



## TROGE MEDICAL SURGICAL SUTURES

In more than 110 countries around the world, the name TROGE MEDICAL stands for the highest quality at competitive prices.

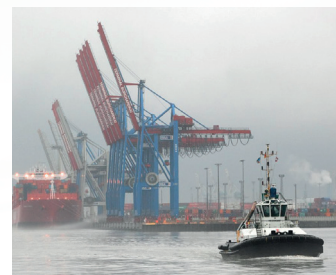
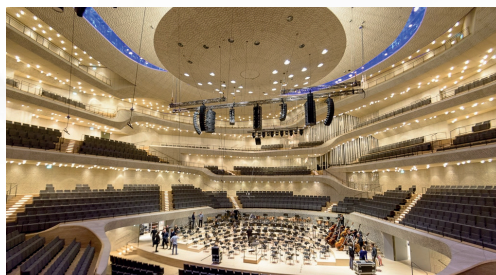
TROGE MEDICAL GmbH was established in 1986 and is recognised today as a world-wide supplier of medical devices including surgical sutures and pharmaceutical products. The company is based in Hamburg, the third largest container port in Europe, giving us an excellent vantage point to arrange logistics. We work with approved wholesalers and selected distribution partners in over 70 countries. These wholesalers distribute to hospitals, pharmacies and numerous aid organisations in their respective countries.

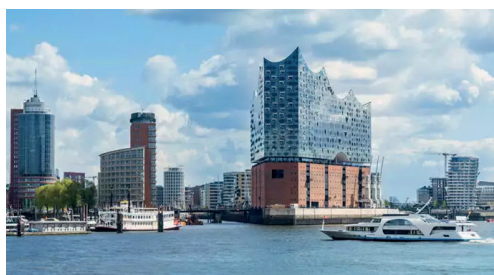
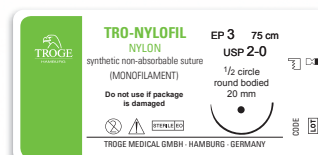
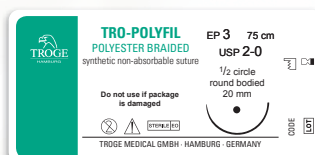
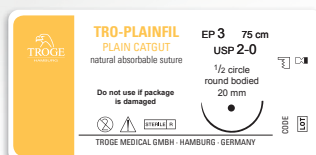
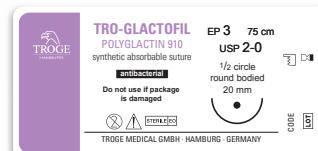
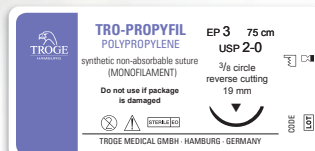
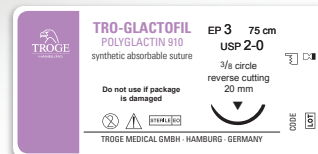
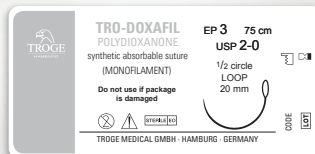
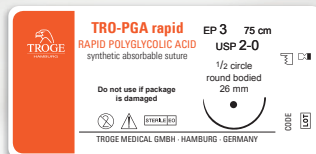
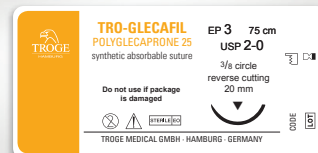
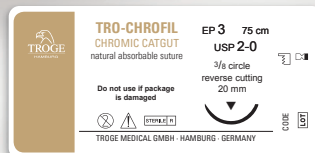
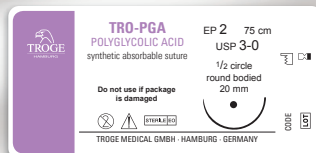
Our insistence on high-quality production is a matter of course for a company operating in a sensitive area, since people all over the world trust us, and this trust is our most important asset. We highly value the continuous improvement of our products to suit medical needs.

### HIGHEST QUALITY AND SAFETY

TROGE MEDICAL has always complied with international quality standards such as EN ISO 9001 and EN ISO 13485 as well as the procedures of our German notified body TÜV NORD CERT. Our products are recognised by internationally approved standards such as EP, BP, USP as well as DIN, EN and ISO. All materials used and finished products are subjected to stringent quality control by a dedicated team. We take a 'beyond compliance' approach to our Quality Management Systems and Quality Assurance initiatives.


















