Manufacturer

Dedienne Santé

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MATHYS
European Orthopaedics

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Surgical technique

DS Evolution System

Modular Cup System
Double Mobility

***Preservation** in motion*

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

***Preservation** in motion*

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

Table of contents

Remark
Please make yourself familiar with the handling of the instruments, the product-related surgical technique and the warnings, the safety notes and the recommendations of the instruction leaflet before using an implant marketed by Mathys Ltd Bettlach. Make use of the Mathys user training and proceed according to the recommended surgical technique.

Introduction

Dual-mobility cups were designed to reduce the risk of dislocation upon movement over the full ROM. Dislocation is one of the major causes of of revision after total hip arthroplasty (THA). The concept of dual mobility was created in the 1970s by Professor Gilles Bousquet. The dual-mobility technology was subsequently developed, featuring a mobile polyethylene liner attached to a femoral head and articulating in a metallic acetabular shell.

The DS Evolution hip system was designed to address the challenges of treating patients – in primary cases as well as in revision cases – who are susceptible to dislocation and need greater stability.

The cobalt-chromium cup (CoCr)
The uncemented DS Evolution, the cemented DS Evolution and the Revision DS Evolution are the three versions at the disposal of surgeons for any patient meeting the Indications described below, depending on bone quality. The DS Evolution uncemented and revision provide secure primary stability, thus promoting rapid osteointegration, which in turn ensures good secondary stability.

The grooved outer surface of the cemented DS Evolution Cup enables good fixation of the implant in the bone cement.

Technical Features
- A Cobalt-Chromium shell
- Cementless press-fit cups feature a flattened pole
- A rough double-layered plasma-sprayed coating consisting of TPS and hydroxyapatite for the cementless versions
- A simple and user-friendly instrument set for implanting the three different cups: uncemented, cemented and revision
- Connection to the acetabular cup positioner is made directly without contact with the implants

1. Indications and contraindications

Indications

- Destruction of the hip joint resulting from degenerative, post-traumatic or inflammatory lesion
- Fracture or avascular necrosis of the femoral head
- Sequelae of earlier operations, total replacement, osteotomy, etc.
- DS Evolution family dual-mobility acetabula are indicated in cases of chronic joint instability and for patients over 70 years of age
- The surgeon must choose the DS Evolution Revision with acetabular anchorage (cortical screw and peg) appropriate to the patient's bone quality.

Warning: do not bend the lug: repeated bending, or bending to and from, will weaken it!

Contraindications and conditions presenting increased risk of failure

- Acute or chronic localised or systemic infections (heart disease, untreated diabetes, permanent haemodialysis, reduced immune system, etc.)
- Severe muscular, neurological or vascular deficiency affecting the limb concerned
- Allergies to the implant's components or ingredients
- Destruction, loss or poor bone quality likely to affect the stability of the artificial joint, severe osteoporosis, significant deformation of the joint to be replaced, localised bone tumours
- Any associated condition which could compromise the functioning or implantation of the prosthesis
- Drug addiction, alcohol abuse, smoking or medication dependency
- Intellectual incapacity of patients in understanding the instructions of the surgeon
- Systemic or metabolic issues
- Local bone tumours
- Obesity, being overweight, increased activity of the patient, intense sporting activity, falling

For further information, please refer to the instructions for use or ask your Mathys representative.

2. Preoperative planning

Use conventional or digital X-ray templates to plan reconstruction of the correct centre of rotation, offset and leg length. Determine the most favourable position of the implant and estimate its appropriate size. Also use preoperative planning to anticipate potential difficulties during surgery.

Example using X-rays
We recommend a pelvic survey radiograph with a film-to-focus distance of 120 cm, which corresponds to a magnification of 1.15:1.

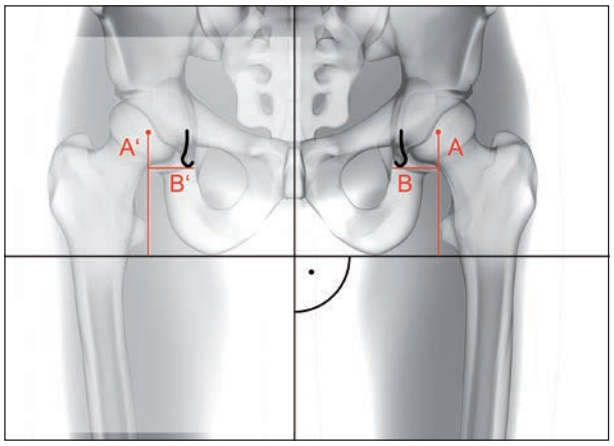


Fig. 1

Determination of the centre of rotation
To determine the centre of rotation of the operated side, the following steps are required:

- The vertical line is plotted through the centre of the symphysis
- The horizontal tangent is aligned to the tips of both ischial tuberosities
- This is followed by measuring the rotational centre of the head on the healthy side
- Next, the vertical line A is plotted which corresponds to the distance between the horizontal interischial tuberous line and the centre of rotation
- Then line B is plotted which is delimited medially by Köhler's teardrop
- Finally, the measured distances A and B are transmitted from the healthy to the operated half of the pelvis (corresponding to A' and B')

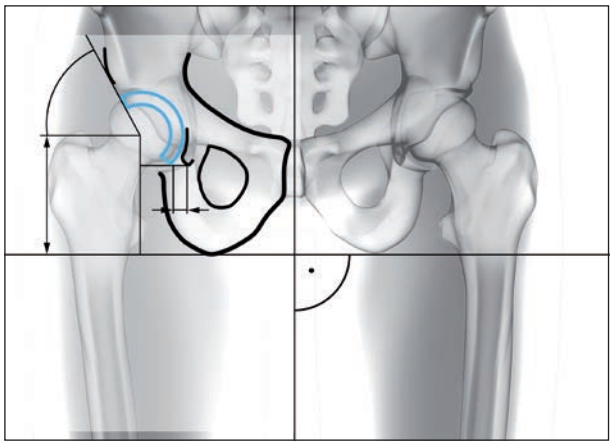


Fig. 2

Planning of the DS Evolution Cup
The position of the DS Evolution Cup is defined based on the contour of the cup, the defined centre of rotation, the position of Köhler's tear-drop and the required inclination angle.

