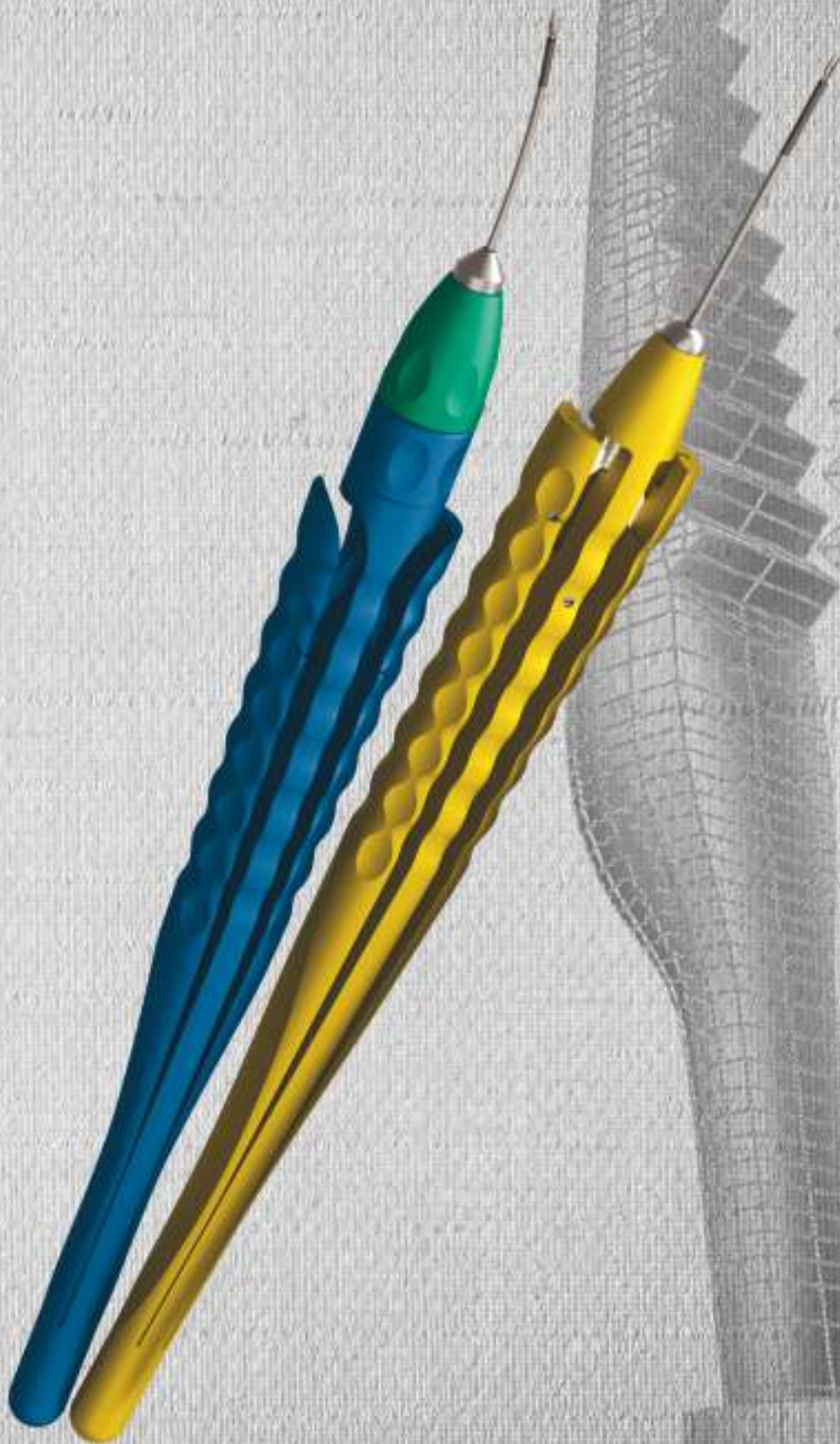
