder Adjustable, Pediatric	3020-62
DORO® Gel Head Ring w/ Base 140 mm	3020-63
DORO® Adjustment Key	3020-65
DORO® Gel Ear Ring w/ Base 90 mm (2pcs)	3020-68
DORO® Trio Gel Pad (adjustable)	3020-71
DORO® Storage Case MPSC System	3020-001

## DORO® Universal Multi-Purpose Skull Clamp System

Included Items	Item no.
DORO® Disposable Skull Pins, Adult (36pcs)	3006-00
DORO® Disposable Skull Pins, Pediatric (36pcs)	3006-10
DORO® Pin Holder Pediatric	3020-01
DORO® Gel Pad (2pcs)	3020-02
DORO® Head Support (w/o Gel Pads)	3020-03
DORO® Multi-Purpose Skull Clamp	3020-50
DORO® Extension Bar 90N/20lbs	3020-52
DORO® Single Pin Holder	3020-55
DORO® Pin Holder Adult	3020-56
DORO® Gel Head Ring w/ Base 90 mm (3pcs)	3020-61
DORO® Pin Holder Adjustable, Pediatric	3020-62
DORO® Gel Head Ring w/ Base 140 mm	3020-63
DORO® Adjustment Key	3020-65
DORO® Gel Ear Ring w/ Base 90 mm (2pcs)	3020-68
DORO® Trio Gel Pad (adjustable)	3020-71
DORO® Storage Case MPSC System	3020-001

# DORO® MULTI-PURPOSE – NON-INVASIVE SET-UP

Choose from a variety of different gel pad shapes and sizes for optimal patient stabilization for non-invasive positioning. All of the pads can either be mounted to the lateral receptacles at the skull clamp or to the head support for maximized flexibility in patient positioning.



**DORO® Multi-Purpose Skull Clamp**  
Non-Invasive Set-Up



**DORO® Gel Ear Ring, with Base 90mm**  
Item no. 3020-68



**DORO® Gel Head Ring, with Base 90mm**  
Item no. 3020-61



**DORO® Trio Gel Pad, adjustable**  
Item no. 3020-71



**DORO® Gel Pad**  
Item no. 3020-02



**DORO® Gel Ear Ring, with Base 140mm**  
Item no. 3020-70



**DORO® Gel Head Ring, with Base 140mm**  
Item no. 3020-63

## DORO® Multi-Purpose Skull Clamp System

Item no. 3020-00

Included Items	Item no.
DORO® Disposable Skull Pins, Pediatric (36pcs)	3006-10
DORO® Pin Holder Pediatric	3020-01
DORO® Head Support (w/o Gel Pads)	3020-03
DORO® Multi-Purpose Skull Clamp	3020-50
DORO® Single Pin Holder	3020-55
DORO® Gel Head Ring w/ Base 90 mm (3pcs)	3020-61
DORO® Pin Holder Adjustable, Pediatric	3020-62
DORO® Gel Head Ring w/ Base 140 mm	3020-63
DORO® Adjustment Key	3020-65
DORO® Gel Ear Ring w/ Base 90 mm (2pcs)	3020-68
DORO® Trio Gel Pad (adjustable)	3020-71
DORO® Storage Case MPSC System	3020-001



**Storage Case MPSC System**  
Item no. 3020-001  
(shown with Multi-Purpose Skull Clamp and Accessories).

## STORE IT SAFELY

All DORO® Multi-Purpose Skull Clamp systems are shipped in a protective storage case.





# CRANIAL STABILIZATION

## Imaging Solutions

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Intra-operative imaging allows to run diagnostic imaging during surgical procedures to support decision making on how to proceed with the case at hand. Having experienced the complexity of different imaging methods and surgical approaches, we strive to provide technically advanced yet easy to use products.



# DORO LUCENT® HEADREST SYSTEM

MRI    CT    ANGIO

The DORO LUCENT® Headrest System is the cranial stabilization system of choice for all procedures applying X-Ray & iCT Imaging. It features the completely metal free DORO® Skull Clamp Radiolucent with its beneficial Quick-Rail® interfaces for a quick and easy attachment of navigation tracking devices, retractor systems and other accessories. The DORO LUCENT® Base Unit features a completely new and streamlined design and is also available in a compact version.

DORO LUCENT® Headrest System Item no. 1101.020	
Included Items	Item no.
DORO LUCENT® Base Unit	1101.021
DORO LUCENT® Transitional Member	1101.026
DORO LUCENT® Locking Transitional Member	1101.031
DORO LUCENT® Storage Case Headrest System	1101.030
DORO LUCENT® Disposable Skull Pins, Adult	1106.003
DORO® Swivel Adaptor Radiolucent	3033-00
DORO® Skull Clamp Radiolucent	3034-00

## HIGH-END IMAGING

DORO LUCENT® Disposable Skull Pins are perfectly stable and reduce imaging artifacts to a minimum (page 11).

## RIGID FIXATION

Safely position the patient engaging the DORO® Skull Clamp Radiolucent.

## FITTING

The system connects to virtually any OR table side-rail types.

## ADAPTABLE

Compact Side Parts are additionally available.

DORO LUCENT® Headrest System  
Item no. 1101.020  
(shown with DORO LUCENT® Disposable Skull Pins, page 11).

## SAFE

The form fitting design of the base unit provides a stable base for the entire system.

## CONVENIENT HANDLING

Combined locking of transitional and sliding member.





# DORO® SKULL CLAMP RADIOLUCENT

MRI    CT    ANGIO

**EASY TO READ  
PRESSURE SCALE**  
Metric and imperial  
units.

**REDUCED RISK OF  
LACERATIONS**  
No play between archholder and  
skull clamp when locked.



**DORO® Skull Clamp Radiolucent**  
Item no. 3034-00  
(shown with **DORO LUCENT®**  
Disposable Skull Pins, page 11).

**VERSATILE**  
Quick-Rail® Technology enables  
you to attach accessories and  
retractor systems easily, quickly,  
and securely to the skull clamp.

