



Comprehensive[®] Nano Stemless Shoulder

Experience the Evolution



PROVEN¹⁻¹³

VERSATILE

SIMPLE

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



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.¹

- Mean ASES score for the Nano Stemless Shoulder was **comparable to the Mini Stem**.
- Excellent implant survivorship of **92.2%** at two years. Nine subjects in the nano group had complications (1 humeral fracture, 2 revisions, 1 glenoid perforation, 1 dislocation and 4 glenoid fractures).
- **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



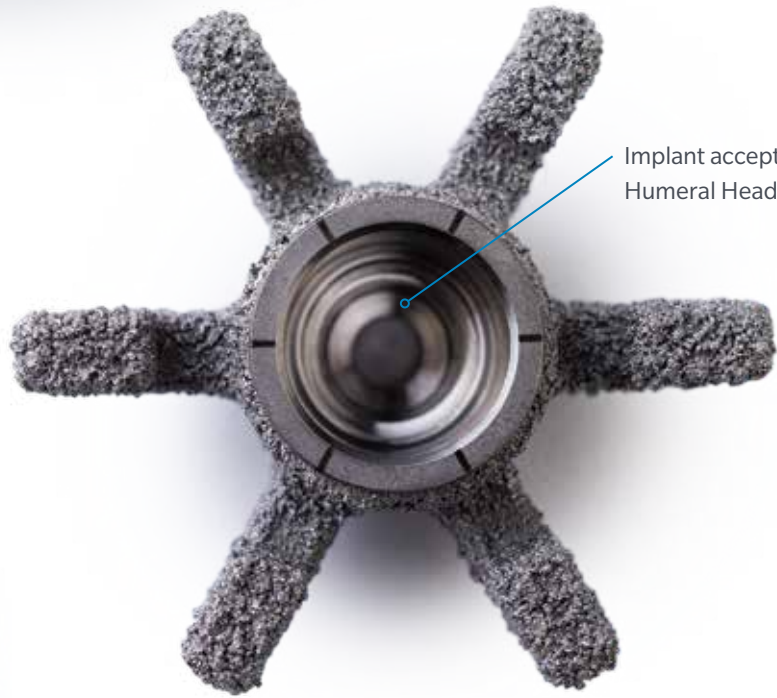
Wing etch marks on proximal face to facilitate visualization of the component in bone and aid in ease of revision if needed.

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

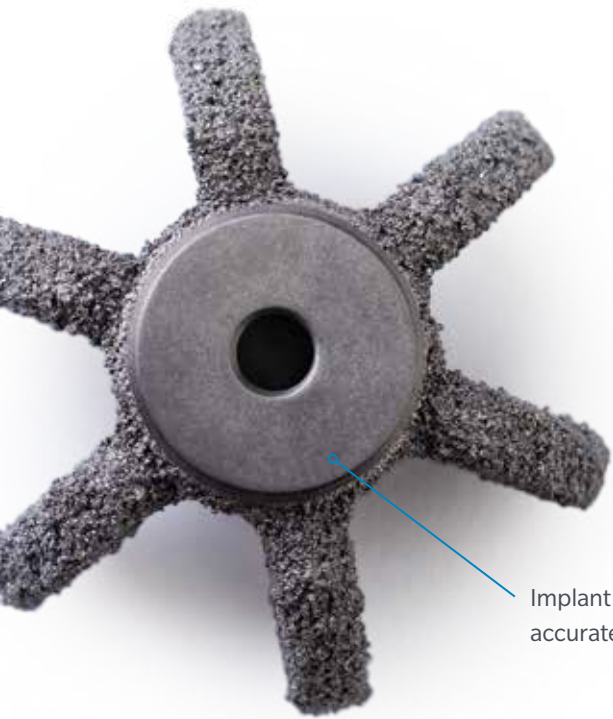
Female Taper to allow for unobstructed view of the glenoid.



PPS® Porous Plasma Spray coating to facilitate biological fixation.



Implant accepts Versa-Dial® Humeral Heads.



