

PERFECT CONCEPTS FOR THE MEDICAL TECHNOLOGY

HIGH-TECH TUBING SOLUTIONS

for the medical technology



Your contact

Günter Fersch

Sales Director

Phone: +49 821 27 26 317 E-Mail: GFersch@gremco.de

YOUR PARTNER FOR COMPLETE SOLUTIONS.

We supply both custom-made products and complete system solutions. Our heat-shrink tubing, multi-lumen tubing and extrudates are successfully used in medical technology due to their excellent chemical, thermal and physical properties. By applying highest development standards and using state-of-the-art economical production methods we achieve a product and delivery reliability for which GREMCO is renowned in the industry.

THE SPECIALIST FOR MEDICAL TECHNOLOGY.

In addition to cabling, we are also experts in media-carrying systems. Our product variety includes single or multi-lumen catheter tubes made of all common materials as well as thin, flexible and yet particularly resistant silicone and fabric-reinforced tubes. These are just some of the outstanding products that we manufacture in close cooperation with our international partners.

INTERNATIONAL KNOW-HOW FOR A GLOBAL WORLD.

We combine our competence with the expertise of our long-term cooperation partners in Europe, the USA and Mexico to achieve the highest levels of innovation and quality. Modern production facilities in Europe, the USA, Central America and Asia also guarantee reliable and first-rate quality. Our highly qualified staff is looking forward to assisting you with any technical issues or design challenges you may have.

RESPONSIBILITY FOR PEOPLE AND THE ENVIRONMENT.

We are committed to complying with and where possible exceeding environmental protection laws. We do this not just because we have to but because it is, in our view, the right thing to do. Reducing our environmental impact is an ongoing goal. We are happy to work with customers or suppliers on projects to further this goal. Please get in touch!

GREMCO will always act in accordance with health and safety laws.

For further information regarding GREMCO's product range and potential medical technology applications please do not hesitate to contact us.

We look forward to hearing from you.

J. Fersch

Your GREMCO Team

POLYOLEFIN HEAT-SHRINK TUBING

FITCOTUBE® - thin-wall

	Description	Typical Application	Temp. range	Shrink ratio	Shrink Temperature
FT100 UL	Extra high quality, flexible, flammable tubing, available in various colors.	Insulation, mechanical relief and protection against environ-mental influence.	-55°C +135°C	2:1	+90°C
FT300 UL	Particularly high-quality, flexible, flammable tubing with high shrinkage capacity, available in various colors.	Protection and insulation of parts with large diameter differences.	-55°C +135°C	3:1	+90°C
FT400	Particularly high quality polyolefin heat shrink tubing (flexible and flammable), with very high shrinking capacity.	Excellent for repair, protection and insulation of already assembled cables and parts with very large diameter differences.	-55°C +135°C	4 : 1	+90°C
FT500	Flexible, flame retardant, general purpose tubing, available in various colors.	Sheathing, insulation and marking of wires and cables in the automotive industry.	-55°C +125°C	2 : 1	+90°C
FT700	Radiation cross-linked, infusible heat shrink tubing with glossy surface.	Protection of components where a smooth surface quality is required, e.g. anchor cables of seat belts.	-55°C +105°C	2:1	+120°C

ADHESIVE LINED POLYOLEFIN HEAT-SHRINK TUBING

FITCOTUBE® - dual-wall

	Description	Typical Application	Temp. range	Shrink ratio	Shrink Temperature
FT800	Radiation crosslinked heat shrink tubing, adhesive coated, with high shrinking capacity.	Highly suitable for moisture and waterproof encap- sulation of wires, cables, crimp and plug connectors and other electrical and mechanical components.	-55°C +125°C	3:1 and 4:1	+110°C
FT888	Radiation crosslinked commercial heat shrink tubing made of flexible, adhesive coated material with high shrinking capacity.	Very suitable for moisture and waterproof encap- sulation of wires, cables, crimp and plug connectors and other electrical and mechanical components.	-55°C +110°C	3:1 and 4:1	+110°C
FT-WB	Flame retardant, radiation cured heat shrink tubing with very high hot melt adhesive and high shrink capacity.	For liquid-tight encapsula- tion, sealing and insulation of electrical connections and components in the automotive industry.	-40°C +130°C	4 :1	+120°C
FT-WB-CP	Transparent polyolefin tubing with high shrink ratio and thick black hot melt adhesive inner liner.	Ideal for controllable sealing of electrical connections and components in the automotive industry.	-40°C +125°C	4,5 : 1	+150°C
FT-WB-HT	Flame retardant polyolefin - high temperature tubing with high shrink ratio and thick hot melt adhesive inner liner.	Ideal for electrical connections and components in the automotive industry.	-40°C +150°C	4,5:1	+150°C