- Selection of the correct DS Evolution Cup size with the aid of the DS Evolution Template
- The DS Evolution Cup is graphically superposed on the illustration of the acetabulum with an inclination of 40° by transferring from A' and B', taking the centre of rotation into account
- Identification of the future implant position compared to the osseous landmarks (Köhler's teardrop, craniolateral roof, osteophytes)

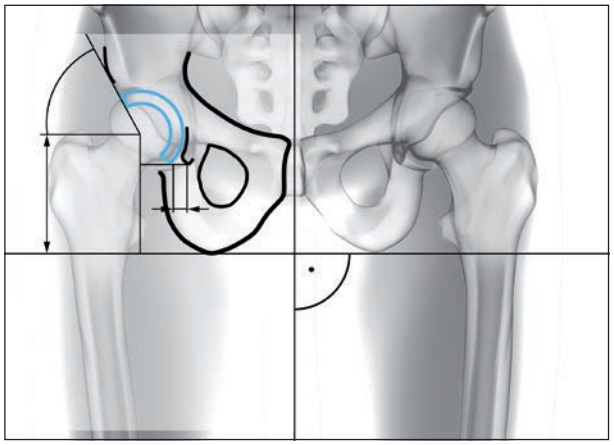


Fig. 3

Align the planning foil parallel to the medial axis, and mark the pelvic contours and the centre of rotation. Taking into account the centre of rotation, determine the size of the acetabular cup and transfer the appropriate contour of the cup onto the foil.

Position the planning film on the healthy side with as precise congruence as possible of the two halves of the pelvis. Trace the healthy femur onto the film using a broken line.

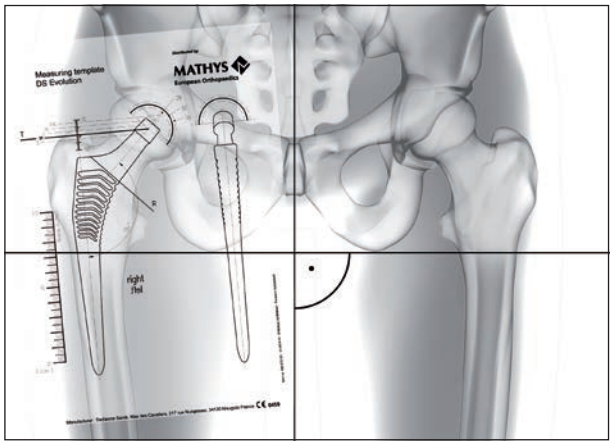


Fig. 4

Planning of the stem

Establish the stem size with the aid of prosthesis templates on the femur requiring operation.
The template needs to be aligned with the centre of rotation and the middle axis. Now, the stem with its defined size can be drawn on the planning foil.
Plot the matching stem with the template in the same abduction/adduction position as the femur plotted as a dotted line from the healthy side.

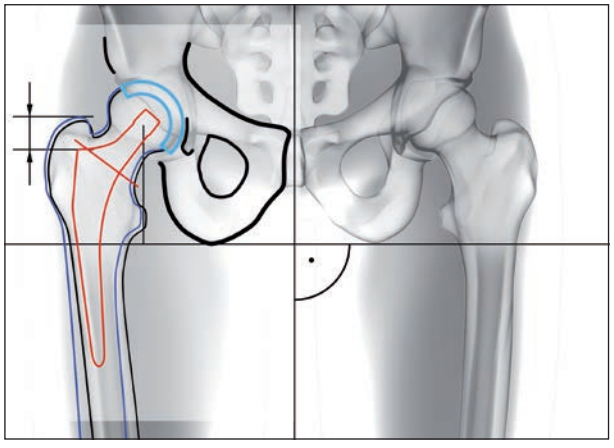


Fig. 5

The distances between the proximal end of the stem taper and the trochanter minor as well as the distance between the stem shoulder and the trochanter major are measured.

Plot the resection level and determine the intersection between the trochanteric massif and the limit of the lateral prosthesis stem.

3. Surgical technique

Various standardized conventional approaches to the hip joint have been established over many years in orthopaedics, depending on the cutting orientation and patient positioning. During the last years, a variety of minimally invasive techniques have been developed to approach the hip joint. For implantation of the DS Evolution System, various surgical approaches are possible. The choice of the specific technique should be based on the individual experience and preferences of the operating surgeon.

Femoral osteotomy
The resection of the neck is done according to the preoperative planning. The neck is exposed using edgeless Hohmann handles. In case of a narrow anatomical situation it is recommended to perform the osteotomy of the neck in two steps. The first step is to remove a discoidal bone segment. Afterwards, the head of the femur is removed using a head extractor.

Fig. 6

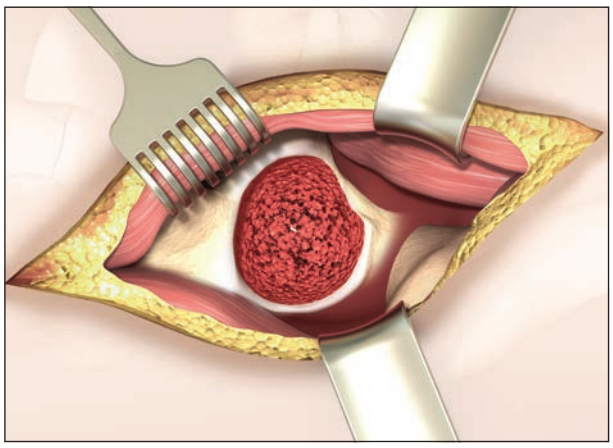


Fig. 7

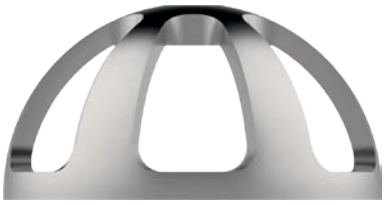
Preparation of the acetabulum
When preparing the acetabulum, expose the osseous circumference and remove any capsular rests.
Carefully remove osteophytes. Deepen the acetabular cavity according to the depth defined in preoperative planning by using a small reamer size.
Subsequently, continue the reaming in increments of 1 – 2 mm until the exposed subchondral bone is slightly vascularized.
For exact preparation of the acetabulum, it is recommended to use the Handle with Quick Coupling and manually ream to the final size (Fig. 6).

Remark
Take care to ream the acetabulum to the level defined in preoperative planning to ensure precise reconstruction of the patient's anatomy.

Remark
Make sure that reaming is carried out to the necessary depth, on the basis of the size of the implant, and that a bed of bleeding cancellous bone is prepared (Fig. 7).

Ø ratio Reamer / Trial cup / Implant

Reamer 52



Trial cup = Reaming diameter

DS Evolution Cup 52 with flattened pole (True Ø 53.5 mm)

Cup size	Equatorial Pressfit
44	1.2 mm
46	1.3 mm
48	1.4 mm
50 – 54	1.5 mm
56 – 60	1.6 mm
62 – 68	1.7 mm

Remark

The true implant dimension of the DS Evolution Cup uncemented is bigger than the labelled size. The amount of press fit to be used should be determined at the time of surgery and be based on bone quality.

