MATRIX SYSTEMS
(Basic UDI-DI 463003499SYSMATLE)
Saddle Metal Matrices 1.310, 1.320
Saddle Metal Matrices. Universal Kit 1.330
Sectional Contoured Metal Matrices 1.198, 1.298, 1.398, 1.498
Metal contoured matrices "Pony" 1.340, 1.350
Lug Matrices 1.338, 1.348, 1.368
Fixing Kit Delta 1.870
Do-All Proxicut System 1.370
Arc Interproximal Kit 1.379
Contact and Shape Former 1.965

Name of manufacturer

TOR VM Ltd.

Registered trade mark of manufacturer

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The products are CE marked

PRECAUTION

Devices in plastic packages should be stored away from heating devices to avoid packaging damage.

INSTRUCTIONS FOR USE
Revision 4
Revised July 30, 2025

The devices contain no human or animal-derived tissues or cells. The devices are supplied non-sterile.

Matrix systems are intended for professional use in dental clinic only. Operating with these devices is well known procedure. No special training needed.

Matrix system name and catalogue number	Matrix system composition

Saddle Metal Matrices 1.310	Saddle Contoured Metal Matrices Small № 1.311 Saddle Contoured Metal Matrices Medium № 1.312 Saddle Contoured Metal Matrices Large № 1.313 Springclip for saddle matrices № 1.003
Saddle Metal Matrices 1.320	Saddle Contoured Metal Matrices Small № 1.311 Saddle Contoured Metal Matrices Medium № 1.312 Saddle Contoured Metal Matrices Large № 1.313 Ring for saddle matrices № 1.033
Saddle Metal Matrices. Universal Kit 1.330	Saddle Metal Matrices Small № 1.301 Saddle Metal Matrices Medium № 1.302 Saddle Metal Matrices Large № 1.303 Saddle Contoured Metal Matrices Small № 1.311 Saddle Contoured Metal Matrices Medium № 1.312 Saddle Contoured Metal Matrices Large № 1.313 Springclip for saddle matrices № 1.003
Sectional Contoured Metal Matrices 1.198	Sectional Contoured Metal Matrices Small with Ledge №1.0971 Sectional Contoured Metal Matrices Small №1.0972 Sectional Contoured Metal Matrices Large №1.0973 Sectional Contoured Metal Matrices Large with Ledge №1.0974 Sectional Contoured Metal Matrices Medium with Ledge №1.0975 Sectional Contoured Metal Matrices Medium №1.0976 Ring №1.099
Sectional Contoured Metal Matrices 1.298	Sectional Contoured Metal Matrices Small with Ledge №1.0971 Sectional Contoured Metal Matrices Small №1.0972 Sectional Contoured Metal Matrices Large №1.0973 Sectional Contoured Metal Matrices Large with Ledge №1.0974 Sectional Contoured Metal Matrices Medium with Ledge №1.0975 Sectional Contoured Metal Matrices Medium №1.0976 Ring №1.099
Sectional Contoured Metal Matrices 1.398	Sectional Contoured Metal Matrices Small with Ledge №1.0971 Sectional Contoured Metal Matrices Small №1.0972 Sectional Contoured Metal Matrices Large №1.0973 Sectional Contoured Metal Matrices Large with Ledge №1.0974 Sectional Contoured Metal Matrices Medium with Ledge №1.0975 Sectional Contoured Metal Matrices Medium №1.0976 Ring №1.099 MD ring №1.167
Sectional Contoured Metal Matrices 1.498	Sectional Contoured Metal Matrices Small with Ledge №1.0971 Sectional Contoured Metal Matrices Small №1.0972 Sectional Contoured Metal Matrices Large №1.0973 Sectional Contoured Metal Matrices Large with Ledge №1.0974 Sectional Contoured Metal Matrices Medium with Ledge №1.0975 Sectional Contoured Metal Matrices Medium №1.0976 MD ring №1.167 Delta ring №1.299 Add-on wedges №1.861
Metal Contoured Matrices «Pony» 1.340	Metal Contoured Matrices «Pony» Small with Ledge № 1.341 Metal Contoured Matrices «Pony» Small № 1.342 Metal Contoured Matrices «Pony» Large № 1.343 Metal Contoured Matrices «Pony» Large with Ledge № 1.344 Slot Springclip № 1.004
Metal Contoured Matrices «Pony» 1.350	Metal Contoured Matrices «Pony» Small with Ledge № 1.341 Metal Contoured Matrices «Pony» Small № 1.342 Metal Contoured Matrices «Pony» Large № 1.343 Metal Contoured Matrices «Pony» Large with Ledge № 1.344 Slot Ring № 1.044
Lug Matrices 1.338	Lug Matrices №2.351 Lug Matrices №2.352 Lug Matrices №2.353 Lug Matrices №1.353L MD ring №1.167
Lug Matrices 1.348	Lug Matrices №1.351