**MIX & MATCH**  
The **DORO®** Skull Clamp Radiolucent can  
be mounted to **DORO®** Aluminum Swivel  
Adaptor and Base Unit utilizing the Mix &  
Match Adaptor #3033-50 (page 23).



**DORO LUCENT®**  
Base Unit Compact  
Item no. 1101.022

**DORO LUCENT®**  
Side Part, short  
Item no. 1101.038

## COMPACT VERSION

Choose the **DORO LUCENT®** Headrest  
System that suits you best. If you need to  
keep a low profile, the **DORO LUCENT®**  
Base Unit Compact offers shortened side  
parts, minimizing the space between base  
unit and OR table.



# DORO LUCENT® NAVIGATION ADAPTORS

MRI    CT    ANGIO

DORO® Navigation Adaptors Radiolucent offer a safe and stable interface for navigation reference arrays from Stryker®, Medtronic and Brainlab. They are directly mounted to the Quick-Rail® of the DORO® Skull Clamp Radiolucent. These adaptors allow a close positioning of the respective navigation reference array to the patients head while keeping the sterile field intact.



**DORO LUCENT®**  
**Navigation Adaptor Brainlab**  
 Item no. 3033-66  
 For Brainlab Reference Array 19145-01  
 with or without elongation 19145-02



**DORO LUCENT®**  
**Navigation Adaptor Medtronic**  
 Item no. 3033-65



**DORO LUCENT®**  
**Navigation Adaptor Stryker®**  
 Item no. 3033-64

**PLEASE NOTE:**  
 • Reference arrays are provided by Stryker®, Medtronic and Brainlab.

# DORO LUCENT® HEADREST ACCESSORIES

MRI    CT    ANGIO



**DORO® Swivel Adaptor**  
**Radiolucent**  
 Item no. 3033-00



**DORO® Swivel Adaptor**  
**Radiolucent, short**  
 Item no. 3033-10



**DORO® Universal DRF Adaptor**  
**Radiolucent (includes key)**  
 Item no. 3038-30



**DORO LUCENT®**  
**Storage Case Headrest System**  
 Item no. 1101.030



**DORO LUCENT®**  
**Locking Transitional Member**  
 Item no. 1101.031



**DORO LUCENT®**  
**Transitional Member**  
 Item no. 1101.026

# MIX & MATCH



## FOR CRANIAL APPLICATIONS

Mix & Match the **DORO®** Skull Clamp Radiolucent with **DORO®** Aluminum Swivel Adaptors and Base Units.



**DORO®** Interface Skull Clamp Radiolucent  
(to ALU Swivel Adaptor)  
Item no. 3033-50

## FOR CRANIAL AND CERVICAL SPINE APPLICATIONS

Mix & Match the **DORO®** Radiolucent Skull Clamp and Swivel Adaptor with **DORO®** Aluminum Base Units.

**DORO®** Transitional Member Radiolucent (to ALU Base Unit)  
Item no. 3032-00



## FOR CERVICAL SPINE APPLICATIONS

Mix & Match **DORO®** Aluminum Skull Clamps with the **DORO®** Radiolucent Swivel Adaptor, Transitional Member and Base Unit.

**DORO®** Interface Skull Clamp Aluminum (to RDL Swivel Adaptor)  
Item no. 3033-51



# DORO® HORSESHOE RADIOLUCENT

MRI    CT    ANGIO

DORO® Radiolucent Horseshoes are the best choice for procedures that do not require a rigid fixation. The products come with an extension bar for skeletal traction. The horseshoe features a Quick-Rail® interface for the quick connection of DORO COBRA® Retractor Arms.

## ADULT VERSION

**DORO® Swivel Horseshoe Headrest Radiolucent Adult, with Extension Bar**  
Item no. 3036-00

Included Items	Item no.
DORO® Horseshoe Base Radiolucent with Extension Bar	3036-50
DORO® Horseshoe Pad, Adult, right	3009-10
DORO® Horseshoe Pad, Adult, left	3009-11

## PEDIATRIC VERSION

**DORO® Swivel Horseshoe Headrest Radiolucent Pediatric, with Extension Bar**  
Item no. 3035-00

Included Items	Item no.
DORO® Horseshoe Base Radiolucent with Extension Bar	3036-50
DORO® Horseshoe Pad, Pediatric, right	3008-10
DORO® Horseshoe Pad, Pediatric, left	3008-11



### VERSATILE

Attach DORO COBRA® Retractor Arms utilizing the DORO COBRA® Quick-Clamp for Radiolucent Quick-Rail® (page 41).

# DORO® HORSESHOE RS RADIOLUCENT

MRI    CT    ANGIO

## ADULT VERSION

**DORO® Horseshoe RS Headrest Radiolucent, Adult, with Extension Bar**  
Item no. 3036-70

Included Items	Item no.
DORO® Horseshoe RS Base Radiolucent with Extension Bar	3036-71
DORO® Horseshoe Pad, Adult, right	3009-10
DORO® Horseshoe Pad, Adult, left	3009-11

## PEDIATRIC VERSION

**DORO® Horseshoe RS Headrest Radiolucent, Pediatric, with Extension Bar**  
Item no. 3035-70

Included Items	Item no.
DORO® Horseshoe RS Base Radiolucent with Extension Bar	3036-71
DORO® Horseshoe Pad, Pediatric, right	3008-10
DORO® Horseshoe Pad, Pediatric, left	3008-11



### COMPACT

Connect the Horseshoe RS directly to the DORO LUCENT® Transitional Member and benefit from a low profile.

# DORO LUCENT® HORSESHOE ENT

MRI    CT    ANGIO

The DORO LUCENT® Horseshoe Headrest ENT is designed to match the specific needs of patient positioning for ear, nose and throat procedures. You can directly mount it to the DORO LUCENT® Transitional Member which allows a low profile by having the open part of the horseshoe facing away from the OR table.