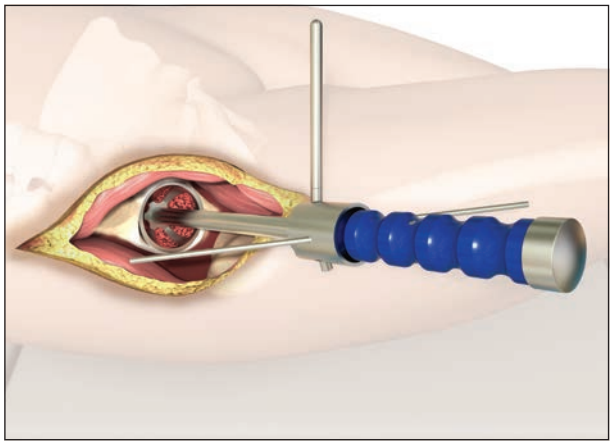


Fig. 8

Determining the cup size

The Trial Cup can be used to check the depth, the roundness and the bone coverage of the implant.

To determine the final DS Evolution Cup size, choose a Trial Cup of the same size as the last Reamer used. Screw the Trial Cup with the same diameter as the last reamer used tightly onto the Impactor for Trial Cups. The windows in the Trial Cup enable the congruence of the DS Evolution Cup and the stability of the anchorage to be checked. Make sure that contact is made with the bone over the whole bony surface.

Evaluate the position and the orientation of the Trial Cup, for example with the help of the Positioning guide mounted on the guard of the Impactor for Trial Cups (Fig. 8).

The Trial Cup must be correctly positioned in the acetabulum and provide sufficient bone coverage to achieve a pressfit of the implant.

Remark

If stability is satisfactory with the Trial Cup, the DS Evolution implant should be of the same diameter. If the Trial Cup does not provide sufficient primary stability, try the Trial Cup one size bigger.

If stability is good, the DS Evolution implant should be of the same diameter as the Trial Cup. If the Trial Cup one size bigger does not fit, use the next largest Reamer and repeat the procedure.

Fig. 9

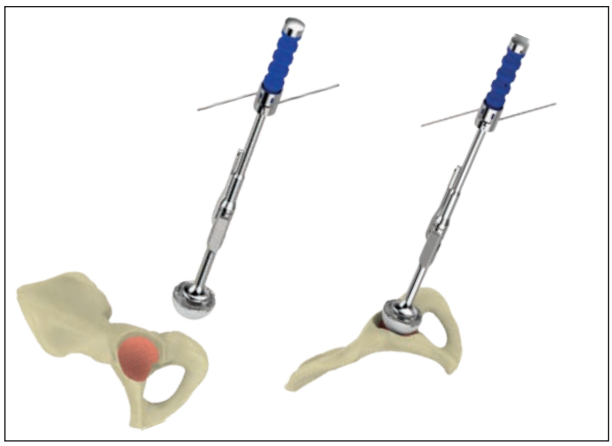


Fig. 10

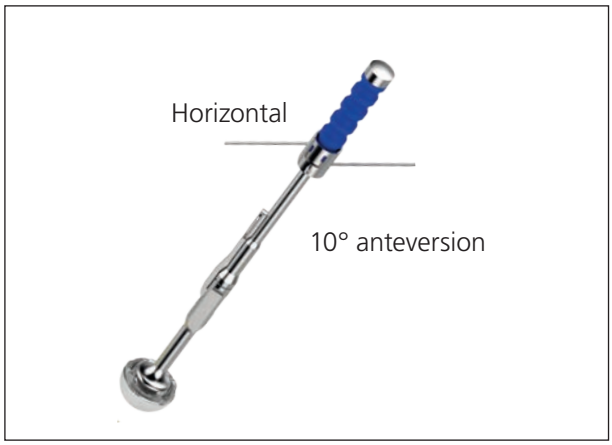


Fig. 11

DS Evolution HA Cups uncemented
The definitive DS Evolution Cup is placed on the back in its original packaging.

Remark
The selection of the DS Evolution Cup size must correspond to the size of the last reamer used and to that of the trial cup.

The marking on the Implant Gripper helps identify the orientation of the Adapter for Impactor.
Ensure the markings on the Adapter for Impactor and the Implant Gripper are aligned (Fig. 9).

The shell is inserted into the prepared site, impaction being applied primarily to the rim of the implant.

Final prosthesis orientation and inclination should be checked prior to impaction (Fig 10).

Use the Positioning Guide to implant the device, setting it to an angle of inclination of 45° and an anteversion of 10° (Fig 11).

Remark
Exact adjustment of the anteversion depends on the anatomical situation and on the femoral stem to be implanted.

Present the DS Evolution Cup implant in the acetabular cavity, position it in the required orientation and impact it into place.

Check the stability and position of the DS Evolution implant.

Remark
This tool is an impactor and should not be used in order to modify orientation while performing the impaction. A special instrument is available for adaptation of the cup position after impaction, if this should be necessary.

Fig. 12

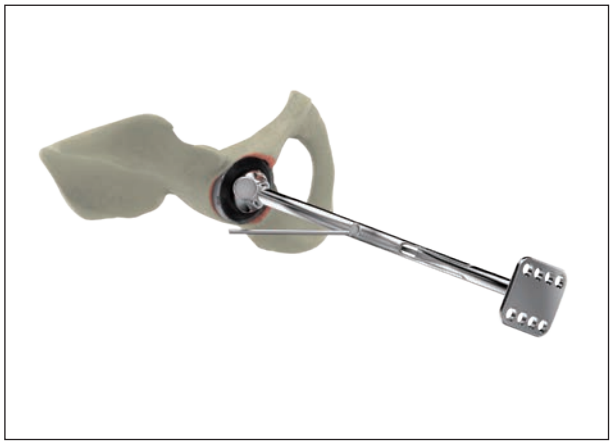


Fig. 13

Fig. 14

Use of the Alignment Guide for the MIS Impactor

If desired, the Alignment Guide can be attached to MIS Impactor to help establish the recommended 45° of abduction/inclination and 10° of anteversion (Fig. 12). The recommended abduction angle of 45° is determined by positioning the MIS Vertical Rod perpendicular to the long axis of the patient (Fig. 12). Anteversion is set at approximately 10° by moving the cup impactor so that the left/right MIS Anteversion Guide is parallel the longitudinal axis of the patient's femur (Fig. 13).

Remark

The Alignment Guide may yield inaccurate placement if the pelvis has moved from the original position during intraoperative manipulation. Small changes in pelvic flexion will greatly affect anteversion. The Alignment Guide is only one aid to assist with proper implant positioning. The surgeon must also rely on anatomic landmarks to avoid improper positioning of the components.