With this catalogue we would like to present to you our extensive range of high quality TROGE MEDICAL SURGICAL SUTURE materials.















## absorbable sutures

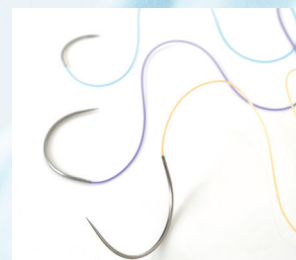
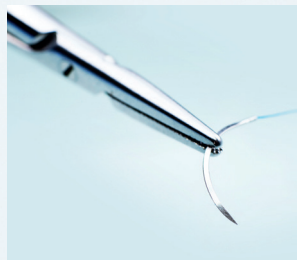
Brand Name/ Material	Structure	Range of Size (USP)	Color	Tensile strength retention days	Indication
<b>TRO-PGA</b> Polyglycolic Acid	Braided 	USP 2 – USP 10-0	Violet or Undyed  	14 days post implantation 75%  21 days post implantation 40%	<ul style="list-style-type: none"> <li>General surgery</li> <li>Gastroenterology</li> <li>Urology</li> <li>Plastic surgery</li> <li>Subcutaneous and intracutaneous closure</li> <li>Gynaecology</li> <li>Ophthalmology</li> <li>Paediatric surgery</li> <li>Ligatures</li> </ul>
<b>TRO-PGA rapid</b> Polyglycolic Acid	Braided 	USP 2 – USP 8-0	Undyed 	7 days post implantation 55%  14 days post implantation 20%  21 days post implantation 40%	<ul style="list-style-type: none"> <li>Subcutaneous and intracutaneous closure</li> <li>Gynaecology</li> <li>Odontology</li> <li>Paediatric surgery</li> <li>Ophthalmology</li> <li>Ligatures</li> </ul>
<b>TRO-GLACTOFIL</b> Polyglactin 910*	Braided 	USP 2 – USP 8-0	Violet 	14 days post implantation 75%  21 days post implantation 40%  28 days post implantation 20%	<ul style="list-style-type: none"> <li>General surgery</li> <li>Gastroenterology</li> <li>Urology</li> <li>Plastic surgery</li> <li>Subcutaneous and intracutaneous closure</li> <li>Gynaecology</li> <li>Odontology</li> <li>Paediatric surgery</li> <li>Ophthalmology</li> <li>Ligatures</li> </ul>
<b>TRO-DOXAFIL</b> Polydioxanone	Monofilament 	USP 2 – USP 7-0	Violet or Undyed  	14 days post implantation 75%  28 days post implantation 65%  42 days post implantation 50%	<ul style="list-style-type: none"> <li>General soft tissue approximation, especially in cases where an extended wound support of more than 4 weeks is desirable</li> <li>Paediatric cardiovascular surgery</li> <li>Suturing of autologous peripheral vessels</li> </ul>
<b>TRO-GLECAFIL</b> Polyglecaprone 25 (glycolide-caprolactone)	Monofilament 	USP 2 – USP 6-0	Violet or Undyed  	7 days post implantation 65%  14 days post implantation 40%	<ul style="list-style-type: none"> <li>Subcutaneous and intracutaneous closure</li> <li>Gynaecology</li> <li>Odontology</li> <li>Paediatric surgery</li> <li>Ophthalmology</li> <li>Ligatures</li> </ul>
<b>TRO-PLAINFIL</b> Plain Catgut	Twisted/ Natural 	USP 2 – USP 6-0	Yellow 	7–10 days	<ul style="list-style-type: none"> <li>General, soft tissue approximation and/or ligation</li> <li>Ophthalmic procedures, but not for use in cardiovascular and neurological procedures</li> </ul>
<b>TRO-CHROFIL</b> Chromic Catgut	Braided 	USP 2 – USP 6-0	Brown 	21–28 days	