## ADULT VERSION

DORO LUCENT® Horseshoe Headrest ENT, Adult  
Item no. 1101.007

Included Items	Item no.
DORO LUCENT® Horseshoe Headrest ENT, RDL w/o Gel Pads	1101.006
DORO® Horseshoe Pad, Adult, right	3009-10
DORO® Horseshoe Pad, Adult, left	3009-11

Shown mounted to the DORO LUCENT® Base Unit.

## PEDIATRIC VERSION

DORO LUCENT® Horseshoe Headrest ENT, Pediatric  
Item no. 1101.008

Included Items	Item no.
DORO LUCENT® Horseshoe Headrest ENT, RDL w/o Gel Pads	1101.006
DORO® Horseshoe Pad, Pediatric, right	3008-10
DORO® Horseshoe Pad, Pediatric, left	3008-11



## ONE BASE FITS ALL

DORO® Horseshoe Bases share the same gel pad holder design. This means that all our horseshoe gel pads can be mounted to every horseshoe base in our portfolio. The innovative design of the DORO® Horseshoe Base gives you the opportunity to quickly adapt these products to adult or pediatric applications by mounting the respective gel pads, ensuring the optimal set-up for each of your patients.



# DORO® QR3 XTom

MRI    SMALL GANTRY CT    ANGIO

The DORO® QR3 XTom Cranial Stabilization System is designed to fit small gantry CTs. Adjustable Extension Arms ensure an optimal patient placement within CT scanner gantries of 32 cm / 12 inch and larger. The XTom System comes with a specifically designed torque screw driver to set pin pressure and with the DORO® XTom U-Belt, which works like a safety net and will prevent major injuries in case of head slippage, no matter the patient's head position.

DORO® QR3 XTom Cranial Stabilization System Item no. 4002.100	
Included Items	Item no.
DORO® QR3 XTom Skull Clamp	4002.001
DORO® XTom U-Belt (3 pcs)	4002.111
DORO® XTom Storage Case	4002.030
DORO® XTom Torque Screwdriver	4002.068
DORO® XTom Base Unit Parkbench	4002-10
DORO LUCENT® Disposable Skull Pins (9 pins)	1106.103

## HIGH-END IMAGING DORO LUCENT®

Disposable Skull Pins reduce imaging artifacts to a minimum.

## A SMALL GANTRY SOLUTION

Adjustable Extension Arms ensure that the patient's head fits into gantries of 32 cm / 12 inch and larger.



## PRECISE NAVIGATION

Navigation tracking device adaptors can easily be attached in close proximity to the surgical field.

## EASY, SAFE AND STABLE INTERFACE

Attach DORO LUNA®, DORO COBRA® or Quick-Clamp products to the form-fitting Quick-Rail® interface.

## COMPATIBLE

The DORO® QR3 XTom Cranial Stabilization System is directly mountable to all standard OR tables with side rails.

DORO® QR3 XTom  
Cranial Stabilization System  
Item no. 4002.100

# Which DORO® System works for your Neurological scanner?

The DORO® QR3 XTom Cranial Stabilization System is designed to fit small gantry CTs like NeuroLogica's OmniTom or CereTom scanners. For CTs with larger gantries the DORO LUCENT® Headrest System is the Cranial Stabilization System of choice.



BodyTom



OmniTom



CereTom

NEUROLOGICA  
SCANNER



DORO LUCENT®  
Headrest System  
Item no. 1101.020  
(page 20)



DORO® QR3 XTom  
Cranial Stabilization System  
Item no. 4002.100

DORO®  
SYSTEM

# DORO LUCENT® iMRI HEADREST SYSTEM

MRI    CT    ANGIO

DORO LUCENT® iMRI Headrest Systems allow you to use all the beneficial features and the known workflow of a standard rigid 3-pin fixation in an iMRI environment. This technically advanced yet familiar-to-use product features a variant of our proven DORO® Skull Clamp Radiolucent. It is mounted to the OR table's transfer board by utilizing the DORO LUCENT® iMRI Parallelogram Adaptor, giving you the freedom you need to properly position patients for surgery.

## FAMILIAR

The classic 3-pin skull clamp design with ratcheting system allows you to rely on your trained routine and known workflows.

## HIGH-END IMAGING DORO LUCENT®

Disposable Skull Pins are perfectly stable and reduce imaging artifacts to a minimum (page 16).

## FAST

Directly mountable to transfer boards of selected OR table manufacturers.

## FLEXIBLE

The parallelogram design supports you in positioning your patient properly for surgery.



DORO LUCENT® iMRI Headrest System  
MAQUET  
Item no. 4003.300

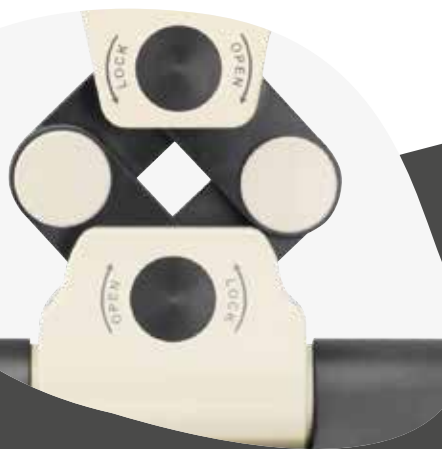
## AUTOMATIC IMAGE REGISTRATION READY

Brainlab Automatic Image Registration (AIR) is the fundamental technology for high-precision surgical navigation from start to finish. It adds intraoperatively acquired MR images to surgical navigation while maintaining the preoperative surgical plan. This updated registration compensates for potential loss of navigation accuracy during surgery.

The Brainlab registration matrix with integrated MR markers has been designed exclusively for DORO LUCENT® iMRI Headrest Systems and therefore seamlessly integrates in the standard patient positioning workflow.