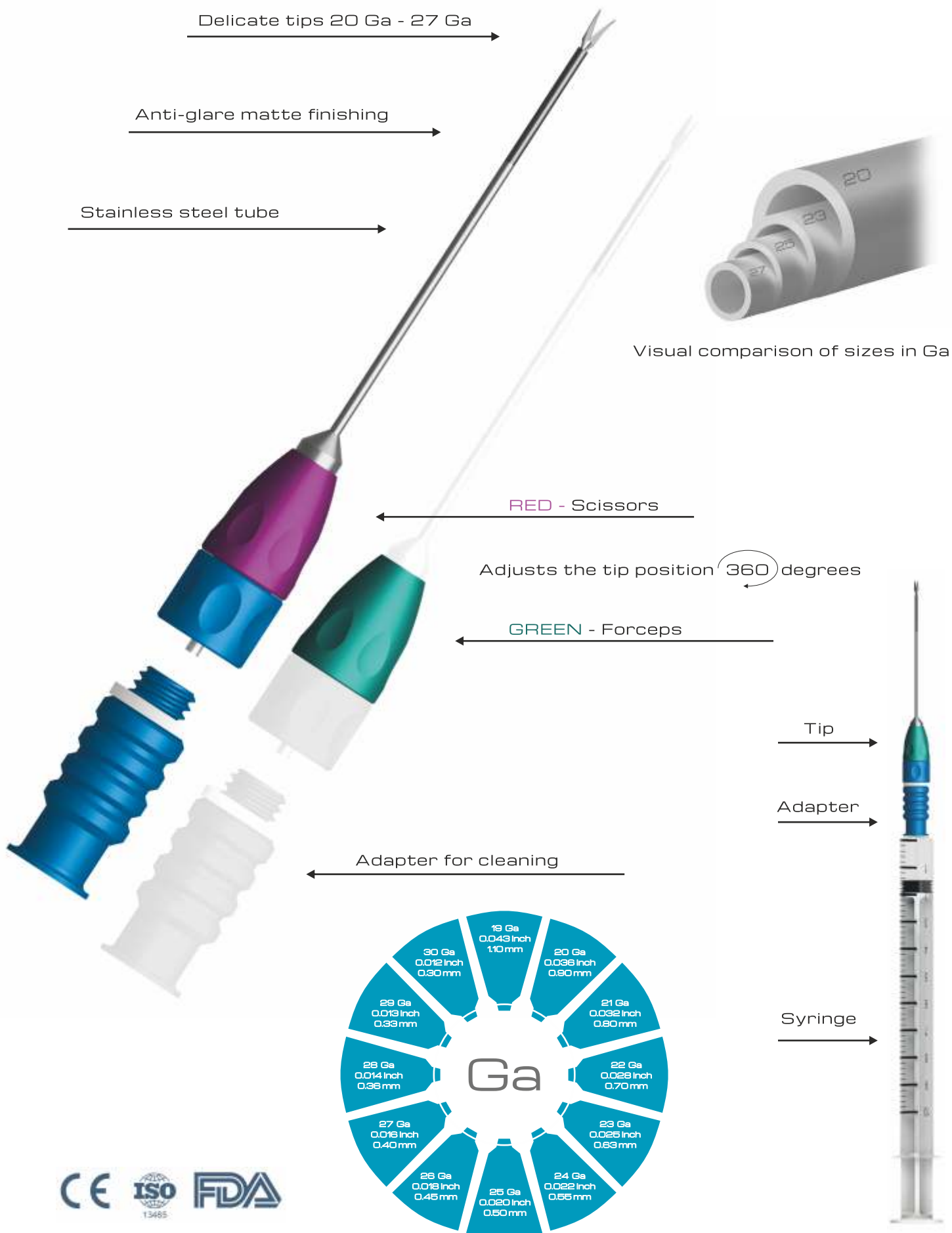


