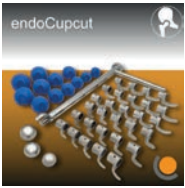
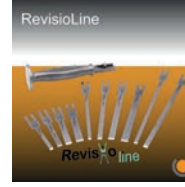


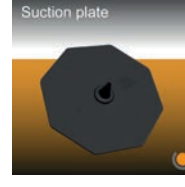
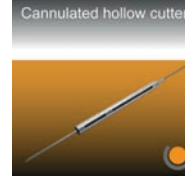
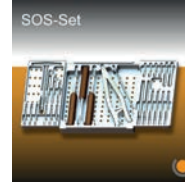
Product Catalog *online* issue 11.2023

*Simplify Mobility*








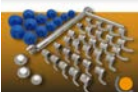

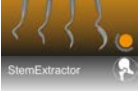



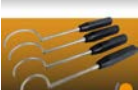
endocon<sup>o</sup>



Our revision **instruments** are designed **independent** of the manufacturer, so we cover around 98% of all arthroplasty systems available on the market.



*Simplify Mobility*

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# Primary and revision hip arthroplasty



# safeConnect<sup>®</sup>

*Safe impaction of taper junctions*

## Safe. Precise. Replicable.





# safeConnect<sup>®</sup> - impactor for taper junctions

## Safe impaction of conical connections

The result of applying manual forces with a mallet to join taper junctions of femoral heads and cup inlays is a wide range of impaction forces.

This represents a potential risk for corrosion and micro motion at the taper junction. Current scientific studies show that a high and constant impact force has a significant impact on the joined tapers' safety.

Under continuous scientific evaluation a standardized impacting procedure has been developed which guarantees a replicable force application to the taper junctions of femoral heads and cup inlays. A new instrument replaces the mallet driven and manual impaction process.

**safeConnect is the essential instrument for primary and revision arthroplasty.**

### Functional principle

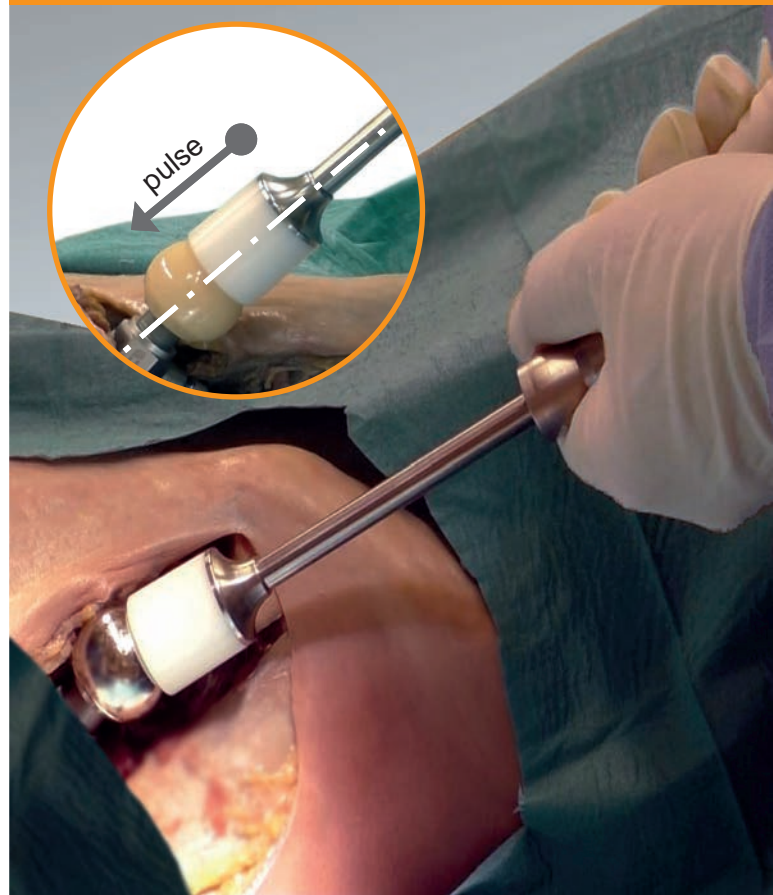
The instrument is placed on the ball head or cup inlay and is manually pushed in the axial direction of the prosthesis. A mechanism is automatically triggered and releases a constant impulse to the components. As a result, the taper connection is connected by a precise and replicable force.

### Advantages

- Standardized and safe procedure
- Precise and replicable application of impaction force
- One instrument for ball heads and cup inlays
- Simplified operation handling

**safeConnect - the ingenious innovation for hip arthroplasty**

**Safe.  
Precise.  
Replicable.**



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Federal Ministry  
of Education  
and Research

Worldwide patented product

### Manufacturer:

endocon GmbH  
In der Au 5  
69257 Wiesenbach Germany

### Equipment and accessories

Article	Reference
740000	safeConnect Set instrument with ball head / cup inlay adapter with diameter 28, 32 and 36 mm
740100	Instrument safeConnect
740120	Ball head attachment safeConnect
740124	Attachment Inlay $\varnothing$ 22 mm safeConnect
740121	Attachment Inlay $\varnothing$ 28 mm safeConnect
740122	Attachment Inlay $\varnothing$ 32 mm safeConnect
740123	Attachment Inlay $\varnothing$ 36 mm safeConnect

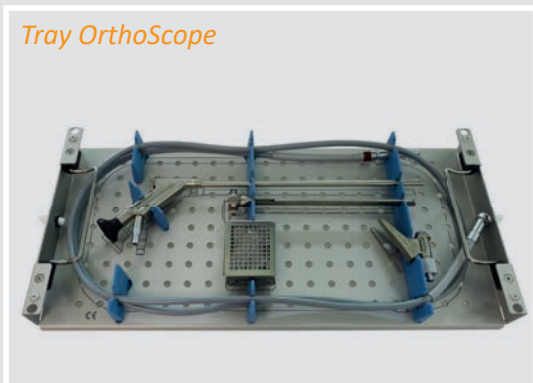
Number 1 for arthroplasty



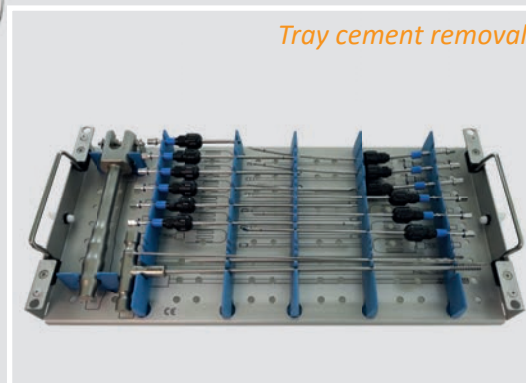
Tray handpiece



Tray OrthoScope



Tray cement removal



# OrthoClast2<sup>®</sup> system

The no. 1 solution for cement removal and cementless prosthesis revisions

Precise. Efficient. Safe.





