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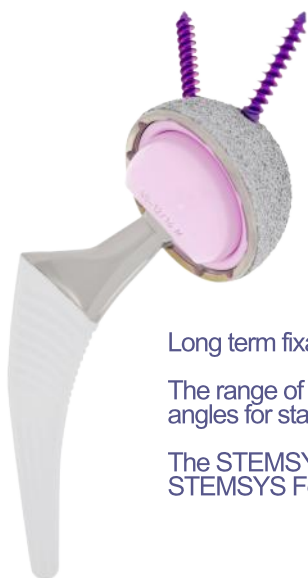


## Stemsys<sup>®</sup> MI

### *Surgical Technique*

Evolutis  
**MOTION INSIDE**

# STEMSYS® MI hip system



The STEMSYS® MI uncemented primary femoral component is a fully coated porous Ti + HA alloy stem, designed for immediate mechanical stability and long term biological fixation.

The STEMSYS® MI is a shortened variant of the STEMSYS® primary stem for hemi or total hip arthroplasty. The shortened length of STEMSYS® MI facilitates the introduction of the stem in true anterior surgical approaches to the hip, and reduces the invasiveness of the implant into the intramedullary bone.

The basis of the design is being based on the well-known trapezoidal proximal and mid section that provides immediate rotational stability and optimal metaphyseal fit.

Long term fixation is enhanced through bone ingrowth into the dual coating of HA and porous titanium plasma.

The range of sizes of the STEMSYS® MI includes 10 sizes (from size 9 to 20) and 2 cervico-diaphyseal neck angles for standard (135°) or latero-varus (128° + 3.2mm) anatomical adaptation.

The STEMSYS® MI Hip System offers stainless steel, cobalt chrome, or composite ceramic femoral heads. STEMSYS Femoral Heads come in 22.2mm, 28mm, 32mm and 36mm sizes.

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### Disclaimer

*This document is intended to be read only by experienced orthopaedic surgeons familiar with the application of hip arthroplasty, and by individuals related to or acknowledged by Evolutis company.*

*This publication is intended as the recommended procedure for using the Evolutis STEMSYS® MI Hip System. It offers guidance only. EVOLUTIS is the manufacturer of the device. As such and claiming no medical skill, EVOLUTIS does not recommend a specific use of a product or a technique. Each surgeon should consider the particular needs of the patient and make appropriate adjustments where necessary.*

*For any additional information related to the products, the indications and contra indications, the warnings and precautions of use, and the adverse effects, please refer to the INSTRUCTION FOR USE leaflet included in the packaging of implants. For further advice please contact your local representative.*

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# Templating and Approach

Pre-operative templating templates will be delivered to your hospital together with the instrument set.  
Digital templating is also available on the mediCad digital templating platform.

The set of templates includes 1 sheet for each 2 sizes of stem ranging from size 9 to size 20 (5 sheets).  
Each sheet figures standard and latero-varus necks.  
Templates are available in 86%, 100%, 115% and 120% magnification ratio. Please inform your local distributor of your referred magnification ratio.

Templating aims at anticipating on the best size of the implant with respect to the primary fixation mode (see important notice below), estimate the neck angle best adapted to the patient, and to identify the neck resection level with reference to the lesser trochanter.

The templating steps are:

- Draw centre of diaphysis line (Fig.1)
- Draw 45° angle resection line and calculate the distance (in mm) to the lesser trochanter (Fig.2)
- Juxtapose the template on the x-ray trying to match (Fig.3):
  - The medial curve of the stem to the inner medial cortical bone
  - The resection line parallel to the 45° resection line
  - The centre of prosthetic head identical or slightly medial to the centre of femoral head.