Fully raise the releasing lever of the Adapter for Impactor to disengage the gripper from the DS Evolution Cup. As the gripper is still connected to the Adapter for Impactor, pull the lever down again to unlock (Fig. 14).

Fig. 15

Fig. 16

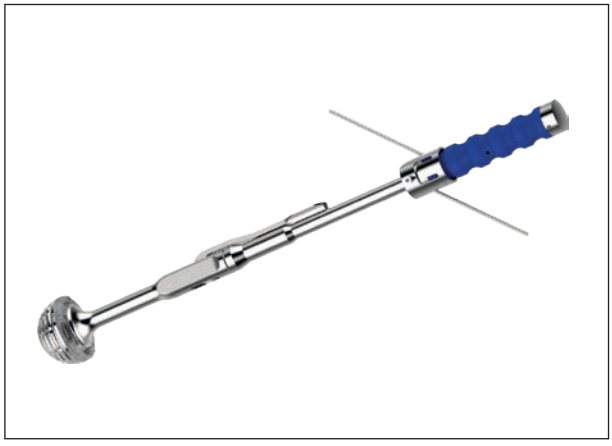


Fig. 17

Once the implant is in place, modifying its orientation is very difficult.
If necessary, use the top of the Handle for Post-Impactor and press it against the inner edge of the DS Evolution Cup (Fig. 15).

Avoid using any metallic or unadapted instrument that might cause damage to the bearing surfaces.

To finalize DS Evolution Cup impaction, it is essential to fully position the Handle for Post-Impactor on the inside of the DS Evolution Shell and apply a series of firm mallet blows along the axis of the acetabulum (Fig. 16).

DS Evolution Cup cemented
The definitive DS Evolution Cup cemented is placed on the back in its original packaging.

Remark
The selection of the DS Evolution Cup cemented size must correspond to the size of the last Reamer or one size smaller. The Reamer has the exact dimension of the DS Evolution Cup cemented.

The DS Evolution Shell cemented comprises grooves with 1 mm depth, which are designed in order to receive the cement (Fig. 17).

The marking on the Implant Gripper helps identify the orientation of the Adapter for Impactor.

Ensure the marking on the Adapter for Impactor and the Implant Gripper are aligned.

Remark
Release the implant before the cement hardens.

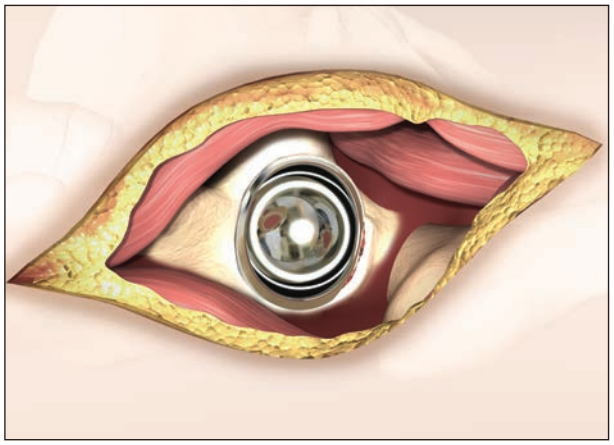


Fig. 18

The DS Evolution Shell cemented is placed into the acetabulum.

Remark
Make sure that all the cement present on the rim and in the DS Evolution Cup cemented is removed completely (Fig. 18).

Fig. 19

Once implant orientation has been controlled with the Positioning Guide, the Implant Gripper is disengaged from the implant by raising the releasing lever of the Adapter for Impactor.

The implant gripper should be removed from the DS Evolution Shell prior to cement hardening.

To perform a minor adjustment, use the top of the Handle for Post-Impactor and push it against the inner edge of the DS Evolution Cup cemented.

During cement hardening, it is necessary to apply continuously pressure medially via the inside of the DS Evolution Cup cemented with the help of the fully inserted Handle for Post-Impactor into the DS Evolution Shell (Fig. 19).

3.1 DS Evolution Revision

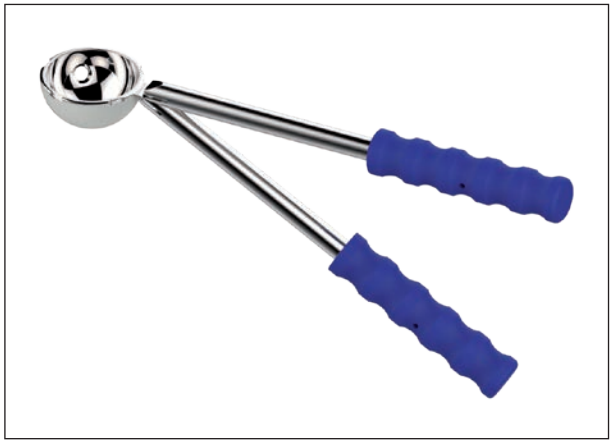


Fig. 20

Fig. 21

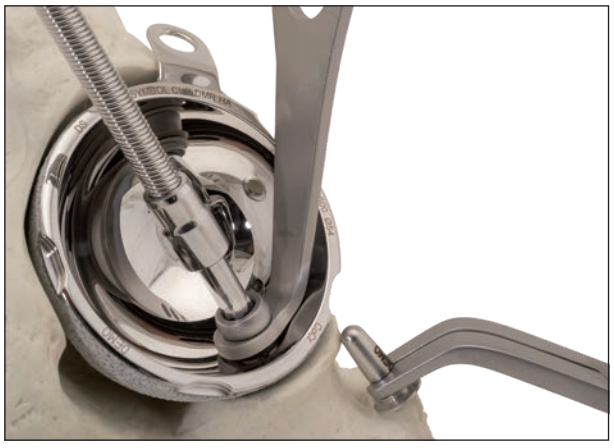


Fig. 22

Modelling the flange
Before impacting the DS Evolution Revision Cup, the cobalt-chromium flange can be shaped with the help of the Bending instr. for flange. Its original position is at an angle of 30 degrees from the equatorial plane of the cup; however it can be straightened or bent slightly in order to adapt it to the anatomy of the specific patient's bone (Fig. 20).

Remark
If the bony rim above the cup is too marked, it will have to be resected using an Osteotome or bone gouging forceps.

Remark
Do not subject the flange to repeated or alternating bending as this could weaken it!

Putting the Drill sleeves into place
Screw the two Drill sleeves, with the help of the Hexagonal Screwdriver, to the inside of the DS Evolution Revision Cup (Fig. 21).

Take care not to scuff the articulating surface of the DS Evolution Revision Cup while performing this operation step.

Precise drilling can be ensured only by using the Drill Sleeves when preparing the holes for the anchoring pegs!

