



Stemless Shoulder Solutions

Experience the Evolution

PROVEN¹⁻¹⁶

VERSATILE

SIMPLE

Bone-preserving alternative to traditional stemmed implants, the **Comprehensive[®] Nano Stemless Shoulder** and the **Sidus[®] Stem-Free Shoulder**. Continued success with over 6 years of clinical data from Europe & an IDE study in the United States and Canada.^{1,4}



PROVEN

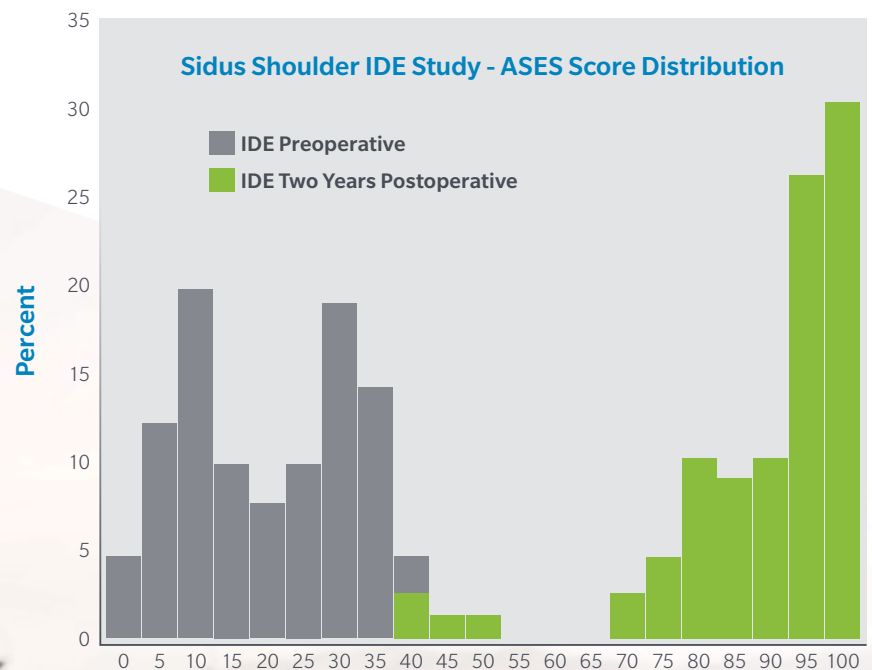
Clinical Study Results

In a multicenter, 2 year IDE study of 71 patients, Sidus Stem-Free Shoulder was proven to be an effective bone sparing option for Total Shoulder Arthroplasty.

Clinically-proven, bone-sparing alternative for Total Shoulder Arthroplasty¹

In a two-year analysis of 71 patients from the Sidus shoulder IDE Study:

- **~98.5%** of patients have over a **30 point** improvement on the ASES score from preoperative.
- Excellent implant survivorship of **~98.5%** at two years.*
- **~98.5%** of the patients completing two year visits successfully passed the radiographic success criteria with no progressive radiolucencies of the humeral component >2 mm and no migration or subsidence of the humeral component.



* Revision not related to implant failure. 3 patients underwent revisions due to integrity of the subscapularis.

Clinical IDE study demonstrated increased mobility and reduced pain compared to preoperative state¹

- Statistically significant improvement in range of motion.
- Significant improvement in the functions of daily life.
- **92.6%** of the patients were either very satisfied or satisfied at two years post-op.

| Sidus Shoulder IDE | Range of motion | |
|---------------------------------------|-----------------|--------------|
| | Pre-op | 2-yr post-op |
| Forward Elevation Active | 93.7 ± 25.3 | 141.5 ± 25.6 |
| Forward Elevation Passive | 93.7 ± 25.3 | 141.5 ± 25.6 |
| External Rotation Arm at Side Active | 20.4 ± 15.7 | 50.9 ± 17.1 |
| External Rotation Arm at Side Passive | 23.8 ± 18 | 55.2 ± 16.7 |
| External Rotation Arm at 90° Active | 24.9 ± 26.6 | 66.8 ± 25.6 |
| External Rotation Arm at 90° Passive | 26.9 ± 26.9 | 72 ± 24.9 |
| Cross-body Adduction Active | 35.6 ± 12.6 | 28.9 ± 8.1 |
| Cross-body Adduction Passive | 33.7 ± 12.4 | 27 ± 7.2 |

| Sidus Shoulder IDE | Not Difficult | |
|-----------------------------|---------------|---------------|
| | Pre-op | Post-op |
| Put on a coat | 1/71 (1.4%) | 54/68 (79.4%) |
| Sleep on affected side | 1/71 (1.4%) | 41/68 (60.3%) |
| Wash back/Do up bra in back | 1/71 (1.4%) | 34/68 (50.0%) |
| Manage toileting | 7/71 (9.9%) | 61/68 (89.7%) |
| Comb hair | 9/71 (12.7%) | 63/68 (92.6%) |
| Reach a high shelf | 1/71 (1.4%) | 45/68 (66.2%) |
| Lift 10 pounds over head | 0/71 (0%) | 41/68 (60.3%) |
| Throw ball | 0/71 (0%) | 38/68 (55.9%) |
| Do usual work | 0/71 (0%) | 58/68 (85.3%) |
| Do usual sport | 2/71 (2.8%) | 46/68 (67.6%) |



