GLOBAL ICON™
Stemless Shoulder System
Design Rationale
ENHANCED PERIPHERAL FIXATION

The GLOBAL ICON™ Stemless Shoulder System is designed to achieve peripheral fixation where the bone quality and density has been demonstrated to be superior to central bone.\textsuperscript{1,2}

SURGICAL EFFICIENCY

The GLOBAL ICON Stemless Shoulder System utilizes 72% fewer surgical steps and 56% fewer instrument passes compared to a traditional stemmed shoulder prosthesis, to potentially improve OR efficiency through its simplified surgical procedure.\textsuperscript{3}
The GLOBAL ICON Stemless Shoulder System offers anatomically designed humeral head sizes and a broad range of peripherally fixated Anchor Plate components to achieve the best-fit circle reconstruction for soft tissue balancing and stability.

The GLOBAL ICON Stemless Shoulder System introduces a bone-preserving design, removing an average of 88% less bone than a traditional stemmed device.
The GLOBAL ICON™ Stemless Shoulder System is designed to provide rigid metaphyseal fixation, despite the absence of a traditional stemmed component. Research and development has directed the design of the Anchor Plate, to position it in areas of the proximal humerus with the highest bone density, while providing cortical support. Over time an increase in radiolucency within the proximal humerus occurs, resulting in deterioration and reduction of the bone density number. Barvencik et al. revealed that the peripheral portion of the humeral head, not the central region, provides the greatest stability due to the density of bone in this region.
The GLOBAL ICON Stemless Shoulder System takes advantage of areas with increased bone density that seemed to be associated with improved fixation strength.\textsuperscript{1,2}

In a cadaveric study, the GLOBAL ICON implant demonstrated short-term stability by having significantly less early migration and equivalent micromotion when compared to a stemmed implant.\textsuperscript{7,8}

The design of the Anchor Plate engages cortical support to potentially reduce the risk of subsidence. The peripheral legs have a grooved macrostructure that is designed to resist rotation and improve fixation.
Accurate sizing and positioning of a prosthetic humeral head can reduce the risk of overstuffing the joint, leading to better outcomes and decreased glenoid component wear and loosening.\textsuperscript{4,9,10}

The standard and +3 mm humeral head sizes provide options to recreate the anatomic best-fit circle of the proximal humerus.
The formation of a sphere, or two-dimensional circle in the coronal plane, allows for the appropriate humeral head size to be determined, providing proper soft-tissue balancing. The integrity of the soft-tissue components of the shoulder greatly contribute to the normal function of an anatomic shoulder replacement.

An anatomic best-fit circle reconstruction can help restore stability and mobility of the prosthetic shoulder.

The GLOBAL ICON Stemless Shoulder System is not restricted to the location of the intramedullary canal, like that of a traditional stemmed device, which may require eccentric head options to accommodate the patient’s anatomy.
Health Care providers are looking for more intuitive and efficient solutions to shorten the learning curve of operating room (OR) teams, positively impact operative time, and reduce costs. The GLOBAL ICON Stemless Shoulder System is designed to improve efficiency in the OR through its simplified surgical procedure and streamlined instrumentation.

When compared to GLOBAL AP™, the GLOBAL ICON Stemless Shoulder System has 72% fewer surgical steps and 56% fewer instrument passes, which are key components in addressing OR efficiencies.\(^3\)

An instrument pass is defined as the number of times an instrument is handed to and from the surgeon.
The Anchor Plate design features windows and slots, providing a guided pathway in case of a revision, where implants can be removed with minimal disruption to bone stock.

When compared to a stemmed arthroplasty device, the GLOBAL ICON System removes an average of 88% less bone.\textsuperscript{5}

The use of a bone-conserving device, in concert with streamlined instrumentation, combines to potentially increase surgical efficiency and reduce blood loss on a primary procedure.
HA-COATED DESIGN
ON THE UNDER SURFACE AND LEGS

FOUR STRAIGHT T-SHAPED LEGS FIT WITHIN THE PERIPHERY OF THE PROXIMAL HUMERUS, DESIGNED TO OPPOSE IMPLANT SLIDING AND ROTATION

CIRCULAR ANCHOR PLATE
FOR CORTICAL BONE COVERAGE AND SUPPORT TO POTENTIALLY REDUCE RISK OF LOOSENING

SYMMETRIC DESIGN
FACILITATES ORIENTATION OPTIONS TO ACCOMMODATE PATIENT ANATOMY

GROOVED MACROSTRUCTURE
PROVIDING ADDITIONAL SURFACE AREA FOR INCREASED BONE CONTACT

HA-COATED DESIGN
ON THE UNDER SURFACE AND LEGS

T-SHAPED LEGS FOR ENHANCED FIXATION

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**STANDARD AND +3 mm HUMERAL HEAD OPTIONS TO RECREATE THE ANATOMICAL BEST-FIT CIRCLE OF THE PROXIMAL HUMERUS**

**WITH THE ANCHOR PEG GLENOID, THE GLOBAL ICON SYSTEM PROVIDES A MISMATCH RANGE OF 2-12 MM.**

**FEMALE MORSE TAPER FOR INCREASED GLENOID EXPOSURE**

**SLOTS AND WINDOWS FOR OSTEOTOME INSERTION TO SEPARATE THE IMPLANT FROM THE BONE DURING REVISION SURGERY**

**THE MARK OF FIXATION**

**DESIGN FEATURES**
References