

# Surgical technique mechanical instrumentation



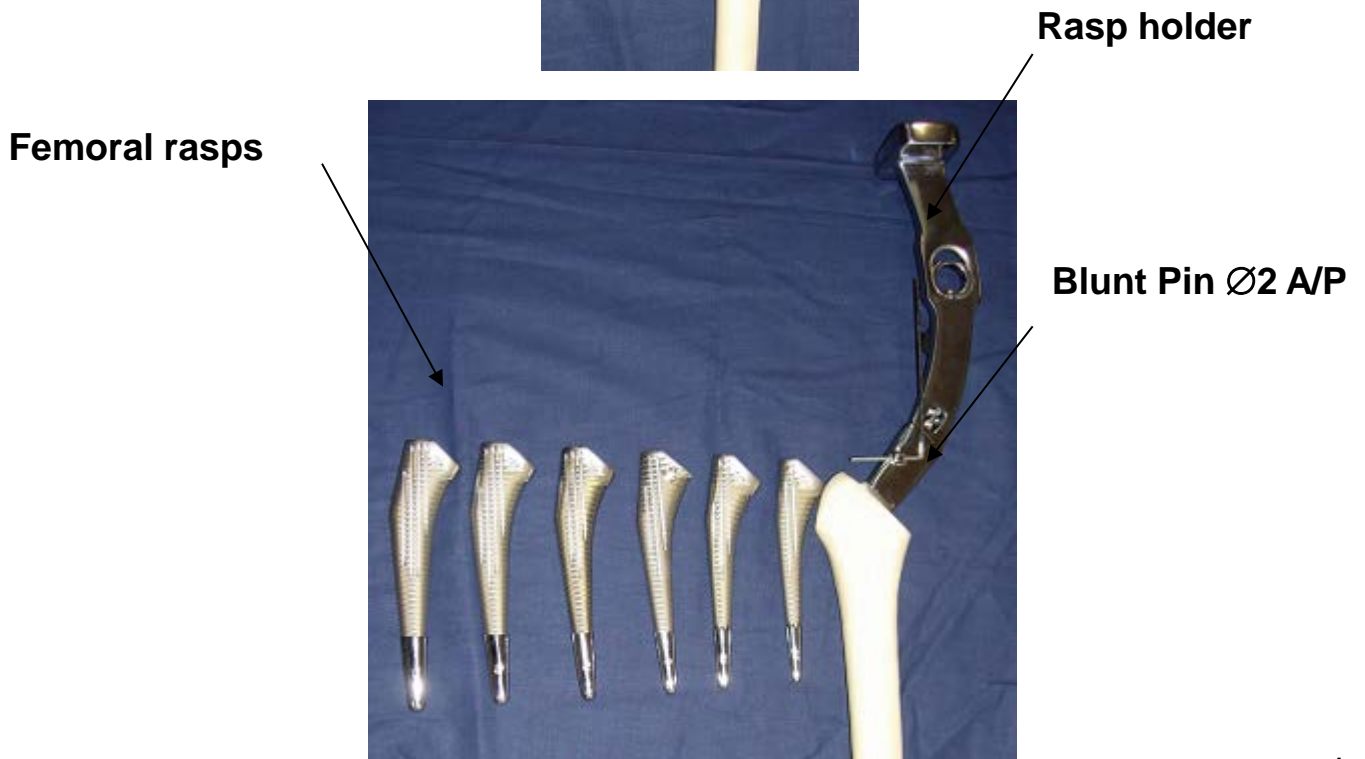
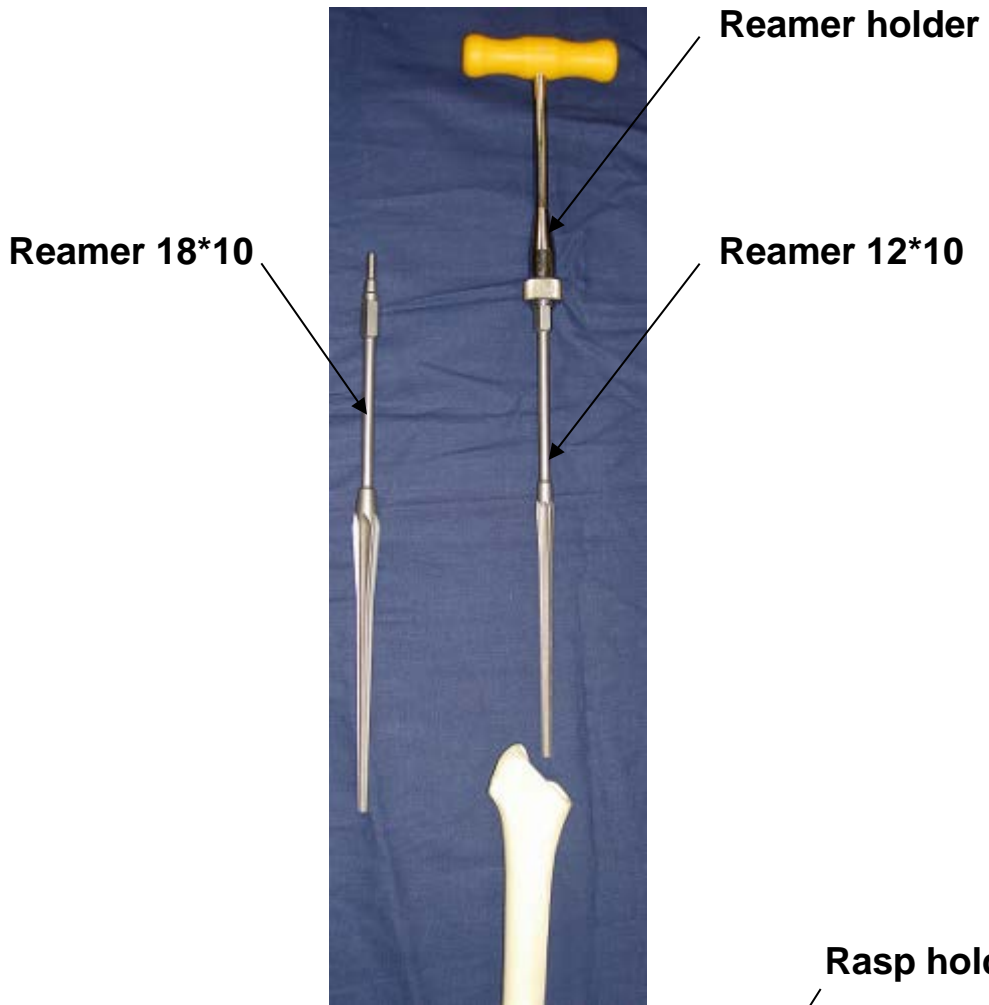
GENERIC<sup>®</sup>, LOGIC<sup>®</sup>, INTEGRALE<sup>®</sup>