Fig.1

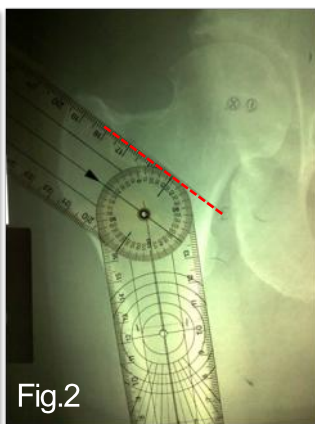


Fig.2

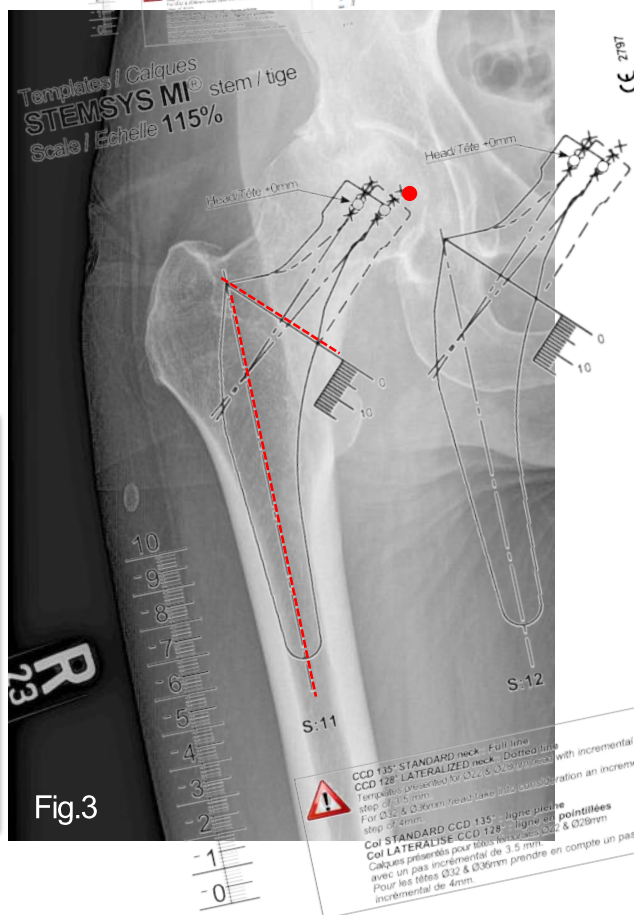


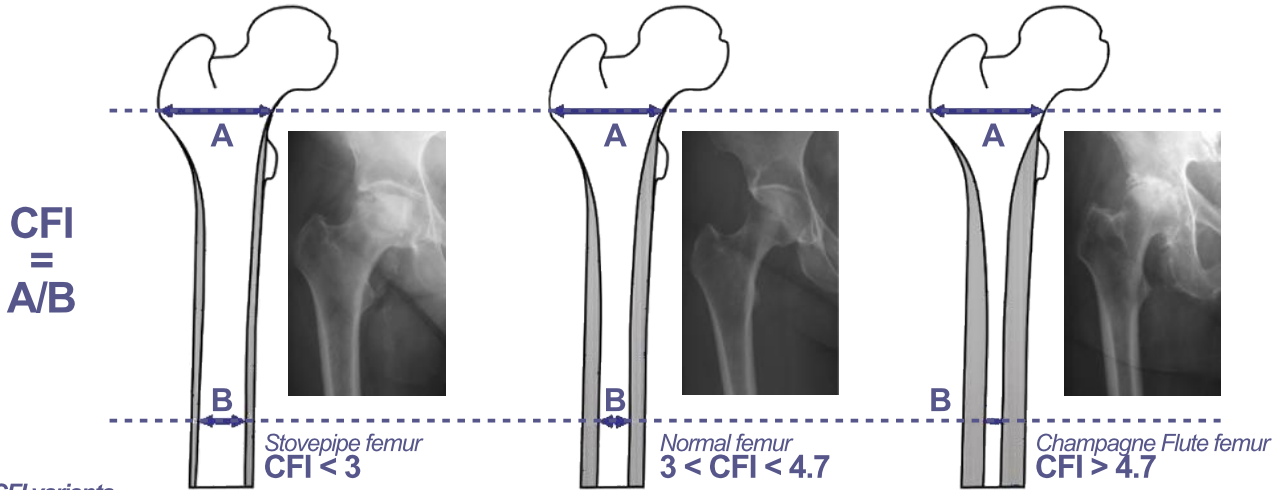
Fig.3

CCD 135° STANDARD neck - Full line  
 CCD 128° LATERALIZED neck - Dotted line  
 Templates provided for 0,2, 0,3, 0,4, 0,5, 0,6, 0,7, 0,8, 0,9, 1,0, 1,1, 1,2, 1,3, 1,4, 1,5, 1,6, 1,7, 1,8, 1,9, 2,0, 2,1, 2,2, 2,3, 2,4, 2,5, 2,6, 2,7, 2,8, 2,9, 3,0, 3,1, 3,2, 3,3, 3,4, 3,5, 3,6, 3,7, 3,8, 3,9, 4,0, 4,1, 4,2, 4,3, 4,4, 4,5, 4,6, 4,7, 4,8, 4,9, 5,0, 5,1, 5,2, 5,3, 5,4, 5,5, 5,6, 5,7, 5,8, 5,9, 6,0, 6,1, 6,2, 6,3, 6,4, 6,5, 6,6, 6,7, 6,8, 6,9, 7,0, 7,1, 7,2, 7,3, 7,4, 7,5, 7,6, 7,7, 7,8, 7,9, 8,0, 8,1, 8,2, 8,3, 8,4, 8,5, 8,6, 8,7, 8,8, 8,9, 9,0, 9,1, 9,2, 9,3, 9,4, 9,5, 9,6, 9,7, 9,8, 9,9, 10,0, 10,1, 10,2, 10,3, 10,4, 10,5, 10,6, 10,7, 10,8, 10,9, 11,0, 11,1, 11,2, 11,3, 11,4, 11,5, 11,6, 11,7, 11,8, 11,9, 12,0, 12,1, 12,2, 12,3, 12,4, 12,5, 12,6, 12,7, 12,8, 12,9, 13,0, 13,1, 13,2, 13,3, 13,4, 13,5, 13,6, 13,7, 13,8, 13,9, 14,0, 14,1, 14,2, 14,3, 14,4, 14,5, 14,6, 14,7, 14,8, 14,9, 15,0, 15,1, 15,2, 15,3, 15,4, 15,5, 15,6, 15,7, 15,8, 15,9, 16,0, 16,1, 16,2, 16,3, 16,4, 16,5, 16,6, 16,7, 16,8, 16,9, 17,0, 17,1, 17,2, 17,3, 17,4, 17,5, 17,6, 17,7, 17,8, 17,9, 18,0, 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# Important notice

## Adjusting the primary fixation mode to the CFI (Canal Flare Index)

STEMSYS® MI is the shortened variant of the conventional Stemsys® femoral stem. Although it can be associated to any surgical approach for minimally invasive purposes, it has been developed to facilitate the introduction of the stem when implanting a total hip through an anterior surgical approach to the hip. As a consequence of this specific use, the Stemsys® MI is more often used for younger patients than for the conventional length Stemsys® and may require a specific surgical adaptation when considering implantation in the high Canal Flare Index (CFI) femoral morphologies specific to the younger population of patients.



### CFI variants

CFI was defined by Noble et al. as the ratio of the intracortical width of the femur at a point 20mm proximal to the lesser trochanter to the intracortical width at the canal isthmus. CFI is considered to express the proximal femoral geometry. In a recent publication, Tanada et al.<sup>(1)</sup> calculated that in a population aged between 25 and 82, the CFI ranged between 2.8 and 6.6 with the average value at 4.65. The stovepipe morphology was identified in 2% of the cases (canal flare index < 3), the normal morphology in 61.2% (3 < canal flare index < 4.7), and the champagne flute in 36.7% (canal flare index > 4.7).

When templating the surgery pre-operatively, the surgeon should be aware that the primary fixation mode of the femoral stem will vary depending on the CFI of each patient. The STEMSYS® MI implants are designed for fixation in the metaphyseal bone, but in femurs with high CFI, primary fixation may not be proximal due to the significant flare of the intramedullary space, and become more distal, which is to be avoided.

