

# New Karey Stems

## Design Rationale



KNEE

HIP

TRAUMA

BIOMATERIALS

OTHERS



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DESIGN AND LAYOUT: Marketing Department

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The new range  
of primary stems...

 **surgival**  
GRUPO COSTAS

 **Karey**  
HIP STEMS SYSTEM

...is a complete system designed  
to facilitate surgeons their mission:  
restore the patient's original anatomy  
with a wide range of solutions for hip arthroplasty.

# INDICATIONS



Coxofemoral joint disorders in which a hip replacement may be indicated are:

- Primary and secondary osteoarthritis.
- Arthritic processes, such as rheumatoid arthritis.
- Atraumatic avascular necrosis.
- Sequelae of subluxation or congenital dislocation.
- Post-traumatic disorders such as acetabular or femoral neck fractures.
- Failed reconstruction processes: proximal femoral osteotomy, arthrodesis, painful endoprosthesis.

# CONTRAINDICATIONS

In respect of **CONTRAINDICATIONS**, they are described as follows:

- Patients with allergies to implant materials. To avoid this, it is advisable to previously submit patients to an allergic test.
- Presence of an active infection.
- Significant destruction of the proximal femur.
- Vascular deficiency in the affected limb.
- Severe osteoporosis. Obesity.
- Serious pathologies such as cardiac, pulmonary, metabolic disorders, etc. which can significantly increase the risk of mortality.
- Progressive neurological disease.

## GENERAL NOTE:

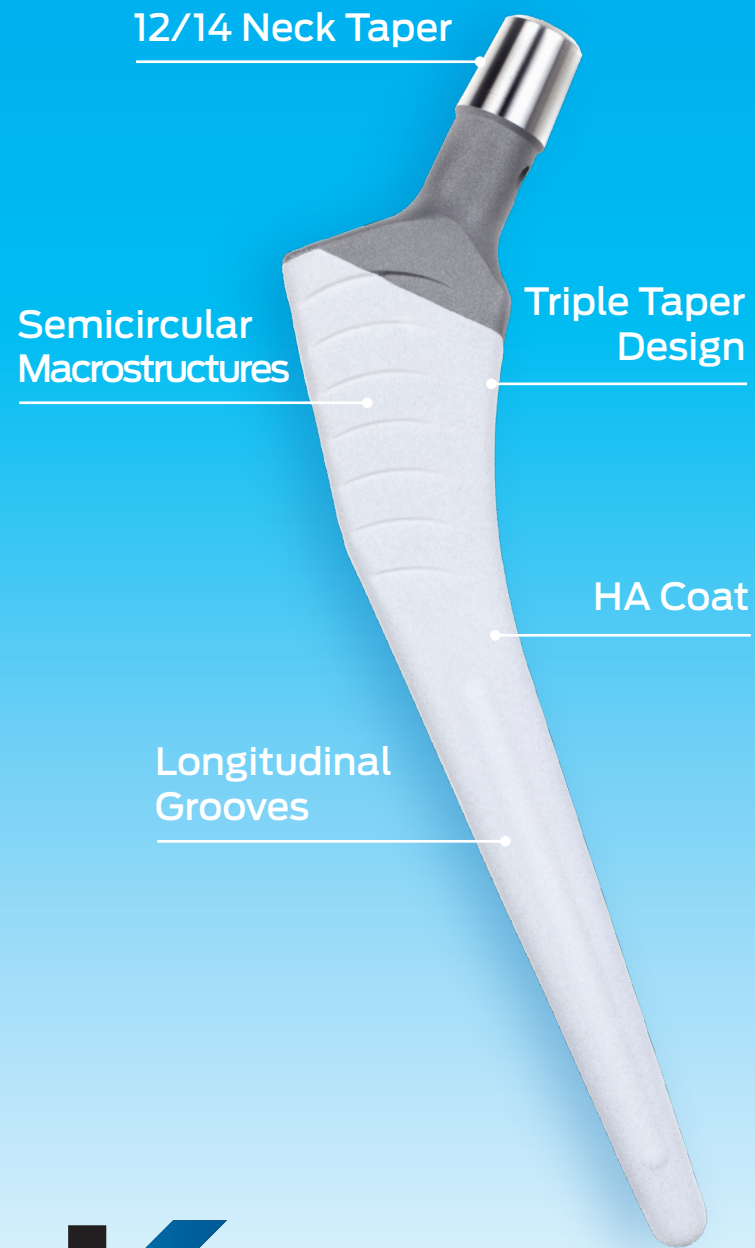
The implantation of this implant must be carried out by expert doctors or under their supervision. They should also be aware the instrumentation associated with this surgical technique.