OPHTHALMIC MICROINVASIVE INSTRUMENTS





HANDLES FOR MICROINVASIVE INSTRUMENTS

New high-technology ergonomic handle.
The optimal handle design allows you to
rotate the instruments 360 degrees.

Scale  1:1

Changeable instruments



Replaceable tips are attached
to the handle by means of a thread.

Monoblock instruments



Solid non-detacheble unit.



MICROINVASIVE INSTRUMENTS

FOR ANTERIOR SEGMENT

KERSHNER CAPSULORHEXIS FORCEPS SHORT TIPS



23 Ga TMV 101

KERSHNER CAPSULORHEXIS FORCEPS



23 Ga TMV 554

FINE-IKEDA CAPSULORHEXIS FORCEPS



23 Ga TMV 102

IKEDA MICRO CAPSULORHEXIS FORCEPS



23 Ga TMV 103

SHUHAEV CAPSULORHEXIS FORCEPS



23 Ga TMV 556

CAPSULORRHEXIS FORCEPS WITH VIEW PORT



23 Ga TMV 558

KERSHNER CAPSULORHEXIS FORCEPS SHORT TIPS



25 Ga TMV 551

KERSHNER CAPSULORHEXIS FORCEPS



25 Ga TMV 555

FINE-IKEDA CAPSULORHEXIS FORCEPS



25 Ga TMV 552

IKEDA MICRO CAPSULORHEXIS FORCEPS



25 Ga TMV 553

SHUHAEV CAPSULORHEXIS FORCEPS



25 Ga TMV 557

KAWAI CAPSULORHEXIS FORCEPS



25 Ga TMV 559



"CROCODILE" FORCEPS



23 Ga TMV 170 - curved tube 17 mm

FORCEPS FOR CORNEAL ENDOTHELIUM IMPLANTATION



23 Ga TMV 174

MICROTYING FORCEPS



23 Ga TMV 186

MICROINVASIV ENDOTHELIAL FORCEPS



23 Ga TMF 374

ICL LOADING FORCEPS



20 Ga TMV 180

MICRO TRABECULECTOMY PUNCH



20 Ga TMV 191

NUCLEUS SPLITTER



23 Ga TMV 172

FORCEPS FOR FOLDABLE LENS REMOVAL IOL



20 Ga TMV 182

MICRONEEDLE HOLDER



23 Ga TMV 187

IOL GRASPING FORCEPS



21 Ga TMV 185

FORCEPS FOR IMPLANTATION ICL IOL



20 Ga TMV 181

"CROCODILE" FORCEPS



23 Ga TMV 190 - straight tube 21 mm

CAPSULOTOMY SCISSORS RIGHT



23Ga TMV 244

CAPSULOTOMY SCISSORS LEFT



23Ga TMV 245

CAPSULOTOMY SCISSORS



23Ga TMV 243

IOL CUTTER



19Ga TMV 282

IRIDECTOMY SCISSORS



23 Ga TMV 343 -Straight tube 21 mm

CAPSULOTOMY SCISSORS RIGHT



20 Ga TMV 254

CAPSULOTOMY SCISSORS LEFT



20 Ga TMV 255

CAPSULOTOMY STRAIGHT SCISSORS



23Ga TMV 246

IOL CUTTER



19Ga TMV 283



IOL

IOL

KERSHNER CAPSULORHEXIS FORCEPS SHORT TIPS



23 Ga TMF 140

KERSHNER CAPSULORHEXIS FORCEPS



23 Ga TMV 554M

SCHUHADEV CAPSULORHEXIS FORCEPS



23 Ga TMF 141

"CROCODILE" FORCEPS



23 Ga TMF 147

CAPSULOTOMY SCISSORS



23 Ga TMF 143

CAPSULOTOMY SCISSORS LEFT



23 Ga TMF 145

KERSHNER CAPSULORHEXIS FORCEPS SHORT TIPS



25 Ga TMV 551M

KERSHNER CAPSULORHEXIS FORCEPS



25 Ga TMV 555M

IKEDA MICRO CAPSULORHEXIS FORCEPS



23 Ga TMF 142

ENDOTHELIALRHESIS FORCEPS



23 Ga TMF 149

CAPSULOTOMY SCISSORS RIGHT



23 Ga TMF 144