The surgeon should take adequate measures to adapt the fixation of the implant to each morphology:

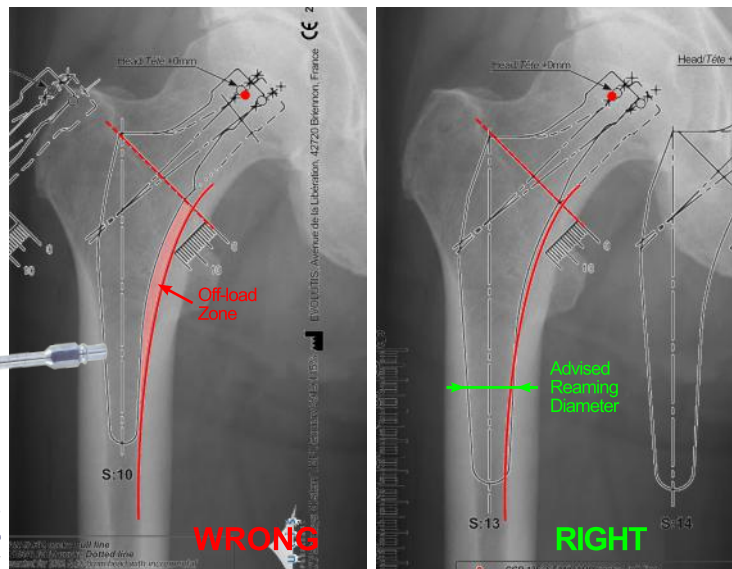
- Stovepipe femurs (CFI < 3) are more indicated for cemented fixation.
- Normal femurs (3 < CFI < 4.7) are indicated for cemented or cementless fixation of a standard primary stem where the main stability will be achieved in the femoral metaphysis section.
- Champagne flute femurs are at risk of achieving the primary stability at the isthmus level, which will create unfavourable conditions of fixation both for the femur (stress-shielding of the proximal femur), and for the stem (excessive lever arm to the shaft of the implant).

In a Champagne Flute intra-femoral morphology, the anticipated size of implant will be based on the metaphyseal adaptation of the implant to the femur, and the surgeon should consider adapting (reaming) the diameter of the isthmus to the distal dimension of the stem.

The surgical procedure is described in page 6.



### Templating of a "Champagne Flute" femur:



Left: no intramedullary modification, size 10 is anticipated to block distally at the level of the isthmus, while the proximal section of the stem stays at distance of the medial cortex (area in pink).

Right: the stem size is selected on its ability to fill the metaphyseal space and to rest on the medial cortex. The reaming diameter should be measured at the level of the stem where the template becomes larger than the canal. In this example of size 13 stem, the isthmus may have to be reamed up to 16mm.

(1) Tawada et al. "Measurement of the Canal Flare Index using 3D-models and the effect of the rotational femur position" - Feb 2018 in Orthopaedic Proceedings (Vol. 93-B, No. SUPP. IV). CFI measures of 49 femurs (18 male, 31 female), aged on average 60.4 years ranging from 25 to 82.

# Surgical steps

## Resection of the femoral neck

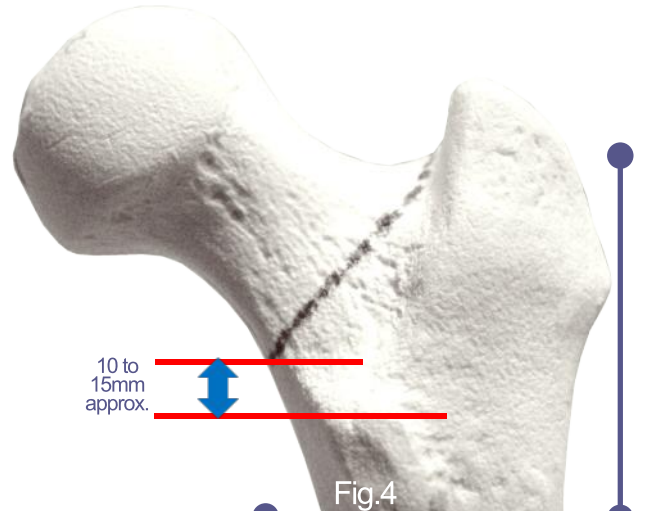
The osteotomy of the femoral neck is approx. 10 to 15mm above the lesser trochanter at an angle of 45° to the intramedullary axis of the femur or parallel to the intertrochanteric line (Fig.4).

This may vary due to differences in the proximal femoral anatomy and should be based on preoperative templating.

The resection is made with an oscillating saw blade. The femoral head is then removed.

*Note: in anterior approach procedures of stiff hips it may be necessary to cut a slice of the femoral neck to facilitate removal of the femoral head.*

In the case of total hip arthroplasty, preparation and implantation of the acetabular component should commence following the neck resection.



## Opening the intramedullary canal

Enter the femoral canal as laterally as possible with the Box Chisel supplied in the STEMSYS® Femoral Stem Instrument set (Fig.5).

Start as close as possible to the greater trochanter base to allow straight broaching axis and prevent any varus or valgus positioning.

*The bone block removed by the chisel can be preserved and used at a later stage, such as bone plug for cemented fixation.*

A femoral reamer, awl or gouge curette (not supplied with the instrument set) is introduced deep into the femoral canal to prepare and determine the axis (Fig.6).

The starting rasp (ref. H01 062) specifically designed for anterior approach is then introduced to remove proximal cancellous bone in the metaphysis and in the greater trochanter to facilitate the introduction of the first broach in the axial direction (Fig.7).



# Surgical steps

## Specific step for high CFI femoral morphologies

Proportionally to a conventional stem, the STEMSYS® MI femoral stem is more often used for younger patients with high canal flare index (CFI) femoral morphology.