	Lug Matrices №1.352 Lug Matrices №1.353 MD ring №1.167
Lug Matrices 1.368	Lug Matrices №1.351 Lug Matrices №1.352 Lug Matrices №1.353 Lug Matrices №1.353L Lug Matrices №2.351 Lug Matrices №2.352 Lug Matrices №2.353 MD ring №1.167
Fixing Kit Delta 1.870	Delta ring № 1.299 Add-on fixing wedges № 1.861 Add-on fixing wedges № 1.866
Do-All Proxicut System 1.370	Proxicut Saw Blades №1.384 Proxicut Diamond Strips, Coarse №1.385C Proxicut Diamond Strips, Medium №1.385M Proxicut Diamond Strips, Fine №1.385F Do-All Proxicut Holder №1.369 Key №1.369K Handle № 1.109
Arc Interproximal Kit 1.379	Arc Saw Blade with Holder №1.379T Arc Diamond Strip with Holder, Coarse №1.379C Arc Diamond Strip with Holder, Medium №1.379M Arc Diamond Strip with Holder, Fine №1.379F Handle № 1.109
Contact and Shape Former 1.965	Contact former № 1.943 Handle № 1.100 Shape-former caps № 1.863 Shape-former caps № 1.867 Shape-former caps № 1.868

Saddle Metal Matrices, Saddle Contoured Metal Matrices, Sectional Contoured Metal Matrices, Metal Contoured Matrices «Pony», Lug Matrices, Add-on fixing wedges, Proxicut Saw Blades, Proxicut Diamond Strips, Arc Saw Blade with Holder, Arc Diamond Strip with Holder, Shape-former caps are single-use devices.

Springclip for saddle matrices, Ring for saddle matrices, Ring, MD ring, Delta ring, Slot Springclip, Slot Ring, Do-All Proxicut Holder, Key, Handles, Contact former are multiple-use devices and are to be sterilized after each use.

Target groups

No limitations for target treatment group – the devices can be used for all groups of patients without restrictions.

Benefits

Saddle Metal Matrices, Saddle Contoured Metal Matrices, Sectional Contoured Metal Matrices, Metal Contoured Matrices «Pony», Lug Matrices provide the following benefits:

1) Improved safety of restoration procedure due to protection of
- adjacent teeth from rotating tools;
- dentogingival papilla from the pressure of the material is created;

2) Consistent high quality of restoration due to:
- creation of proper tight contact point;
- providing right anatomy of the proximal surface of the teeth;

3) Reduction of restoration time due to:
- operating reliability and simplicity of use;
- easy adaptation and easy removal from the tooth;

- prevention of the release of the filling material beyond the side edges of the cavity.

Springclip for saddle matrices, Ring for saddle matrices, Ring, MD ring, Delta ring, Slot Springclip, Slot Ring provide the following benefits:
1) Improved safety of restoration procedure due to:
- reliable and atraumatic clamping of the matrix to the neck of the tooth.
2) Consistent high quality of restoration due to:
- creation of proper tight contact point;
- providing right anatomy of the proximal surface of the teeth;
- to ensure a tight contact of the matrix band with the walls along the entire perimeter of the filling area.
3) Reduction of restoration time due to:
- operating reliability and simplicity of use;
- easy adaptation and easy removal from the tooth;
- prevention of the release of the filling material beyond the side edges of the cavity.