FLUOROPOLYMER AND SILICONE HEAT-SHRINK TUBING

FITCOTUBE® - thin-wall / dual-wall

	Description	Typical Application	Temp. range	Shrink ratio	Shrink Temperature
Thin-wall					
FT175 UL	Semi-rigid, highly abrasion-re- sistant, non-flammable Kynar® tubing.	Protection at high temperature as well as chemical liquids, e.g. in fuel tanks.	-55° +175°	2:1	+170°C
FT190 UL, CSA	Semi-rigid, abrasion resistant, flame retardant, high temperature PVDF heat shrink tubing for reliable insulation.	Protection of soldered and crimped connections. Has a high chemical stability.	-55°C +190°C	2 :1	+175°C
TF/TF-R	High temperature, chemical resistant heat shrinkable tubing made of modified PTFE.	Used for very high ambient temperatures and protection of wires and cables against aggressive chemical substances.	-67°C +250°C	1,5 - 3,5 : 1	+327°C
Dual-wall					
TF/FP (A-Z)	Double-walled, high-tem- perature resistant heat shrinkable tubing made of PTFE with melting FEP core.	For sealing and encapsulating components with the highest requirements for temperature resistance and/or chemical resistance to very aggressive substances.	-200°C +190°C	1,5 : 1	+346°C +354°C
Silicone					
FT250	High temperature resistant, halogen-free, very flexible heat shrink tubing made of radiation crosslinked silicone. Chemically resistant.	Extremely flexible, mechanically strong protective hose for use in very wide temperature ranges.	-50°C +200°C	2:1	+140°C

MECHANICAL PROTECTION SLEEVES

FITCOFLEX®

	Description	Typical Application	Temp. range	Diameter range
FITCOFLEX® B-PET22	Self-extinguishing braided sleeve made of 0.22 mm thick PET monofilaments.	Bundling and protection of cabling, test cordsets and media-carrying cables. Provides good abrasion resistance and excellent protection against oil, or other chemical substances.	-70°C +150°C	3,0 mm 45 mm
FITCOFLEX® I-PET25	Halogen-free, self-extinguishing fabric protection sleeve made of 0.25 mm thick PET monofilaments.	Bundling and protection of cabling, test cordsets and media-carrying cables. Provides good abrasion resistance and excellent protection against oil, or other chemical substances.	-70°C +150°C	3,0 mm 45 mm
FITCOFLEX® I-PET35	Halogen-free, fabric protection sleeve made of 0.25 mm thick PET monofilaments with high surface coverage.	Bundling and protection of cabling, test harnesses at high temperature resistance. For universal use with a large number of diameter ranges thanks to high expansion rate.	-55°C +150°C	3,0 mm 86 mm
FITCOFLEX® I-PA25	Mechanical, halogen-free fabric protection sleeve made of polyamide 6.6 with very high expansion rate.	Bundling and protection of cabling, test cordsets and media-carrying cables. Provides good abrasion resistance and excellent protection against oil, or other chemical substances.	-40°C +125°C	25 mm 32 mm
FITCOFLEX® I-PA35	Mechanical, self-extinguishing fabric protection sleeve made of polyamide 6.6 with high surface coverage.	Bundling and protection of wire rope hoists, cable harnesses and hose and pipe lines.	-55°C +125°C	3,0 mm 87 mm
FITCOFLEX® I-WRAP	Mechanical, halogen-free and tightly woven tape made of PET monofilament and multifilament fibers, which allows subsequent installation or repair due to its open tube shape.	Bundling and mechanical protection of already assembled cable, line as well as fluid system.	-55°C +150°C	3,0 mm 50 mm