Chisel tip for cementless stem removal

### Flexible chisel

- Working depth up to 190 mm
- Slim 5mm version for Wagner and ribbed shafts
- Pre-defined bone and prosthesis side
- Single-use chisel, multiple reprocessable

## Cementless prosthesis revision with OrthoClast



## Revision of cementless prostheses with pneumatic shock waves

The removal of cementless prosthesis using the conventional technique with a transfemoral access mostly ends with a major damage of the bone. The OrthoClast System in combination with the flexible micro chisel preserves the bone stock and normally avoids the transfemoral access. The OrthoClast System works with a shock wave technology comparable with a pneumatic hammer.

### Field of use

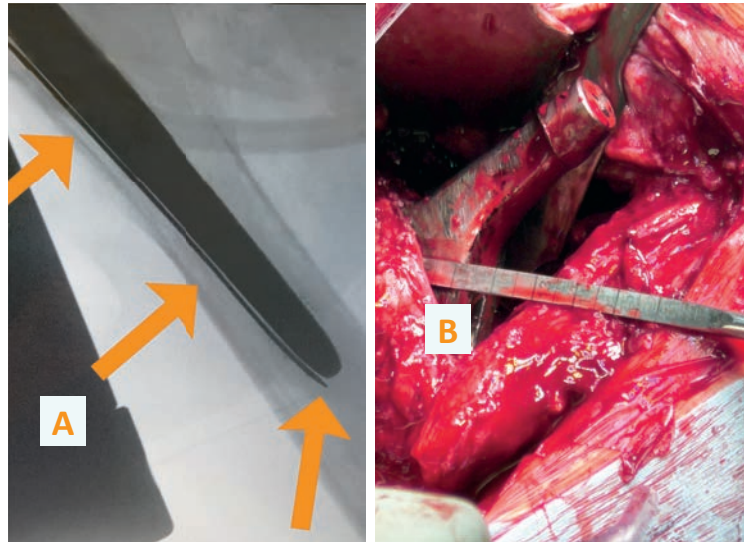
- Structured / unstructured prosthesis stem
- Septic / aseptic release of prosthesis stem
- Broken / damaged prosthesis stem
- Misaligned prosthesis stem
- Endo-Exo Femoral Prosthesis.

The OrthoClast handpiece works with a narrow, **flexible chisel** with a working depth of **up to 190 mm**.

- Dissection of the bone-prosthesis-interface
- **Controlled sliding of the flat chisel along (A) the prosthesis stem.** No bone perforations or fissures of the bone.
- Chisel with pre-defined bone and prosthesis side (**B**)

### Advantages

- **No femoral fenestration**, minimal bone trauma
- **Controlled sliding** of the chisel, without bone perforation
- **Bone saving method to dissect** the bone-prosthesis-interface
- **Significant reduction of the operating time**



### Steps of a conventional operation

Preparation of the femoral fenestration	Manual exposure of the proximal prosthesis	Extraction of the prosthesis	Closing the femoral fenestration	Reimplantation

### Steps of an operation using OrthoClast

with OrthoClast	Extraction of the prosthesis	Reimplantation
Dissection of the bone-prosthesis-interface		

Time reduction  
up to **60%**



# Revision of cemented prostheses

## using endoscopic view

The manual removal of bone cement during the cemented arthroplasty revision with conventional chisels is exhausting, imprecise and potentially full of complications. The OrthoClast System simplifies all processes, preserves the bone stock and normally avoids the fenestration.

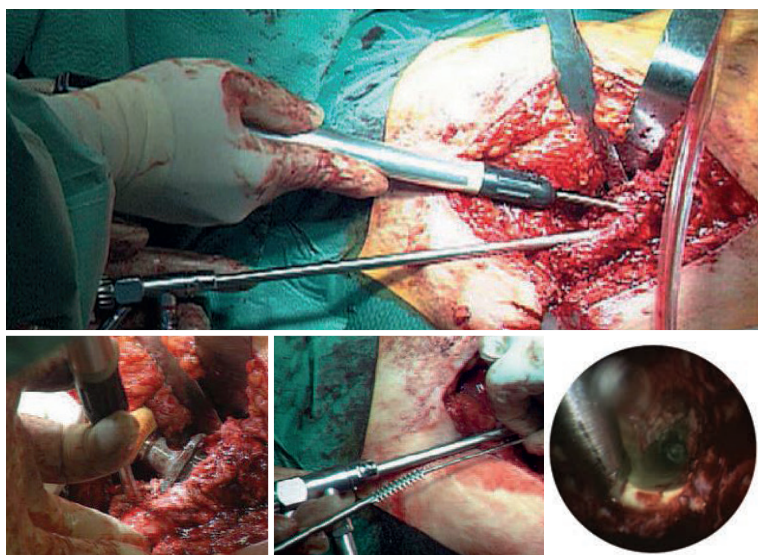
### Field of use

- Proximal bone cement removal for hip and knee revisions arthroplasty
- Medial and distal bone cement removal with endoscopic view
- Removal of the distal cement tip and the medullary plug with endoscopic view

This method is based on decades of experience in the development and application of pneumatically generated shock waves in the medical field.