Add-on fixing wedges are used to create ideal contacts and a tight cervical seal when placing direct restorations, and also for separating the teeth, maintaining the separation once obtained, or holding a matrix in place. They can be used alone or in combination with a compatible matrix system. The wedges keep filling and restorative materials in the matrix and reduce the formation of overhang, making polishing easier and quicker.
Wedging also serves the following purposes:
- prevents surplus amalgam being forced into the gingival crevice;
- assists in contouring the cervical part of the proximal surface;
- separates the teeth to compensate for the thickness of the matrix band such that proximal contact is re-established when the band is removed.

Shape-former caps are used for dental filling modelling.

The benefit of using *Proxicut Saw Blades, Proxicut Diamond Strips, Arc Saw Blade with Holder, Arc Diamond Strip with Holder* is to help dentist to do perfect dental filling. Strip is available for easier use in short interproximal areas.
1) consistent high quality of restoration due to:
- removal of excess flash and refine the margins of the restoration;
- providing smooth restoration surface and preventing interproximal plaque build up;
- providing smooth restoration contacts, leading to less wear on opposing and adjacent teeth;
- providing more aesthetic, light-reflectant restoration for the patient.
2) providing conditions for oral health due to:
- reduction of surface imperfections and consequently the risk of surface breakdown and corrosion;
- providing smooth surfaces that facilitate oral hygiene procedures with access to all surfaces, marginal areas, and interproximal areas through normal toothbrushing and use of dental floss;
- improving oral function and mastication, since food slides more easily over polished tooth surface.
3) reduction of restoration time due to:
- operating reliability and simplicity of use;
- easy removal of excess of filling material from interproximal areas;
- reliable tooth separation upon veneer fixation.

Warnings and precautions
1) Do not re-use *Saddle Metal Matrices, Saddle Contoured Metal Matrices, Sectional Contoured Metal Matrices, Metal Contoured Matrices «Pony», Lug Matrices, Add-on fixing wedges, Proxicut*

Saw Blades, Proxicut Diamond Strips, Arc Saw Blade with Holder, Arc Diamond Strip with Holder, Shape-former caps.
2) Prior to use *matrix system* make sure of integrity of the device and absence of rust on it and that device surface is free from cracks and rough edges.
3) The devices cannot be placed in the inflamed gingiva as it can cause bleeding.
4) The devices are supplied in non-sterile state and in case of risk of contamination are to be sterilized in autoclave bag in autoclave at 121ºC for 20 min (plastic devices) and at 134ºC for 5 min (metal devices) in accordance with instructions of autoclave manufacturer. The multiple use devices (*Springclip for saddle matrices, Ring for saddle matrices, Ring, MD ring, Delta ring, Slot Springclip, Slot Ring, Do-All Proxicut Holder, Key, Handles, Contact former*) are to be sterilized after each use.
5) Use rubber dam when operating with the devices to avoid device swallowing by the patient.
6) When operating with rings and springclips:
- open the device for a width not more than 10 - 12 mm (between ring / springclip tines);
- open the device for necessary width outside the patient mouth before placing it on a tooth;
- avoid device high-speed opening and/or pressing.

STERILIZATION

Springclip for saddle matrices, Ring for saddle matrices, Ring, MD ring, Delta ring, Slot Springclip, Slot Ring, Do-All Proxicut Holder, Key, Handles, Contact former are multiple use and require sterilization after each use.

Presterilizing clearing
In order to remove any inorganic and organic contaminants (including protein, fat, mechanical and others), including drug residues from medical device and to decrease in general microbial contamination to facilitate subsequent sterilization presterilizing clearing is carried out.
The devices can be cleaned in two ways:
a) mechanical cleaning;
b) ultrasonic cleaning.

A. Mechanical cleaning
1) Soak devices with full immersion in the cleaning agent with filling the cavities and channels with cleaning agent right after the use;
2) Wash devices in the same cleaning agent in which it was soaked using a brush;
3) Rinse with running water (channels - using a syringe or electric suction);
4) Rinse with distilled water (channels - using a syringe or electric suction);
It is up to end user to ensure that cleaning agent is suitable for medical devices mechanical cleaning and use it in accordance with its instruction on use.