CAPSULOTOMY STRAIGHT SCISSORS



23 Ga TMF 146





MICROINVASIVE INSTRUMENTS

FOR POSTERIOR SEGMENT

GRIPPING STRAIGHT FORCEPS



20 Ga TMV 111
23 Ga TMV 351
25 Ga TMV 501
27 Ga TMV 701

"CROCODILE" FORCEPS



20 Ga TMV 126
23 Ga TMV 352
25 Ga TMV 502

PICK FORCEPS



20 Ga TMV 105
23 Ga TMV 353
25 Ga TMV 503

PICK

END GRIPPING FORCEPS



23 Ga TMV 354
25 Ga TMV 504
27 Ga TMV 704

ILM

ASYMMETRICAL FORCEPS



20 Ga TMV 165
23 Ga TMV 355
25 Ga TMV 505

ILM

END GRASPING FORCEPS



23 Ga TMV 356
25 Ga TMV 506
27 Ga TMV 706

ILM

END GRIPPING FORCEPS



20 Ga TMV 157
23 Ga TMV 357
25 Ga TMV 507
27 Ga TMV 707

ILM

END GRASPING FORCEPS



23 Ga TMV 358
25 Ga TMV 508

ILM

MACULORHEXIS FORCEPS



25 Ga TMV 508

ILM

MACULORHEXIS FORCEPS



23 Ga TMV 179

GRIPPING FORCEPS



20 Ga TMV 178

SUBRETINAL FORCEPS



20 Ga TMV 118

GRIPPING FORCEPS ANGLED WITH PLATFORM



20 Ga TMV 123

GRIPPING FORCEPS ANGLED



23 Ga TMV 131

MACULORHEXIS SCISSORS



23 Ga TMV 142

GRIPPING FORCEPS WITH PLATFORM



20 Ga TMV 135
23 Ga TMV 136
25 Ga TMV 516

SUBRETINAL FORCEPS



20 Ga TMV 121

PIC FORCEPS



23 Ga TMV 110

END GRASPING FORCEPS WITH TRIANGULAR PLATFORM



20 Ga TMV 134

GRIPPING FORCEPS STRAIGHT



20 Ga TMV 154



VERTICAL SCISSORS



20Ga TMV 226



VERTICAL SCISSORS



25Ga TMV 401



CURVED SUBRETINAL SCISSORS



23Ga TMV 342



STRAIGHT SCISSORS



20Ga TMV 203



STRAIGHT SCISSORS



25Ga TMV 404



VERTICAL SCISSORS



20Ga TMV 242



VERTICAL SCISSORS



23Ga TMV 341



CURVED SUBRETINAL SCISSORS



20Ga TMV 248



CURVED SUBRETINAL SCISSORS



25Ga TMV 402



STRAIGHT SCISSORS



23Ga TMV 344



HORIZONTAL SYMMETRICAL SCISSORS



20Ga TMV 214



FOREIGN BODY REMOVAL FORCEPS



19 Ga TMV 144

FOREIGN BODY REMOVAL FORCEPS



19 Ga TMV 146

FOREIGN BODY REMOVAL FORCEPS



23 Ga TMV 361

FOREIGN BODY REMOVAL FORCEPS



19 Ga TMV 149

HORIZONTAL SCISSORS



20 Ga TMV 215 | Compatible with
23 Ga TMV 217 | handle TVN 002 only

FOREIGN BODY REMOVAL FORCEPS



20 Ga TMV 143

FOREIGN BODY REMOVAL FORCEPS



20 Ga TMV 145

FOREIGN BODY REMOVAL FORCEPS



20 Ga TMV 148



GRIPPING STRAIGHT FORCEPS



20 Ga TMV 111M
23 Ga TMV 351M
25 Ga TMV 501M
27 Ga TMV 701M

"CROCODILE" FORCEPS



20 Ga TMV 126M
23 Ga TMV 352M
25 Ga TMV 502M

PICK FORCEPS



PICK

20 Ga TMV 105M
23 Ga TMV 353M
25 Ga TMV 503M

END GRIPPING FORCEPS



ILM

23 Ga TMV 354M
25 Ga TMV 504M
27 Ga TMV 704M

ASYMMETRICAL FORCEPS



ILM

20 Ga TMV 165M
23 Ga TMV 355M
25 Ga TMV 505M

END GRASPING FORCEPS



ILM

23 Ga TMV 356M
25 Ga TMV 506M
