

Regain Motion & Restore Anatomy with Specifically Designed Silicone System

Soft Skeletal Hand Implants
For MCP and PIP Joints



- Extensive Clinical Experience
- Joint Specific Design Features
- Intuitive Instrumentation

SILICONE SYSTEM
SOFT SKELETAL HAND IMPLANTS

Soft Skeletal Hand Implant System

Arthritis of the hand can make simple motions such as gripping an object or turning a key painful, if not impossible. Soft Skeletal Hand Implants can help alleviate the disabling effects of this disease. By incorporating advanced materials, extensive clinical experience, and joint-specific design features, these implants offer today's hand surgeon advantages not currently available in other finger joint prostheses.



MCP and PIP Soft Skeletal Implants

MCP and PIP Soft Skeletal Implants, constructed of specifically engineered elastomer material, offer post surgical results unavailable with any other finger joint implant.

Joint Specific Design

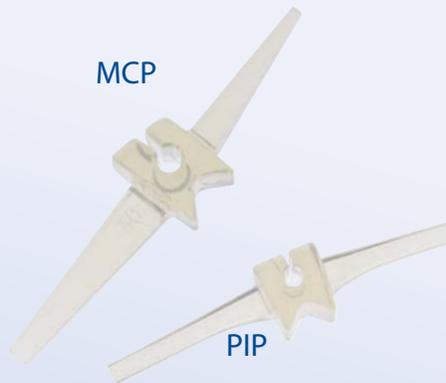
- > Accommodates the specific, unique biomechanics and anatomy of the MCP and PIP joints

Volar Hinge Axis

- > Creates an anatomical balance between the flexor and extensor mechanisms allowing full extension and flexion without volar impingement

Hinge Exterior

- > In conjunction with the volar hinge axis, the hinge exterior design prevents volar impingement during flexion



Interior Hinge Radius

- > Circular radius reduces point stresses in the hinge by directing the stress over a wide area as flexed

Hinge Block Buttress

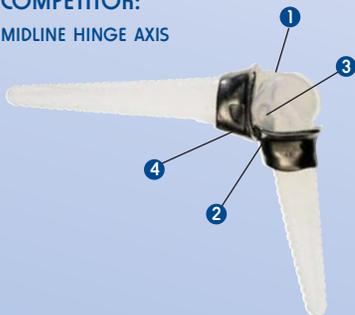
- > Impedes bony overgrowth by providing full seating for the resected bone surface, eliminating the need for cumbersome grommets

Squared Implant Stems

- > Provide rotational stability and allow for more precise anatomical placement

Volar Hinge Design versus Midline Hinge Axis

COMPETITOR:
MIDLINE HINGE AXIS



1 Hinge Design

Competitor:
Midline Hinge Axis

MCP:
Volar Hinge Axis

Advantage:
The volar hinge axis provides a balance between the flexor and extensor tendons, mitigating extension lag and allowing patients to achieve their full range of motion potential.

2 Hinge Block

Competitor:
Curved Medial/
Lateral Hinge

MCP:
Full Flat Volar/
Dorsal/Lateral
Buttress

Advantage:
The hinge block buttress impedes overgrowth by providing complete seating against the resected bone.

3 Interior Hinge

Competitor:
Dorsal Semi-hinge

MCP:
Keyhole Radius

Advantage:
The keyhole radius dissipates stress in flexion.

4 Volar Hinge Exterior

Competitor:
Design may result in
volar impingement

MCP:
Design prevents
volar impingement

Advantage:
Prevention of volar
impingement
encourages full
range of motion.

SBi MCP:
VOLAR HINGE AXIS



MCP and PIP Instrumentation

- Each set of MCP and PIP instruments contains color coded broaches and matching color coded trial sizes for fast and accurate identification.
- The MCP instrument set contains a metacarpal and phalangeal broach for each of the seven implant sizes, one starter awl, one double-ended rasp and one sizer for each implant size.
- The PIP instrument set contains a proximal and middle phalangeal broach for each of the five implant sizes, one starter awl, one double-ended rasp and one sizer for each implant size.



The PreFlex MCP

The PreFlex MCP soft skeletal implant is manufactured from the same engineered silicone elastomer that is used in our standard MCP and PIP implants. The PreFlex MCP has all of the same features as the standard MCP soft skeletal implant, but is angled at 30-degrees in order to more properly replicate the normal resting position of the hand. The PreFlex comes in the same sizes and uses the same instruments as the standard MCP implants.



Anatomic Design

- The 30-degree flexion of the PreFlex anatomically replicates the natural resting position of the hand

Proven Design

- The volar hinge and buttress block are the same anatomic design used in the standard MCP soft skeletal implant.

Familiar Instrumentation

- The instrumentation used is identical to the instrumentation used by the standard MCP implants. All sizes are identical as well.

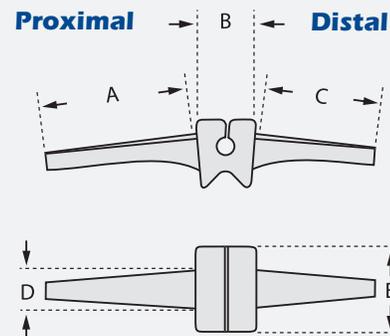
Functional Testing: In Vitro

MCP and PIP implants are manufactured from an extensively tested medical grade silicone elastomer. During in vitro functional testing, the implants were subjected to over 20 million cycles of flexing with no visible evidence of crack formation or deterioration of hinge integrity. While in vitro testing cannot duplicate in vivo conditions, the studies show that the improved physical properties may result in enhanced prosthetic durability.

Implant Dimensions and Ordering Information

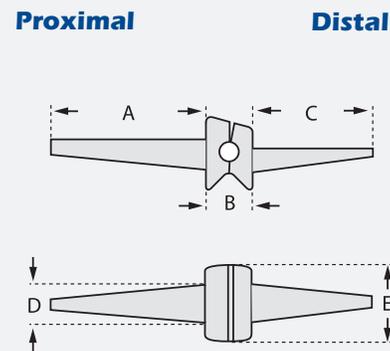
Silicone PIP Implants (Dimensions in mm)

SIZE	A	B	C	D	E
PIP 10	13	5	10	3	7
PIP 20	14	6	12	4	8
PIP 30	16	6	13	4	9
PIP 40	18	7	14	5	10
PIP 50	20	8	16	5	



Silicone MCP Implants (Dimensions in mm)

SIZE	A	B	C	D	E
MCP 00	15	5	12	4	9
MCP 10	17	6	14	5	10
MCP 20	19	6	15	6	11
MCP 30	22	7	17	6	12
MCP 40	25	8	20	7	13
MCP 50	28	8	22	7	15
MCP 60	31	10	24	8	16



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