DESIGN



| Size | D - mm | H - mm |
|------|--------|--------|
| S | 24 | 16 |
| M | 28 | 19 |
| L | 32 | 22 |

Taper connection with the possibility to use a wide range of Humeral Head options from the Sidus and the Bigliani/Flatow® Shoulder systems.

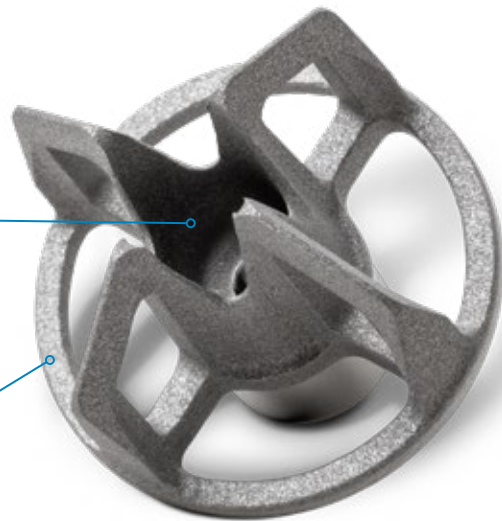
Four windows for free view of humerus and facilitating revision.



Anti lever-out surfaces on each fin designed to resist shear loads.

Humeral anchor geometry and surface finish designed to resist rotational and lever-out forces.

Four open-fin press-fit anchors designed to provide rotational stability while allowing for bone through-growth. Hollow core to preserve bone.



Rough blasted surface structure fixation to facilitate bone on-growth as well as to increase the friction between the implant & bone for primary stability.

PROVEN

Clinical Study Results

In a multicenter, 2 year IDE study of 116 patients, Nano Stemless Shoulder was proven to be an effective bone sparing option for Total Shoulder Arthroplasty demonstrating increased mobility and reduced pain for the patients compared to the preoperative state.⁴

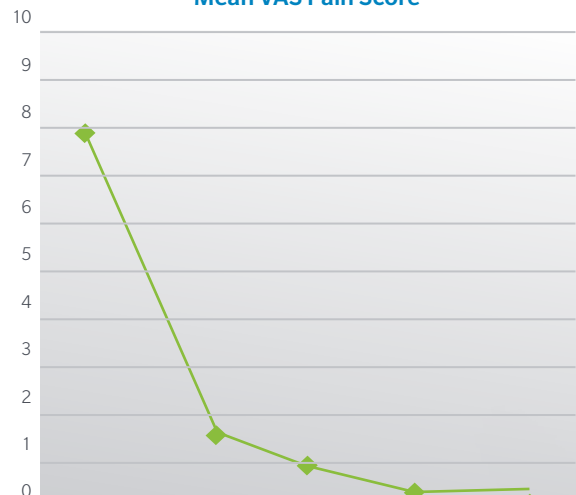
- Mean ASES score for the Nano Stemless Shoulder was **comparable to the Mini Stem**.
- Excellent implant survivorship of **~93%** at two years.
- **100%** of the patients completing two year visits successfully passed the radiographic success criteria with no progressive radiolucencies of the humeral component >2 mm and no migration or subsidence of the humeral component.
- Mean VAS pain score **reduced significantly** post-surgery compared to pre-operatively.
- Statistically significant **improvement in range of motion**.
- **Significant improvement** in Activities of Daily Living (ADL).

Comprehensive Nano Humeral Component IDE - Mean ASES Score



◆ ASES Score Nano
■ ASES Score Mini

Comprehensive Nano Humeral Component IDE - Mean VAS Pain Score



◆ VAS Pain Score

| | Range of motion | |
|--|-----------------|----------------|
| Comprehensive Nano IDE Study | Pre-Operative | Post-Operative |
| Forward Elevation – Active | 107.0 ± 30.0 | 157.3 ± 21.1 |
| Forward Elevation – Passive | 116.9 ± 29.5 | 161.7 ± 18.1 |
| External Rotation, Arm at Side – Active | 24.4 ± 20.8 | 61.6 ± 22.5 |
| External Rotation, Arm at Side – Passive | 28.6 ± 20.2 | 64.1 ± 22.2 |
| External Rotation, Arm at 90° – Active | 42.4 ± 26.1 | 81.2 ± 16.2 |
| External Rotation, Arm at 90° – Passive | 46.4 ± 27.7 | 83.4 ± 16.5 |