\* Available also as TRO-GLACTOFIL antibacterial

















## non-absorbable sutures

Brand Name/ Material	Structure	Range of Size (USP)	Color	Tensile strength	Indication
<b>TRO-PROPYFIL</b> Polypropylene	Monofilament 	USP 2 – USP 10-0	Blue 	No loss of tensile strength	<ul style="list-style-type: none"> <li>■ Vascular and cardiovascular surgery</li> <li>■ Skin closure</li> <li>■ Plastic surgery</li> <li>■ Ophthalmology</li> <li>■ Neurosurgery</li> </ul>
<b>TRO-NYLOFIL</b> Polyamide 6 and 6.6	Monofilament, Braided 	USP 2- USP 6/0	Blue or Black 	15–20% loss of tensile strength per year	<ul style="list-style-type: none"> <li>■ Skin closure and plastic surgery</li> <li>■ Micro-vascular surgery</li> <li>■ Ophthalmology</li> <li>■ Orthopaedics</li> </ul>
<b>TRO-POLYFIL</b> Polyethylene Terephthalate	Braided 	USP 5-0 – USP 7-0	Green or White 	Indefinite/long period	<ul style="list-style-type: none"> <li>■ Skin closure</li> <li>■ Cardiovascular surgery</li> <li>■ Vascular surgery</li> <li>■ Ophthalmology</li> <li>■ Orthopaedics</li> <li>■ Gastrointestinal surgery</li> <li>■ Neurosurgery</li> </ul>
<b>TRO-SILKOFIL</b> Natural Silk	Braided, Twisted 	USP 6-0 USP 8-0 (Braided Silk) USP 8-0 – USP 9-0 (Twisted Silk)	Black (Braided Silk) Blue (Twisted Silk) 	Gradual loss of tensile strength over two years	<ul style="list-style-type: none"> <li>■ General surgery</li> <li>■ Skin Closure</li> <li>■ Oral surgery</li> <li>■ Neurosurgery</li> <li>■ Ligatures (Braided Silk)</li> </ul>



## Needle Shape

	Tip shape	Needle Cross-section	Application
Taper point/Round Bodied			Gentle separation of fibrous tissue (aponeurosis, biliary tract, dura, fascia, gastrointestinal tract, laparoscopy, muscle, myocardium, nerve, peritoneum, pleura, subcutaneous fat, urogenital tract, vessels, valve)
Cutting	Conventional Cutting 		skin, sternum
	Reverse Cutting 		Cutting edge on outer curve. For tough, difficult-to-penetrate tissues. (fascia, ligament, nasal cavity, oral, mucosa, pharynx, skin, tendon sheath)
Premium Cutting/Extra sharp			skin (plastic or cosmetic)
Blunt			Blunt dissection (friable tissue), cervix (ligating incompetent cervix), fascia, intestine, kidney, liver, spleen
Taper Cut			Easy penetration of dense tough tissue
Spatula			eye (primary application)

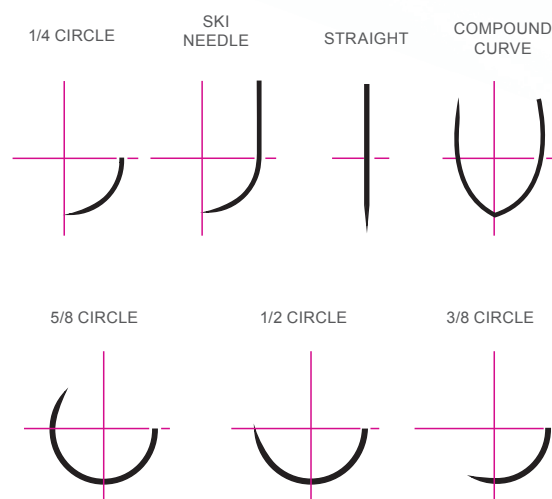
## Suture Size

USP	Ph Eur. (Metric)	Diameter (mm)
10-0	0.2	0.020–0.029
9-0	0.3	0.030–0.039
8-0	0.4	0.040–0.049
7-0	0.5	0.050–0.069
6-0	0.7	0.070–0.099
5-0	1	0.100–0.149
4-0	1.5	0.150–0.199
3-0	2	0.200–0.249
2-0	3	0.300–0.349
0	3.5	0.350–0.399
1	4	0.400–0.499
2	5	0.500–0.599

Please note: USP values differ for Catgut Sutures

## Needle Curvature

The choice of needle shape is frequently governed by the accessibility of the tissue to be sutured, and normally the more confined the operative site the greater the curvature required. The basic shapes involved are:



## Suture

## Needle

absorbable sutures

non-absorbable sutures

TRO-PGA  
Polyglycolic Acid

PGA

Length  
cm

15

1

Diameter  
USP

10-0

100

TRO-PGA rapid  
Polyglycolic Acid

PGAR

20

2

9-0

90

8-0

80

TRO-GLACTOFIL  
Polyglactin 910

PGLA\*

30

3

7-0

70

45

4

6-0

60

TRO-DOXAFIL  
Polydioxanone

PDO

60

5

5-0

50

4-0

40

TRO-GLECAFIL  
Polyglecaprone 25

PGCL

70

6

3-0

30

75

7

2-0

20

TRO-CHROFIL  
Chromic catgut

CC

90

8

0

10

TRO-PLAINFIL  
Plain catgut

CP

100

9

1

01

2

02

TRO-PROPYFIL  
Polypropylene

PM

150

12

TRO-NYLOFIL  
Nylon

NL

180

13

TRO-SILKOFIL  
Silk

SK

TRO-POLYFIL  
Polyester

PB

CODE

CODE

CODE

Length  
mm

6

6

6.5

6.5

7

7

8

8

8.5

8.5

10

10

11

11

12

12

13

13

14

14

15

15

16

16

17

17

18

18

19

19

20

20

22

22

24

24

25

25

26

26

27

27

28

28

30

30

35

35

38

38

39

39

40

40

45

45

48

48

50

50

55

55

60

60

65

65

70

70

75

75

80

80

90

90

Curvature

straight

A

1/2 circle

B

1/2 circle

(double)

C

1/4 circle

D

1/4 circle

(double)

E

3/8 circle

F

3/8 circle

(double)

G

5/8 circle

H

5/8 circle

(double)

I

J shape

J

Compound  
Curve

K

Cross-section

round

bodied

0

round

bodied

heavy

1

curved

cutting

2

curved

cutting

heavy

3

reverse

cutting

4

reverse

cutting

heavy

5

tapercut

6

tapercut

heavy

7

micro-point  
spatula

curved

8

blunt

taper point

9

blunt taper

point

heavy

10

straight

cutting

11

\*Also available as PGLA antibacterial

Further specifications available on request

Example Product Code:

PGA

2

10

35

B

0

CODE

PGA21035B0



Related TROGE MEDICAL products:

## TRO-MICROCISION

SURGICAL SCALPELS



Quality: DIN EN 27740 ( = ISO 7740 )

TRO-MICROCISION surgical scalpels consist of a plastic handle to which a blade of carbon steel is securely fixed. The precision blades show durable sharpness also during long incisions. TRO-MICROCISION surgical scalpels are sterile, pyrogen-free and atoxic. Also available with stainless steel blade. For single use.

MATERIAL: PVC, carbon / stainless steel

STANDARD SIZES: 10 | 11 | 12 | 15 | 18 | 20 | 21 | 22 | 23 | 24 other sizes available

## TRO-MICROCUT/ TRO-MICROGRIP

SURGICAL BLADES/SCALPEL HANDLES



Quality: DIN EN 27740 ( = ISO 7740 )

TRO-MICROCUT surgical blades are made of carbon steel. The precision blades show durable sharpness also during long incisions. Sterile, pyrogen-free and atoxic. Also available in stainless steel. For single use. For smooth and safe surgery incisions. TRO-MICROGRIP scalpel handles are made of stainless steel and can be reused. They are supplied non sterile.

SIZES – SCALPEL HANDLES:

No. 3 (for blades no. 10 – 15)

No. 4 (for blades no. 18 – 25)

MATERIAL: Carbon / stainless steel

STANDARD SIZES – BLADES: 10 | 11 | 12 | 15 | 18 | 20 | 21 | 22 | 23 | 24  
other sizes available

## TRO-SENSOSURGE

SURGICAL GLOVES



QUALITY: ASTM D 3577, EN 455

TRO-SENSOSURGE surgical gloves are made of soft latex material and are sterile. Due to their excellent elasticity they are extremely resistant and show a high tensile strength. They are shaped anatomically and lightly powdered with fully absorbable corn starch USP, ensuring best comfort also in longlasting procedures. The microrough surface enables improved instrument handling maintaining maximum sensitivity. Also available, TRO-SENSOSURGE plus: powder free, polymer-coated surgical gloves with extra long cuff. For single use in the operating room or catheterisations.

MATERIAL: Latex

SIZES: 6 | 6.5 | 7 | 7.5 | 8 | 8.5 | 9

# CARING FOR GLOBAL HEALTH