### Advantages

- **Endoscopic view** to the end of the medullary cavity
- **Precise and controlled guiding of the chisel**, significant reduced danger of cortical bone perforation
- Removal of cement by **saving the bone structure** all the way down to the bottom
- **Unimpaired, intact cortical bone**, no cerclages necessary
- **Minimal bone trauma**
- **Significant reduction of operation time**
- **Reduction of convalescence period** for the patient



Chisel tips for cement removal

### Chisels

- Length 120 mm - 270 mm
- Straight and curved stems
- Negative and positive tips, see manual
- Reusable

## Cement removal with OrthoClast and OrthoScope



### Steps of a conventional operation

Proximal cement removal	Extraction of the prosthesis	Proximal femoral cavity cement removal	Distal „blind“ cement removal	Femoral fenestration	Removal of the distal cement tip and the medullary plug	Closing the fenestration	Reimplantation
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### Steps of an operation using OrthoClast

Proximal cement removal	Extraction of the prosthesis	with OrthoClast Proximal femoral cavity cement removal	with OrthoScope Distal femoral cavity cement removal	with OrthoScope Removal distal cement tip and medullary plug	Reimplantation
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using endoscopic view

Time reduction  
up to **40%**



## OrthoClast System

Safety first with better operation results:

- Proper control of the chisel guidance
- Flexible micro chisel for cementless arthroplasty revision
- Chisels set for cement removal
- Significant operation time reduction
- Endoscopic controlled bone cement removal
- Reduction of intra and postoperative complications
- Reduction of convalescence period for the patient



### Plunger for ceramic inlays FR-063

Function: for loosening and releasing fixed ceramic inlays and ball heads.

#### Specifications:

- Cup inlay (ceramic)
- Ball heads (all materials)

### OrthoClast-Set

- Ergonomic handset
- Compact control unit
- Widespread chisel set

Individual, versatile chisels enable an effective and fast bone cement removal. The cement fragmentation is carried out without any heat development. No risk of thermal tissue damages and mechanical bone damages.

Separate chisel to dissect the bone-prosthesis-interface.

#### Technical data

##### Control unit

- Hospital compressed air supply
- Integrated waste air return system
- To be operated in sterile orthopaedic theatres

##### Handset

- No electrical connection to patient or surgeon

### Extraction-Set

- Kirschner wire with drill tip
- Cannulated drill
- Cannulated extractor

These components complete the OrthoClast System. Precise positioning of the guiding Kirschner wire is ensured by the OrthoScope. Removal of the distal cement tip and the medullar plug is performed gently and safely. Therefore the transfemoral access is mostly obsolete. The cannulated instruments avoid an intra-femoral increase of pressure thus minimizing the risk of fat embolism and thrombosis.

#### Technical data

- Kirschner wire with drill tip, 450 mm
- Cannulated drill, 300 mm
- Cannulated extractor with T-handle, 400 mm

### OrthoScope-Set

- Endoscope with integrated flushing and suction
- Integrated suction cannula
- Flushing valve on the optic tip

The invention of the OrthoScope rod-lens optical system with integrated flushing / suction is the vital breakthrough in bone cement removal. An adjustable suction cannula facilitates viewing even inside of heavily bleeding femoral cavities. The safe visual control of bone cement removal of the OrthoScope fulfils the highest demands in medical diagnostics.

#### Technical data

- Intra-femoral endoscope
- Viewing angle 25°, image angle 97°
- Stem dimension 8 mm x 5 mm, Length 260 mm
- Lens cleaning system with adjustable suction cannula

### OrthoClast Generator



### Cement tip extraction set

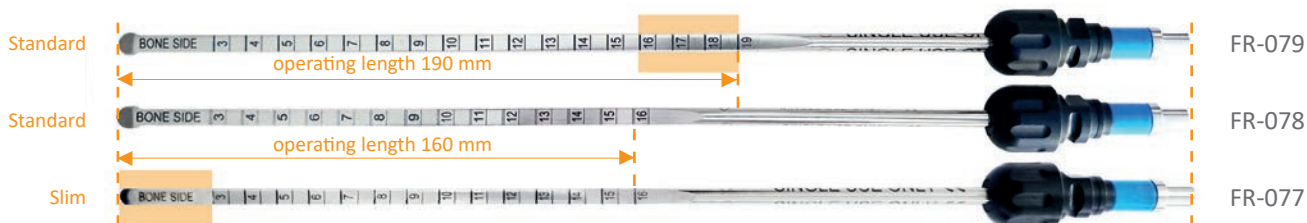


### OrthoScope













# OrthoClast system: modules, parts and spare parts

OrthoClast® Basic set			
	FT-200 OrthoClast2® basic unit 230V		EH-078G Pneumatic pedal OrthoClast2
			EH-078 Pneumatic pedal OrthoClast
	EL-147 Handpiece OrthoClast		EH-077-OC2 Handpiece tube FT-200 to EL-147
			EH-077 Handpiece tube FT-118 to EL-147
SteriTray handpiece		Compressed air connection	
	FR-073 SteriTray handpiece with lid		20010260 Dräger Air-Motor air hose
			20080261 4-Kant air hose
OrthoClast® Components for non cemented removal			
	FR-078 - SINGLE USE* working length up to 160 mm, tip 7mm Flexible microstructure chisel		FR-079 - SINGLE USE* working length up to 190 mm, tip 7mm Long flexible microstructure chisel
	FR-077 - SINGLE USE* working length up to 160 mm, thin tip (5mm). Flexible microstructure chisel Suitable for Wagner and ribbed stems		FR-062 Split mallet
FR-063		Plunger for ceramic inlay removal	
	FR-063 Plunger for ceramic inlay removal Field of use: Cup, ceramic OrthoClast setting: 1-shot		<i>* Manufacturer's specification: Multiple reprocessable (sterilisable), SINGLE USE for application.</i>



# OrthoClast system: modules, parts and spare parts

OrthoClast® Cement removal module			
FR-059	Chisels set		
	FR-047 Screwdriver tip Ø 5.00 mm, 120mm		FR-048 Short negative gouge tip Ø 4.0 mm, 200mm
	FR-049 Long positive gouge tip Ø 4.0 mm, 200mm		FR-050 Short negative gouge tip Ø 4.0 mm, 270mm
	FR-051 Short negative gouge tip Ø 3.2 mm, 270 mm		FR-052 Short negative gouge tip, curved shaft Ø 4.0 mm, 270mm
	FR-053 Long positive gouge tip Ø 3.2 mm, 270 mm		FR-054 Hollow screwdriver tip Ø 4.0 mm, 270mm
	FR-055 Screwdriver tip Ø 3.2 mm, 270 mm		FR-056 Long negative gouge tip Ø 3.2 mm, 270 mm
	FR-057 Long positive gouge tip, curved shaft Ø 4.0 mm, 270mm		FR-058 Long negative gouge tip, curved shaft Ø 4.0 mm, 270mm
FR-064	Set Extraction distal plug		
	FR-060 Canulated drill		FR-061 Extractor for distal plug
	FR-062 Split mallet		FR-069 Kirchner's wire 450 mm (2 units)
	FR-074 SteriTray chisels set with lid		