27 Ga TMV 706M

END GRIPPING FORCEPS



ILM

20 Ga TMV 157M
23 Ga TMV 357M
25 Ga TMV 507M
27 Ga TMV 707M

END GRASPING FORCEPS



ILM

23 Ga TMV 359M
25 Ga TMV 509M

MACULORHEXIS FORCEPS



ILM

25 Ga TMV 508M

MACULORHEXIS FORCEPS



23 Ga TMV 179M



VERTICAL SCISSORS



20Ga TMV 226M

VERTICAL SCISSORS



25Ga TMV 401M

CURVED SUBRETINAL SCISSORS



23Ga TMV 342M

STRAIGHT SCISSORS



20Ga TMV 203M

STRAIGHT SCISSORS



25Ga TMV 404M

VERTICAL SCISSORS



20Ga TMV 242M

VERTICAL SCISSORS



23Ga TMV 341M

CURVED SUBRETINAL SCISSORS



20Ga TMV 248M

CURVED SUBRETINAL SCISSORS



25Ga TMV 402M

STRAIGHT SCISSORS



23Ga TMV 344M

HORIZONTAL SYMMETRICAL SCISSORS



20Ga TMV 214M



MEMBRANE SPATULA

23 Ga TMT 201
25 Ga TMT 202
27 Ga TMT 205



MEMBRANE SPATULA

23 Ga TMT 203
25 Ga TMT 204



HANDLE FOR MICROSPATULA BLUE COLOR 23 Ga



HANDLE FOR MICROSPATULA YELLOW COLOR 25 Ga



TITANIUM BACKFLUSH HANDLE PASSIVE ASPIRATION

TMN 111



TITANIUM BACKFLUSH HANDLE ACTIVE ASPIRATION

TMN 112



CANNULA FOR SILICONE OIL WITH TUBE



23 Ga TMC 175
25 Ga TMC 176

CANNULA FOR SILICONE OIL



23 Ga TMC 177
25 Ga TMC 178

CANNULA FOR OUT SILICONE OIL



TMC 179

RETINAL CANNULA STRAIGHT



23 Ga TMC 180
25 Ga TMC 181

ADAPTER - PORT INSERTING



20 Ga TMV 306
23 Ga TMV 313
25 Ga TMV 323

ADAPTER - PORT



20 Ga TMV 304
23 Ga TMV 311
25 Ga TMV 321

ADAPTER - PLUG



20 Ga TMV 305
23 Ga TMV 312
25 Ga TMV 322

FORCEPS FOR PORT



TMV 301

FIXATOR OF PORT



TMV 302

INSTRUCTION FOR INITIAL USE

It is essential that the instrument be cleaned and sterilized before initial use following the procedures as outlined in this instruction brochure.

CARE AND HANDLING

Intraocular tips have a delicate precision mechanism inside. Intraocular fluids will enter this mechanism during surgery. If these fluids are not promptly and properly cleaned out, it will lead to corrosion or clogs and the possibility of instrument malfunction. Proteins may also accumulate inside of the mechanism.

CLEANING

1. Unscrew the tip from the handle, then attach flushing adapter



2. Ultrasonically clean both parts, if possible.

3. Flush the tip with distilled or deionized water by connecting syringe filled with water to adapter.

4. Flush the tip with alcohol. This will remove the water and facilitate drying.

5. Dry the tip by forcing one or two syringes full of air through tip. Pressurized air is recommended, as it flushes out debris and fluid more efficiently than syringe forced air.

Thoroughly dry handle, tip and cup.

