

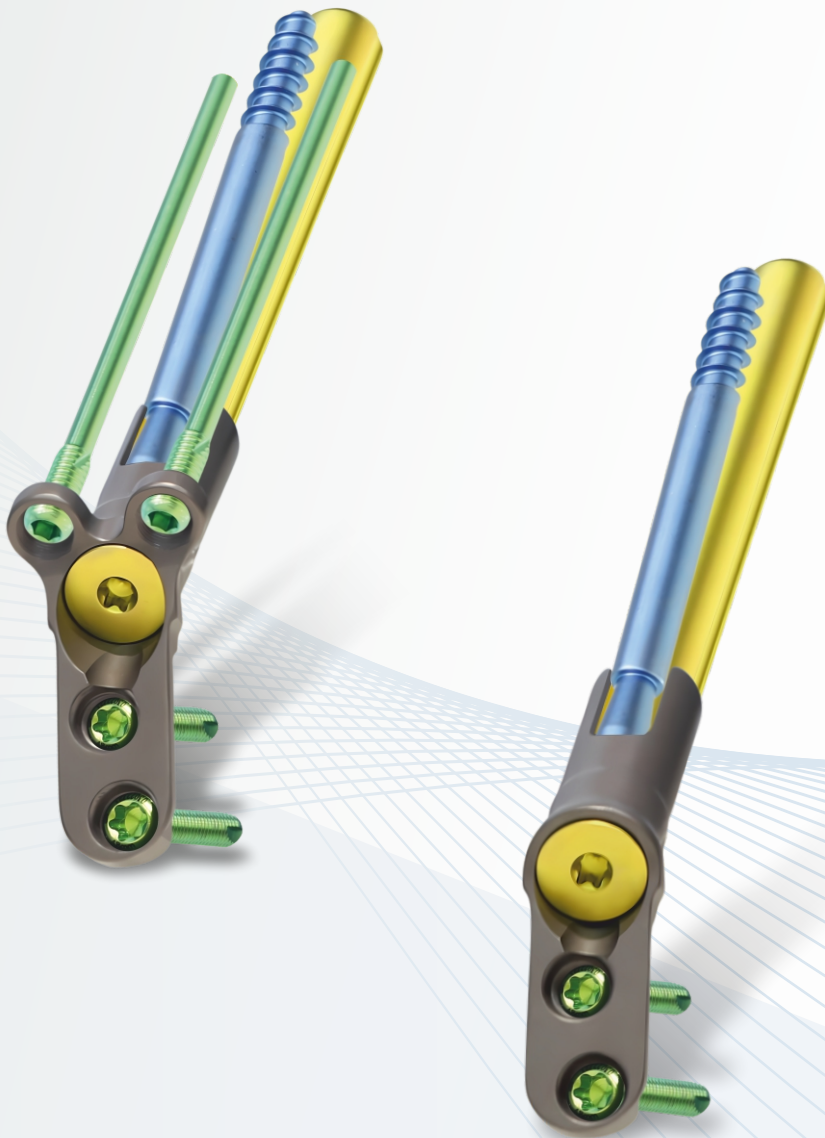


SORATH ORTHO

A DIVISION OF SIGMA SURGICAL

FEMUR NECK FIXATION SYSTEM

Advanced Fixation for Femoral Neck Fracture Healing



ISO 13485

www.sorathortho.co.in

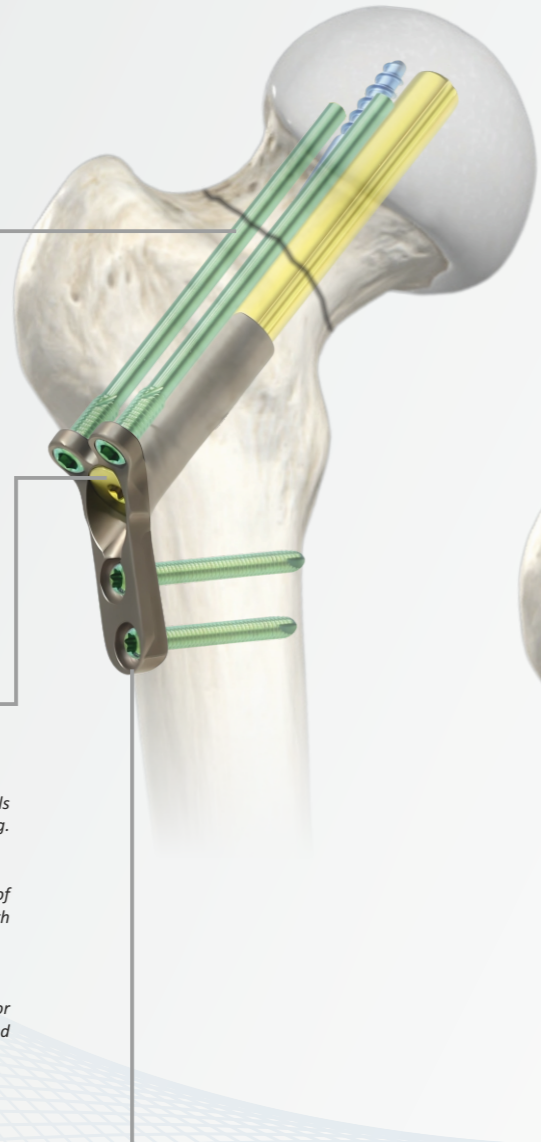
Twin Lock-BCP Shaft Screw, Dia 5.0 mm

- Provides superior stability by securely anchoring in the bone, minimizing angular and rotational movements during weight-bearing.
- Offers enhanced grip and fixation strength in osteoporotic bone, ensuring reliable support for effective fracture repair