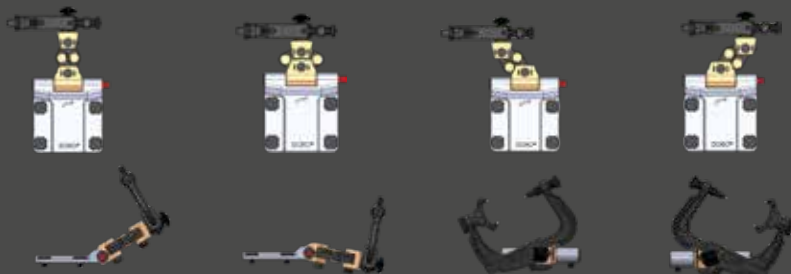


DORO LUCENT® iMRI Headrest System  
MAQUET  
Item no. 4003.300  
(shown with Brainlab AIR)



## MOVEMENT CAPABILITIES

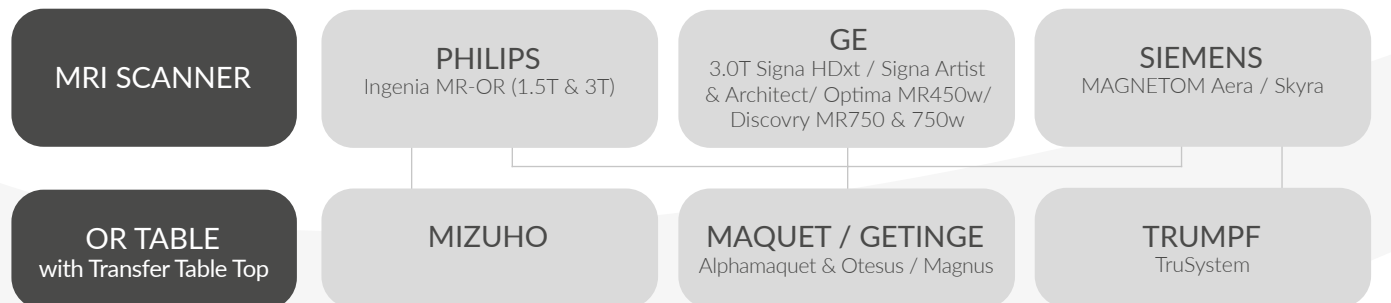
DORO LUCENT® Parallelogram Adaptors allow you to shift, tilt, angle and rotate the skull clamp to find a fitting position for your patient.





# Which DORO LUCENT® iMRI Headrest System works for you?

Check the type of MRI scanner and OR table in your OR environment and compare it to the overview below to identify the DORO LUCENT® iMRI Headrest System that will fit your OR environment.



**DORO LUCENT®**  
iMRI Headrest System MIZUHO  
Item no. 4003.350

Included Items	Item no.
DORO® Skull Clamp Radiolucent for <b>DORO LUCENT®</b> Parallelogram Adaptor	4003.001
DORO® Headplate	4003.005
DORO® Adjusting Wrench for <b>DORO LUCENT®</b> Parallelogram Adaptor	4003.011
<b>DORO LUCENT®</b> Storage Case for Parallelogram Adaptors	4003.030
<b>DORO LUCENT®</b> iMRI Parallelogram Adaptor MAQUET	4003.311
<b>DORO LUCENT®</b> Disposable Skull Pins, Adult (3 pcs)	1106.003

A fitting iMRI Transfer Collision Indicator must be purchased from Phillips.



**DORO LUCENT®**  
iMRI Headrest System MAQUET  
Item no. 4003.300

Included Items	Item no.
DORO® Skull Clamp Radiolucent for <b>DORO LUCENT®</b> Parallelogram Adaptor	4003.001
DORO® Headplate	4003.005
DORO® Adjusting Wrench for <b>DORO LUCENT®</b> Parallelogram Adaptor	4003.011
<b>DORO LUCENT®</b> Storage Case for Parallelogram Adaptors	4003.030
<b>DORO LUCENT®</b> iMRI Parallelogram Adaptor MAQUET	4003.311
<b>DORO LUCENT®</b> iMRI Transfer Collision Indicator	4003.XXX
<b>DORO LUCENT®</b> Disposable Skull Pins, Adult (3 pcs)	1106.003

**PLEASE NOTE:**

With the first installation of a **DORO LUCENT®** iMRI Headrest System, an expert training is mandatory (page 32). Please contact your local **DORO®** representative for details.



**DORO LUCENT®**  
iMRI Headrest System TRUMPF  
Item no. 4003.200

Included Items	Item no.
DORO® Skull Clamp Radiolucent for <b>DORO LUCENT®</b> Parallelogram Adaptor	4003.001
DORO® Headplate	4003.005
DORO® Adjusting Wrench for <b>DORO LUCENT®</b> Parallelogram Adaptor	4003.011
<b>DORO LUCENT®</b> Storage Case for Parallelogram Adaptors	4003.030
<b>DORO LUCENT®</b> iMRI Parallelogram Adaptor TRUMPF	4003.211
<b>DORO LUCENT®</b> iMRI Pad TRUMPF	4003.212
<b>DORO LUCENT®</b> iMRI Transfer Collision Indicator	4003.XXX
<b>DORO LUCENT®</b> Disposable Skull Pins, Adult (3 pcs)	1106.003
<b>DORO®</b> Torx Screwdriver T45, nonmagnetic	3033-68

# DORO LUCENT® iXI HEADREST SYSTEM

✓ MRI    ✓ CT    ✓ ANGIO

The DORO LUCENT® iXI Headrest System increases your diagnostic capabilities as it supports intra-operative MR, CT and Angio imaging. This enables you and your team to run diagnostics on bone and tissue within the same surgery, resulting in a more precise treatment with lower time consumption compared to separate imaging approaches.

## STATE-OF-THE-ART

The DORO LUCENT® iXI Headrest System is a dedicated multimodality imaging solution designed for use with MAQUET / GETINGE Magnus OR Tables and SIEMENS Nexaris Imaging Suites.