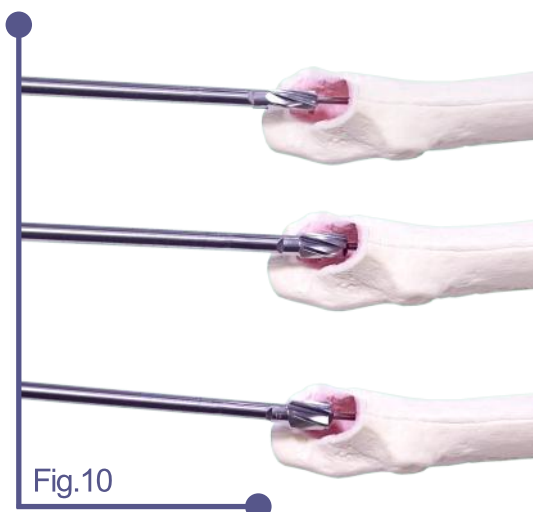
When facing a case where the femoral CFI is  $\geq 4.7$  (read **important notice** page 5), it is advised to ream the femoral diaphysis to prevent from an excessively tight distal fixation of the stem.

- 1) Templating step should have identified the high CFI case and calculated the required reaming diameter (page 5)
- 2) Introduce the reaming guide wire into the diaphysis (Fig.8)
- 3) Slide the smaller diameter reaming head on the flexible shaft
- 4) Introduce the head and shaft on the guide wire (Fig.9)
- 5) Connect the power tool to the flexible shaft
- 6) Ream the diaphysis at the minimum depth indicated in table 1
- 7) Increment the reaming heads up to the reaming diameter indicated for the templated femoral size in table 1 (Fig.10)



	A-A width 30mm from tip	Reaming diameter	Reaming depth
Size 9	11.9	Ø12	7 cm
Size 10	12.5	Ø12.5	8 cm
Size 11	13.6	Ø13.5	8.5 cm
Size 12	14,3	Ø14.5	9 cm
Size 13	15,5	Ø15.5	9.5 cm
Size 14	16	Ø16	10 cm
Size 15	17	Ø17	10 cm
Size 16	17,5	Ø17.5	10.5 cm
Size 18	19	Ø19	11 cm
Size 20	20,1	Ø20	12 cm

**Table 1: Diameter and depth of reaming**  
 Depth measured from medial level of cut  
 For **information purpose**.  
 Should be adapted during templating procedure, read page 3.



## Choice of broach handle

The STEMSYS® MI system offers the choice broach-handles adapted to the surgical approach of the operator.

Broach handles are available for the posterior approach (H01 066), for the true direct anterior approach (DAA) (H01 065), and for the anterolateral approach (H01 067 and H01 068).

This surgical technique describes the use with an anterior approach H01 065 handle and broaches in "female" connection.

In case of use of a broach handles intended for another approach, the surgeon will have to adapt this surgical technique to his practice and to his installation. Nevertheless the surgical steps remain the same.



# Surgical steps

## Preparation of the femoral canal

Open the locking lever of the broach handle (Fig. 12).  
Engage the broach into the broach handle (Fig. 13).  
Close the locking lever to ensure rigid assembly of the broach (Fig. 14).  
Start broaching.



Start with the smallest broach and increment sizes one at a time until axial and rotational stability are achieved.

The surgeon chooses the anteversion of the broaches in line with the orientation of the femoral neck, usually about 15°. An optional Tommy bar (ref.: H50 004) can be inserted in the proximal transverse hole of the broach handle to help controlling anteversion.

The aim is for the implant to sit tightly in compacted cancellous bone and not to be in direct contact with the cortex.

Each broach should be impacted to the level of the osteotomy, and the final broach – which determines the actual implant size – seated at this level. It should be stable axially and in rotation when the handle twisted or rotated (Fig. 15).

To disengage the broach from the handle, pull the locking lever and remove the handle from the broach.

Leave the last broach in situ for trialling (Fig. 16).

Note: When implanting a collared stem, additional calcar preparation is required:

Introduce the optional calcar reamer (H72 330) on the broach and ream until bone level is even with broach (Fig. 17).



# Surgical steps

## Trial reduction

Leaving the final broach in place, remove the broach handle. Attach the appropriate neck and head trials (*Fig.18 & 19*).

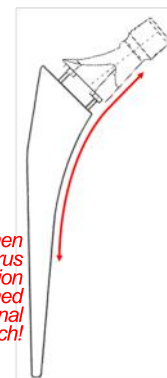
Trial necks are available in standard 135° (straight) or latero-varus 128°+3.2mm offset versions.



Fig.18



Fig.19



*Important notice: when using the latero-varus trial neck, proper position is when neck is aligned with the internal curvature of broach!*

Head trials are delivered in standard instrument sets in 28mm (-3.5, 0, +3.5, +7), 32mm (-4, 0, +4) and 36mm (-4, 0, +4) diameters. For 22.2mm trials, and for extra-short and extra-long in 32mm and 16mm, complementary head trials need to be requested.



Unless otherwise specified, select the GREEN trial head of the diameter corresponding to the acetabular cup.

The trial heads are coloured according their length:

- YELLOW is short,
- GREEN is standard,
- BLUE is long,
- BLACK is extra-long.

Position the trial head on the Morse taper of the trial neck (*Fig.20*).

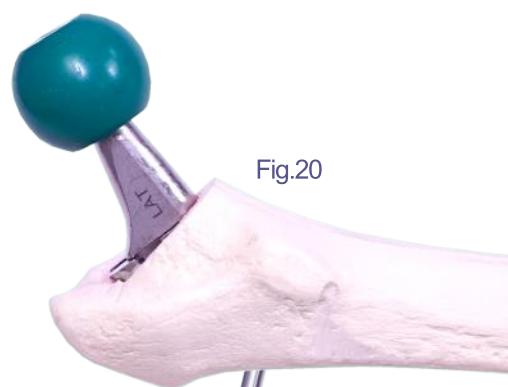


Fig.20



Fig.21

Reduce the hip using the head pusher tip (*Fig.21*).

Assess stability through the full range of motion (*Fig.22*).

Repeat the trial reduction with different lengths of trial heads as required.