B. Ultrasonic cleaning
1) Fill the ultrasonic bath container with the devices (collapsible products were placed in disassembled form; products with locks - open), then the cleaning agent was added to at least 1/3 and not more than 2/3 of the volume of the container of the ultrasonic bath;
2) Process in an ultrasonic bath with the temperature of the cleaning agent at least 18°C;
3) Rinse with running water (channels - using a syringe or electric suction);
4) Rinse with distilled water (channels - using a syringe or electric suction);

It is up to end user to ensure that cleaning agent is suitable for use in ultrasonic baths and use it in accordance with its instruction on use.

Sterilization process:
Procedure:

1) Disinfect your hands;
2) Put on disposable gloves;
3) Put the cleaned the devices in the autoclave bag;
4) Carry out the sterilization in accordance with the instruction of the autoclave manufacturer at 134ºC for 5 minutes.

The user is responsible for inspecting the devices prior to each use and for the use of damaged and dirty devices. The life time of devices depends on the frequency of use, the care by the user and proper reprocessing methods.

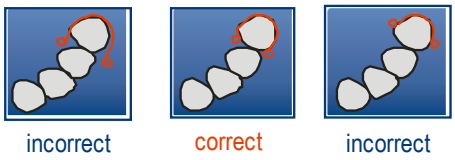
Warning:
1) Do not use cleaning agents, detergents or disinfectants containing high percentage of chlorine and cleaners containing oxalic acid, strong alkalines (pH>9), strong acids (pH<4), phenols or iodophors, hydrogen peroxide, interhalogenic agents, halogenic hydrocarbons, strong oxidizing agents, organic solvents, aldehydes.
2) Do not keep devices in liquid medium for more than 3 hours.
3) Dry the devices thoroughly before sterilization.
4) Follow instructions of autoclave (sterilizer) manufacturer.
5) To avoid corrosion of the metal due to electrolysis, do not place devices in autoclave together with products made of aluminum, brass and copper.
6) Do not use / sterilize the devices in case of presence of traces of rust on the surface or traces of surface damage.

OPERATING INSTRUCTIONS

Preparation
1. Open the packaging.
2. Make sure that there are no:
- signs of violation of the integrity of the device (including cracks and chips),
- traces of rust or dirt on the surface.

Operating procedure

<u>Saddle metal matrices 1.310, 1.320, 1.330</u>



<u>Important!</u>
To provide perfect contact choose appropriate matrix length

<u>Installation with springclip for saddle matrices № 1.003</u>

1. Outside the patient mouth insert tines of springclip into the matrix side tubes

2. Press springclip holders with matrix and install matrix onto the tooth

3. The systems works on distal and on mesial tooth surface

Installation with ring for saddle matrices № 1.033

1. Outside the patient mouth insert tines of the ring into the matrix side tubes

2. Open the ring assembled with saddle matrix via forceps № 1.099-1 (or via standard rubber dam forceps) and install matrix onto the tooth

3. Ready for restoration. On the distal surface

4. The systems can be installed on mesial tooth surface too

Sectional contoured metal matrices 1.198, 1.298, 1.398, 1.498

All matrices are available of 4 types – hard, 0,050 mm thick / hard, 0,035 mm thick / soft, 0,050 mm thick / soft, 0,035 mm thick.
Hard matrices are easy to install. Soft matrices are easily adapted for contact point formation.
Matrices of 0,035 mm thickness are more effective for restoration of small decays.
Matrices of 0,050 mm thickness are intended for restoration of large decays in subgingival area. Such matrices retain the shape well.

Use rubber dam when operating with sectional matrices to avoid matrix swallowing by the patient.