| | ADL's: Not Difficult | |
|---------------------------------|----------------------|------------------------|
| Comprehensive Nano IDE Study | Pre-Operative | 2 years Post-Operative |
| Put on a Coat | 3/132 (2.27%) | 103/112 (91.96%) |
| Sleep on Affected Side | 5/132 (3.79%) | 89/112 (79.46%) |
| Wash Back/Do Up Bra In Back | 1/132 (0.76%) | 82/112 (73.21%) |
| Manage Toileting | 38/132 (28.79%) | 106/112 (94.64%) |
| Comb Hair | 14/132 (10.61%) | 106/112 (94.64%) |
| Reach a High Shelf | 2/132 (1.52%) | 94/112 (83.93%) |
| Lift 10 lbs. Above the Shoulder | 3/132 (2.27%) | 85/112 (75.89%) |
| Throw a Ball Overhand | 1/132 (0.76%) | 79/112 (70.54%) |
| Do Usual Work | 16/132 (12.12%) | 101/112 (90.18%) |
| Do Usual Sport | 6/132 (4.55%) | 90/112 (80.36%) |

DESIGN



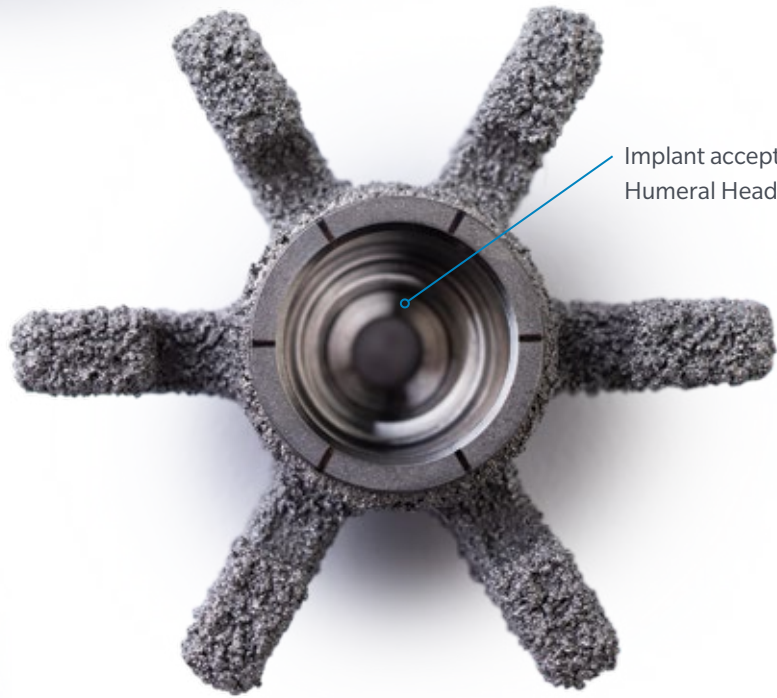
Wing etch marks on proximal face to facilitate visualization of the component in bone and aid in ease of revision if needed.

25%–35% more surface area coated with PPS compared to mini stem aiding in biological fixation.

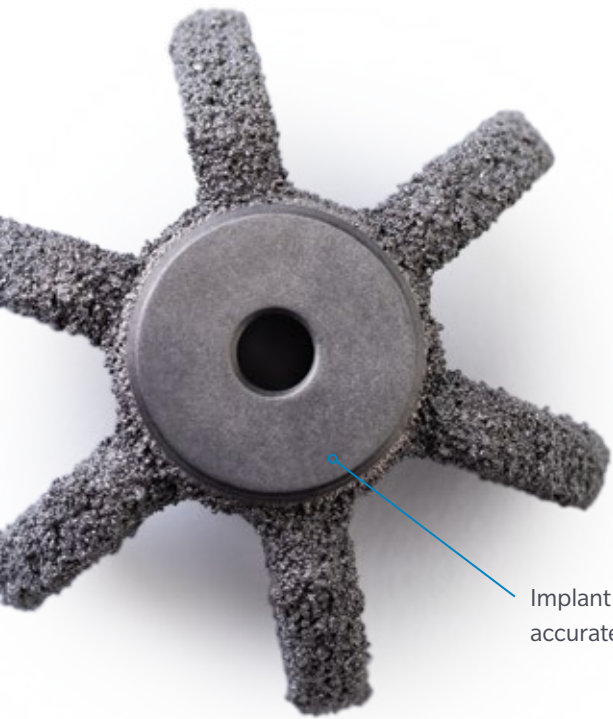
Female Taper to allow for unobstructed view of the glenoid.



PPS® Porous Plasma Spray coating for enhanced biological fixation.



Implant accepts Versa-Dial® Humeral Heads.