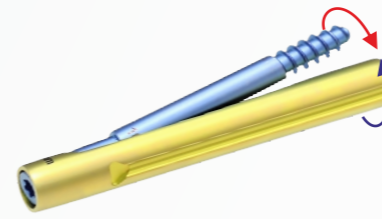
End Cap:

- **Preventing Backout:**
End caps secure the ends of fixation devices, preventing screws or nails from backing out or migrating due to patient movement and loading.
- **Protecting Soft Tissue:**
They provide a smooth surface at the device's end, reducing the risk of irritation or damage to soft tissues, which is crucial in areas with minimal soft tissue coverage like the femoral neck.
- **Size Options:**
End caps are available in sizes ranging from 6 to 16 mm, allowing for customization based on the required amount of compression and specific surgical needs.



Femur Neck Fixation Screw :

- Provides rotational stability by diverging design between Screw and Blade
- Allows implant placement even in a small femoral neck



Femur Neck Fixation Blade :

- Provides angular stability by fixing angle between Blade and Screw
- Dynamic design with up to 20 mm of controlled collapse, without lateral protrusion for the first 15 mm

Twin Lock-BCP Screw, Dia 5.0 mm

- It securely fixes the plate to the femoral shaft bone during fracture repair.
- Provides stable fixation by locking securely into the plate, preventing movement and maintaining alignment.

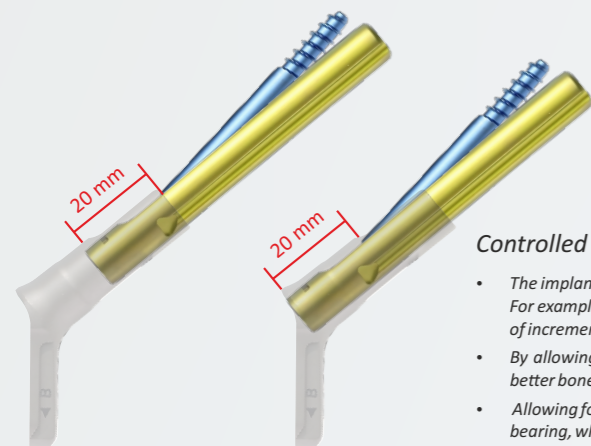
Femur Neck Fixation Plate with Support:

- Designed at a 130° angle to closely fit to the bone structure.
- Ensures angular stability by fixing the angle with plate to Blade & shaft screw.
- Accommodates standard 5.0 mm locking and shaft screws.
- Minimizes the implant footprint on the bone, offering a compact alternative to three cannulated screws.



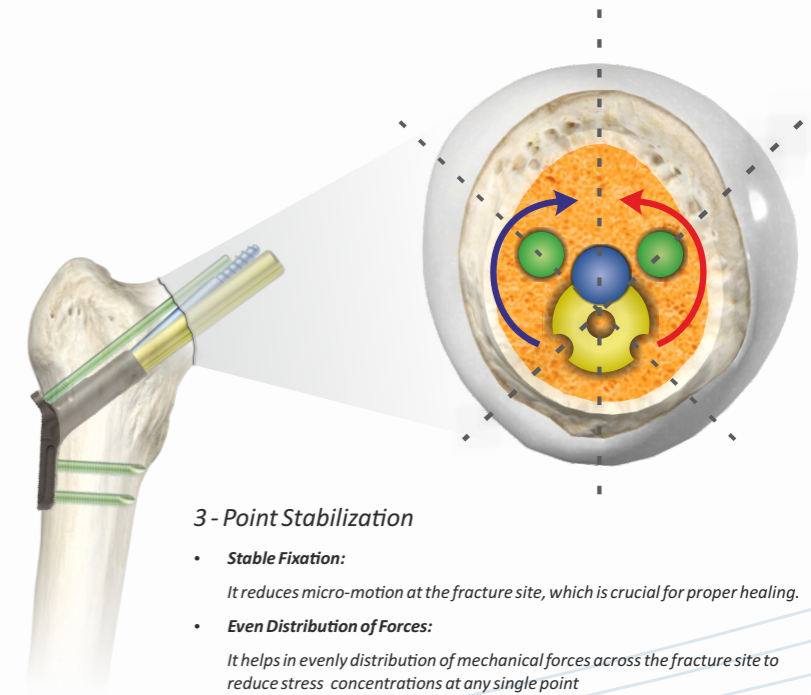
Controlled collapse

- The implant offers up to 20 mm of controlled collapse, with end caps available in 6, 8, 10, 12, 14, and 16 mm sizes. For example, an 8 mm compression requires a 12 mm end cap. This allows for compression to be adjusted in 2 mm of increments (4, 6, 8, 10, 12, 14, and 20 mm), ensuring a controlled collapse.
- By allowing controlled compression, the system can enhance the contact between bone fragments, promoting better bone healing.
- Allowing for slight movement can help in accommodating the natural micro-movements that occur during weight-bearing, which helps in the biological healing process.