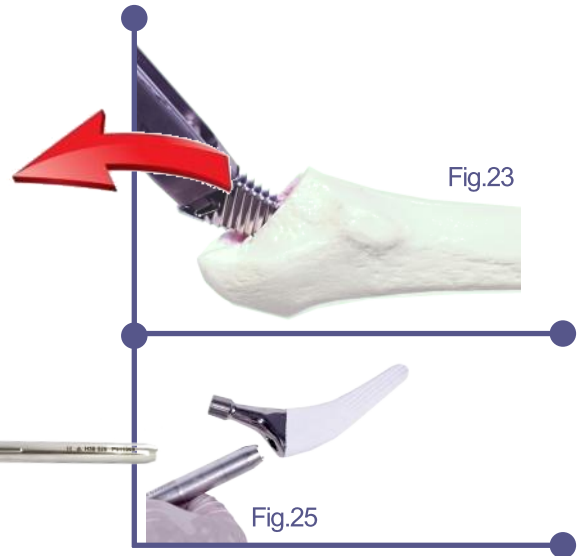
Fig.22



# Surgical steps

## Insertion of the final stem

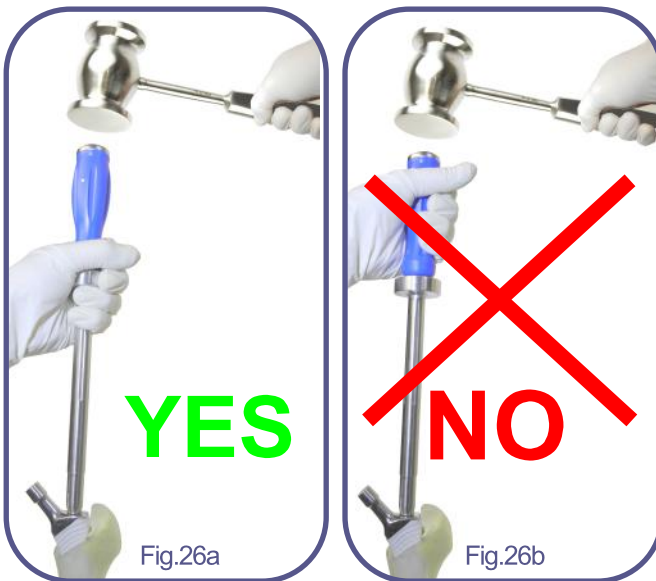
When the correct stability has been achieved, re-attach the broach handle and remove the broach from the femoral canal (Fig.23).



Push the threaded stem holder through the outer body of the stem holder until thread appears out of the sleeve (Fig.24).



Adapt the threaded stem holder and its outer body on the STEMSYS® MI implant taking care to adjust the teeth of the outer body to the corresponding slot on the implant (Fig.25).  
Firmly screw the stem holder to the implant. The conical end of the outer body associated to a firm screwing enables the surgeon to control rotation while introducing the implant into the femur.



The operator controls the rotation of the implant when holding the stem impactor at the junction between the blue handle and the thumb wheel of the outer body (Fig.26a).

Holding the blue handle of the stem impactor alone does not allow proper rotation control of the implant as the assembly can be unscrewed (Fig.26b).



The definitive **cementless implants** are impacted using the stem impactor (H38 022) + holding sleeve (H38 020) assembly and a hammer (Fig.27).

The definitive **cemented implants** are introduced into the femoral canal by hand with the final stem impactor (H01 029) (Fig.28).



Final stem impactor H01 029



Fig.28

# Surgical steps

## Placement of the femoral head and final reduction of the hip joint

Before positioning the definitive femoral head, clean the morse taper carefully: first wash with water then dry with swab.

Tap lightly to fix the femoral head onto the femoral morse taper using the head pusher (Fig.29).



Stem impactor H38 022 + Head Pusher tip H02 001

Ensure manually that the femoral head is firmly secured.

The hip joint is finally reduced. Final mobilization (flexion-extension, internal-external rotation, abduction) before wound closing will confirm stability and function of the arthroplasty (Fig.30).



Fig.30

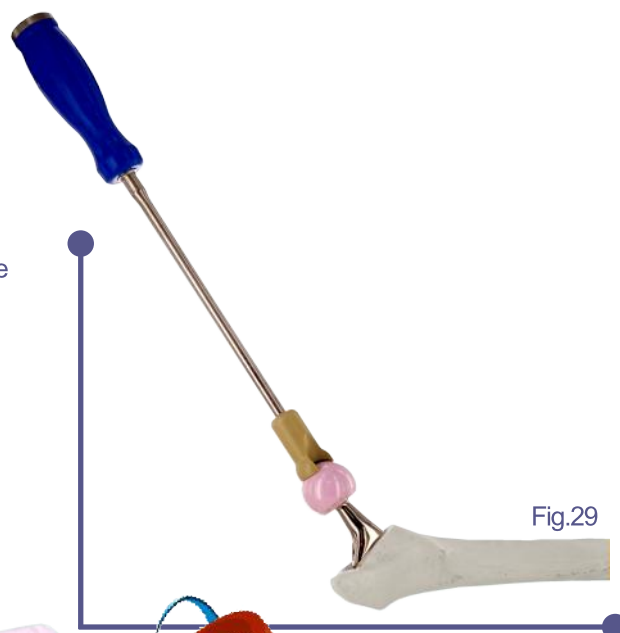


Fig.29

## Revision procedure: removal of head and stem

The removal of the head is realized with the head pusher tip (Fig.31).

For the removal of the stem attach the stem impactor + holding sleeve to the sledge hammer (H01 033), then to the femoral stem.

In case of well osteointegrated stem, the surgeon should take care to detach the bone to stem interface before hammering.

In case of cemented stem, the surgeon should begin by detaching the stem from the cement mantle with specifically supplied scissors.

Hammer the stem out of the femur (Fig.32).



