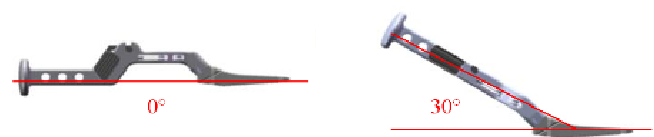


QUADRA SYSTEM

QUADRA SYSTEM

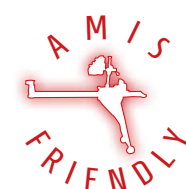
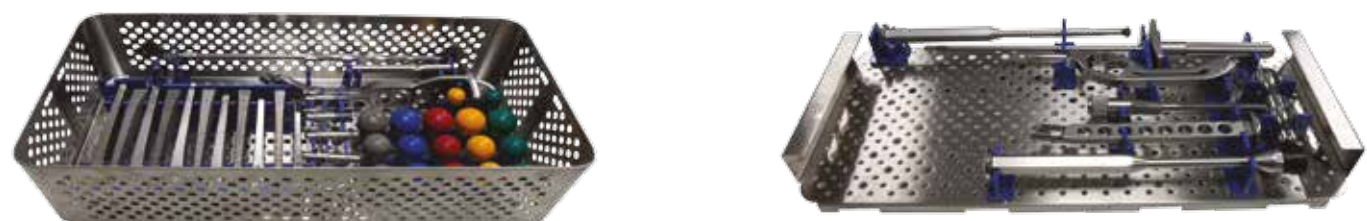
INSTRUMENTATION

- One tray to implant Quadra-S, Quadra-H, Quadra-C*.
- Both standard and lateralised trial necks fit on to the broaches for **quick** and **precise** trial reduction.
- **Reliable** practical manual and motorised broach handles.
- Offset broach handles available in left and right versions for motorised and manual use with 2 different inclinations:



- High **quality** sharp broaches for precise preparation of the medullary cavity.
- Monoblock motorised broaches option for use with femoral stem trials.
- Dedicated AMIS instrumentation.

ONE TRAY IS ENOUGH!



* Quadra-R instrumentation requires a different tray for dedicated broaches and trial necks.

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REDEFINING THR: THE AMIS SYNERGY

The anterior approach, consolidated by years of clinical experience, is the only technique that follows an **intermuscular and internervous path** and therefore lowers the risk of damaging periaricular structures such as muscles, tendons, vessels and nerves.

Medacta International is the world leader for educating and supporting surgeons in their pursuit of Anterior Minimally Invasive Surgery (AMIS). **Reference Centers around the world** provide the necessary AMIS education experience and Medacta offers **continuous support for surgeons**, as well as constantly improving and developing the industry's most specialised instrumentation platform.

When you use the Quadra System, you enter the Medacta International world of AMIS.

Discover:

- The definitive MIS approach: AMIS;
- Dedicated AMIS instrumentation;
- The **AMIS Mobile Leg Positioner**: the original extension table included as part of the instrumentation, which makes surgery easier and reproducible;
- The **AMIS Education Programme** based on Medacta's proven educational methods.

AMIS

The AMIS Mobile Leg Positioner will be supplied as part of the instrumentation to help ensure effective and reliable positioning of the leg during surgery. Traction, adduction and hyperextension have never been so easy.



QUADRA SYSTEM

A COMPLETE RANGE OF STRAIGHT STEMS



Hip | Knee | Spine | Navigation

Brochure

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QUADRA SYSTEM

A COMPLETE RANGE OF STRAIGHT STEMS

QUADRA SYSTEM: MORE THAN 10 YEARS OF SUCCESS

With a clinical history starting in 2003 and thousands of stems implanted every year worldwide, Quadra System stems have proved to be a reliable solution for hip arthroplasty.^[1] In a clinical study by Balgrist University, a 100% survival rate at 5 years was reported on 109 patients, considering aseptic loosening as the endpoint.^[15]

- Complete range of straight stems
- Effective stability thanks to the triple tapered design
- Wide range of sizes
- Reliable, compact and precise instrumentation

PRODUCT RANGE



QUADRA-S & QUADRA-H

- 11 STANDARD sizes with 135° neck-shaft angle and 7 LATERALISED sizes with 127° neck-shaft angle.
- 5mm shorter neck sizes are available for both STANDARD and LATERALISED versions.

QUADRA-C

- 8 STANDARD sizes with 135° neck-shaft angle.

QUADRA-R

- 10 sizes with 127° neck-shaft angle.

CEMENTLESS STEMS

Straight cementless femoral stems have demonstrated the ability to withstand biomechanical stress with an outstanding survival rate, through 20 years of clinical follow-up.^[2,3,4] The Quadra System includes of 2 cementless stem options sharing all mechanical characteristics, but with different surface treatments: **Quadra-S** is sand-blasted and **Quadra-H** has an HA coating.

QUADRA-H

QUADRA-S

CEMENTED STEM

Quadra-C is the cemented stem in the Quadra System range.

Quadra-C has:

- Rounded edges to avoid peak stresses within the cement mantle.
- The same instrumentation as the Quadra cementless stems.

QUADRA-C



CEMENTLESS LONG STEM

Quadra-R is a cementless straight long stem for revision purposes or pertrochanteric fractures.

QUADRA-R

Based on the Quadra-H, Quadra-R provides the stem with a longer and larger distal shaft for greater distal stability in the femoral cavity. It shares most of the characteristics of the cementless options. Quadra-R is available with a dedicated instrumentation tray.

MATERIALS & FINISHES

Quadra-S and Quadra-H are made in a niobium-titanium alloy. Titanium is a biocompatible material ideal for direct interaction with the bone.^[5,6,7] Quadra-C is made of high nitrogen stainless steel providing the ideal stiffness for a cemented solution.

Quadra-S Surface - The surface has a superficial Ra roughness between 4µm and 7µm thanks to a specific sand-blasting treatment on the shaft, which allows outstanding osteointegration.^[4]



Quadra-H and Quadra-R Surface - The surface has an 80 µm thick HA coating applied after sand-blasting. The HA coating has chemical characteristics similar to those of human bone.^[8,9,10,11] When the HA coating is absorbed there is good interaction between stem and bone, leading to long-term fixation.



Quadra-C Surface - Mirror polished surface for correct interaction with the cement mantle.



CONCEPT

SHAPE

- Based on experience with straight, rectangular cementless stems.

DESIGN

- Triple taper with trapezoidal cross section providing good axial and rotational stability with optimal anchoring to the bone.^[12]

NECK

- Different offsets to reproduce patient joint geometry including standard, lateralised and short neck options.
- Mirror polished rounded neck to minimise wear.
- Suitable for Double Mobility cups.

TAPER

- Micro threaded.
- 12/14 EUROCONE (5°42'30").
- Shortened to increase ROM.

PROXIMAL FEMUR

Close contact between the stem and the cortical bone thanks to the tapered shape and high precision broaches.

- Good stability.
- Natural load transfer.
- Minimised stress-shielding risk, preserving healthy bone.
- Non-bulky lateral shoulder ideal for MIS approaches.

MACROSTRUCTURES

Horizontal and vertical macrostructures increase contact surface area by 10-15%.^[13]

- The proximal horizontal macrostructures increase axial stability.
- The vertical distal macrostructures increase rotational stability.

DIAPHYSIS

- Squared shape for an adequate primary diaphyseal fit.^[14]
- Enhanced rotational stability.

DISTAL TIP

Double tapered distal tip reduces the risk of stress peak in the diaphysis.

QUADRA SYSTEM: COMPLETE RANGE OF STRAIGHT STEMS