**Manufacturer:**  
endocon GmbH  
In der Au 5  
69257 Wiesenbach Germany



## OrthoClast system: modules, parts and spare parts

OrthoScope® Full module endoscopic view			
FR-046 Set OrthoScope®			
	FR-046/1 OrthoScope® optic		FR-046/2 Suction sheath
	FR-046/3 Standard flushing valve		FR-046/4 Valve cartridge, multiple use (one packing unit contains 5 pieces)
	FR-046/6 Flexible light guide		FR-046/7 Set of tube adaptors (4 pieces)
	FR-046/8 Cleaning brush (packing unit contains 3 pieces)		FR-072 SteriTray OrthoScope® with lid
FR-096 Set Coaxial flushing valve			
	FR-046/10 Coaxial flushing valve		BC-157 O-Rings (one packing unit contains 2 pieces)
	BE-016 Silicones for FR-046/10 (one packing unit contains 5 pieces)		FR-046/9 O-Rings (one packing unit contains 2 pieces)
	DV-038 Suction canula, sterile, single use (one packing unit contains 5 pieces)		
OrthoClast system - loan and spare parts			
	R_801040 OrthoClast system with generator, handpiece, compressed air hose and tray		R_801041 Loan system for cement removal
	R_801042 Loan system OrthoScope endoscopic view of cement removal		

**Manufacturer:**  
endocon GmbH  
In der Au 5  
69257 Wiesenbach Germany

The most efficient technology using ultrasound



# TORS

*Ultrasound instrument for revision of endoprotheses.*

**For removing bone cement.**



# TORS - Bone cement removal

TORS is currently the newest and most modern system for bone cement removal. The use of innovative technologies and modern techniques enable a significantly more effective, gentler and safer bone cement removal than comparable systems on the market.

The new designed probes **increase the effectiveness of the cement removal** and thus the saving of operating theatre working time. The technically well-engineered system convinces with an extremely stable functional performance, as well as an **easy and comfortable handling**.



## SOFT TISSUE SET

The new soft tissue scalpel works by means of an ultrasound-based procedure that enables haemostatic skin and muscle incisions equivalent to monopolar diathermy. However, the temperature development is significantly reduced, therefore correspondingly gentler and thus enables significantly better bleeding control.






T1T1TT  
TORS soft tissue dissector



T1T1FT  
TORS foot switch for Soft Tissue



## TORS - loan

	<p>R_T10000 Rental set TORS, complete with handpieces and foot pedal.</p>		<p>R_T10001 Set of working probes for the TORS rental system. Can be used several times. The probes that are no longer usable after use will be charged.</p>
	<p>T1T1AH TORS Handpiece holder STERIL - SU 1 piece</p>		<p>R_T10004 Rental set TORS Soft Tissue Set including handpiece and foot pedal. Can be ordered separately.</p>

## Options and spare parts

	<p>T1T1G TORS generator with supply cable</p>		<p>T1T1CC TORS Cement Cable</p>
	<p>T1T1CT TORS transducer for cement removal</p>		<p>T1T1FC TORS foot switch for cement transducer</p>
	<p>T1P4R2 TORS Cement 200 Ø4 Piercer Probe</p>		<p>T1P6R1 TORS Bohrer Sonde 100 Ø6 mm  T1P6R2 TORS Cement 200 Ø6 Piercer Probe</p>
	<p>T1P8R1 TORS Cement 100 Ø8 Piercer Probe  T1P8R2 TORS Cement 200 Ø8 Piercer Probe</p>		<p>T1P10R2 TORS Cement 200 Ø10 Piercer Probe</p>
	<p>T1S6R1 TORS Cement 100 Ø6 Scraper Probe  T1S6R2 TORS Cement 200 Ø6 Scraper Probe</p>		<p>T1S8R1 TORS Cement 100 Ø8 Scraper Probe  T1S8R2 TORS Cement 200 Ø8 Scraper Probe</p>
	<p>T1S10R2 TORS Cement 200 Ø10 Scraper Probe</p>		<p>T1ECR1 TORS Probe Extension Bar curved</p>
	<p>T1ESR2 TORS Probe Extension Bar straight 132mm</p>		<p>T1ESR1 TORS Probe Extension Bar straight 90mm</p>
	<p>T1T1TT TORS Soft Tissue Dissector</p>		<p>T1T1FT TORS Soft Tissue Footswitch</p>

**Tip! Individual instrument development!**

Do you have any change requests?  
... or your own ideas and suggestions for solutions?

We are specialised in the **development of instruments**  
and manufacture them in our own factory,  
even in very small quantities. Do not hesitate to contact us!



**Cup-Instruments**

# endoCupex - Acetabular cup extractor

Universal instrument for the removal of threaded cups, cemented and cementless acetabular cups

Quick to learn.  
Easy handling.  
Flexible.

The all-rounder for multiple applications by stepless spreading and solid wedging in the acetabular cup.  
**Suitable for all cup sizes.**

Universally applicable for the removal of:

- Threaded cups / threaded rings
- Press-Fit cups
- Cemented PE cups
- PE inlays

### Advantages

- **Accelerates the revision-operation and increases the efficiency** of the operation cycle
- **All sizes of implants** can be covered reliably with only one instrument
- **Costs-profitable solution** for a wide range of applications
- **Manufacturer independent** acetabular cup replacement instrument

### Technical specifications of the span

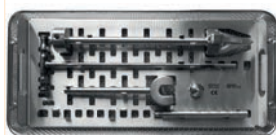
- Minimal inside diameter 24.4 mm
- Maximum inside diameter 72 mm

endoCupex eases and accelerates the removal of the cup.