Fig.31



Fig.32



# Instrumentation SNAPSHOT

Ref: H58 9107  
and H58 9109

STEMSYS MI Direct Anterior  
and Antero-Lateral

Col d'essai Droit  
Standard Trial neck  
H72 024

Col d'essai Latéralisé  
Offset Trial neck  
H72 026

Têtes d'essai Ø28 Ø32 Ø36  
Trial heads Ø28 Ø32 Ø36  
H02 S2280 à/à H02 S2363

Impacteur orienteur de tige  
Final stem impactor  
H01 029

Ciseaux à spongieux  
Box chisel  
H46 005

Impacteur de tige  
Stem impactor  
H38 022

Râpes fémorales  
taille 9 à 20  
Femoral rasps  
size 9 to 20  
H58 209 à/à H58 220

Manche voie antérieure  
(x2)  
Anterior approach  
handle (x2)  
H01 065  
**OU/OR**  
Manche voie antéro-  
latérale  
Antero-Lateral approach  
handle  
H01 067 et/and H01 068

Embout pousse-tête Ø35  
Head pusher tip  
H36 002

Panier pour Instruments  
Tray for Instruments  
H58 9007 (DAA)  
ou/or  
H52 9009 (A-L)

Râpe de démarrage  
Starting rasp  
H01 062

Corps de porte implant  
Femoral stem holding  
sleeve  
H38 020

Embout pousse-tête Ø26  
Head pusher tip  
H02 001

**OPTIONS**

H72 330	Fraise à Calcar Ø33	Calcar Reamer Ø33
H02 S2220	Tête d'essai Ø22 -2	Trial head Ø22 -2
H02 S2221	Tête d'essai Ø22 +0	Trial head Ø22 +0
H02 S2222	Tête d'essai Ø22 +2	Trial head Ø22 +2
H02 S2323	Tête d'essai Ø32 +8	Trial head Ø32 +8
H02 S2363	Tête d'essai Ø36 +8	Trial head Ø36 +8

**OPTIONS**

Têtes d'Alésage Ø7.5 à 17.0mm  
Reaming heads Ø7.5 to 17.0mm  
Q.507-7.5 à/à Q.507-17

Arbre d'alésage flexible (x2)  
Flexible Reaming Shaft (x2)  
Q.507.01L et/and Q.597.02L

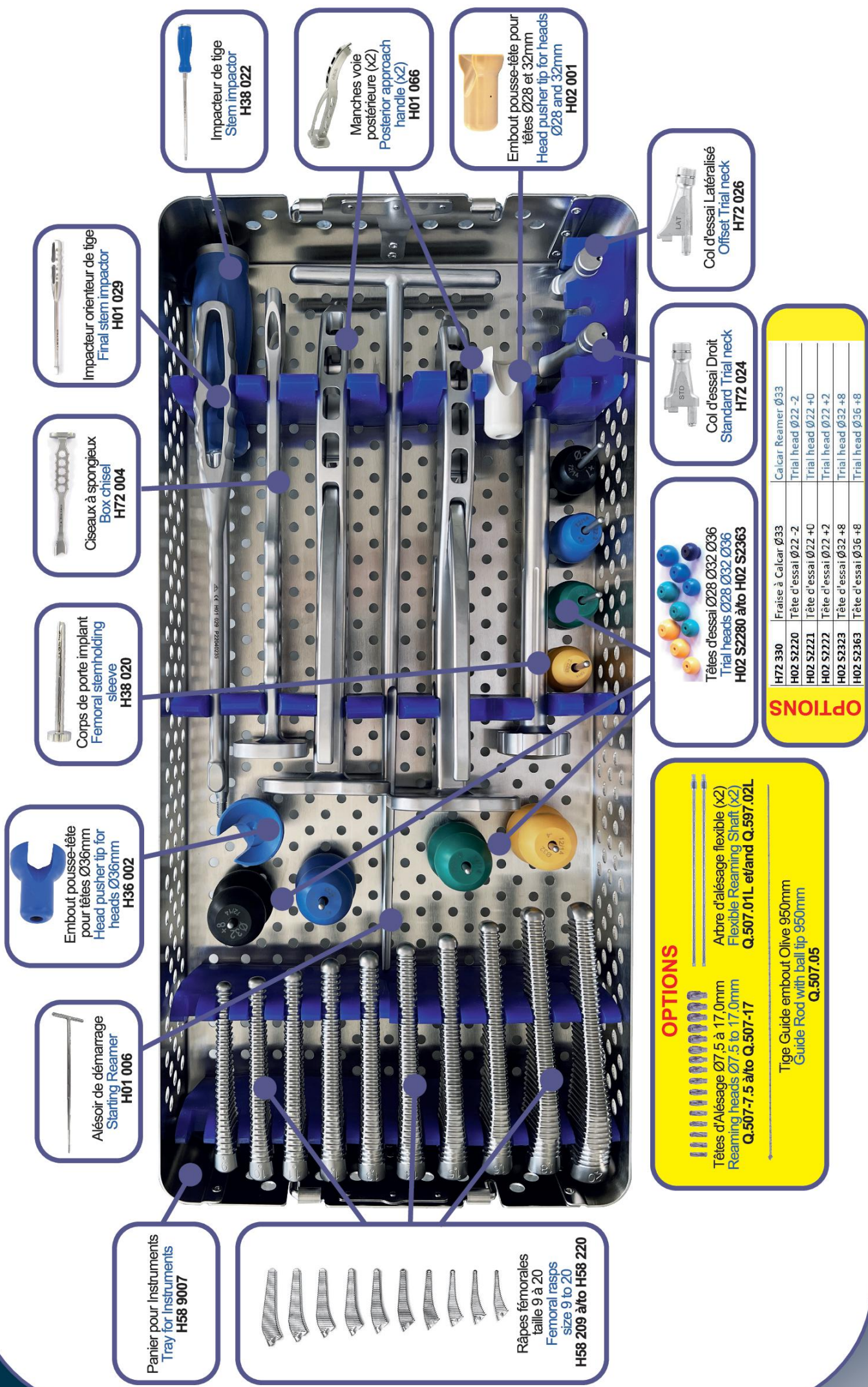
Tige Guide embout Olive 950mm  
Guide Rod with ball tip 950mm  
Q.507.05

# Instrumentation

# SNAPS HOT

Ref: H58 9110

STEMSYS MI  
Posterior Approach



Impacteur orienteur de tige  
Final stem impactor  
H01 029

Ciseaux à spongieux  
Box chisel  
H72 004

Corps de porte implant  
Femoral stemholding sleeve  
H38 020

Embout pousse-tête pour têtes Ø36mm  
Head pusher tip for heads Ø36mm  
H36 002

Alésoir de démarrage  
Starting Reamer  
H01 006

Panier pour Instruments  
Tray for Instruments  
H58 9007

Râpes fémorales  
taille 9 à 20  
Femoral rasps  
size 9 to 20  
H58 209 à/to H58 220