DORO LUCENT®  
iXI Headrest System  
Item no. 4003.500

DORO LUCENT®  
iXI Headrest System  
Item no. 4003.500

Included Items	Item no.
DORO® Skull Clamp Radiolucent for DORO LUCENT® Parallelogram Adaptor	4003.001
DORO® Headplate	4003.005
DORO® Adjusting Wrench for DORO LUCENT® Parallelogram Adaptor	4003.011
DORO LUCENT® Storage Case for DORO LUCENT® Parallelogram Adaptor	4003.030
DORO LUCENT® iXI Parallelogram Adaptor	4003.511
DORO LUCENT® iXI Transfer Collision Indicator	4003.5XX
DORO LUCENT® Disposable Skull Pins, Adult (3 pcs)	1106.003

## EXTENDABLE

Quick-Rail® Technology enables you to attach accessories and retractor systems easily, quickly, and securely to the skull clamp.

## FAMILIAR

The classic skull clamp design lets you apply your known routines and workflows.



DORO LUCENT®  
Headplate  
Item no. 4003.005

## AN OPTIMIZED WORKFLOW

Position the patient as required for surgery before starting the actual pinning procedure with the DORO LUCENT® Headplate. This makes further movements of the sedated patient unnecessary, resulting in reduced procedural risk, less stress for the patient and increased convenience for you and your team.

### PLEASE NOTE:

With the first installation of a DORO LUCENT® iXI Headrest System, an expert training is mandatory (page 32). Please contact your local DORO® representative for details.

# DORO LUCENT® PRODUCT TRAININGS

Dedicated products like the DORO LUCENT® iMRI or iXI Headrest Systems come as a part of a larger iMRI or multimodality imaging installation. Before you start conducting live cases with these state-of-the-art products we will train you in their use. We explain functions, simulate workflows, and assist you in matching them to your distinct needs. These training sessions are held on site, in your facility, with you and your team, to offer the best possible education. DORO® application specialists will cover essential and advanced product knowledge and will match the training to your OR environment. The training will especially focus on overall system set-up & movement capabilities as well as patient positioning and clinical workflow subject to the respective imaging modality.



iMRI & iXI Product Training  
Item no. 8001



# DORO LUCENT® iMRI & iXI ACCESSORIES



DORO LUCENT® Headplate  
Item no. 4003.005



DORO LUCENT® iMRI Pad TRUMPF  
Item no. 4003.212



DORO LUCENT® Storage Case  
for Parallelogram Adaptors  
Item no. 4003.030



DORO® Adjusting Wrench for  
DORO LUCENT® Parallelogram Adaptor  
Item no. 4003.011



DORO® Torx Screwdriver  
T45, nonmagnetic  
Item no. 3033-68



DORO LUCENT® iMRI  
Transfer Collision Indicator  
Item no. 4003.XXX



DORO LUCENT® iXI  
Transfer Collision Indicator  
Item no. 4003.5XX

# DORO® SKULL CLAMP – SPINAL FRAMES

MRI    CT    ANGIO

–RADIOLUCENT –

This modification of our metal-free DORO® Skull Clamp Radiolucent is designed for spinal surgeries and can be mounted to all established spinal OR tables and spinal frames. The slim design allows the skull clamp to be lowered between the rails of the open frame, simplifying patient positioning and imaging procedures.



DORO® Skull Clamp Radiolucent for Spinal Frames shown mounted to a MIZUHO OSI Insite® table (side view).



DORO® Skull Clamp Radiolucent for Spinal Frames shown mounted to a MIZUHO OSI Insite® table (front view).



Comparison: Standard DORO® Skull Clamp Radiolucent shown mounted to a MIZUHO OSI Insite® table.

## FREEDOM IN PATIENT POSITIONING

Unique shape allows lowering of the patient's head between the rails of an open frame OR table.



DORO® Skull Clamp Radiolucent for Spinal Frames  
Item no. 4004.101  
(shown with DORO LUCENT® Disposable Skull Pins, page 11).

## VERSATILE

Quick-Rail® Technology enables you to attach accessories and retractor systems easily, quickly, and securely to the skull clamp.

## MIX & MATCH

The DORO® Skull Clamp Radiolucent can be mounted to DORO® Aluminum Swivel Adaptor and Base Unit utilizing the Mix & Match Adaptor #3033-50 (page 23) or to fitting counterparts of spinal frame table manufacturers.



# DORO® OR TABLE ADAPTORS RADIOLUCENT

MRI    CT    ANGIO



DORO® Angiography Table Adaptor  
SIEMENS, Radiolucent  
for Artis Table  
Item no. 4003-00



DORO® Table Adaptor  
medifa®, Radiolucent  
for Medifa® OR Table 8000  
Item no. 4004.001



DORO® Table Adaptor  
STERIS, Radiolucent  
for STERIS Carbon OR Tables CMAX XRAY  
Item no. 4004.002



DORO® Table Adaptor  
MAQUET, Radiolucent  
Item no. 3031-50



DORO® Transitional Member  
Radiolucent, long (160 mm)  
Item no. 3032-10



DORO® Transitional Member  
Radiolucent, short (120 mm)  
Item no. 3032-20

For Alphamaquet 1150 and Magnus 1180  
and only in conjunction with MAQUET  
Adaptor, MAQUET item no. 6005.25A0.

Compatible with DORO® Table Adaptors  
Radiolucent, item nos 3031-50,  
4003-00, 4004.001, 4004.002.

Compatible with DORO® Table Adaptors  
Radiolucent, item nos 3031-50,  
4003-00, 4004.001, 4004.002.



# DORO® Radiolucent Table Adaptors Set Up Possibilities

Start with the OR table manufacturer at the bottom and work your way up to the DORO® solution that works best for you.





# RETRACTOR SYSTEMS

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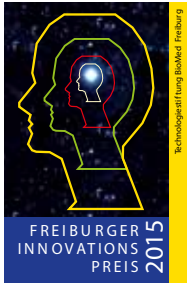
Surgeries are often connected to time-critical or stressful situations. Having to work under pressure demands the highest level of concentration. To enable you to focus on your work, we are driven to develop retractor systems which ease your workflow. Easy to set-up, convenient to use, comfortable as a hand rest, these systems will support you during the whole surgical procedure.