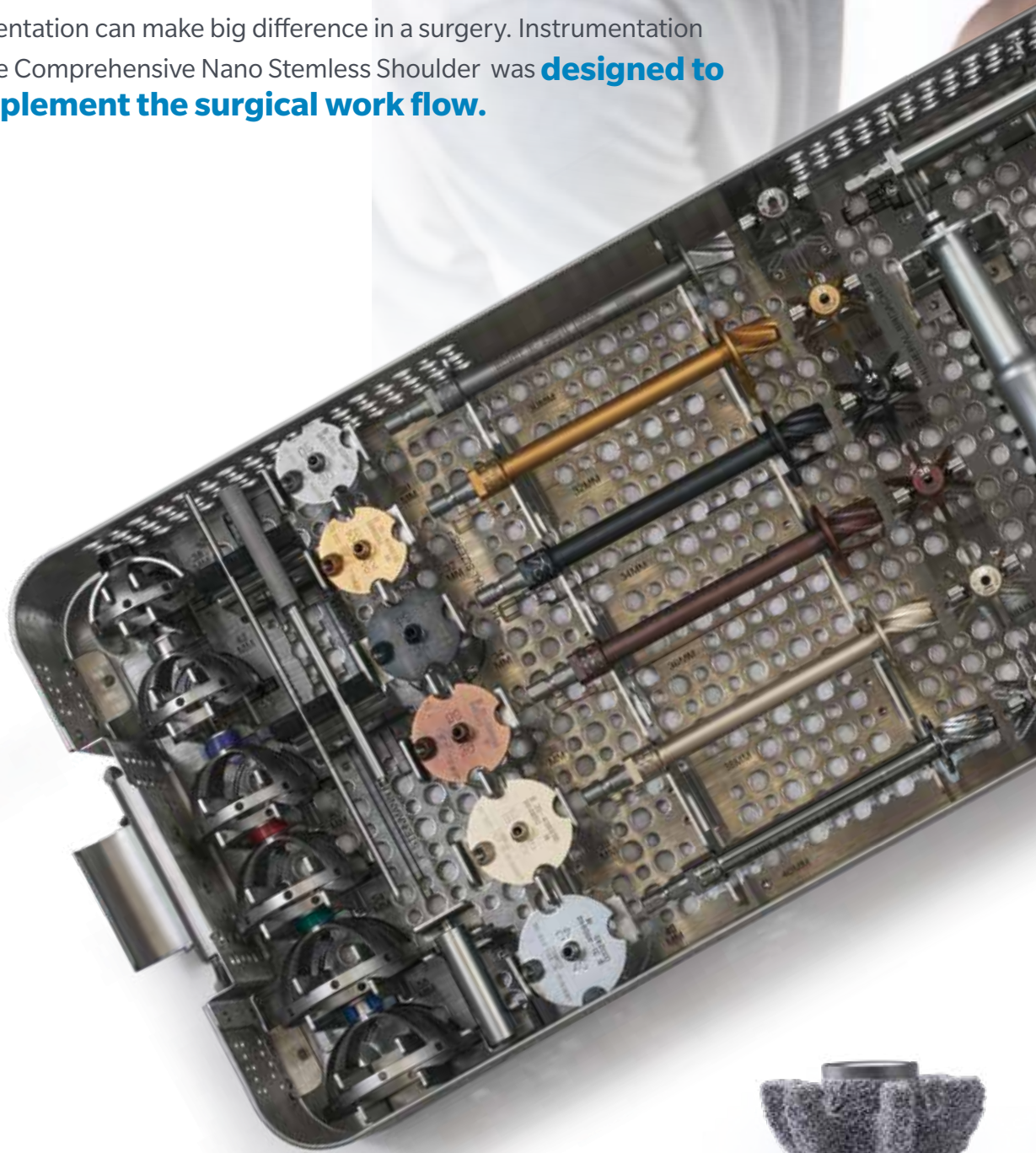
Implant cannulated to allow for accurate insertion over Steinmann Pin.