Installation with rings

1. Install matrix (preferably wide side down to gingiva) and wedge

2. Open the ring via forceps

3. Put the ring on the tooth and perform restoration

4. The system can be installed either on distal or on mesial surface of the tooth

Possible ring positions

Variant 1. Ring tines located behind the wedge (restoration of large cavities)

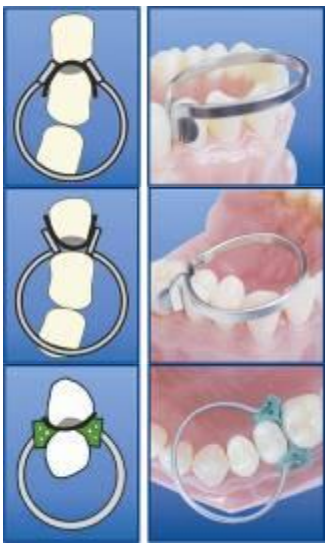
Variant 2. Ring tines located in front of the wedge (restoration of small cavities)

Variant 3. Two rings with various tines height on one tooth (restoration of decay on distal and mesial surfaces of one tooth)

Variants of installation of rings with flat tines

Rings with flat tines are recommended upon restoration of large decays near the contact point

Flat ring 1.199



D-ring 1.166. Tines of D-ring are curved inwards to fix matrix on distal side of the tooth

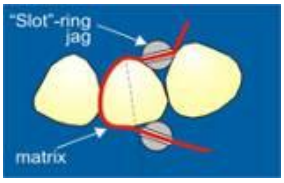
M-ring 1.177. Tines of M-ring are curved out to fix matrix on mesial side of the tooth

Delta ring 1.299 with add-on wedges 1.861. Double tines of Delta ring are suitable for installation of fixing wedges and add-on wedges (see how to operate with add-on wedges)

Installation with springclip

Springclip can be installed without forceps. Sprinclip provides more gentle (weak) fixation of matrix than ring

Metal contoured matrices "Pony" 1.340, 1.350



Pony matrices are ideal for fixation with Slot springclip or Slot ring. Any other metal matrices can be installed with Slot springclip and Slot ring provided matrix edges are narrow enough to do not overhang from the slot into the direction of gingiva.

Installation with Slot springclip №1.004

1. Insert matrix into the slots of springclip

2. Install the springclip with matrix onto the tooth

3. Ready for restoration on mesial surface of the tooth

4. Ready for restoration on distal surface of the tooth

Installation with Slot ring №1.044

1. Open the ring via forceps № 1.099-1 or via standard rubber dam clamp forceps, insert matrix into the slots of the ring

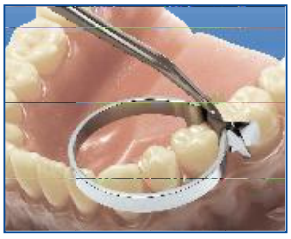
2. Install the ring with matrix onto the tooth

3. Ready for restoration on distal surface of the tooth

4. Ready for restoration on mesial surface of the tooth

Lug matrices 1.338, 1.348, 1.368

Lug matrices are installed similar to sectional matrices.
Contact point is adjusted by pulling matrix lugs to adjacent tooth using dental plier. Use rubber dam when operating with lug matrices to avoid matrix swallowing by the patient.



Fixing Kit Delta 1.870

1. Select the necessary wedge.
2. Install matrix onto the prepared tooth.
3. Out of patient mouth insert tines of fixing ring into the holes of add-on fixing wedges.
4. Using forceps put on the ring with add-on wedges onto the prepared tooth.
5. Remove forceps from the mouth and perform the restoration.

Operating position
Add-on wedges

6. Remove the ring with add-on wedges and matrix from the mouth.

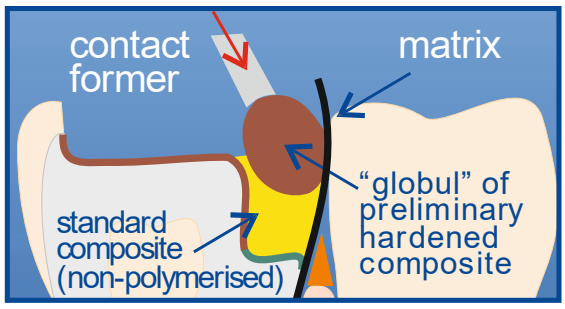
Do-All Proxicut System 1.370

1. Accurately open the package with saw blades.
2. Assemble saw blade and proxicut holder.
3. Insert the system into interproximal area.
4. Remove dental calculus (tartar) or excess of filling material from interproximal area by rocking motion of the system by hand.
5. Withdraw the system from the mouth and disassemble saw blade from the proxicut holder.
6. Install coarse proxicut diamond strip on the proxicut holder.
7. Insert the system into interproximal area.
8. Remove dental calculus (tartar) or excess of filling material from interproximal area by rocking motion of the system by hand
9. Withdraw the system from the mouth and disassemble the coarse proxicut diamond strip from the proxicut holder and repeat the procedure with two other types of diamond strips.

