SURGICAL TECHNIQUE

LOWER LIMB

Strap Flex Synthetic cerclage

TRAUMA





Technique

The Strapflex® system is made up of a PET lasso and two 316L stainless steel crimps.

The stainless steel crimps are used for the fixation of the lasso. Flexible cerclage avoids extended dissection of the soft tissues as well as the risk of bone necrosis **(1)**.

Indications for use (2)

- Fixation of long bone fractures,
- Holding together bone fragments of a fracture or during arthroplasty.

Instrumentation

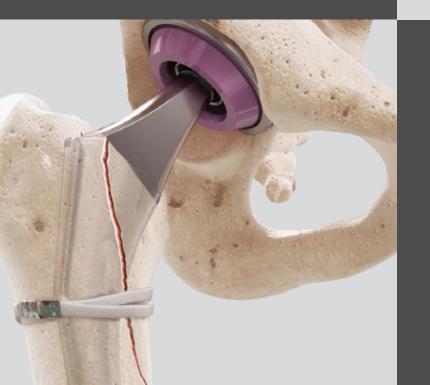
- **Curved clamp:** the curved clamp helps pass the lasso behind the diaphysis.

- **Tensor:** it is used to adjust the tension of the lasso in preparation for crimping.
- Crimping pliers: the crimping pliers are used to lock the crimps in place on the lasso.

Applications

The device allows bone fragments to be held in place during consolidation. It has been assessed on various joints.

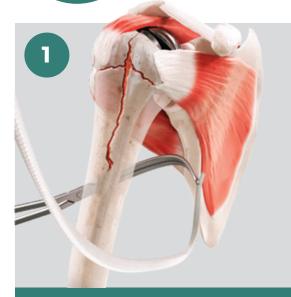
- Reinforcement of osteosynthesis in the revision of shoulder arthroplasty **(3)**.
- Reinforcement of osteosynthesis of femoral fractures (1).
- Reinforcement of osteosynthesis of femoral neck fracture, reinforcement on a prosthesis or a revision **(4)**.





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The technique described is specific to the instrumentation needed to correctly use the product. Comply with the instructions leaflet (2).

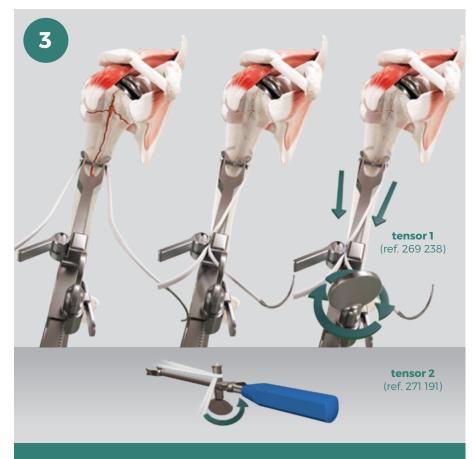


Prior to use, the two crimps are threaded onto the lasso. They must be situated at least 15 cm away from the part of the lasso that has no needle.

The curved clamp is passed behind the zone that will be held with the cerclage in order to grab the end of the lasso that has no needle. The lasso is carefully positioned along the trajectory of the clamp as it is withdrawn.



The lasso is inserted into the two crimps using the needle end.



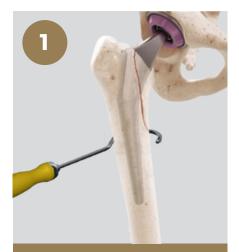
The extremities of the lasso are passed through the holes of the tensor arms. Then locked in tension with the help of the tightening leverage. **Progressively**, the lasso is tensioned by turning clockwise. The tension is checked by the surgeon. It is possible to release the tension unlocking the lateral cleat anti-reverse.



Crimp the crimps using the crimping pliers. Check the fixation. Unlock and remove the lasso from the tensor, then use a scalpel to cut the surplus lasso to roughly 5 mm from the crimps. Depending on the version used, you may be able to use the needle end of the lasso to perform another cerclage. LOWER

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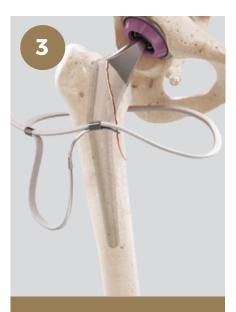
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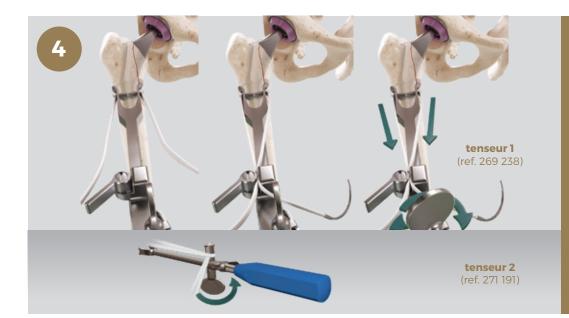
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The curved clamp is passed backward the area to strap. The part without needle is passed through the lower limb curved clamp slot.



The lasso is inserted into the two crimps using the needle end.



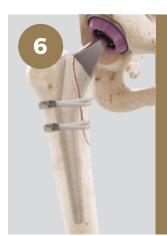
openings of the arms of the tensor and then locked in tension using the tightening lever. The lasso is then **progressively** tightened by turning the tightening knob in a clockwise direction. The tension is controlled by the operator. It is possible to release the tension by unlocking the lateral

The ends of the lasso



Crimp the crimps using the crimping pliers. Check the fixation. Unlock and remove the lasso from the tensor, then use a scalpel to cut the surplus lasso to roughly 5 mm from the crimps. Depending on the version

Depending on the version used, you may be able to use the needle end of the lasso to perform another cerclage.





Recommendation:

for the femur and tibia long bones, it is recommended to wrap the Strapflex twice around the bone for better compression.

REFERENCES

Implants

Reference	Designation	Description
269 022	Strapflex 2 cerclage	Flexible cerclage L600 + 4 crimps (2 cerclages)

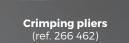


References

- Agarwala S, Menon A, Chaudhari S. Cerclage wiring as an adjunct for the treatment of femur fractures: series of 11 cases. J Orthop Case Rep.2017 ;7(4) :39-43.
- 2. StrapFlex instruction manual.
- 3. Edwards TB, Stuart KD, Trappey GJ et al. Utility of polymer cerclage cables in revision shoulder arthroplasty. Orthopedics. 2011;34(4).
- 4. Ting NT, Wera GD, Levine BR et al. Early experience with a novel non metallic cable in reconstructive hip surgery. Clinical Orthopaedics and Related Research. 2010;468(9):2382-2386.











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