

## PRESS FIT TOTAL ELBOW SYSTEM



**axis**  
TOTAL ELBOW SYSTEM

# IMPROVISED LEGACY IMPLANTS

The **axis** total elbow system is improvised on the foundation of a time tested and clinically proven design.

In combination with Crosslinked UHMW polyethylene bearings and advances in instrumentation the **axis** total elbow system makes for a great choice in elbow replacement.

Technical improvements brought out with new manufacturing process further enhances the quality and longevity of the **axis** total elbow system.



## DESCRIPTION

- The press-fit locking structure is adopted to preserve more bone of the distal internal and external epicondyle of the humerus.
- The hinged connection is used between the humerus and ulna prosthesis: which allows the joint to bend and straighten replicating the natural movement of the elbow while reducing the tremor of the prosthesis, it can also make the rotation and swing between the prosthesis at a certain angle, disperse the stress and improve the longevity of the prosthesis.

## COMPONENTS

- Humerus stem, Ulna stem, Humerus insert, Ulna axis bushes, connecting rod and screws.

## EXCELLENT WEAR AND DURABILITY

- Titanium alloy ulnar and humeral components - durable & light weight construction
- Robust Co-Cr linkage system - enhances durability of linkage without applying compressive loads to screws.
- Highly Crosslinked UHMWPE inserts - prevent delamination and maximize oxidation stability, minimizes polyethylene wear and improve mechanical properties. The thicker bearing design option reduces the edge load and stress and maximizes the contact area to distribute the joint reaction force.

# PRODUCT STRUCTURE



Ulna stem has some range of motion while it is rotated around the cylinder of two ulna axis.

## ULNA STEM

Titanium plasma spray coating of ulna stem promotes fixation and improves strength

The curvature and offset can meet the real condition of humerus and ulna joint



## ULNA AXIS BUSHES

Connection between cylindrical part of ulna axis bushes and ulna stem is for clearance fit which ensures certain range of motion and prevents metal to metal contact



## CONNECTING ROD

Connecting Rod snapfit with ulna axis to prevent it from sliding



## LOCKING SCREW

Fits into the threaded hole of the humerus stem, to lock both ends of the connecting rod for overall stability



## HUMERUS INSERT

The head of the ulna stem is in contact with this curved groove and the prosthesis has certain range of motion.



## HUMERUS HEAD

The circular head design at the joint with the ulna can maintain the geometric shape of the distal humerus



The Anterior neck with flange prevents the shaking and rotation in medullary cavity after the prosthesis is implanted

# IMPLANT SCOPE

## Humerus Stem with Insert & Locking Screws

Sizes	Length	Art No
1	95 mm	27.01.095
1+	145 mm	27.01.145
2	100 mm	27.02.100
2+	150 mm	27.02.150
3	105 mm	27.03.105
3+	155 mm	27.03.155

## Ulna Stem with Bush & Connecting Rod - Right

Sizes	Length	Side	Art No
1	75 mm	Right	27.01.075
1+	100 mm	Right	27.01.100
2	80 mm	Right	27.02.080
2+	115 mm	Right	27.02.115
3	90 mm	Right	27.03.090
3+	120 mm	Right	27.03.120

## Ulna Stem with Bush & Connecting Rod - Left

Sizes	Length	Side	Art No
1	75 mm	Left	27.11.075
1+	100 mm	Left	27.11.100
2	80 mm	Left	27.12.080
2+	115 mm	Left	27.12.115
3	90 mm	Left	27.13.090
3+	120 mm	Left	27.13.120

# INSTRUMENTATION