Putting the pegs into place
First of all, the cavity of each DS Evolution pegs must be prepared with the help of the Flexible Drill Bit (Length 26 mm, Ø 5.4 mm), or of the Curved Impactor guided by the Drill Sleeve (Fig. 22).

Fig. 23

Then remove the Drill Sleeve with the help of the Hexagonal Screwdriver with Cardan Joint, the Hexagonal Screwdriver and the Peg-Holder Forceps (Fig. 23).

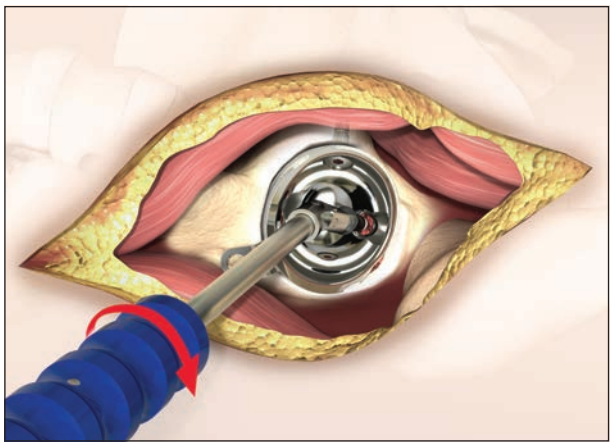


Fig. 24

Use the Peg-Holder Forceps to put the DS Evolution Peg into place and screw it in firmly. Repeat the procedure for the second DS Evolution Peg (Fig. 24).

Fig. 25a Correct

Fig. 25b Incorrect

Remark

To ensure good anchorage, each Peg must be put into place as soon as the hole has been drilled for it.
Check that the Pegs are screwed firmly into place. This will prevent them from protruding and thus avoid any interference with the mobile polyethylene inlay (Figs 25a and 25b).

Fig. 26

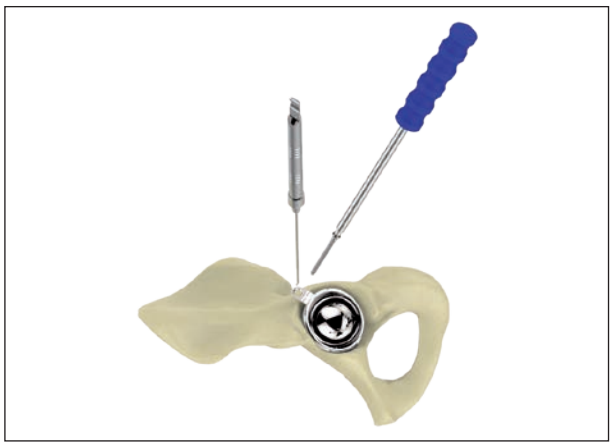


Fig. 27

Putting the cortical screw into place
Drill the bone with the Ø3.2 Drill Bit and its Drilling Guide (Fig 26).

Use the Depth Gauge to select the appropriate length of the DS Evolution Cortical Screw (Fig 26).

Choose a Screw of the length required to reach the medial cortical bone and put it into place with the help of the Forceps and the Hexagonal Screwdriver with the Cardan Joint (Fig. 27).

The inside of the DS Evolution Revision Cup must not be damaged under any circumstances during this procedure.

To minimize the risk of neural and vascular damage, the orientation and drilling depth of the screw holes as well as screw lengths must be chosen according to the anatomical conditions in the pelvic region.

Screws should be placed in the posterior superior or posterior inferior Quadrant(s) of the acetabulum.*

We strongly recommend using DS Evolution Screws.

* Wasielewski RC, Cooperstein LA, Kruger MP, Rubash HE. Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. J Bone Joint Surg. 1990: 72–A(4);501–508.

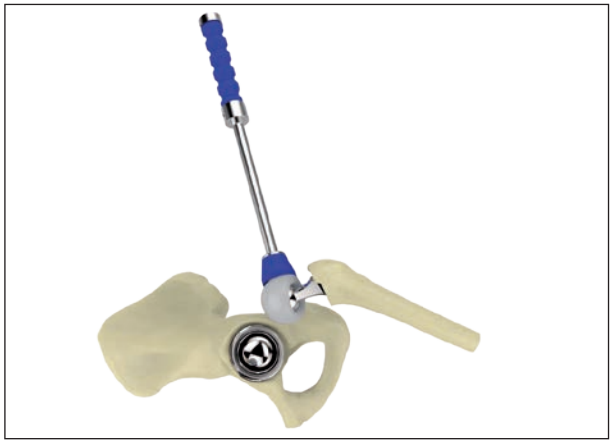


Fig. 28

Trial reduction with the Trial Inlay
Position the selected Trial Inlay on the previously implanted femoral stem (Fig. 28). Carry out a trial reduction in order to check the range of movement. Test for stability and muscle tension, and check whether there is any danger of a cam effect.

Fig. 29

Putting the permanent implant into place
After cleaning and drying the inside of the shell, position the DS Evolution Inlay and the permanent Femoral Head on the Femoral Stem.

If a modular Femoral Stem is used

a) Impacting the head into the DS Evolution Inlay
Place the Base of the Assembling Device on the table. Slide the Assembling Device against the centring peg of the base. Lock the assembly by means of the lateral screw, using the Allen Key.
Insert the Adapter corresponding to the Cone of the Femoral Stem (8 – 10, 10 – 12, 11 – 13 or 12 – 14) onto the centring peg of the base. Position the Femoral Head on the support. Place the DS Evolution Inlay on the Femoral Head in an axial position.

Screw the device down until the Femoral Head passes through the inner retaining rim of the DS Evolution Inlay (Fig. 29).

Remark
Check for total mobility and anchoring of the Femoral Head in the DS Evolution Inlay.
Never use water in order to push the Femoral Head before impaction in the DS Evolution Inlay.

b) Impacting the assembly onto the femoral stem

Position the Femoral Head and the DS Evolution Inlay on the cone of the stem and then complete impaction with the help of the Inlay Impactor, keeping the DS Evolution Inlay and the Femoral Head on a correct axis.

If a monoblock Femoral Stem is used

Slide the Assembling Device around the neck of the femoral stem until it is firmly in contact. Apply the fork of the device at the base of the Femoral Head. Place the DS Evolution Inlay axially on the Femoral Head and screw the device down until the head passes through the inner retaining rim of the DS Evolution Inlay.

Remark

Check for total mobility and retention of the Femoral Head in the DS Evolution Inlay.
Never use water in order to push Femoral Head before impaction in the DS Evolution Inlay.