## Pre-surgical planning

- By means of radiological assessment and templates, it is possible to:
  - determine the position of the joint's centre chosen by the surgeon.
  - choose the height of the GENERIC<sup>®</sup>, LOGIC<sup>®</sup> or INTEGRALE<sup>®</sup> femoral stem (identical templates for these 3 femoral stems):
    - find this height by the distance between the horizontal projection from the centre of the femoral head with a standard neck and a reliable bone landmark. This measurement will be noted and checked throughout the operation with the ancillary component (the horizontal projection from the centre of the femoral head with a standard neck is equivalent to the blunt pin).
  - Assess the size of the implants.
- The GENERIC<sup>®</sup>, LOGIC<sup>®</sup> and INTEGRALE<sup>®</sup> stems can be implanted with the same ancillary component and the same installation technique.

**N.B:** These instructions are intended to ensure the correct use of the ancillary equipment; the surgical approach and technique are the sole responsibility of the surgeon.



## Preparing the medullary canal

- Expose the joint and cut the femoral neck according to your usual surgical procedure.
- Put the 12\*10 reamer on the reamer holder and insert all of it in the diaphyseal canal in order to prepare the entry of the rasps in the diaphyseal axis.
- Put the 18\*10 reamer on the reamer holder and insert all of it in the diaphyseal canal in order to avoid the trochanter and reduce the risk of positioning the rasps in varus.