## endoCupex - modules, parts and spare parts

Options, spare parts and loan



780900  
**endoCupex Professional set**  
Main instrument with T-handle, handle, cone and slot hammer, system tray (sieve insert and basket)



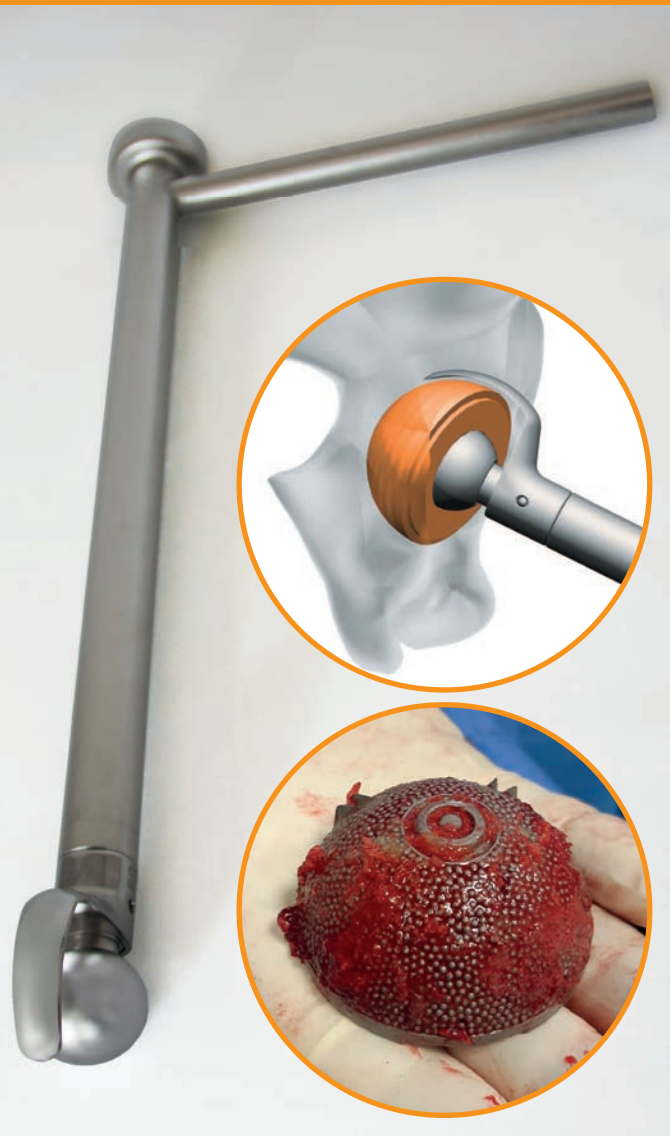
780913  
endoCupex main instrument  
endoCupex with T-handle, handle, cone and slot hammer without system tray



# endoCupcut - Acetabular cup cutter

Universal instrument for the removal of cementless acetabular cups

Gentle with the bones.  
Time saving.  
Indispensable.



The modular system includes all cutter sizes for a convenient cup removal. The quick and safe extraction reduces the operation time. The spherical cutter permits a precise and gentle bone incision along the acetabular rim to the bottom of the cup. The minor bone damage permits a fast convalescence.

- Blades inserts wear-resistant and reusable
- 15 different blades for a cup diameter of 44 up to 72 mm
- 15 short blades as pre-cutting blades
- Various ball heads diameter guarantees for perfect centering of the instrument in the cup inlay



## Advantages

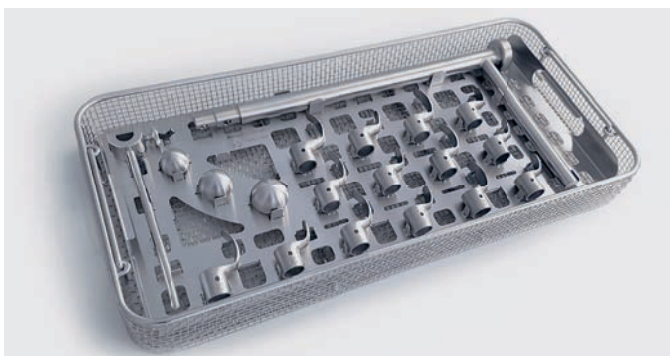
- Sophisticated precision technology for profitable applications
- **Short convalescence time** for the patient and shorter operation cycles
- **Reduced investment costs** due to a single modular system
- **Manufacturer independent** acetabular cup instrument

endoCupcut for a bone gentle treatment by the acetabular cup removal.

## Optional kit ball-shaped heads

- Accessories for the revision of surface replacement prostheses, Duo Mobility cups and for use with damaged / removed inlays.
- Precision-fit ball heads in sizes 38 to 60mm

endoCupcut small tray



endoCupcut Professional



## endoCupcut: modules, parts and spare parts

### Options and spare parts



780992

#### endoCupcut Professional set

Main tool endoCupcut; 3 ball heads 28, 32 and 36 mm; 15 short blades and 15 long blades size 44 up to 72 mm; Set ball-heads for surface replacement with 12 heads 38 up to 60 mm; Spread over 2 trays, both with sieve insert and basket.



780990

#### endoCupcut Medium set

Main tool endoCupcut; 3 ball heads 28, 32 and 36 mm; 15 short blades and 15 long blades size 44 up to 72 mm; Spread over 2 trays, both with sieve insert and basket.



780994

#### endoCupcut Small set

Main tool endoCupcut; 3 ball heads 28, 32 and 36 mm; 7 short blades and 7 long blades size 48 up to 60 mm; Tray with sieve insert and basket.

### endoCupcut loan system



R\_780883

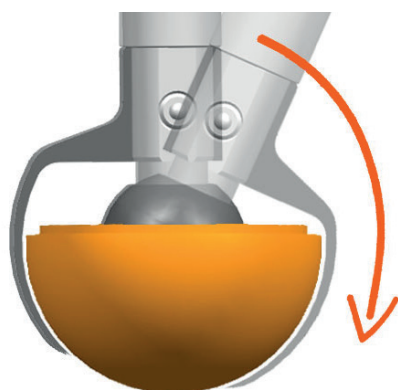
Loan system set of ball heads for surface replacement.

12 pieces, sizes 38-60 mm



#### Resharpener service!

We offer you the possibility to have your set inspected by us. We take care of all its parts and bring the blades back into form with sharpening! Ask us!



#### That's why the endoCupcut system is the right choice:

The blades of the endoCupcut are designed to allow a precise cut along the profile of the cup. The double curvature of the blade (longitudinal and transversal) guarantees a close-fitting cut with minimal bone loss.

Experienced surgeons report cup revisions in which **the same cup size has been used again.**

**The endoCupcut is described by experienced users as "the Ferrari" among the cup cutting systems.**







## Cup revision



# Osteotoms *mod. Smith-Petersen for cup revision*

Osteotomes with curved blades for manual removal of acetabular cups. There are four different sizes S, M, L and XL to choose from.

The robust osteotomes have a continuous metallic core and are very handy with a silicone handle.