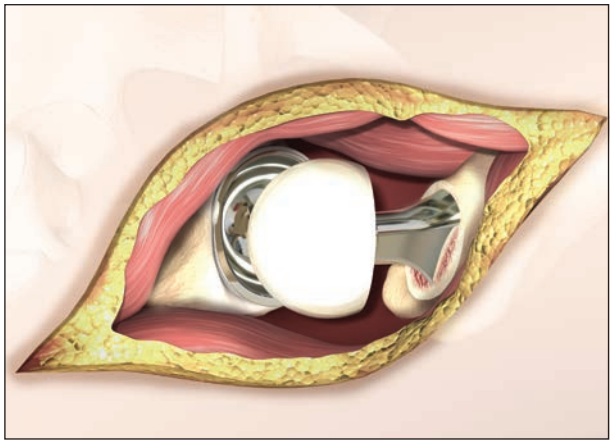


Fig. 30

Reduction and closing of the wound

Once the hip has been reduced, close the wound in layers according to the surgeon's preferences (Figs 30 and 31).

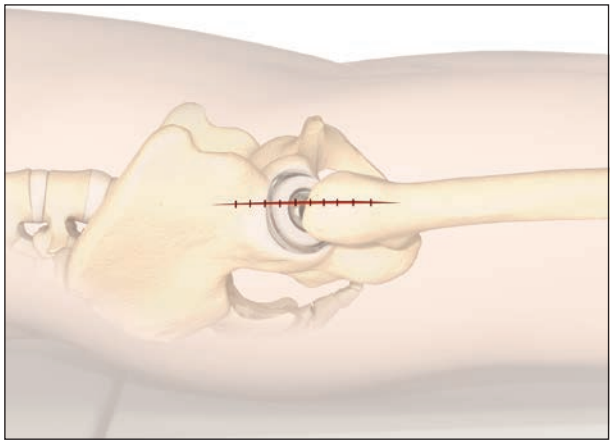


Fig. 31

4. Implants

DS Evolution HA Cup uncemented

Item no.	Description
52.34.0902	DS Evolution HA Cup 46 uncemented
52.34.0903	DS Evolution HA Cup 48 uncemented
52.34.0904	DS Evolution HA Cup 50 uncemented
52.34.0905	DS Evolution HA Cup 52 uncemented
52.34.0906	DS Evolution HA Cup 54 uncemented
52.34.0907	DS Evolution HA Cup 56 uncemented
52.34.0908	DS Evolution HA Cup 58 uncemented
52.34.0909	DS Evolution HA Cup 60 uncemented
52.34.0910	DS Evolution HA Cup 62 uncemented
52.34.0911	DS Evolution HA Cup 64 uncemented
52.34.0912	DS Evolution HA Cup 66 uncemented
52.34.0913	DS Evolution HA Cup 68 uncemented

Material: CoCr, TPS + HA

DS Evolution Cup cemented

Item no.	Description
52.34.0915	DS Evolution Cup 46 cemented
52.34.0916	DS Evolution Cup 48 cemented
52.34.0917	DS Evolution Cup 50 cemented
52.34.0918	DS Evolution Cup 52 cemented
52.34.0919	DS Evolution Cup 54 cemented
52.34.0920	DS Evolution Cup 56 cemented
52.34.0921	DS Evolution Cup 58 cemented
52.34.0922	DS Evolution Cup 60 cemented
52.34.0923	DS Evolution Cup 62 cemented
52.34.0924	DS Evolution Cup 64 cemented
52.34.0925	DS Evolution Cup 66 cemented
52.34.0926	DS Evolution Cup 68 cemented

Material: CoCr

DS Evolution HA Cup Revision

Item no.	Description
52.34.0928	DS Evolution HA Cup 46 Revision
52.34.0929	DS Evolution HA Cup 48 Revision
52.34.0930	DS Evolution HA Cup 50 Revision
52.34.0931	DS Evolution HA Cup 52 Revision
52.34.0932	DS Evolution HA Cup 54 Revision
52.34.0933	DS Evolution HA Cup 56 Revision
52.34.0934	DS Evolution HA Cup 58 Revision
52.34.0935	DS Evolution HA Cup 60 Revision
52.34.0936	DS Evolution HA Cup 62 Revision
52.34.0937	DS Evolution HA Cup 64 Revision
52.34.0938	DS Evolution HA Cup 66 Revision
52.34.0939	DS Evolution HA Cup 68 Revision

Material: CoCr, TPS + HA

DS Evolution PE Inlays

Item no.	Description
52.34.0940	DS Evolution PE Inlay 28/46
52.34.0941	DS Evolution PE Inlay 28/48
52.34.0942	DS Evolution PE Inlay 28/50
52.34.0943	DS Evolution PE Inlay 28/52
52.34.0944	DS Evolution PE Inlay 28/54
52.34.0945	DS Evolution PE Inlay 28/56
52.34.0946	DS Evolution PE Inlay 28/58
52.34.0947	DS Evolution PE Inlay 28/60
52.34.0948	DS Evolution PE Inlay 28/62
52.34.0949	DS Evolution PE Inlay 28/64
52.34.0950	DS Evolution PE Inlay 28/66
52.34.0951	DS Evolution PE Inlay 28/68

Material: UHMWPE

DS Evolution Screws

Item no.	Description
52.34.0952	CoCrMo Cortical Screw 4.5 x 32
52.34.0953	CoCrMo Cortical Screw 4.5 x 36
52.34.0954	CoCrMo Cortical Screw 4.5 x 40
52.34.0955	CoCrMo Cortical Screw 4.5 x 44
52.34.0956	CoCrMo Cortical Screw 4.5 x 48
52.34.0957	CoCrMo Cortical Screw 4.5 x 52
52.34.0958	CoCrMo Cortical Screw 4.5 x 56
52.34.0959	CoCrMo Cortical Screw 4.5 x 60
52.34.0960	CoCrMo Cortical Screw 4.5 x 64
52.34.0961	CoCrMo Cortical Screw 4.5 x 68
52.34.0962	CoCrMo Cortical Screw 4.5 x 72

