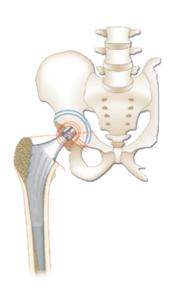


# Surgical Technique

# **CEMENTLESS** FIRST INTENTION STRAIGHT STEM STANDARD OR LATERALIZED





# SURGICAL TECHNIQUE

# 1. Planning

#### Objectives of the planning

- Restore the hip joint's centre
- Restore the length of the limb
- Determine the size of the implant

#### **Planning summary**

On the x-rays, trace the following:

- femoral anatomical axes
- bi-ischiatic line
- body and lesser trochanter central lines

Determine the difference in length of the lower limbs.

Determine the centre of the cup on the healthy side (C) and transfer this to the side to be treated (C').

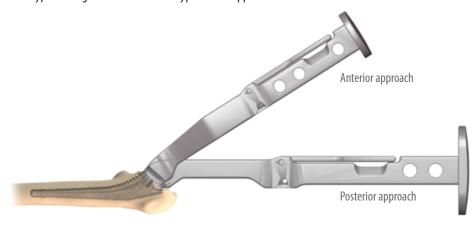
On the healthy side, the centre of the femoral head (F) coincides with C. Trace a line between the top of the great trochanter and F.

This line is perpendicular to the anatomical axis. Copy centre F' on the side to be treated. Using templates place one of the 3 centres of the prosthetic femoral head onto point F'. Thanks to this point, determine the most suitable size, draw and measure the cutting height of the neck with respect to the top edge of the lesser trochanter (10mm).

# 2. Approaches

The approach depends on the surgeon's preference. It needs to allow the top of the greater trochanter to be identified and to draw the planned cutting height of the neck or to identify the lesser trochanter with a finger and estimate the plan.

The Hip'n go cementless stem instrumentation is adapted to all approaches and provides rasp handles for these whether they are posterior, anteroexternal type Röttinger or direct anterior type Hueter approaches.





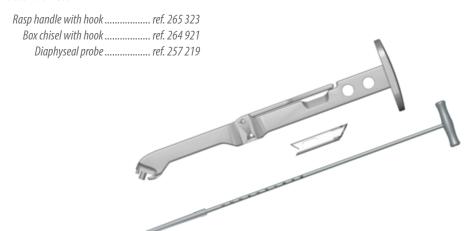
# Using the modular box chisel

Inserting the diaphyseal probe

## 3. Neck cuts

Using an oscillating saw, make a cut to the femoral neck axis, with the required anteversion. The medullar cavity is accessed with the modular box chisel included in the instrumentation set. This fits onto the rasp handle and allows part of the femoral cancellous bone to be removed from the metaphyseal area.

A diaphyseal probe is also provided to check that the medullar canal will allow the final implant to be inserted correctly, based on the planned size, length and distal diameter.



# 4. Implanting the cup

Using femoral rasps with a female connection, the surgeon can choose either to prepare the femur or the cup first.



Femoral rasping

## 5. Preparing the femur

Once the diaphyseal axis has been identified, the rasps are inserted successively, in increasing sizes, by pushing the holder towards the greater trochanter to remain in the frontal axis of the diaphysis, correcting, if necessary, the sagittal alignment. Increasing rasp sizes must be inserted as far as the upper edge. The final rasp must be tested in rotation. The final rasp must not be able to move in deeper or in rotation. Its size corresponds to the size of the final implant.

Rasp handle with hook ...... ref. 265 323

Rasps ...... ref. 267 211 to 267 220



The holder is removed from the rasp and a trial neck is fitted to the rasp. 3 trial necks are supplied in the Hip'n go instrument set:

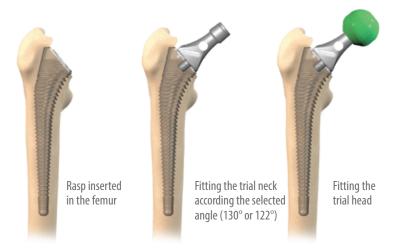
- 1 neck of 130°
- 2 necks of 122°, the first is for sizes 1 to 5, the second is for sizes from 6 to 10.

Trial heads in 22, 28, 32 and 36 mm are supplied in the instrument set with a colour code to identify the length of necks.

- Short neck (-3.5): yellow
- Medium neck (0): green
- Long neck (+3.5): red

Once assembled, the hip is reduced. Limb length, mobility and stability are checked.