6. Force special thermoresistant instrument milk through the tip, as in No 3 above.

7. Dry with air as in No 5 above.

8. Handle should be soaked in distilled or deionized water for two minutes.

9. Dry with surgical sponge.

10. Lubricate joints in handle with instrument milk and work the mechanism.

INSTRUMENT DETERGENTS AND/OR CLEANERS

Only detergents and cleaners specially designed for use on surgical stainless steel or titanium instruments are acceptable for use in the cleaning process. The cleaning guidelines of the solution manufacturer and your institution should be observed.

ULTRASONIC CLEANING EQUIPMENT

An ultrasonic cleaner could also be used in the instrument cleaning process, but not as the sole cleaning method. The instrument should, at the very least, be flushed with distilled water prior to being placed in the ultrasonic cleaner. A five to ten minutes cycle in the ultrasonic cleaner should be sufficient. The instrument must be secured on a silicone finger mat during the ultrasonic cleaning procedure. Special care should be taken to make certain that the tip of the instrument does not come into contact with the sides of the ultrasonic container, as this could damage the instrument.

LUBRICATION

Moving parts and working mechanisms of the Titan Medical instruments should be lubricated occasionally with a medical grade instrument lubricant (especially after an ultrasonic bath) to ensure the smooth operation of the working mechanism. The recommended directions of the instrument lubricant manufacturer and your institution should be observed.

STORAGE AND STERILIZATION

Surgical instruments should be stored in the sterilizing trays of proper size lined with soft silicone mats. Instruments should not touch each other. We recommend using protective tips made of soft silicone tubing of the proper size and thickness. Do not use rubber or plastic protective tips, as they can melt during autoclaving and cause damage of instruments. Stainless steel and titanium instruments can be sterilized via steam autoclaving, chemical disinfectants, ethylene oxide gas, or even dry hot air. Gas and dry chemical sterilization are the best methods for stainless steel instruments, but they take a lengthy time period to accomplish the desired result. The most practical method of sterilization is heat or steam, which require less time, however, these methods can be damaging to delicate stainless steel instruments. Please be sure that you and the members of your staff have read and understood the instructions supplied by the manufacturer of your particular sterilizer.

STERILIZATION CYCLES

Finally, the instrument should be sterilized prior to the next surgical procedure. TITAN MEDICAL instruments can be sterilized using any of the following methods:

100/ ETO cycles

Concentration ETO: 850+50mg/l

Temperature: 37°C - 47°C

Exposure time: 3-4 hours

Humidity: 70/ RH minimum

Steam Autoclaving

Sterilizer Type: Gravity Displacement Prevacuum

Sample Config.: wrapped

Temperature: 121°C to 123°C 132°C to 135°C

Exposure time: 15 to 30 minutes 3 to 4 minutes

'Flash' Autoclaving

Sterilizer Type: Gravity Displacement Prevacuum

Sample Config.: unwrapped

Temperature: 132°C

Exposure time: 3 minutes

The above-mentioned sterilization cycles represent the industry standards and should be capable of producing a sterile device. Due to variations in sterilization equipment and device bioburden in clinical use, TITAN MEDICAL is not able to provide specific cycle parameters. It is the responsibility of each user to perform the validation and verification of the sterilization cycle to ensure an adequate sterility assurance level for our products.

INSPECTION

Be sure to inspect every microsurgical instrument at the end of your surgical day. Please conduct this inspection under a microscope or magnification lens. If a damaged instrument is detected, repair or replace it.

WARRANTY

Warranty period is 2 years from the date of sale. Manufacturer assumes obligation to repair or replace the defective instrument, if defect developed under normal use / storage of the instruments.

CLAIMS

Claims accompanied with this leaflet should be sent to Manufacturer's address:

Technicheskaya str., 120 A, 420054, Kazan, Russia,

Phone/Fax: +7 (843) 277 07 78, +7 (843) 260 17 58

STATEMENT OF COMPLIANCE

This Instrument is in compliance with technical documentation, is ready for the supply, is fit for regular usage.

RECYCLING

Instruments are non-toxic, apyrogenic, recyclable. Before recycling instruments must be disinfected.