## Preparing the femur

- Put the femoral rasp on the rasp holder.
- Insert the rasps, starting with size 1, in the femur, increasing the size until the best metaphyseal filling is obtained. To check the level of penetration, insert the blunt pin in the rasp holder (it represents the horizontal projection from the centre of the prosthetic head with a standard neck).
- Leave the last rasp inserted in the femur in place and unclip the rasp holder.

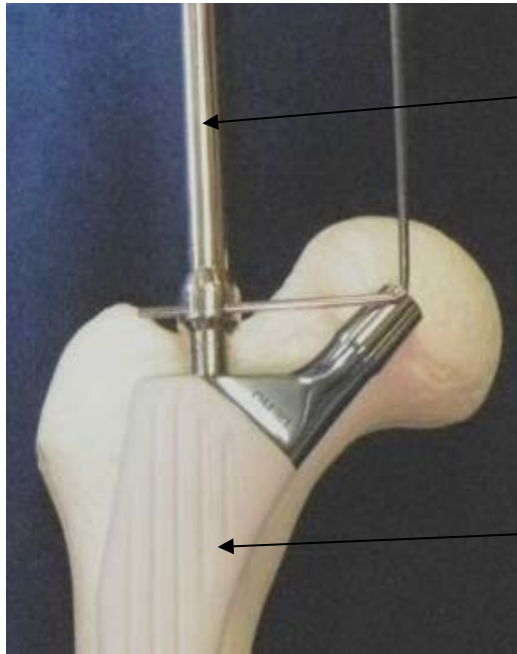
**Trial neck on the rasp**



## Joint stability and mobility trials

- Place the trial neck on the selected rasp (choose the required head diameter and neck length of the head).
- Perform a reduction with the head impactor mounted on the universal tightening wrench.
- Test the full range of movement and joint stability in order to check the extramedullary adjustments.
- If the tests are not satisfactory, change the trial neck on the rasp.
- Restart the tests until you have determined which trial neck offers the best stability and mobility for the limb.
- N.B:
  - Remove the trial neck on the selected rasp.
  - Extract the rasp from the femur with the rasp holder.
  - Keep the rasp and trial neck assembly, which has been checked for definitive assembly, on the table.

**Comment:** It is possible to carry out a resection of the femoral neck directly on the rasp.

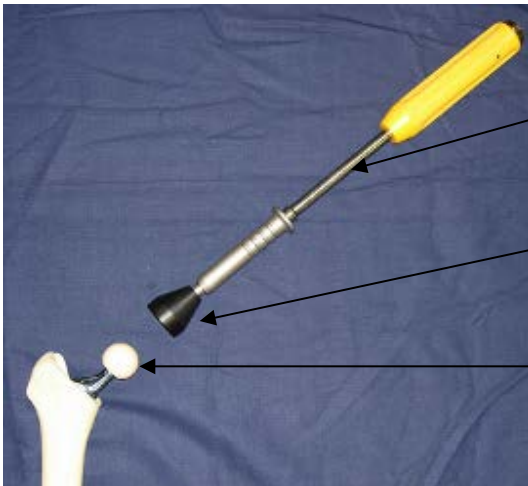


Trochanter meter

Permanent stem



Trial head on the stem



Universal tightening wrench

Head impactor

Permanent head



## Installing the permanent implants

- Install the GENERIC<sup>®</sup>, LOGIC<sup>®</sup> or INTEGRALE<sup>®</sup> stem in the femur (after having placed cement in the femur), with the stem impactor (the impaction limit corresponds to the HAP limit for cementless stems).
- Check the height of the centre of the prosthetic head in relation to an anatomical marker with the blunt pin inserted in the trochanter meter (which represents the horizontal projection from the centre of the prosthetic head with a standard neck).
- At this stage, it is possible to carry out tests with the trial heads on the stem.
- Install the permanent head using the tightening tip, then impact it with the head impactor mounted on the universal tightening wrench and reduce it.



**Stem and  
cylinder for  
slide hammer**

**Head for slide  
hammer**

## Extracting the implants

- Extracting the femoral head (tap the entire peripheral area around the head).
  