# DORO LUNA<sup>®</sup> RETRACTOR SYSTEM

The DORO LUNA<sup>®</sup> Retractor System is made to support you in every surgery. Its open design allows you to always keep the curves parallel to the floor, independently of patient and skull clamp positioning. Tilt, shift and angle the system into any position you need and you will still be able to use the curves as a comfortable hand rest and retractor arm interface. The adaptability of the DORO LUNA<sup>®</sup> Retractor System can be further enhanced with additional accessories, making it the most versatile retractor system to date.



The DORO LUNA<sup>®</sup> Retractor System is the winner of the 2015 Freiburg Innovation Award.

## CONVENIENT

Snap-on attachment of DORO COBRA<sup>®</sup> Flexible Rotary Arms on any desired position on the curve.

## SUPPORTIVE

Ergonomic design makes the DORO LUNA<sup>®</sup> Curve the optimal hand support. It can be positioned parallel to the floor, independently of skull clamp position.



DORO LUNA<sup>®</sup>  
Retractor System Standard  
Item no. 1203.100  
(shown mounted to the  
DORO<sup>®</sup> QR3 Skull Clamp)

## FAST

DORO LUNA<sup>®</sup> attaches directly to the Quick-Rail<sup>®</sup>, even over multiple layers of sterile drape.

## EASY

No extra tools are needed to mount and use DORO LUNA<sup>®</sup> Retractor Systems.

### DORO LUNA® Retractor System – Standard System

Item no. 1203.100

Included Items	Item no.
DORO COBRA® Flexible Rotary Arm 280mm (2 pcs)	1201.006
DORO® Retractor Sterilization Tray	1201.091
DORO LUNA® Quick-Clamp for Quick-Rail® (2 pcs)	1203.001
DORO LUNA® Coupling (4 pcs)	1203.002
DORO LUNA® Rod (2 pcs)	1203.003
DORO LUNA® Curve (2 pcs)	1203.004
DORO LUNA® Sterilization Tray	1203.091
DORO® Blade Set 102 mm, Black Coated, 5 pcs (2 sets)	3116-101

### DORO LUNA® Retractor System – Compact System

Item no. 1203.200

Included Items	Item no.
DORO COBRA® Flexible Rotary Arm 280mm (2 pcs)	1201.006
DORO® Retractor Sterilization Tray	1201.091
DORO LUNA® Quick-Clamp for Quick-Rail® (2 pcs)	1203.001
DORO LUNA® Coupling (2 pcs)	1203.002
DORO LUNA® Rod	1203.003
DORO LUNA® Curve	1203.004
DORO LUNA® Sterilization Tray	1203.091
DORO® Blade Set 102 mm, Black Coated, 5 pcs (2 sets)	3116-101



## GET THE BUNDLE

DORO LUNA® Standard Retractor System & DORO® QR3 Skull Clamp  
Item no. 1203.110

DORO LUNA® Standard Retractor System & DORO® QR3 Headrest System  
Item no. 1203.120



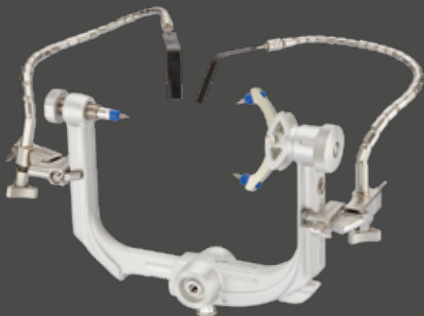
## GET THE BUNDLE

DORO LUNA® Compact Retractor System & DORO® QR3 Skull Clamp  
Item no. 1203.210

DORO LUNA® Compact Retractor System & DORO® QR3 Headrest System  
Item no. 1203.220

# A HIGHLY FLEXIBLE INTERFACE

Unfold the full potential of your DORO LUNA® & DORO COBRA® products by combining them in various set-ups. Mount half a DORO LUNA® Retractor System as a hand support while directly connecting DORO COBRA® Flexible Rotary Arms to the Quick-Rail® of the skull clamp, either in an imaging or in a non-imaging environment.



DORO COBRA® Retractor System mounted to the DORO® QR3 Skull Clamp.



DORO LUNA® Retractor System mounted to the DORO® QR3 Skull Clamp.



DORO LUNA® & DORO COBRA® combined set-up mounted to the DORO® Skull Clamp Radiolucent.

# DORO COBRA® RETRACTOR SYSTEM

The DORO COBRA® Retractor System is the retractor system of choice for minimal obstruction and access to the surgical site. DORO COBRA® Flexible Rotary Arms are directly mounted to the Quick-Rail® of either the DORO® QR3 Skull Clamp or the DORO® Skull Clamp Radiolucent. A combined set-up with DORO LUNA® components is possible and grants enhanced set-up and application possibilities.



DORO COBRA® Retractor System  
Item no. 1201.100  
(shown mounted to the  
DORO® QR3 Skull Clamp)

DORO COBRA® Retractor System for Aluminum Quick-Rail®  
Item no. 1201.100

Included Items	Item no.
DORO COBRA® Quick-Clamp for Aluminum Quick-Rail® (2 pcs)	1201.021
DORO COBRA® Flexible Rotary Arm 420 mm (2 pcs)	1201.008
DORO® Blade, Black Coated, 102 x 7 mm (2 pcs)	3116-111
DORO® Blade, Black Coated, 102 x 10 mm (2 pcs)	3116-121
DORO® Retractor Sterilization Tray	1201.091

## CONVENIENT

The DORO COBRA® Retractor System leaves you all the space you need to perform your surgery. You would like to use a comfortable hand support with it? Just mount a DORO LUNA® Compact Retractor System (page 39) to the other side of the skull clamp.

# MIX MATCH



## DORO COBRA®

Mix & Match the **DORO COBRA®** Retractor System with the **DORO®** Skull Clamp Radiolucent.

**DORO COBRA®** Quick-Clamp for Radiolucent Quick-Rail®  
Item no. 1201.022

**DORO COBRA®** Retractor System for Radiolucent Quick-Rail®  
Item no. 1201.109



## DORO LUNA®

Mix & Match the **DORO LUNA®** Retractor System with the **DORO®** Skull Clamp Radiolucent.

