

1. August 2022

High-Tech knitting for surgery

Knitted fabrics are widely used in surgery for various applications and textile implants including, for example, suture materials, meshes for hernia repair, artificial ligaments, knitted grafts and filter for oxygenators. The versatility of Comez knitting machinery allows their users to create numerous types of textiles that meet the many requirements in terms of strength, flexibility, durability and stability of these articles.



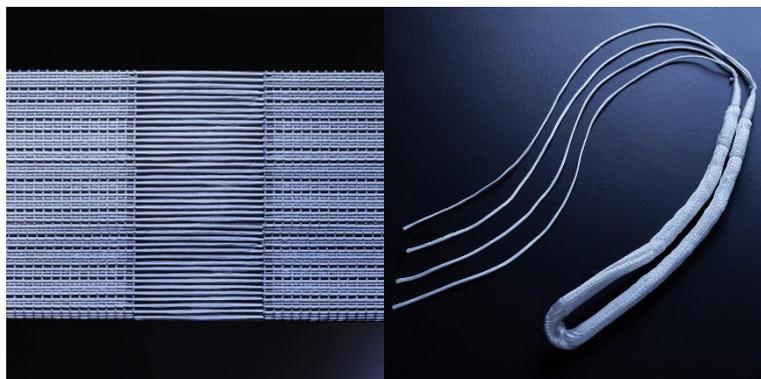
Hernia mesh

Our machines enable the production of hernia meshes with customized designs and countless pore configurations. Depending on the end user's needs, both 2D and 3D meshes can be realized, in monofilament or other materials.

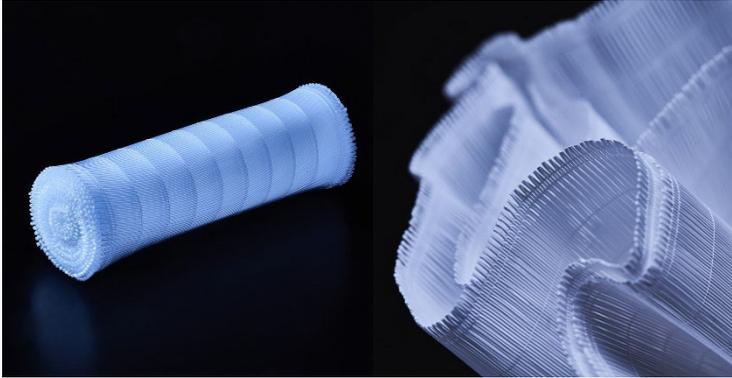
- **End-use:** treatment of abdominal or inguinal hernia
- **Machine model:** [ACOTRONIC 8B/600](#) ▪ [SNB/EL-800](#)

Artificial ligaments

Textile ligaments are used for the reconstruction of damaged ligaments located in different parts of the body. These applications require a special knitted texture by using crochet machines. The layout of the finished product as well as the dimension can vary based on individual requirements and surgical treatments.



- **End-use:** artificial ligament for reconstructing knee ligaments
- **Machine model:** [ACOTRONIC 8B/600](#)



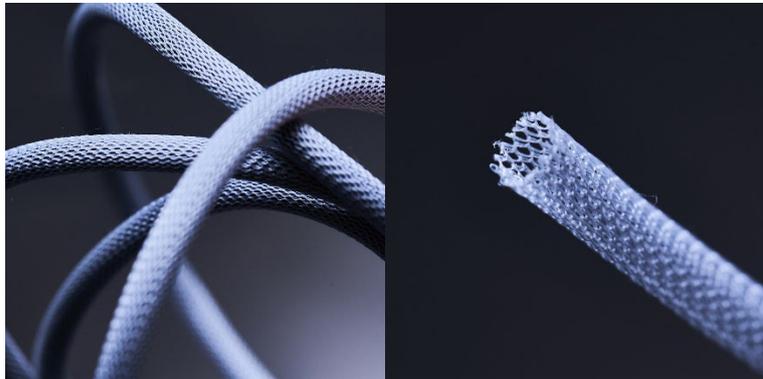
Mat fabric for blood filtration

Membrane filters are used in artificial lungs, blood oxygenators and heat exchangers. These fabrics consist of microcapillaries linked by crochet technology. We designed a specific crochet knitting machine configuration for blood filtration fabrics.

- **End-use:** fabrics for oxygenators and heat exchangers
- **Machine model:** [CT-8B/829](#)

Knitted vein and arteries grafts

Knitted grafts are made of synthetic materials. Artificial textile veins can be produced in different designs and diameters. The main distinction hereby is between linear and bifurcated knitted grafts.



- **End-use:** knitted grafts for replacing damaged sections of arteries and vein
- **Machine model:** [DNB/EL-32](#)

Are you interested on our technologies for medical applications? You find more information on our [website](#) or contact us via your responsible [sales contact](#).