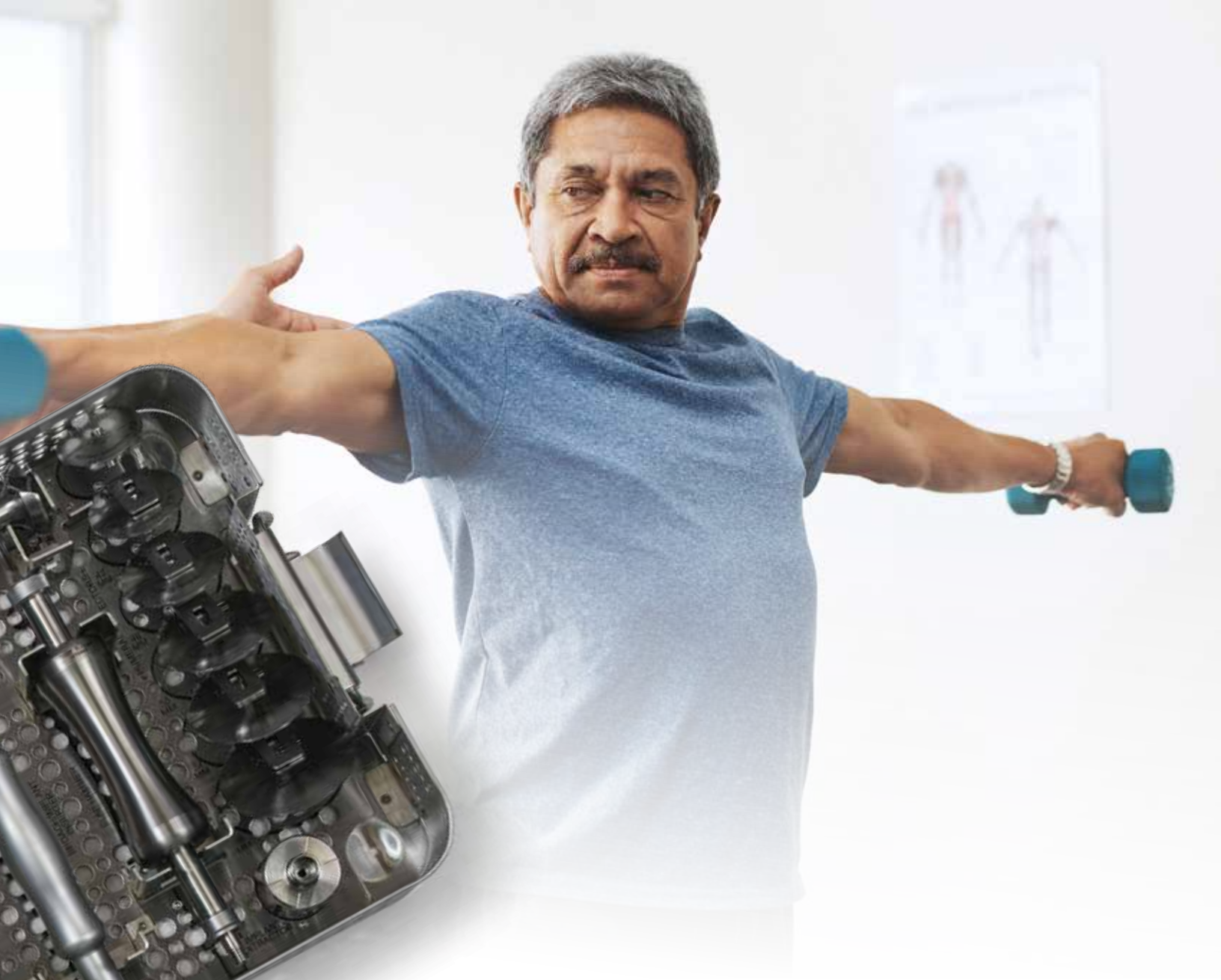
Position of implant is independent of humeral canal, enabling optimal coverage and tensioning.

SIMPLE

Instrumentation

Instrumentation can make big difference in a surgery. Instrumentation for the Comprehensive Nano Stemless Shoulder 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**



Comprehensive Nano Stemless Shoulder

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





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