**DORO LUNA®** Quick-Clamp for Radiolucent Quick-Rail®  
Item no. 1203.009

**DORO LUNA®** Retractor System - Standard System for Radiolucent Quick-Rail®  
Item no. 1203.109

**DORO LUNA®** Retractor System - Compact System for Radiolucent Quick-Rail®  
Item no. 1203.209



# DORO COBRA® FLEXIBLE ROTARY ARMS

DORO COBRA® Flexible Rotary Arms are smooth and very precise in their movement. Just clip them on their form-fitting counterparts like the DORO LUNA® Curve or the DORO COBRA® Quick-Clamps, mount a DORO® Brain Spatula and continue your procedure. All DORO COBRA® Retractor Arms share the ability to be quickly adjusted, even without releasing the arm's tension.



## DORO COBRA® Flexible Rotary Arms

Available Items	Item no.
DORO COBRA® Flexible Rotary Arm 200 mm	1201.005
DORO COBRA® Flexible Rotary Arm 280 mm	1201.006
DORO COBRA® Flexible Rotary Arm 350 mm	1201.007
DORO COBRA® Flexible Rotary Arm 420 mm	1201.008

### QUICK ADJUSTMENTS UNDER TENSION

Even under tension, repositioning of the attached brain spatula is possible. Neither the tension of the retractor arm nor the stiffness of the brain spatula will be lost while doing so.

### FLEXIBLE

Four different lengths and a 360° rotational body let you position the DORO COBRA® Flexible Rotary Arms precisely at the location where you need them, gaining a high visibility on your surgical site.

### FAST TO MOUNT

The snap-On technology allows to quickly, and easily mount DORO COBRA® Flexible Rotary Arms.

# DORO® FLEXIBLE ARMS



## DORO® Flexible Arms

Available Items	Item no.
DORO® Flexible Arm 230 mm	3114-34
DORO® Flexible Arm 300 mm	3114-35

## DORO® Flexible Rotary Arms

Available Items	Item no.
DORO® Flexible Rotary Arm 200 mm	3114-36
DORO® Flexible Rotary Arm 280 mm	3114-37
DORO® Flexible Rotary Arm 350 mm	3114-38

# DORO® QUICK-CLAMP

– FOR RADIOLUCENT QUICK-RAIL® –

The DORO® Quick-Clamp with Starburst for Radiolucent Quick-Rail® serves as an intuitive interface\* for devices used for example in frameless stereotactic or endoscopic procedures. Designed for use over the sterile barrier and form-fittingly connected to the proven Quick-Rail® of the DORO® Skull Clamp Radiolucent, the adaptor provides a stable and secure connection point for third party devices.



**DORO® Quick-Clamp with Starburst  
for Radiolucent Quick-Rail®**  
Item no. 3033-69

\*The interface is designed to bear a max. load of 16.8 Nm (which equals a weight of 3.4 kg attached to a horizontally mounted, 50 cm long arm). It is validated for use with the Brainlab VarioGuide™. It is the responsibility of the user to verify that third party devices can safely be secured to the DORO® Quick-Clamp with Starburst for Radiolucent Quick-Rail®. The product is shown mounted to a DORO® Skull Clamp Radiolucent.

# DORO® HALO RETRACTOR SYSTEM

The DORO® Halo Retractor System features the classic halo ring design. You can easily attach it to the Quick-Rail® of DORO® QR3 Skull Clamps utilizing the DORO® Quick-Clamp or to older skull clamp versions by engaging the alternatively available C-Clamp. Rotary retractor arms, brain spatulas and accessories are available.



## ADAPTABLE

Adjust the halo ring to your needs. One half ring can be angled upwards or downwards, or be removed completely.

## COMPATIBLE

The DORO® Halo Retractor System fits almost all common skull clamps, either utilizing the form-fitting Quick-Rail® interface or the C-Clamp.

### DORO® Quick-Clamp Halo Retractor System Item no. 1202.100T



Included Items	Item no.
DORO® Quick-Clamp Halo Coupling Set (2 pcs)	1202.010
DORO® Halo Ring	3110-01
DORO® Halo Support Rod 8 mm (2 pcs)	3110-08
DORO® Halo Universal Key (2 pcs)	3110-80
DORO® Halo Pattie Tray	3110-85
DORO® Flexible Rotary Arm 280 mm (3 pcs)	3114-37
DORO® Blade Set 102 mm, Black Coated, 5 pcs (2 sets)	3116-101
DORO® Micro Blade Set, 6 pcs	3116-20
DORO® Halo Sterilization Case w/ Rack	3117-00

### DORO® Halo Retractor System w/ C-Clamp Item no. 3100-00



Included Items	Item no.
DORO® Halo Ring	3110-01
DORO® Halo Support Rod 8 mm (2 pcs)	3110-08
DORO® Halo Support Bracket w/ C-Clamp Adaptor (2 pcs)	3110-51
DORO® Halo Universal Key (2 pcs)	3110-80
DORO® Halo Pattie Tray	3110-85
DORO® Flexible Arm 230 mm (3 pcs)	3114-34
DORO® Blade Set 102mm, Black Coated, 5 pcs (2 sets)	3116-101
DORO® Micro Blade Set, 6 pcs	3116-20
DORO® Halo Sterilization Case w/ Rack	3117-00

# DORO® RETRACTOR ACCESSORIES



DORO® Quick-Clamp  
Item no. 1202.014



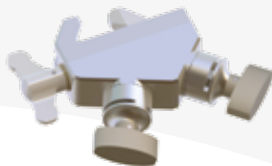
DORO® Quick-Clamp Coupling Universal  
Item no. 1202.015