Material: CoCr

DS Evolution Peg

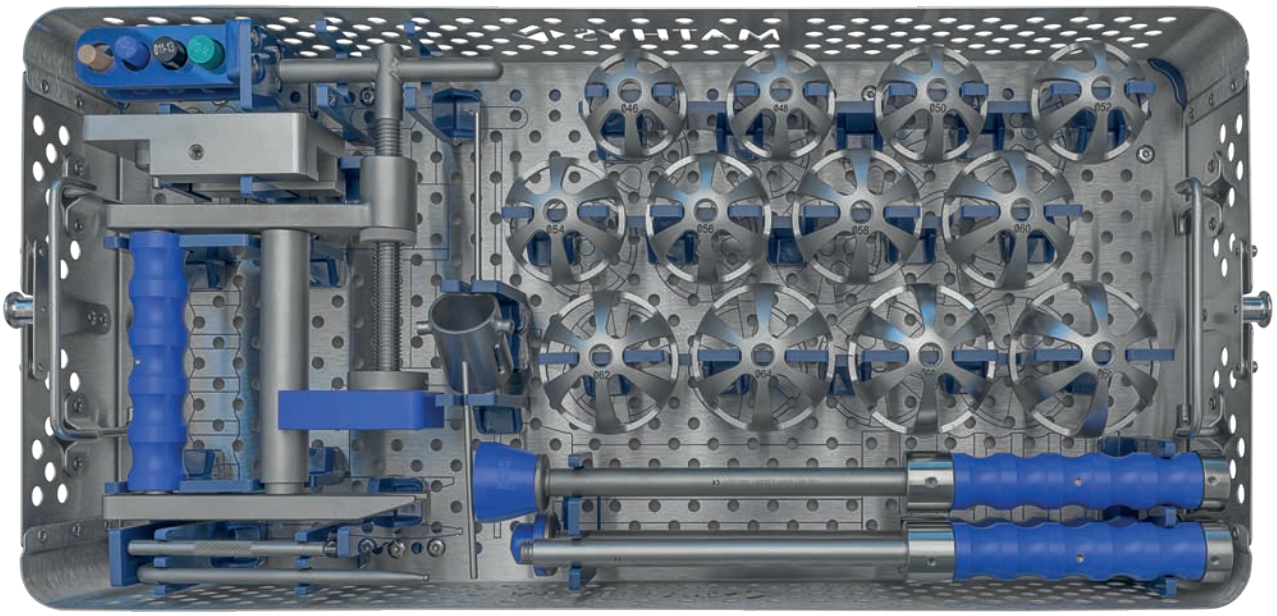
Item no.	Description
52.34.0963	DS Evolution CoCrMo Anchoring Peg

Material: CoCr

5. Instruments

5.1 DS Evolution Instrumentation 51.34.0878A

DS Evolution Instrumentation 51.34.0878A



Item no. 51.34.0880 **DS Evolution Tray 1**
No Picture / Item no. 51.34.0879 **DS Evolution Lid**

Item no.	Description	Size
050346	DS Evolution Trial Cup 46	46
050348	DS Evolution Trial Cup 48	48
050350	DS Evolution Trial Cup 50	50
050352	DS Evolution Trial Cup 52	52
050354	DS Evolution Trial Cup 54	54
050356	DS Evolution Trial Cup 56	56
050358	DS Evolution Trial Cup 58	58
050360	DS Evolution Trial Cup 60	60
050362	DS Evolution Trial Cup 62	62
050364	DS Evolution Trial Cup 64	64
050366	DS Evolution Trial Cup 66	66*
050368	DS Evolution Trial Cup 68	68*

* Will be available on request

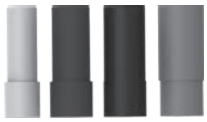
Item no.	Description
02011038	DS Evolution Allen Key

Item no.	Description
050700M 050700	DS Evolution Handle for Post-Impactor

Item no.	Description
050900M 050900	DS Evolution Impactor for Trial Cup

Item no.	Description
051300M 051300	DS Evolution Assembling Device

Item no.	Description
051400M 051400	DS Evolution Handle for Inlay Impactor

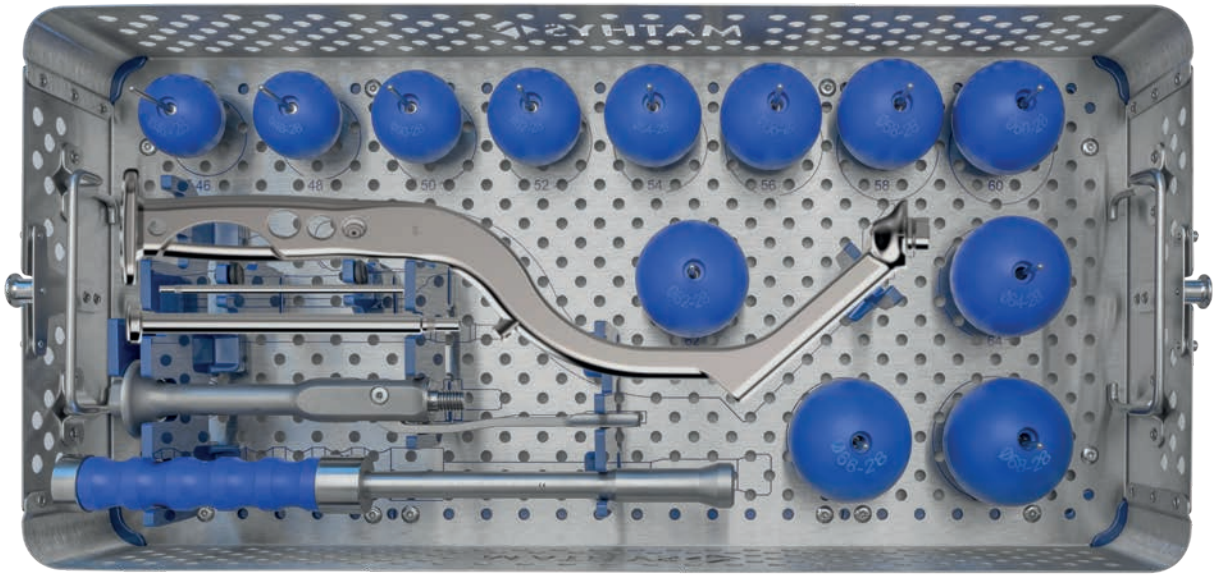


Item no.	Description
051608	DS Evolution Adapter for 8–10 cone
051610	DS Evolution Adapter for 10–12 cone
051611	DS Evolution Adapter for 11–13 cone
051612	DS Evolution Adapter for 12–14 cone

Item no.	Description
051700	DS Evolution Base for Assembling Device

Item no.	Description
051900	DS Evolution Positioning Guide 45°

Item no.	Description
052000	DS Evolution Rod for Position Guide 10°



Item no. 51.34.0881 **DS Evolution Tray 2**
No Picture / Item no. 51.34.0879 **DS Evolution Lid**