Hoof rasps ref	267	7211	to 267	7 220
Trial necks 130°ret	267	7 230		
Trial necks 122° T1 to 5ref	267	7 23 1		
Trial necks 122°T6 to 10ref	267	7 232		
Trial heads Ø22.2ret	23	1 368	to 23 i	369
Trial heads Ø28ret	23	1 357	to 23 i	360
Trial heads Ø32ref	23	1 352	to 23 i	354
Trial heads Ø36 ref	254	4461	to 254	463



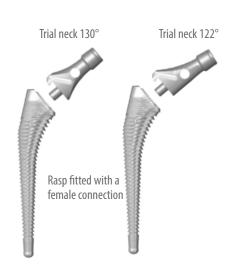


The rasp and the trial implants are extracted. Hold the femoral prosthesis in your hand by the protective cap on the Morse cone and introduce it into the diaphysis. The descent of the stem is guided by the half moon stem impactor and introduced into the oval impaction hole of the stem; gentle tapping places the implant in the position previously occupied by the rasp.

The rasps and final stems have the same set of trial heads and thus enable any adjustments.

The selected head is fitted and the arthroplasty is reduced using the head impactor.

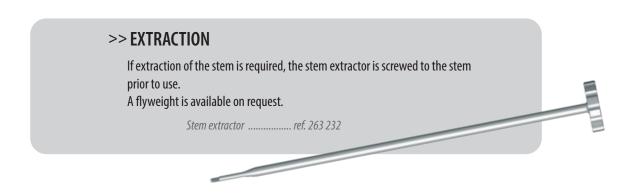




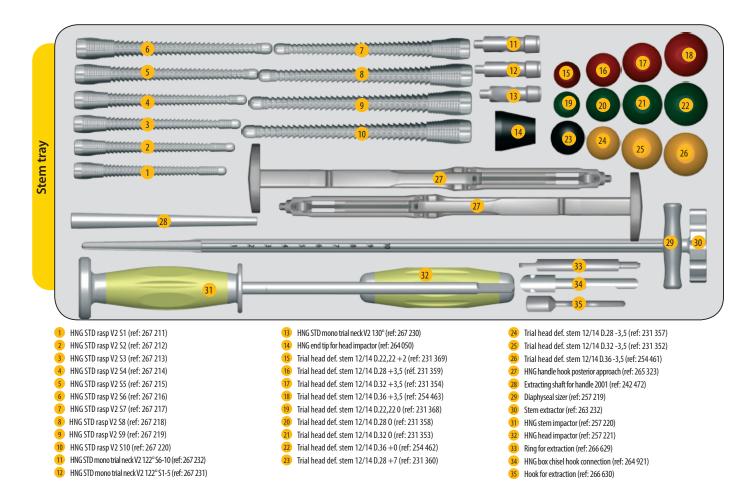


# 8. Closing

The surgeon will close layer by layer in his usual manner.



# **INSTRUMENT SET**





# References

#### [Cementless first intention straight stem - Standard or lateralized]

#### **STANDARD STEMS**

256 597	Stem 130° CL HAP S1
256 598	Stem 130° CL HAP S2
256 599	Stem 130° CL HAP S3
256 600	Stem 130° CL HAP S4
256 601	Stem 130° CL HAP S5
256 602	Stem 130° CL HAP S6
256 603	Stem 130° CL HAP S7
256 604	Stem 130° CL HAP S8
256 605	Stem 130° CL HAP S9
256 606	Stem 130° CL HAP S10

#### **VARIZED AND LASERALIZED STEMS**

Stem 122° CL HAP S1
Stem 122° CL HAP S2
Stem 122° CL HAP S3
Stem 122° CL HAP S4
Stem 122° CL HAP S5
Stem 122° CL HAP S6
Stem 122° CL HAP S7
Stem 122° CL HAP S8
Stem 122° CL HAP S9
Stem 122° CL HAP S10

#### **CERAMIC BIOLOX FORTE HEADS**

234 131	Taper 12/14 Ø28 (-3,5)
234 132	Taper 12/14 Ø28 (0)
234 133	Taper 12/14 Ø28 (+3,5)
250 729	Taper 12/14 Ø32 (-3,5)
250 730	Taper 12/14 Ø32 (0)
250 731	Taper 12/14 Ø32 (+3,5)
254 525	Taper 12/14 Ø36 (-3,5)
254 526	Taper 12/14 Ø36 (0)
254 527	Taper 12/14 Ø36 (+3,5)

#### **STAINLESS STEEL HEAD**

231 402	Taper 12/14 Ø22,2 (0)
231 403	Taper 12/14 Ø22,2 (+2)
231 391	Taper 12/14 Ø28 (-3,5)
231 392	Taper 12/14 Ø28 (0)
231 393	Taper 12/14 Ø28 (+3,5)
231 394	Taper 12/14 Ø28 (+7)

# OTHER IMPLANTS OF THE RANGE





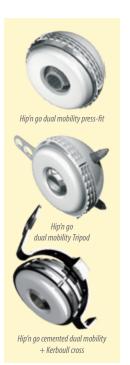
Stainless steel heads Ø22,2 - 28mm CoCr







Biolox Delta ceramic heads Ø28 - 32 - 36mm





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