- Extracting the stem: attach the stem to the femoral stem extractor and the slide hammer cylinder and proceed to extract the stem. The extraction is carried out in the axis of the prosthesis.

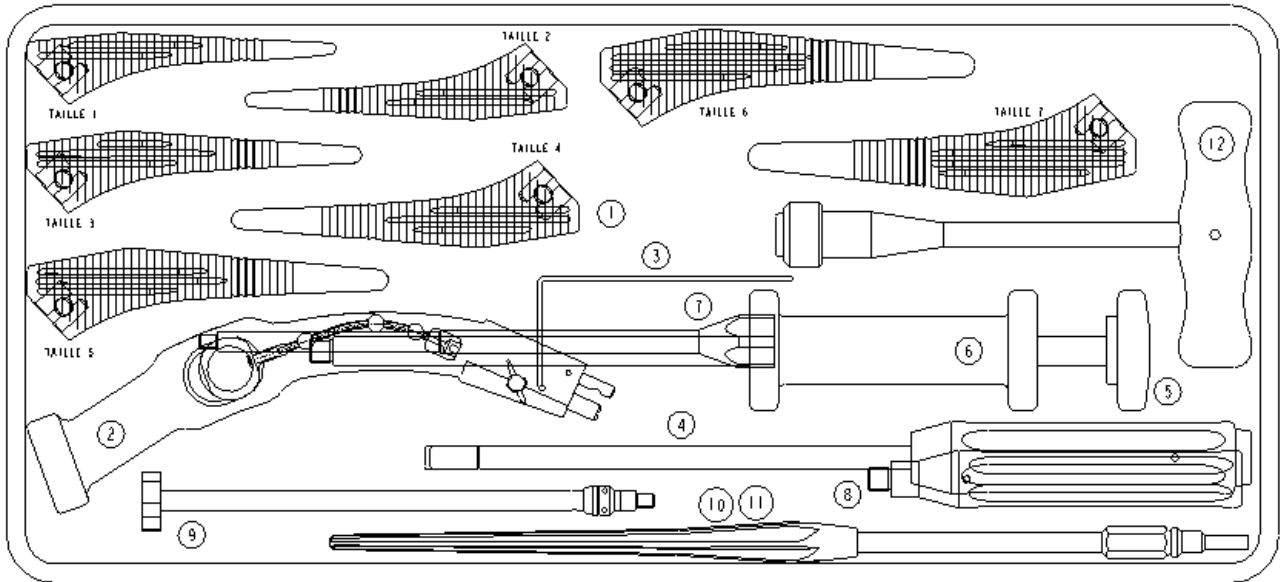
## Ancillary components

- The GENERIC<sup>®</sup>, LOGIC<sup>®</sup> and INTEGRALE<sup>®</sup> ancillary component set consists of 2 trays:
  - A femur preparation set
  - A trial set

### **N.B.**

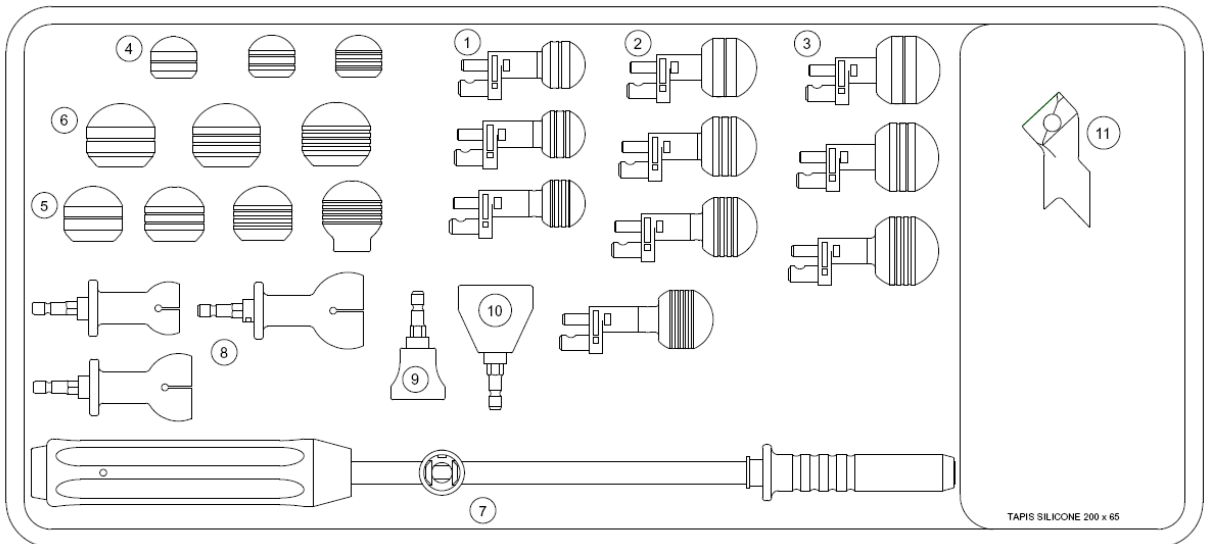
The GENERIC<sup>®</sup>, LOGIC<sup>®</sup> and INTEGRALE<sup>®</sup> stems can be installed with the INTEGRALE<sup>®</sup> modular ancillary components using only the modular trial neck on the lateral rasp and the trial neck on the lateral/medial stem in a lateral position.