Advantages of FNF System Over DHS and CC Screw Fixation

- **No Insertional Torque:**
Reduces the risk of malrotation during insertion.
- **Compact Design:**
Smaller incision and shorter operation time with fewer surgical steps; suitable for patients with a narrow femoral neck.
- **Higher Resistance to Varus Collapse:**
Offers greater stability compared to fixation with three cannulated screws.
- **Minimized Soft Tissue Irritation:**
Implant collapse does not result in lateral protrusion, reducing the risk of soft tissue irritation.

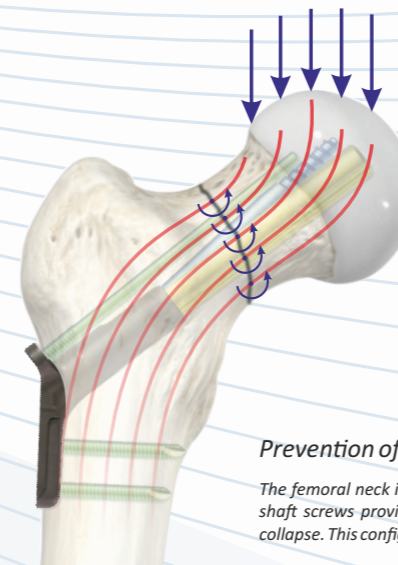


3 - Point Stabilization

- **Stable Fixation:**
It reduces micro-motion at the fracture site, which is crucial for proper healing.
- **Even Distribution of Forces:**
It helps in evenly distribution of mechanical forces across the fracture site to reduce stress concentrations at any single point
- **Prevents Rotational Instability:**
It is susceptible to rotational forces, especially during walking. It counters these forces to maintain fracture alignment and promote healing.
- **Enhanced Compression:**
With multiple points of fixation, it's easier to achieve and maintain compression across the fracture site. This compression is essential for primary bone healing, as it encourages bone contact and stabilization
- **Reduction in Complications:**
It is more robust and stable fixation, the risk of complications such as non-union, malunion, and implant migration can be significantly reduced.

Prevention of Varus Collapse & Enhanced Angular Stability:

The femoral neck is prone to varus collapse under weight-bearing forces. The combination of the plate, blade, and two supporting shaft screws provides robust support against these forces, maintaining the correct anatomical alignment and preventing varus collapse. This configuration also enhances angular stability, ensuring proper alignment throughout the healing process.





Femur Neck Fixation Plate

- 1 & 2 Holes (40 mm variation in size)
C22104001 & C22104002 (Ti)

C22101001 & C22101002 (SS)



Femur Neck Fixation Plate with Support

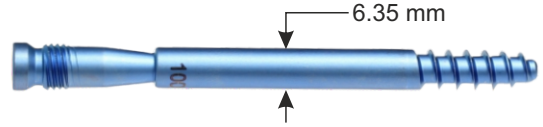
- 1 & 2 Holes (40 mm variation in size)
C30604001 & C30604002 (Ti)

C30601001 & C30601002 (SS)



Femur Neck Fixation Blade

- 75 - 120 mm (5 mm Variation in size)
A21304075 to A21304120 (Ti) A21301075 to A21301120 (SS)



Femur Neck Fixation screw

- 75 - 120 mm (5 mm Variation in size)
A21204075 to A21204120 (Ti) A21201075 to A21201120 (SS)



End Cap for Femur Neck Fixation

- 6 - 16 mm (2 mm Variation in size)
A25204006 to A25204016 (Ti) A25201006 to A25201016 (SS)



Twin Lock-BCP Screw, Dia 5.0 mm

- 28 - 48 mm (2 mm Variation in size)
A16604028 to A16604048 (Ti) A16601028 to A16601048 (SS)



Twin Lock-BCP Shaft Screw, Dia 5.0 mm

- 55 - 100 mm (5 mm Variation in size)
A27904055 to A27904100 (Ti) A27901055 to A27901100 (SS)

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Manufacturing Facility :

SIGMA SURGICAL PRIVATE LIMITED

Survey no:1636/1,Opp. Bharat petrol pump,
Indore highway, Village-Kuha,
Taluka-Daskroi, Ahmedabad-382433.
Gujarat, India. 📍: 22.99946, 72.78633

Customer care :

+91-7575011006 / +91-8866211414

www.sorathortho.com
info@sorathortho.com