TUBES FOR MEDICAL APPLICATIONS

FITCO®MED

	Characteristics	Typical Application	Material
Fitco®Med			
Multilumen tubes	Available as reinforced and unreinforced, and with MultiDurometer. They are sterilizable torosion-resistant and can be and can also be customized on request.	Use with catheters (central venous), in urology/cardiology, dialysis, drainage and endocsopy.	In all common materials
Endoscopy and catheter tubes	Very good sliding properties and highest possible flexibility.	Application in diagnostic and therapeutic measures.	In all common materials
Corrugated pipe	The corrugated shape of the surface of the hose gives the dimensionally stable material a certain flexibility and freedom of movement.	Optimal abrasion and chafe protection of cables in places, which require flexibility.	PP, PA6, PA12, Arnitel, PFA
Extrudates fro	m Fluoropolymers		
FITCO® Iso PTFE	Tight tolerance extrusions made of PTFE, with high temperature resistance as well as extreme chemical chemical resistance and excellent sliding properties. Available with and without USP Class VI available.	Various applications with high requirements on sliding properties.	PTFE
FITCO® Iso FEP	Tight tolerance extrusions from FEP with high surface quality and wide temperature application range.	Extremely flexible hoses for transporting aggressive liquids and gases.	FEP
FITCO® Iso PFA	Similar to PTFE, but produced by the melt extrusion process, with excellent transparency/clarity, flexibility and good sliding properties.	Versatile and is suitable for almost all solid, liquid and gaseous media. Furthermore, the PFA tubing is almost transparent, which allows fluids to be observed precisely.	PFA
Pressure tubes	3		
FITCO® PE-SIL	Transparent silicone hose with polyester yarn braiding and high tear tear resistance.	For medical applications, where pressure or gases need to be transported.	Silicone

PRODUCTION ACCESSOIRES FOR MEDICAL APPLICATIONS

WIRES/CABLES AND PROCESSING EQUIPMENT

	Eigenschaften	Typische Anwendungen	Temp bereich	Material
Wires/cables				
Wires & Cables	Very flexible, biocompatible electrical wires and cables with very good chemical resistance. Autoclavable as well as radiopaque.	Use with catheters, in endoscopy cables, hybrid cables, video cables for endoscopy, and ECG cables in vivo/ex-vivo.	-75°C +260°C (depending on material)	In all common materials
Coaxial cable	Coaxial cables, micro-coaxial cables and miniature coaxial cables according to common RG specification and different, especially for the use in customized medical applications.	High frequency components such as audio, video and multimedia systems.	-75°C +200°C (depending on material)	
Processing equ	ipment			
HG2520E HG2620E (2300 W) Hot air blower	Electronically controlled hot air blower with brushless motor, digital temperature adjustment via joystick. Air volume regulation from 150 - 500 l/min. Including LCD display and residual heat indicator. (approx. 10,000 h operating time).	Processing of heat shrinkable tubing and soldering sleeves, shrinking-in of electronic components. Suitable for construction sites.	+50°C +700°C	Hot air gun, Hot air bar tool
Mecalbi STCS series shrink fit machines	Mecalbi specializes in the production and development of customized hot air and infrared shrink systems. All devices have a control module in which process parameters such as temperature or shrink time can be set.	Depending on the machine type, one or more shrink sleeves can be processed simultaneously. Thus optimally suited for areas of application with very specific application requirements.		Heat-Shrink Oven, Heat- Shrink System
SQUIX 4M 300 Thermal transfer printer	Prints with a print resolution of 300 or 600 dpi, barcodes, serial numbers, markings or logos in excellent quality on shrink sleeves.	For the printing of shrink sleeves in the industrial environment environment and due to its centered material centered material guide and does not printhead alignment.		Printer for Heat- Shrink Tubing

COMPONENTS FOR HIGH-TECH SOLUTIONS.

INNOVATIVE PRODUCTS. PROVEN QUALITY.

Since 1990, we have been advising and supplying our customers in all areas of high-quality and sophisticated high-tech solutions. GREMCO stands for modern manufacturing methods, best quality management and fast service - with customers across Germany as well as many more countries.

MEDICAL WIRES / CABLES.
MULTI-LUMEN TUBES.
ENDOSCOPY AND CATHETER.
FLUOROPOLYMER EXTRUDATES.
HEAT-SHRINK TUBING.

"We are proud of our long-term experience and well-founded knowledge in medical technology."

JÜRGEN WEBER, SALES ENGINEER



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OUR COMPANY AT A GLANCE

- International corporation
- Production facilities in Europe, USA, Mexico and Asia
- High environmental standards
- FITCO® trademark
- Quality management according to ISO 9001:2015
- High material competence
- Complete system solutions
- Custom-made / Bespoke products