“More than 30 years  
**developing safe products**  
to help the best specialists  
**to restore people mobility.”**







**Karey**·HA  
HIP STEMS SYSTEM

## Technical Characteristics

*The range of Karey HA Stems, **made of Ti6Al4V titanium alloy** (ISO 5832-3), are indicated for both total and partial hip arthroplasties.*

### · 12/14 Neck Taper:

Compatible with Surgival Femoral Heads made of Stainless Steel, CrCo and Ceramic.

### · Triple Taper Design:

The trapezoidal shape in the sagittal and frontal planes offers greater primary stability and prevents prosthetic subsidence. The distal part is progressively undersized to reduce implant rigidity and improve contact with cancellous bone (secondary stability)

### · Metaphyseal semicircular macrostructures:

Increase the contact surface, avoid component subsidence and have antivaro effect.

### · HA Coat:

130 micron HA Coating by Air Plasma Spraying

### · Longitudinal Grooves:

Increase the bone-implant contact surface, prevent rotation, decrease distal tightness with respect to the metaphyseal portion and improve the diaphyseal vascularization of the prosthetic femur.

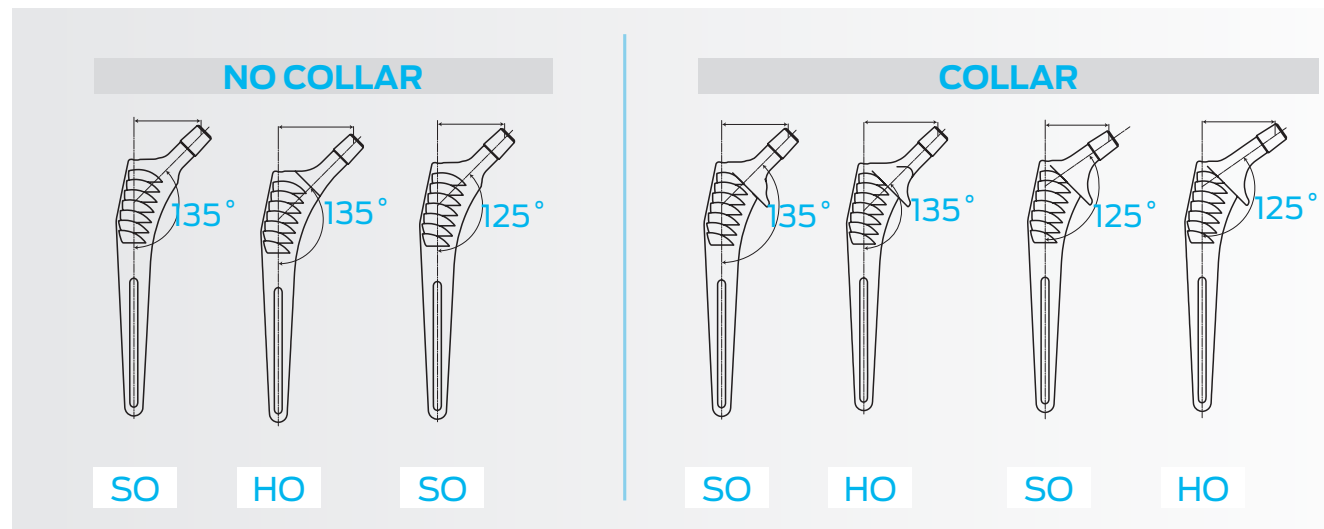
# KAREY HA Stem Versions

• **Range of Stems:** Each of the following **variants** and **sizes**:

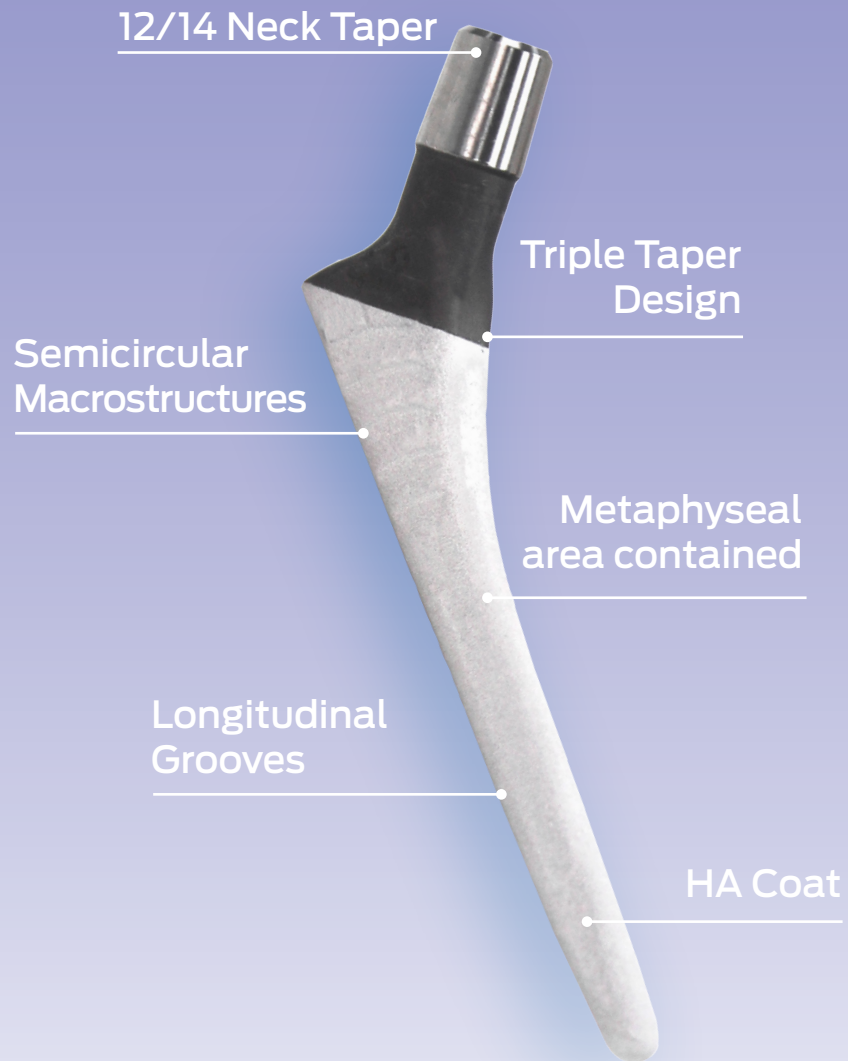
		NO COLLAR SIZES									
135° (ACD)	STANDARD OFFSET (SO)	6	8	9	10	11	12	13	14	15	16
	HIGH OFFSET (HO)			9	10	11	12	13	14	15	16
125° (ACD)	STANDARD OFFSET (SO)			9	10						

		COLLAR SIZES									
135° (ACD)	STANDARD OFFSET (SO)		8	9	10	11	12	13	14	15	16
	HIGH OFFSET (HO)			9	10	11	12	13	14	15	16
125° (ACD)	STANDARD OFFSET (SO)			9	10	11	12	13	14	15	16
	HIGH OFFSET (HO)			9	10	11	12	13	14	15	16

The result is  
**53 stems**  
that make up the  
Karey HA line.







## Technical Characteristics

*Size 6 of Karey HA stem, **made of Ti6Al4V titanium alloy** (ISO 5832-3), is indicated for secondary hip osteoarthritis due to dysplasia*

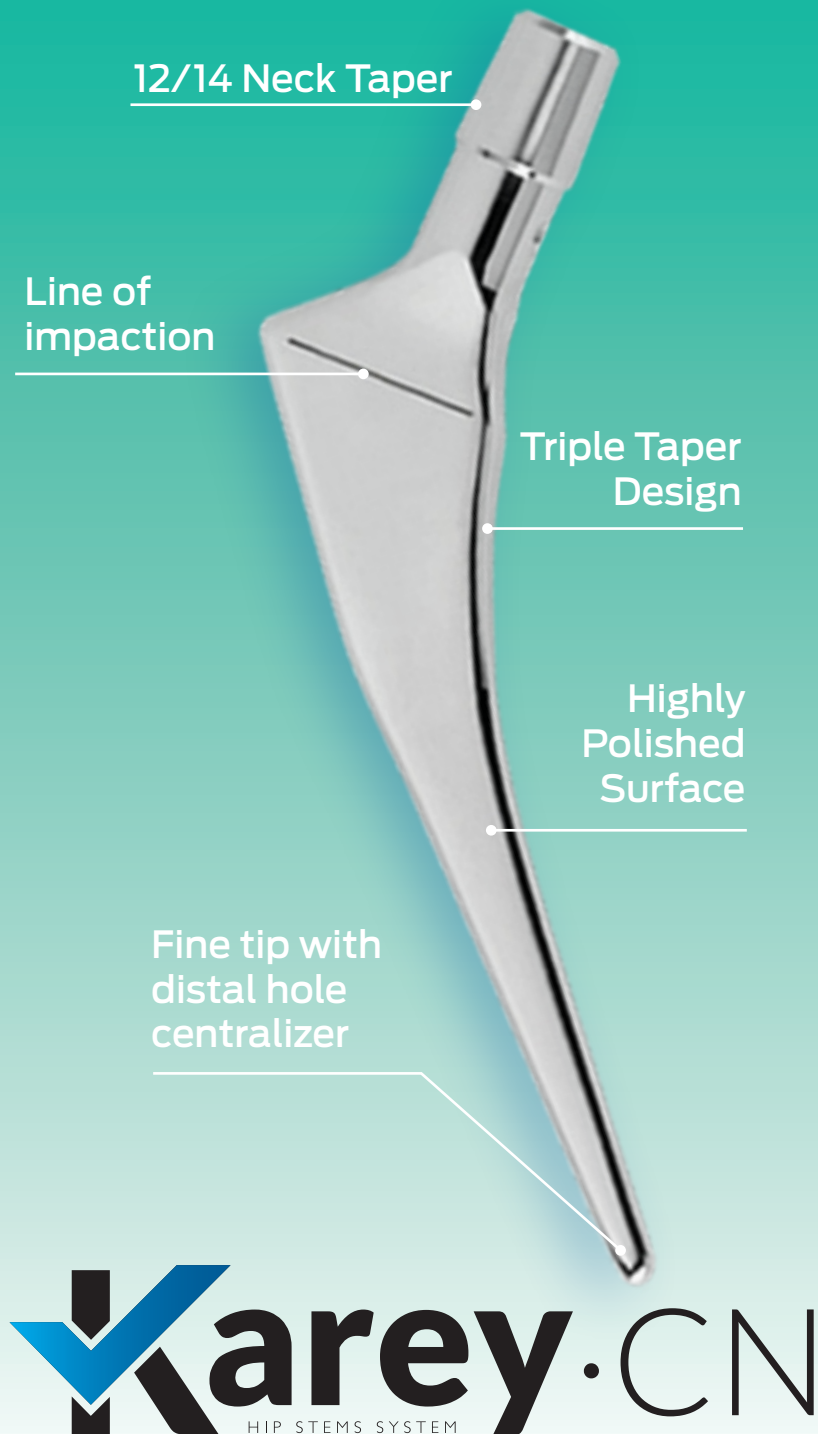
This stem shares most of the technical and design characteristics of the rest of the stem in the Karey HA line, with only one significant difference:

- **Metaphyseal area of reduced dimensions:**

The more contained dimensions of this stem in the metaphyseal area prevent intraoperative break.

**Note:**

The Karey HA Size 8 stem could also be used in secondary osteoarthritis in dysplastic hips.



## Technical Characteristics

*The range of Karey CN Stems, **made of nitrogenous stainless steel** (ISO 5832-9), are indicated for cemented use in both total and partial hip arthroplasties.*

- **12/14 Neck Taper:**

Compatible with Surgival Femoral Heads made of Stainless Steel, CrCo and Ceramic.

- **Triple Taper Design:**

The trapezoidal shape in the sagittal and frontal planes offers greater primary stability and prevents prosthetic subsidence.

- **Polished surface and rounded edges:**

They ensure correct adhesion to cement, avoiding stress concentration.

- **Conical distal fine tip:**

It prevents diaphyseal blockage and provides a construction with distal flexibility to avoid compromising cemented fixation.

- **Centralizer hole:**

It allows the use of a PMMA centralizer that guarantees the alignment and distal centralization of the stem in the femoral shaft. (Only for SIZES 11 to 16).

# KAREY CN Stem Versions

• **Range of Stems:** Each of the following **variants** and **sizes**:

## SIZES WITHOUT HOLE FOR CENTRALIZER

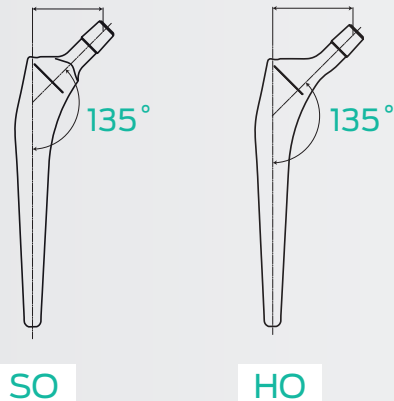
135° (ACD)	STANDARD OFFSET (SO)	8	9	10	11	12	13	14	15	16
	HIGH OFFSET (HO)		9	10	11	12	13	14	15	16

## SIZES WITH HOLE FOR CENTRALIZER

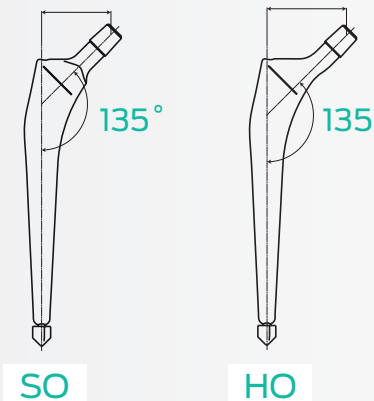
135° (ACD)	STANDARD OFFSET (SO)				11	12	13	14	15	16
	HIGH OFFSET (HO)				11	12	13	14	15	16

The result is  
**29 stems**  
that make up the  
Karey CN line.

### WITHOUT CENTRALIZER



### WITH CENTRALIZER



### CENTRALIZER SIZE

STEM T 11 - T13	Ø 10
STEM T14 - T16	Ø 12



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