Implant cannulated to allow for accurate insertion over Steinmann Pin.

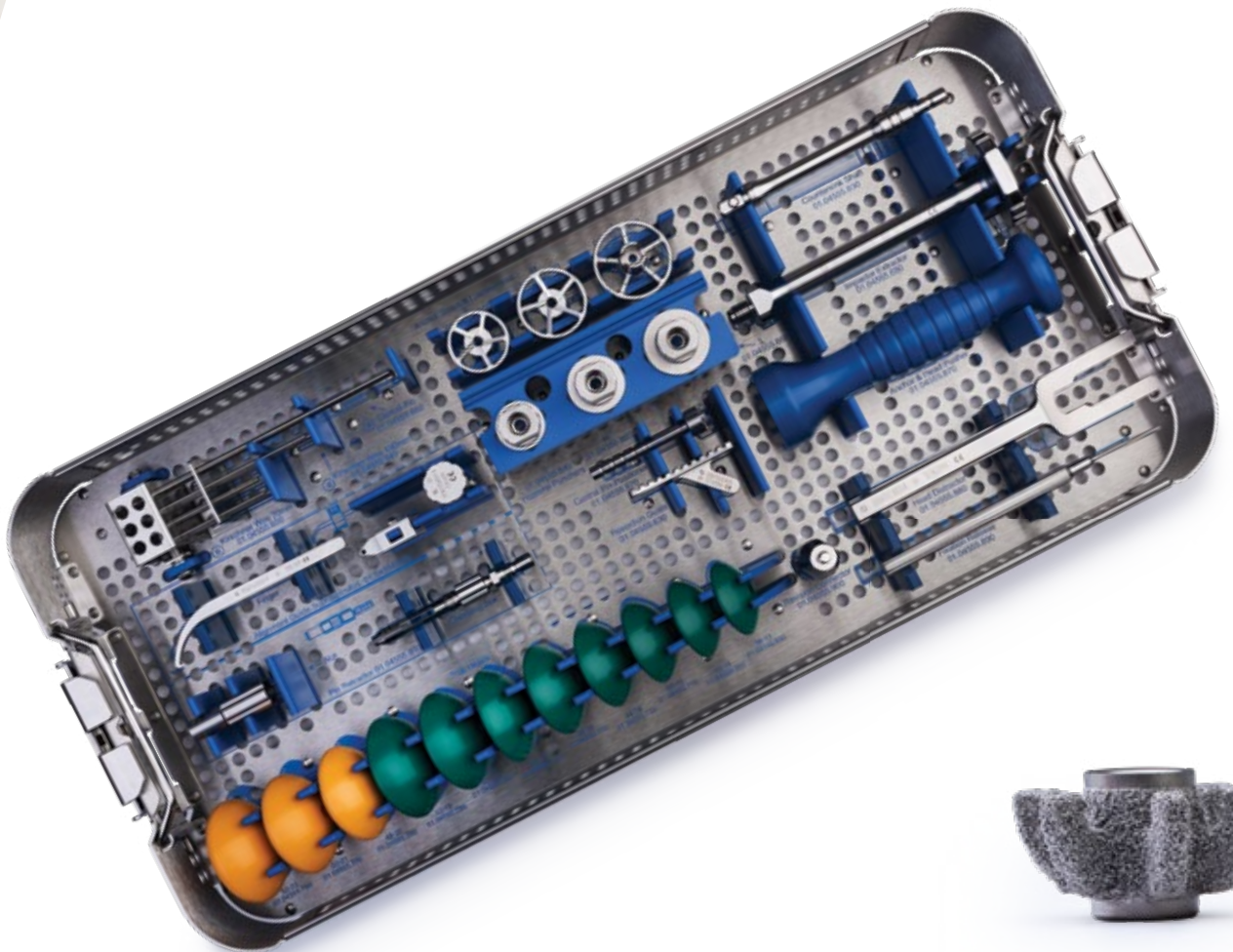
Position of implant is independent of humeral canal, enabling optimal coverage and tensioning.

SIMPLE

Instrumentation

Instrumentation can make big difference in a surgery. Instrumentation for the Comprehensive Nano Stemless Shoulder & Sidus Stem-Free Shoulder was **designed to complement the surgical work flow.**

- Instrumentation **designed for surgeons of all skill levels** to facilitate **ease of use** in the Operating Room
- Instruments are laid out in the **order of surgical flow**





Stemless Shoulder Solutions

1. An effective **clinically-proven**, bone-sparing option for Total Shoulder Arthroplasty.^{1,4}
2. **Restored** mobility and **alleviated** pain in clinical studies.^{1,4}
3. Anatomic **flexibility** and **secure fixation**.^{1,4}
4. An efficient, **bone-sparing solution**, should revision become necessary.
5. Procedural efficiency with **easy-to-use** instrumentation.





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