Impacteur de tige  
Stem impactor  
H38 022

Manches voie postérieure (x2)  
Posterior approach handle (x2)  
H01 066

Embout pousse-tête pour têtes Ø28 et 32mm  
Head pusher tip for heads Ø28 and 32mm  
H02 001

Col d'essai Latéralisé  
Offset Trial neck  
H72 026

Col d'essai Droit  
Standard Trial neck  
H72 024

Têtes d'essai Ø28 Ø32 Ø36  
Trial heads Ø28 Ø32 Ø36  
H02 S2280 à/to H02 S2363

**OPTIONS**

Arbre d'alésage flexible (x2)  
Flexible Reaming Shaft (x2)  
Q.507-01L et/and Q.597-02L

Tige Guide embout Olive 950mm  
Guide Rod with ball tip 950mm  
Q.507.05

**OPTIONS**

H72 330	Fraise à Calcar Ø33	Calcar Reamer Ø33
H02 S2220	Tête d'essai Ø22 -2	Trial head Ø22 -2
H02 S2221	Tête d'essai Ø22 +0	Trial head Ø22 +0
H02 S2222	Tête d'essai Ø22 +2	Trial head Ø22 +2
H02 S2323	Tête d'essai Ø32 +8	Trial head Ø32 +8
H02 S2363	Tête d'essai Ø36 +8	Trial head Ø36 +8

Panier pour Instruments  
Tray for Instruments  
Q.507L



Poignet en T raccord AO  
T-Handle for Reamer  
shaft with AO connection  
Q.507.03L

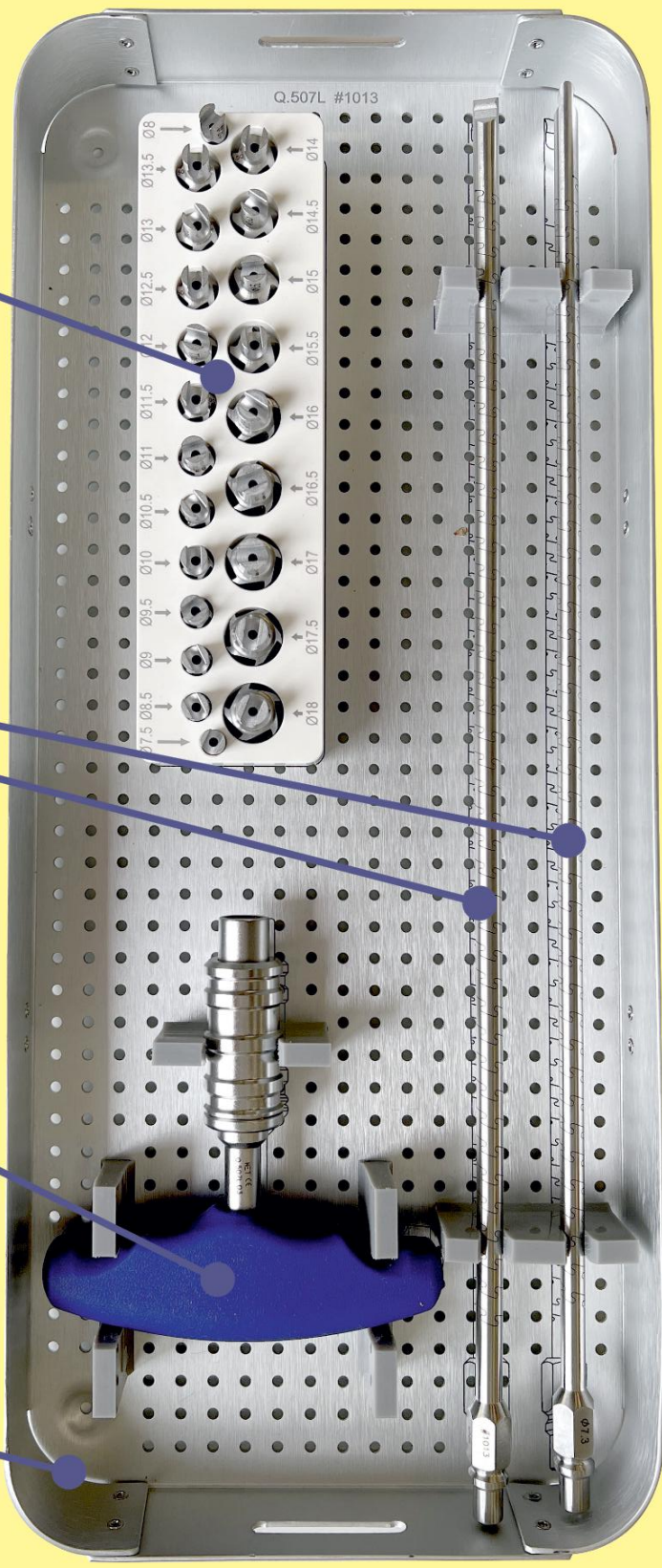


Arbre d'alésage flexible (x2)  
Flexible Reaming Shaft (x2)  
Q.507.01L et/and Q.597.02L



Têtes d'Alésage Ø7,5 à 18,0mm  
Reaming heads Ø7.5 to 18.0mm  
Q.507-7.5 à to Q.507-18

