

RUA Medical has a demonstrated history of manufacturing implantable medical textiles and components for the medical device and biotechnology industries. RUA Medical's textile experts will support you from concept generation and rapid prototyping through to large-scale production. Our capabilities include:

MATERIAL

- Access to a full range of input materials, including PET/PP/PTFE/UHMWPE monofilament and multifilament yarns, resorbable/ biodegradable yarns (PGA, PGLA, PLA, PCL), metals (stainless steel, nitinol), PEEK, radio opaque yarns, thermoformable yarns, natural and synthetic silk, high stretch and high shrinkage yarns
- Input material preparation, including yarn extrusion, twisting, texturising, combining, covering, splitting, winding, direct warping, sectional warping, over braiding and heatsetting

TEXTILE MANUFACTURE

- Warp knitting (flat fabric, mesh, 3D, spacer, tubular, bi/trifurcating, lock knit, tapers, netting, pile, velour)
- Weft knitting (circular, flat, v-bed),
- Weaving (flat, 3D, spacer, tubular, bi/trifurcating, tapers, tapes, jacquard, twills, velours, satins)
- Braiding (flat, tubular, single and double bifurcating),
- Knit braiding, crochet knitting, embroidery, non-woven textiles and electrospinning

CLEANING PROCESSES

- Washing, scouring, ultrasonic cleaning, plasma treatment

HEAT SETTING AND ANNEALING PROCESSES

- Low/high heat treatments, sintering, ultrasonic welding

FINISHING AND ASSEMBLY

- Coating, pad printing, sewing, embroidery, needle crimping and adhesive systems
- Cutting processes, including laser-cutting to create intricate designs and structures for streamlined assembly, die and manual cutting
- Full product assembly and packaging
- Blister tray and pouch manufacture and sealing
- Label and barcode printing
- Retail box packing with IFUs and patient labelling

MANAGED STERILISATION SERVICE - Gamma, EtO and electron beam

ADDITIVE MANUFACTURING SERVICES - 3D printing

TESTING SERVICES

- Physical and chemical parameters, microbiological, permeability (water and air), extractables, toxicology, visual (manual, optical CT and SEM) & ISO 7198