

Ordering information

Implants

Item no.	Description	Item no.	Description
56.20.0000SC	CBH std. stem TAN 0 uncem.	56.20.1000SC	CBH lat. stem TAN 0 uncem.
56.20.0101SC	CBH std. stem TAN 1 uncem.	56.20.1101SC	CBH lat. stem TAN 1 uncem.
56.20.0102SC	CBH std. stem TAN 2 uncem.	56.20.1102SC	CBH lat. stem TAN 2 uncem.
56.20.0103SC	CBH std. stem TAN 3 uncem.	56.20.1103SC	CBH lat. stem TAN 3 uncem.
56.20.0104SC	CBH std. stem TAN 4 uncem.	56.20.1104SC	CBH lat. stem TAN 4 uncem.
56.20.0105SC	CBH std. stem TAN 5 uncem.	56.20.1105SC	CBH lat. stem TAN 5 uncem.
56.20.0106SC	CBH std. stem TAN 6 uncem.	56.20.1106SC	CBH lat. stem TAN 6 uncem.
56.20.0107SC	CBH std. stem TAN 7 uncem.	56.20.1107SC	CBH lat. stem TAN 7 uncem.
56.20.0108SC	CBH std. stem TAN 8 uncem.	56.20.1108SC	CBH lat. stem TAN 8 uncem.
56.20.0109SC	CBH std. stem TAN 9 uncem.	56.20.1109SC	CBH lat. stem TAN 9 uncem.
56.20.0110SC	CBH std. stem TAN 10 uncem.	56.20.1110SC	CBH lat. stem TAN 10 uncem.
56.20.0111SC	CBH std. stem TAN 11 uncem.	56.20.1111SC	CBH lat. stem TAN 11 uncem.
56.20.0112SC	CBH std. stem TAN 12 uncem.	56.20.1112SC	CBH lat. stem TAN 12 uncem.

Instrument tray

Item no.	Description
56.01.0017A	CBH instrumentation

Measuring Templates

Item no.	Description
330.010.017	CBH stem lateral Template
330.010.018	CBH stem standard Template

Digital Measuring Templates are available for the common preoperative planning software.

CBH Product information

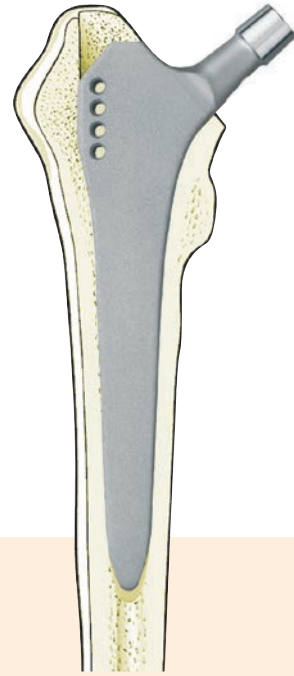


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... together with passion!

Biomechanical concept



The aim of the cementless implantation of a prosthetic hip stem is to obtain a mechanically stable anchorage and, as a natural consequence, the subsequent bonding to the bone through osteointegration.

In order to achieve the permanent bond between implant and bone, the conditions for a stable primary anchorage must be guaranteed. Other conditions for good osteointegration are the surface consistency and the biocompatibility of the implant material. When these various factors are all present and optimal, the bone tissue in contact with the implant can take on a functional structure and achieve permanent secondary stability.



In the development of the cementless CBH Stem, the following factors have a decisive influence on the success of the anchorage:

Shaping of the implant (design)

The geometric design of the CBH Stem is determined, on one hand, by the internal anatomy of the femur and, on the other, by the secure absorption of the high rotational forces.

The choice of this **conically tapered stem design, with rectangular cross-section**, has the following advantages:

- The specific shape fits between the two curvatures of the femur, the anteversion-anteflexion and the antecurvation without any major destruction of the cortex.
- The aim of the so-called press-fit anchorage of the CBH Stem with rectangular cross-section is to achieve a secure, rotation-stable fixation by means of **diaphyseal support** in the cortical bone.
- The specific design with the rectangular cross-section does not completely fill the medullary cavity. Hence, parts of the **endosteal blood supply** are conserved.
- The progressively increasing **sizes are adapted to the anatomy** and ensure an optimal anchoring in varying femur morphologies.

Best individual solution for the patient

Stem versions

A standard and a lateral version of the CBH Stem are available for each of the 13 sizes.

The standard stem has a CCD angle of 131° (offset 33–49 mm).

The lateral stem has a CCD angle of 124° (offset 39–57 mm).

The standard or the lateral version of any size can be selected without modifying the leg length.

Properties of the implant material

The biocompatibility, the mechanical properties and the elasticity are the most important material properties of cementless implants. The forged titanium alloy Ti6Al7Nb chosen is optimal and meets the demands made on a modern implant material intended for cementless anchoring. The rough-blasted surface has a mean roughness of 6 µm.

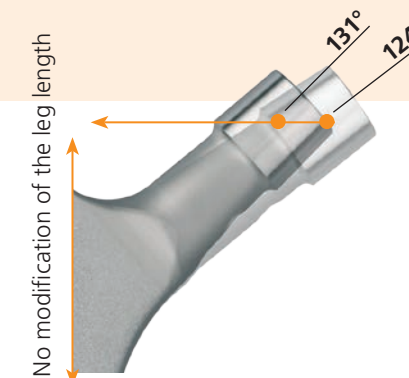


Stem-Head Combination

The CBH stem size 0 can only be combined with Heads up to neck length L. The CBH stems size 1–12 can only be combined with Heads up to neck length XL.

Optimised neck and cone part

According to the latest scientific findings, the CBH Stem has an optimised neck design and a 12/14 cone. This increases the range of motion and reduces the risk of impingement (stem-cup).



Surgical technique

Instruments

The instruments placed at the disposal of the surgeon are user-friendly. In order to achieve the surgical objective of an optimal primary stability by means of wedging against the cortical bone over a long distance, special attention has to be given to the accurate preparation of the osseous bed for the prosthesis. The ground rasps match the size plan of the CBH Stem, and their outstanding features are their functionality and precise geometry.

The rasps are also used for the trial reduction.