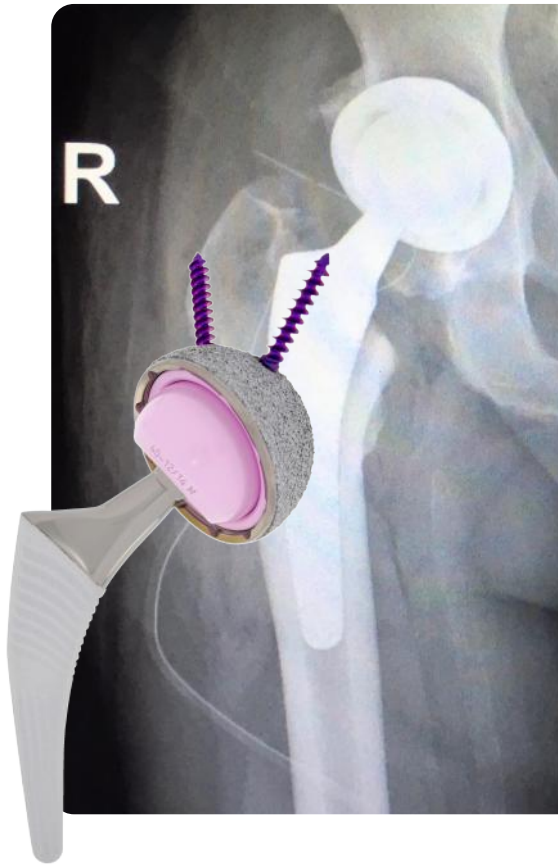
# OPTION



Tige Guide embout Olive 950mm  
Guide Rod with ball tip 950mm  
507.05M



# Reference list

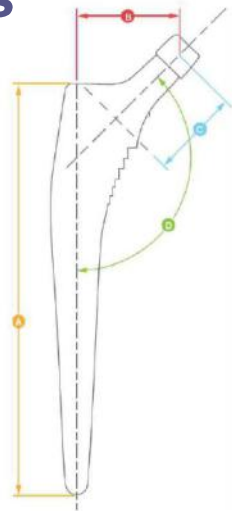


Stemsys MI Implants <i>Implants</i>		
Standard 135° Standard	Size Taille	Lateral Offset 128° Latéro-varus
H57 009 <sup>(2)</sup>	size 9	H57 L009 <sup>(1)</sup>
H57 010	size 10	H57 L010 <sup>(2)</sup>
H57 011	size 11	H57 L011
H57 012	size 12	H57 L012
H57 013	size 13	H57 L013
H57 014	size 14	H57 L014
H57 015	size 15	H57 L015
H57 016	size 16	H57 L016
H57 018	size 18	H57 L018
H57 020	size 20	H57 L020

Femoral Heads <i>Têtes fémorales</i>				
Diameter Diamètre	Length Longueur	Stainless steel Acier Inox	Cobalt-Chromium Chrome-Cobalt	Composite Ceramic Céramique Composite
Ø22	-2.0mm	H11 1220	H10 1220	-
	+0mm	H11 1221	H10 1221	-
	+2.0mm	H11 1222	H10 1222	-
	-7mm	H11 1279	H10 1279	-
Ø28	-3.5mm	H11 1280	H10 1280	H14 C1280
	+0mm	H11 1281	H10 1281	H14 C1281
	+3.5mm	H11 1282	H10 1282	H14 C1282
	+7mm	H11 1283	H10 1283	-
Ø32	-4mm	H11 1320	H10 1320	H14 C1320
	+0mm	H11 1321	H10 1321	H14 C1321
	+4mm	H11 1322	H10 1322	H14 C1322
	+8mm	H11 1323	H10 1323	H14 C1323
Ø36	-4mm	-	H10 1360	H14 C1360
	+0mm	-	H10 1361	H14 C1361
	+4mm	-	H10 1362	H14 C1362
	+8mm	-	H10 1363	H14 C1363

(1) Not validated for patients exceeding 75kgs (165lbs) and do not use with femoral head ≥ +7mm  
 (2) Not validated for patients exceeding 75kgs (165lbs)

## STEMSYS® MI stem dimensions



Taille Size	Reference Catalogue Number	Implants 135° STANDARD Implants			
		Longueur Length	Offset Latéral Lateral Offset (mm)	Longueur col Neck length	NSA Angle CCD
9	H57 009	95	37.5	38.5	135°
10	H57 010	102	38.5	38.5	135°
11	H57 011	106	39.5	38.5	135°
12	H57 012	110	40.5	38.5	135°
13	H57 013	114	41.5	38.5	135°
14	H57 014	118	42.5	38.5	135°
15	H57 015	122	43.5	38.5	135°
16	H57 016	126	44.5	38.5	135°
18	H57 018	134	45.5	38.5	135°
20	H57 020	142	46.5	38.5	135°
		Implants 128° LATERO-VARUS Implants			
9	H57 L009	95	45.5	42.0	128°
10	H57 L010	102	46.5	42.0	128°
11	H57 L011	106	47.5	42.0	128°
12	H57 L012	110	48.5	42.0	128°
13	H57 L013	114	49.5	42.0	128°
14	H57 L014	118	50.5	42.0	128°
15	H57 L015	122	51.5	42.0	128°
16	H57 L016	126	52.5	42.0	128°
18	H57 L018	134	53.5	42.0	128°
20	H57 L020	142	54.5	42.0	128°

Dimension table for STEMSYS MI femoral implant

**Notice:** Instrument set content may be subject to modifications and/or adapted to the customer's needs. Consequently the item lists presented in the Snapshots in pages 12 to 14 are for indication purposes only. For an accurate list of the instrument set that has been delivered to your hospital, please refer to the delivery bill.

**Important Notice:**

The STEMSYS® MI implants belong to the class III implantable medical device classification. The STEMSYS® MI implants are indicated in total hip arthroplasty primary procedures (THR) for the femoral component. The surgeon is required to read the instructions for use (IFU) leaflet S12 032 included in the packaging of the implant or available for download on the [www.evolutisfrance.com](http://www.evolutisfrance.com) website, as well as the surgical technique manual (H58 454) initially delivered with the instrument set, or equally available for download on the [www.evolutisfrance.com](http://www.evolutisfrance.com) website.

**Materials:**

Stems: Titanium alloy TA6V according ISO5832-3 coated with T40 titanium + Calcium Hydroxyapatite coating  
 Femoral heads: Stainless steel according ISO5832-9 or Co-Cr according ISO5832-12 or Composite Ceramic according ISO6474-2  
 VACUPAC Vacuum packaging, Gamma ray sterilised