## Femur preparation set



Rep.	Name	Ref.
1	Femoral rasp 1 <sup>st</sup> intention size 1	2-0100201
1	Femoral rasp 1 <sup>st</sup> intention size 2	2-0100202
1	Femoral rasp 1 <sup>st</sup> intention size 3	2-0100203
1	Femoral rasp 1 <sup>st</sup> intention size 4	2-0100204
1	Femoral rasp 1 <sup>st</sup> intention size 5	2-0100205
1	Femoral rasp 1 <sup>st</sup> intention size 6	2-0100206
1	Femoral rasp 1 <sup>st</sup> intention size 7	2-0100207
2	Rasp holder	2-0103100
3	Blunt pin Ø 2 A/P	2-0114000
4	Stem impactor	
5	Stem for slide hammer	2-0102900
6	Cylinder for slide hammer	2-0103300
7	Head for slide hammer	2-0103200
8	Handle	2-0104200
9	Trochanter meter	2-0103700
10	Reamer 12 x 10	2-0103612
11	Reamer 18 x 10	2-0103618
12	Reamer holder	

## Trial set



Rep.	Name	Ref.
1	Trial neck Ø 22.2 short neck	2-0100505
1	Trial neck Ø 22.2 standard neck	2-0100506
1	Trial neck Ø 22.2 long neck	2-0100507
2	Trial neck Ø 28 short neck	2-0100501
2	Trial neck Ø 28 standard neck	2-0100502
2	Trial neck Ø 28 long neck	2-0100503
2	Trial neck Ø 28 extra long neck	2-0100504
3	Trial neck Ø 32 short neck	2-0100508
3	Trial neck Ø 32 standard neck	2-0100509
3	Trial neck Ø 32 long neck	2-0100510
4	Trial head on stem Ø 22.2 short neck	2-0100405
4	Trial head on stem Ø 22.2 standard neck	2-0100406
4	Trial head on stem Ø 22.2 long neck	2-0100407
5	Trial head on stem Ø 28 short neck	2-0100401
5	Trial head on stem Ø 28 standard neck	2-0100402
5	Trial head on stem Ø 28 long neck	2-0100403
5	Trial head on stem Ø 28 extra long neck	2-0100404
6	Trial head on stem Ø 32 short neck	2-0100408
6	Trial head on stem Ø 32 standard neck	2-0100409
6	Trial head on stem Ø 32 long neck	2-0100410

## Trial set

<b>Rep.</b>	<b>Name</b>	<b>Ref.</b>
7	Mechanical/navigated universal tightening wrench	2-0117600
8	Tightening head for Ø22.2 head	2-0104322
8	Tightening head for Ø28 head	2-0104328
8	Tightening head for Ø32 head	2-0104332
9	Head Impactor Ø22.2 head	2-0101400
10	Head Impactor Ø28 and Ø32 heads	2-0114200
11	Chisel-punch	2-0116300