DORO® Halo Support Rod Holder  
Item no. 1202.016



DORO® Quick-Clamp Halo Coupling Set  
Item no. 1202.010



DORO® Quick-Clamp with Interface Mizuho-Type Retractors  
Item no. 1201.045



DORO® Halo Support Bracket with C-Clamp Adaptor  
Item no. 3110-51



DORO® Halo Ring  
Item no. 3110-01



DORO® Halo Support Rod 8mm  
Item no. 3110-08



DORO® Clamp Body for Skin Hooks  
Item no. 3114-53



DORO® Halo Pattie Tray  
Item no. 3110-85



DORO® Halo Universal Key  
Item no. 3110-80



DORO® Mini Vice  
Item no. 3114-54

# DORO® STERILIZATION TRAYS

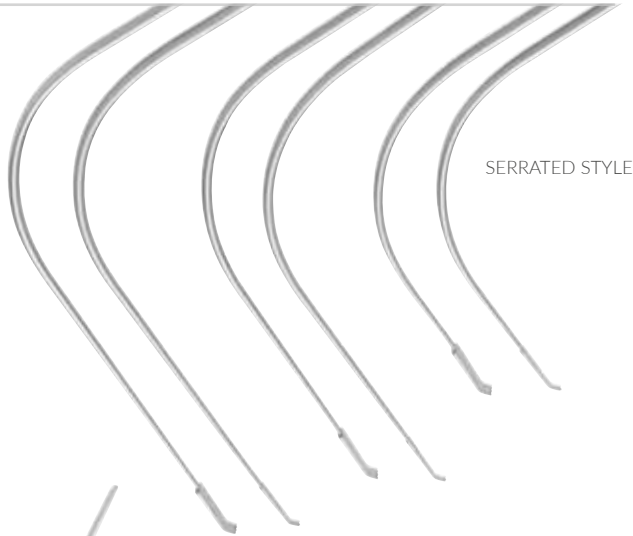
## DORO® Sterilization Trays

Included Items	Item no.
DORO® Retractor Sterilization Tray (shown)	1201.091
DORO LUNA® Sterilization Tray (shown)	1203.091
DORO® Halo Sterilization Case w/ Rack	3117-00





# DORO® MICRO BLADES



SERRATED STYLE



HOOKED STYLE



STRAIGHT STYLE

**DORO® Micro Blade Set,  
Straight, 6 pcs.**  
Item no. 3116-20



Included Items	Item no.
124 x 2 mm	3116-21
124 x 4 mm	3116-22
150 x 2 mm	3116-23
150 x 4 mm	3116-24
165 x 2 mm	3116-25
165 x 4 mm	3116-26

**DORO® Micro Blade Set,  
Serrated, 6 pcs.**  
Item no. 3116-30



Included Items	Item no.
124 x 2 mm	3116-31
124 x 4 mm	3116-32
150 x 2 mm	3116-33
150 x 4 mm	3116-34
164 x 2 mm	3116-35
164 x 4 mm	3116-36

**DORO® Micro Blade Set,  
Hooked, 6 pcs.**  
Item no. 3116-40



Included Items	Item no.
124 x 2 mm	3116-41
124 x 4 mm	3116-42
150 x 2 mm	3116-43
150 x 4 mm	3116-44
164 x 2 mm	3116-45
164 x 4 mm	3116-46



**DORO® Adaptor for Flat Brain Spatula**  
Item no. 1201.046  
(shown with **DORO COBRA®** Flexible Rotary Arm)

## WANT TO USE YOUR OWN BLADES?

Do you want to use our state-of-the-art **DORO COBRA®** Flexible Rotary Arms in combination with brain spatulas you are already familiar with? The **DORO®** Adaptor for Flat Brain Spatulas is the right choice as it attaches to all **DORO®** Retractor Arms and holds all common flat brain spatulas. But try out our blades at least once... we are sure you will like them.

# DORO® BLADES



**DORO® Blade Set 152 mm, Black Coated, 5 pcs.**  
Item no. 3116-10

Included Items	Item no.
152 x 7 mm	3116-11
152 x 10 mm	3116-12
152 x 16 mm	3116-13
152 x 20 mm	3116-14
152 x 26 mm	3116-15

**DORO® Blade Set 102 mm, Black Coated, 5 pcs.**  
Item no. 3116-101

Included Items	Item no.
102 x 7 mm	3116-111
102 x 10 mm	3116-121
102 x 16 mm	3116-131
102 x 20 mm	3116-141
102 x 26 mm	3116-151

**DORO® Blade, Black Coated**

not included in Set	Item no.
152 x 13 mm	3116-16
102 x 13 mm	3116-161



**DORO® Blade Set 152 mm, Conical, Black Coated, 5 pcs.**  
Item no. 3116-60

Included Items	Item no.
152 x 2 mm	3116-61
152 x 3 mm	3116-62
152 x 4 mm	3116-63
152 x 5 mm	3116-64
152 x 6 mm	3116-65

**DORO® Blade Set 102 mm, Conical, Black Coated, 5 pcs.**  
Item no. 3116-601

Included Items	Item no.
102 x 2 mm	3116-611
102 x 3 mm	3116-621
102 x 4 mm	3116-631
102 x 5 mm	3116-641
102 x 6 mm	3116-651



**DORO® Blade Set 102 mm, Rounded Tip, Black Coated, 5 pcs.**  
Item no. 3116-70

Included Items	Item no.
102 x 7 mm	3116-71
102 x 10 mm	3116-72
102 x 16 mm	3116-73
102 x 20 mm	3116-74
102 x 26 mm	3116-75

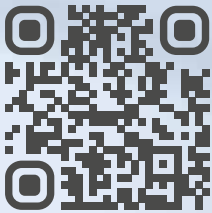
**CONNECTIVITY GUARANTEED**  
DORO® Blades and Micro Blades fit all DORO® and DORO COBRA® Retractor Arms.



## WHY BLACK?

The black matt finish of our blades prevents reflections from the dazzling light focused on the surgical site during procedures and lets you concentrate on your procedure without interruptions.

[www.blackforestmedical.com](http://www.blackforestmedical.com)



DORO® REPRESENTATIVE



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MEDICAL  
GROUP**

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