Article	Reference
0020070 Osteotomes Set	Osteotome modified Smith-Petersen set 4 Osteotome - sizes S to XL
 00200730 Size S	Osteotome for cup revision with silicone handle - S Total length: 310mm; Blade: 18mm x 20mm. Handle length: 136 mm
 00200731 Size M	Osteotome for cup revision with silicone handle - M Total length: 330mm; Blade: 18mm x 32mm. Handle length: 136 mm
 00200732 Size L	Osteotome for cup revision with silicone handle - L Total length: 345mm; Blade: 18mm x 48mm. Handle length: 136 mm
 00200733 Size XL	Osteotome for cup revision with silicone handle - XL Total length: 360mm; Blade: 18mm x 64mm. Handle length: 136 mm





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Other **instruments**



# StemExtractor - Hip stem extractor

## Universal extraction tool for the safe removal of cement-free and cemented hip stems

The StemExtractor is a proven surgical instrument for total hip replacement femoral components that should be available in every revision surgery.

### Advantages

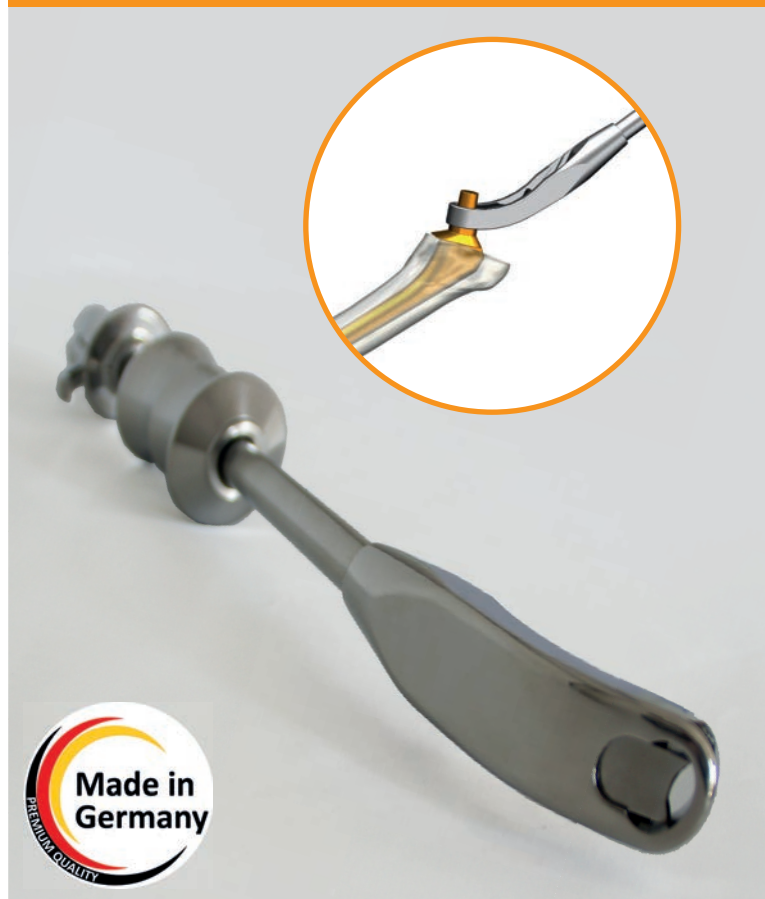
- Only a few steps necessary for safe fixation of the instrument to the neck of the prosthesis
- Axial force transfer and stable clamping force by patented system
- Transfer of clamping force along a curved tool head to the prosthesis cone
- Minimized size of the instrument head, designed for limited space conditions
- Efficient, rational and cost-saving surgical operations
- Since 1993 successful in clinical use
- Complete decomposability of the instrument without additional tools
- Easy and validated instrument reprocessing

### Technical specifications

- Cone size from 8 mm to 16 mm possible with clamps
- Slide hammer weight: 1.2 kg (standard) or 1.7 kg
- Total weight: 2.4 kg (standard)
- Total length: 550 mm STANDARD  
635 mm LONG
- Driving distance: 205 mm STANDARD  
275 mm LONG

**StemExtractor** - the state of the art instrument for hip stem removal

Simple handling.  
Safe.  
Ergonomic.



## EndoDriver: Modules, parts and spare parts

### Options and spare parts

	780500 <b>StemExtractor STANDARD Professional set</b> Main instrument with system tray (sieve insert and basket)		780600 <b>STANDARD Instrument</b> Main instrument 550 mm
	780520 <b>StemExtractor LONG Professional set</b> Main instrument with system tray (sieve insert and basket)		780620 <b>LONG Instrument</b> Main instrument 635 mm
	780612 <b>Slide hammer 1.2 kg</b> (standard) 780604 <b>Slide hammer 1.7 kg</b>		780617 - OPTIONAL <b>Head of tool AU/AU2 StemExtractor</b>

## Stem prosthesis revisions



# RevisioLine

*Universal chisel system for the arthroplasty*

**Precise. Reliable. Reusable.**



# RevisioLine - Blade system for the arthroplasty

The blades set has been specially developed for the revision of cementless and cemented stem prostheses.

The set consists of 10 straight, flexible, ground faced blades. The different sizes offer the greatest flexibility in stem revision.

The hardened-stainless-steel-handle with quick coupling function enables the chisel blades to be changed fast and easily without additional tools.



Article	Reference
RL0990 Handle	RevisioLine handle for chisel blades RevisioLine ergonomic handle for chisel blades with quick release. Enables quick replacement of chisel blades during surgery.
RL0990-SP Strike plate	Strike plate for RevisioLine handle The RevisioLine impact plate is wider than conventional impact plates. More safety for the user! We manufacture personalised impact plates on request.