Item no.	Description
3700502204483	DS Evolution MIS Impactor

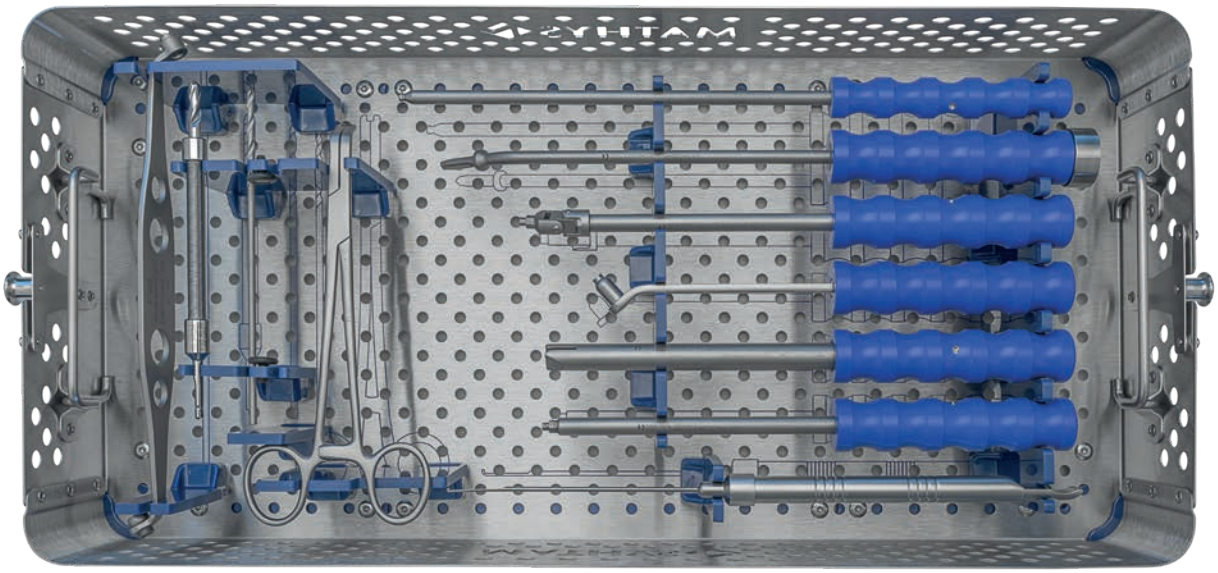
Item no.	Description
3700502204506	DS Evolution MIS Anteversion Guide
3700502204513	DS Evolution MIS Vertical Rod

Item no.	Description
3700502204995	DS Evolution Adapter for Impactor

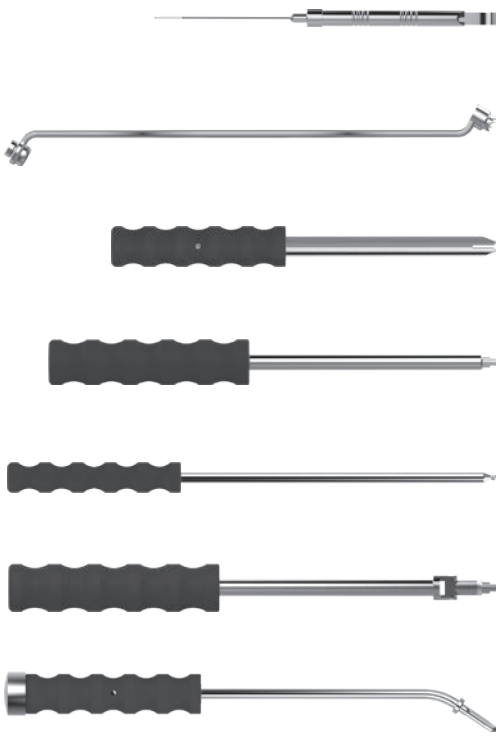
Item no.	Description	Size
050846	DS Evolution Trial Inlay 46/28	46
050848	DS Evolution Trial Inlay 48/28	48
050850	DS Evolution Trial Inlay 50/28	50
050852	DS Evolution Trial Inlay 52/28	52
050854	DS Evolution Trial Inlay 54/28	54
050856	DS Evolution Trial Inlay 56/28	56
050858	DS Evolution Trial Inlay 58/28	58
050860	DS Evolution Trial Inlay 60/28	60
050862	DS Evolution Trial Inlay 62/28	62
050864	DS Evolution Trial Inlay 64/28	64
050866	DS Evolution Trial Inlay 66/28	66*
050868	DS Evolution Trial Inlay 68/28	68*

* Will be available on request

Item no.	Description
050400M 050400	DS Evolution Cup Impactor



Item no. 51.34.0882 **DS Evolution Tray 3**
No Picture / Item no. 51.34.0879 **DS Evolution Lid**



Item no.	Description
14010	DS Evolution Depth Gauge

Item no.	Description
3700502204872	DS Evolution Position Guide for Pegs

Item no.	Description
040351M	DS Evolution Bending Instr. for Flange

Item no.	Description
040359M	DS Evolution Hexagonal screwdriver

Item no.	Description
040362M	DS Evolution Hex. Screwdriver, long

Item no.	Description
040363M	DS Evolution Hex. Screwdr. w/cardan joint

Item no.	Description
040364M	DS Evolution Curved Impactor

Item no.	Description
040366	DS Evolution Flexible Drill Bit 5.4

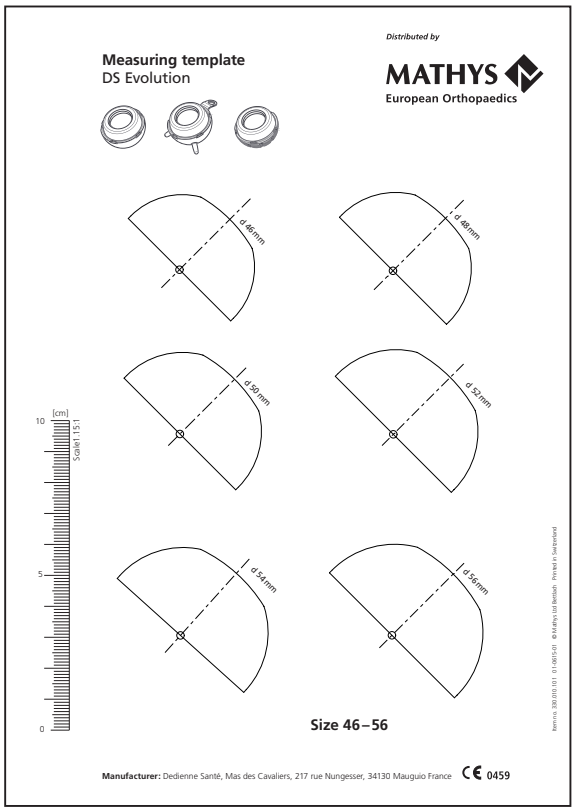
Item no.	Description
14230	DS Evolution Drill Bit 3.2

Item no.	Description
94714M 94714	DS Evolution Drill Guide

Item no.	Description
94718	DS Evolution Holding Forceps for Peg

5.2 Measuring template

The article number of the measuring template is 330.010.101.



6. Symbols

 Manufacturer

 Correct

 Incorrect

 Caution

Notes

Manufacturer

Dedienne Santé

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