Arc Interproximal Kit 1.379

1. Accurately open the package with arc saw blades.
2. Assemble arc saw blade with holder with handle.
3. Insert the system into interproximal area.
4. Remove dental calculus (tartar) or excess of filling material from interproximal area by rocking motion of the system by hand.
5. Withdraw the system from the mouth and disassemble arc saw blade with holder from handle.
6. Assemble arc saw diamond strip with holder and handle.
7. Insert the system into interproximal area.
8. Remove dental calculus (tartar) or excess of filling material from interproximal area by rocking motion of the system by hand.
9. Withdraw the system from the mouth and disassemble the coarse arc diamond strip with holder from handle and repeat the procedure with two other types of arc diamond strips with holder.

Contact and Shape Former 1.965



1) Perform adhesive preparation of the tooth.
2) Apply fluid composite (0,3-0,5 mm layer) on all the sides of treated cavity except the gingival one, perform photopolymerization.
2) Out of the patient mouth prepare “globul” from standard composite (size of the “globul” should be a bit smaller than treated cavity), perform its photopolymerization.
3) On gingiva side of the cavity apply first thin layer of fluid composite and then standard composite. Don’t perform photopolymerization!
4) Place the “globul” into the cavity and press it with contact former providing matrix close tightness to neighbour tooth in the contact point.
Keep on pressing the “globul” perform photopolymerization. After it remove contact former and repeat photopolymerization once more.
5) Perform tooth restoration.
6) Remove fixing ring, bend back matrix and perform composite photopolymerization in gingival area with light directed from facial and lingual surface of the tooth.
7) Remove matrix and fixing wedge.
8) Perform restoration polishing and finishing.
9) Check contact the state of contact surfaces and contact point location and density with floss.

Storage

Store *devices* in a dry place, away from direct sunlight. Devices in plastic packages should be stored away from heating devices to avoid packaging damage.

Product shelf-life

Shelf-life of *matrix systems* is unlimited.

Disposal

Used *Saddle Metal Matrices, Saddle Contoured Metal Matrices, Sectional Contoured Metal Matrices, Metal Contoured Matrices «Pony», Lug Matrices, Add-on fixing wedges, Proxicut Saw Blades, Proxicut Diamond Strips, Arc Saw Blade with Holder, Arc Diamond Strip with Holder, Shape-former caps* and unusable *Springclip for saddle matrices, Ring for saddle matrices, Ring, MD ring, Delta ring, Slot Springclip, Slot Ring, Do-All Proxicut Holder, Key, Handles, Contact former* are to be disposed as class 3a "other non-hazardous wastes" according to WHO-UNEP/SBC 2005 coding recommendations.

Warranty

Saddle Metal Matrices, Saddle Contoured Metal Matrices, Sectional Contoured Metal Matrices, Metal Contoured Matrices «Pony», Lug Matrices, Add-on fixing wedges, Proxicut Saw Blades, Proxicut Diamond Strips, Arc Saw Blade with Holder, Arc Diamond Strip with Holder, Shape-former caps are single-use devices.
Springclip for saddle matrices, Ring for saddle matrices, Ring, MD ring, Delta ring, Slot Springclip, Slot Ring, Do-All Proxicut Holder, Key, Handles, Contact former are multiple-use devices and are to be sterilized after each use.
TOR VM will replace the product that is proved to be nonconforming.
It is up to user to ensure that the product is suitable for the intended process and purpose. The user is responsible for inspecting the devices prior to each use and for the use of damaged and dirty devices. The life time of devices depends on the frequency of use, the care by the user and proper reprocessing methods.

Any serious incident or non-compliance that has occurred in relation to TOR VM *matrix systems* should be reported by e-mail torvm77@gmail.com and/or tor.vm.de@googlemail.com.

In case of emergency contact

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Language
IFU is available in English and can be provided in any official Union language on customer request.