## RevisioLine - 60 mm, straight



RL0981 Chisel straight	RevisioLine flexible chisel blade 60/6 mm Case of use: proximal area Size: L = 60 mm, W = 6 mm
RL0991 alternative RL0991-SU	RevisioLine flexible chisel blade 60/8 mm Case of use: proximal area Size: L = 60 mm, W = 8 mm
RL0992 alternative RL0992-SU	RevisioLine flexible chisel blade 60/10 mm Case of use: proximal area Size: L = 60 mm, W = 10 mm
RL0993 alternative RL0993-SU	RevisioLine flexible chisel blade 60/12 mm Case of use: proximal area Size: L = 60 mm, W = 12 mm
RL0984 alternative RL0984-SU	RevisioLine flexible chisel blade 60/25 mm Case of use: proximal area Size: L = 60 mm, W = 25 mm

## RevisioLine - 125 mm, straight



RL0982 alternative RL0982-SU	RevisioLine flexible chisel blade 125/6 mm Case of use: distal area Size: L = 125 mm, W = 6 mm
RL0994 alternative RL0994-SU	RevisioLine flexible chisel blade 125/8 mm Case of use: distal area Size: L = 125 mm, W = 8 mm
RL0995 alternative RL0995-SU	RevisioLine flexible chisel blade 125/10 mm Case of use: distal area Size: L = 125 mm, W = 10 mm
RL0996 alternative RL0996-SU	RevisioLine flexible chisel blade 125/12 mm Case of use: distal area Size: L = 125 mm, W = 12 mm
RL0985 alternative RL0985-SU	RevisioLine flexible chisel blade 125/25 mm Case of use: distal area Size: L = 125 mm, W = 25 mm

## RevisioLine - 190 mm, straight



Article	Reference
RL0983 alternative	RevisioLine flexible chisel blade 190/6 mm Case of use: distal area Size: L = 190 mm, W = 6 mm
RL0983-SU	
RL0997 alternative	RevisioLine flexible chisel blade 190/8 mm Case of use: distal area Size: L = 190 mm, W = 8 mm
RL0997-SU	

## RevisioLine - chisel curved



Article	Reference
RL0986_L alternative	RevisioLine flexible chisel blade Case of use: proximal area, knee revisions Size: W = 8 mm, left curved
RL0986_L-SU	
RL0986_R alternative	RevisioLine flexible chisel blade Case of use: proximal area, knee revisions Size: W = 8 mm, right curved
RL0986_R-SU	

**Revisio**  *line*

### Options and spare parts

Please note: all chisels have one side for the prosthesis and one side for the bone part.

All RevisioLine chisels are available as:

- **STANDARD**, multiple sterilisable and usable
- **SINGLE USE (SU)**, multiple sterilisable but single use for application



## Deschamps



# Ligature **needle** *for revisions*

Deschamps / ligature needle. Instrument for manual transfer of wire cerclages up to  $\varnothing$  2 mm. Four different sizes 40, 50, 60 and 70 mm are available.

The robust wire guide of the instruments is seamless and can be used for various wire cerclages up to  $\varnothing$  2 mm, robust silicone handle, reusable several times.

Article	Reference
780420 Set	Set 4 ligature needles Sizes 40 to 70 for wire cerclage max. $\varnothing$ 2mm
780421 Size 40	Deschamps-ligature needle Total length 262mm; Bow diameter 40 mm. wire cerclage max. $\varnothing$ 2mm
780422 Size 50	Deschamps- ligature needle Total length 272mm; Bow diameter 50 mm. wire cerclage max. $\varnothing$ 2mm
780423 Size 60	Deschamps- ligature needle Total length 282mm; Bow diameter 60 mm. wire cerclage max. $\varnothing$ 2mm
780424 Size 70	Deschamps- ligature needle Total length 292mm; Bow diameter 70 mm. wire cerclage max. $\varnothing$ 2mm










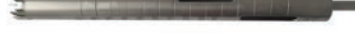

## Hollow cutters - set for revisions

The hollow cutters have been specially developed for the revision of broken stem prostheses and fixed modular stem prostheses. They are also used for the revision of broken intramedullary nail systems and broken Endo-exo prostheses. In this case, the prosthesis segments are milled over and picked up in parts in the cavity of the milling cutter.

### Field of use:

- Loosening / removal of implant fragments and modular stem prostheses.
- Exposure / preparation of implant fragments and modular stem prostheses for the attachment of a removal or unscrewing instrument or for the attachment of locking forceps.

Inner diameter of 12-18 mm; holder for JAKOBS chuck.

	Article	Reference
	200089 Trepine Ø12 mm	Bore depth 200mm; ext. diameter 15mm; int. diameter 12mm, Jacobs drill chuck.
	200090 Trepine Ø13 mm	Bore depth 200mm; ext. diameter 16mm; int. diameter 13mm, Jacobs drill chuck.
	200091 Trepine Ø14 mm	Bore depth 200mm; ext. diameter 17mm; int. diameter 14mm, Jacobs drill chuck.
	200092 Trepine Ø15 mm	Bore depth 200mm; ext. diameter 18mm; int. diameter 15mm, Jacobs drill chuck.
	200093 Trepine Ø16 mm	Bore depth 200mm; ext. diameter 19mm; int. diameter 16mm, Jacobs drill chuck.
	200094 Trepine Ø17 mm	Bore depth 200mm; ext. diameter 20mm; int. diameter 17mm, Jacobs drill chuck.
	200095 Trepine Ø18 mm	Bore depth 200mm; ext. diameter 21mm; int. diameter 18mm, Jacobs drill chuck.
	200099 Complete set	Set for revision Ø12-18 mm



# Cannulated hollow cutters

for orthopaedics and tumour surgery



for safe guidance, a K-wire can be used as illustrated

Cannulated hollow cutters for orthopaedics and tumour surgery







The cannulated hollow burrs were specially developed for tumour surgery in order to mill out bone tumours. A K-wire is used for centring, ensuring precise guidance of the cutter. The milled tissue is collected inside the hollow cutter and can be ejected by means of a pusher.

Inner diameters of 6 / 8 / 10 mm are available in lengths of 110 and 150 mm.

Holder for JAKOBS chuck.

**Field of use:**

- Excision of tumours in bone tissue
- Excision of cysts in bone

	Article	Reference
	TH1010 Trepine Ø 8 mm	Operating depth 100mm; Outer diameter 8mm; Inner diameter 6mm.
	TH1011 Trepine Ø 8 mm	Operating depth 130mm; Outer diameter 8mm; Inner diameter 6mm.
	TH1012 Trepine Ø 10 mm	Operating depth 100mm; Outer diameter 10mm; Inner diameter 8mm.
	TH1013 Trepine Ø 10 mm	Operating depth 130mm; Outer diameter 10mm; Inner diameter 8mm.
	TH1014 Trepine Ø 12 mm	Operating depth 100mm; Outer diameter 12mm; Inner diameter 10mm.
	TH1015 Trepine Ø 12 mm	Operating depth 130mm; Outer diameter 12mm; Inner diameter 10mm.





# Intramedullary Nail extraction

## Universal tool for the removal of intramedullary nails with internal threads.

The instrument consists of an impact tube with a sliding hammer and a push rod, which is guided through a fine thread in the impact tube. The conical tip of the push rod is used to spread a tip which is selected according to the diameter of the nail receiver in the manner of a plug.

The tension of the push rod is thus held in the rear part by a spring assembly. Due to the clamping range of the tips, 3 sizes are sufficient to cover all internal threads. It should be noted that the sizes of the tips are selected so that they fit into the borehole of the nail with the least possible clearance. This achieves the maximum stable combination of extractor and nail.

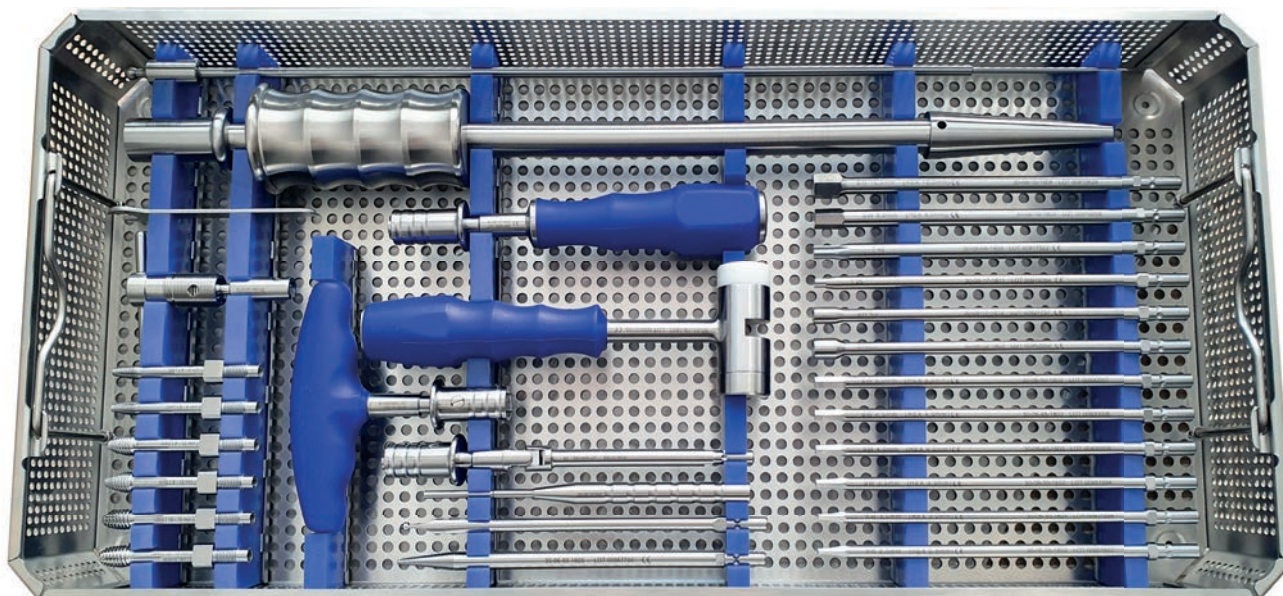
Provided with the instruments are a straight and a candan handle for a set of long hex bits from 2.5 to 5.5 mm ascending in steps of 0.5 mm. The bits are suitable to remove screws with corresponding hex sockets. At the tip the surfaces of the bits are slightly converging, so that they can be secured onto the bit by a slight knocking of the bit into the hex socket of the plug and can thus be easily removed.

**Fast.**  
**Unproblematic.**  
**Safe.**

### Advantages

- Fast and safe extraction of intramedullary nails with internal thread
- Easy assembly and tensioning
- Fast and safe, significant reduction in OP time
- Includes various handles, allen wrench, universal joint and hammer
- Clean, organised storage

Intramedullary Nail extraction - indispensable in each OR



## Nail-Extractor

### Options and spare parts



820000  
Complete set  
intramedullary nail extractor



# SOS-Set

**Universal OP-removal-tool for damaged and broken bone screws.**  
Screw removal set complete.

Universal set for loosening or removing broken and damaged screws. Safe and reliable.

*Specifications:*

- Overtightened screw heads
- Broken / torn off screws

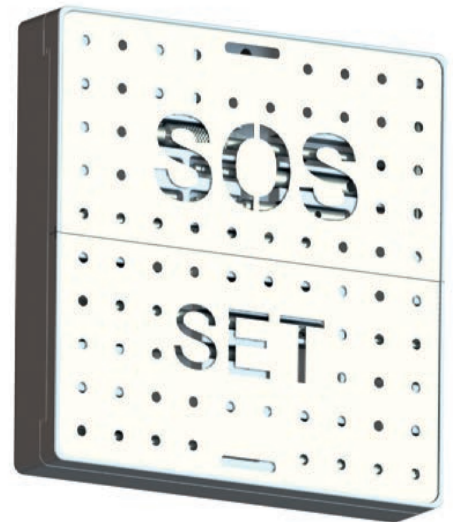
The set contains all necessary instruments for the exposure of screws, cleaning of screw heads in order to apply the instrument, safe gripping of damaged hexagonal / cross and Torx screws up to the left removal of thread fragments in depth. The respective application is illustrated by means of a simple template.

All tools available for screw size:

1.5 / 2.0 / 2.7 / 3.5 / 4.0 / 4.5 / 5.0 / 6.5 / 7.0 mm

**SOS-Set - for a smooth operation**

**Compact.**  
**Universal.**  
**Essential.**



## SOS-Set

### Options and spare parts



820050  
SOS-Set with box

*All components also separately available.  
Ask us!*



# Suction **plate**

*Competitive universal solution*

**Reusable. Powerful. Clean.**



# Suction plate

Accessories for universal surgical suction device in the operating room.  
Quick removal of surgical fluids and blood.

Ensure safe and efficient suction of fluids and blood from the ground during a surgery.

## Advantages at a glance:

- Significant cost reduction against disposable products
- Reusable suction plate, made of hardened aluminum
- Optimized suction power
- Tested long term working product
- Simple cleaning / preparation of the suction plate
- Universal connection to all suction systems

## Specifications:

- Orthopedic Surgery
- Gynecology
- Urology
- Neurosurgery
- Trauma and reconstructive surgery
- Ambulance
- Laboratory

**Suction plate** - the efficient and economic solution for the operating room

Reusable.  
Powerful.  
Clean.



## Equipment and accessories

Article	Reference
780817	Suction plate
780818	Connection hose

*Simplify Mobility*



endocon<sup>o</sup>

*Simplify Mobility*