

Extraoral Orthodontic Products



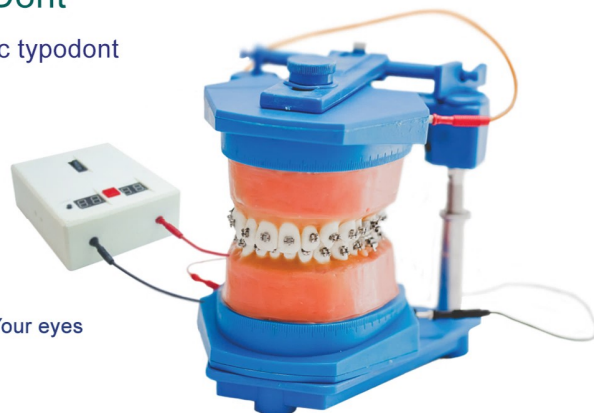
Head cap
Neckpad

ElectroDont

The electric typodont

Advantages of ElectroDont:

- No more splashing about in hot water
- Forget the brackets falling off (teeth moulded with the brackets)
- Larger teeth - easier work
- Dental movements happen in front of Your eyes
- Heating starts from the roots
- Corticalis - made of hard wax,
- Spongiosa - made of soft wax
- Clean, fast convenient, educational and pleasurable to use
- Possible to self-adapt for modeling different cases



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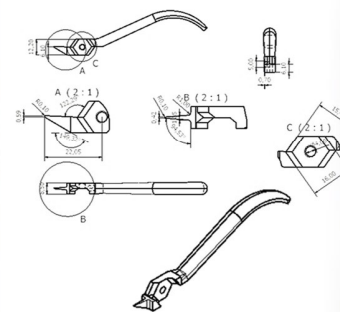


V1.5 2021.07.21



Savaria-Dent

Product Catalog



www.savariadent.hu

Order Guide

After choosing the pliers, you can place your order at the following:

e-mail: info@savariadent.hu
Tel.: +36 94 505 840

Order code consists of the following:

SD/...../.....
Pliers Code (e.g.: 110 = Angulation) Options(e.g.: 4/UL = 4°/Upper Left)

Examples:

SD 200C/R/F or SD 110/22/UL
Aderer Curved Right Fine Angulation 22° Upper Left

The available options of pliers are shown inclined in the description.

Based on our experiences regarding customer needs, we produce our pliers with matte head and shiny stem, in M-L sizes. It is an option to order the pliers with other surface finishings and grip lengths, however this may increase delivery time.

Every single pair of pliers gets an individual identification number. This way we can track the pliers during manufacturing and after sale.

The multiple hardness check during the manufacturing process, the function tests and EN ISO 13485 standard ensures our product's high quality and user satisfaction. Our products are made by Savaria-Dent, in Hungary.

The pliers are single-boxed with warranty ticket, a user's guide and detailed specification.



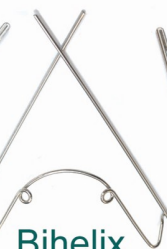
Lingual Tubes



Lingual Cleats



Quadhelix



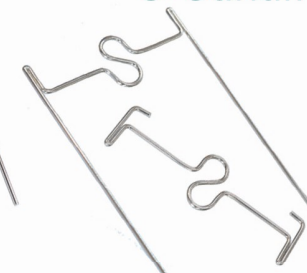
Bihelix



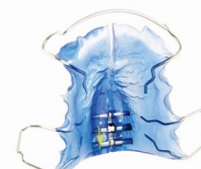
Goshgarian

Various sizes

S-Garian



Orthodontic Appliances



Bracket Height Gauge



TMJ Registration



PLIER USER'S GUIDE AND WARRANTY

In order to ensure the reliable, long-term functionality and the validity of the warranty for the product as intended by its manufacturer, please read this guide carefully and follow its instructions. Your purchased orthodontic pliers are made of the hardest corrosion-resistant chrome-vanadium steel currently available. As the result of the joint construction, manufacturing precision, supervision of the operational steps, the very detailed documentation of the whole manufacturing process and the final functional inspection, hopefully you will be satisfied with our product for a long time. However, for this, the below mentioned instructions must be observed.

1. All orthodontic pliers manufactured by Savaria-Dent Kft. were strictly made only to **assist professional orthodontic treatment**. For each of the different tasks, the most suitable pliers are the ones that were specifically designed for that certain task; although there are some universal pliers that can handle a number of tasks. However, the user has to be aware of the capacity of each plier, to avoid overload. It is a general rule that all the pliers should be used only for the tasks as they are intended to, and the doctor should be aware of their proper operation before use, because for consequences caused by not using the proper instrument, he/she is responsible.
2. Each pliers have individual manufacturing numbers. The first character section of the order code plus the number engraved into the ends of the stems clearly identify the given pliers (e.g. SD158 51G). This manufacturing number can also help you to trace your pliers.
3. The pliers doesn't need any kind of everyday maintenance besides cleaning and the lubrication of the joint. However, cutters and other pliers that have sharp edges must be inspected before every use, because using worn or chipped edges require extra force to be applied, which overloads the insert and the cutting surface on the wire (the wire end) won't be precise. If re-sharpening is needed, the pliers must be sent back to Savaria-Dent Kft, where we do the re-sharpening for a fee. **Any kind of repair done by a third party makes the warranty void.**
4. The two main danger that can damage the pliers are overload and corrosion. Even the mechanically best base materials have their limits; as the effect of multiple overload, the fine tips and edges may break. Since as the last step of our manufacturing process, all the pliers have went through functional and hardness inspection, we can firmly declare that the breakage of the fine tips are caused either by dropping on the floor or by significant overload, and is not a warranty issue. (Capacity of the pliers are engraved into their stems too.) Yet if you think that the breakage wasn't caused by your fault, please send back the pliers together with the broken piece if possible, and we investigate the cause of the breakage. The question of corrosion is unfolded more in the „Sterilization“ section.
5. If possible, the instruments should be kept dry. The body, the screw, the washers, the soldered carbide insert and the soldering materials are all made of materials with different corrosion potential. Because of this, in humid, aggressive circumstances galvanic cell may be formed, what can lead to the occurrence of yellowish-brownish stains caused by the migration of ferrum. Actually these stains are only aesthetical defects, not affecting the pliers mechanical properties, and can be easily removed with the scouring side of a sponge.
6. Before drying the pliers it is practical to wipe them dry with a hygroscopic material (e.g. paper towel), because this way the liquid drops can be soaked up, thus the dissolved materials in the drops would not subside on the surface of the pliers. Following this, the next step should be the complete drying with compressed air.
7. It is recommended to regularly lubricate the pliers' rotating (joint) part and the screw's axis part with one-one drop of turbine oil. This helps to achieve a long lifespan with easy opening and without play. However, excessive lubrication should be avoided, because during sterilization the heat makes the oil dissolve which may create a yellowish plaque on the surfaces. This may also be removed with a sponge, but can be made easier with isopropyl-alcohol. Do not use mineral oils or silicone, because they prevent the penetration of the sterilizing steam into the thin gaps (e.g. the joint), and might facilitate the formation of bacteria-cultures. Use paraffin that can vaporize, or white oil, or oil used for the lubrication of turbines instead.
8. During the first use, and after longer periods of no use, sometimes the pliers open not so smoothly, but they get loosen up by „breaking in“ the joint. As for the new pliers, because of their very precise assembly, their openability is affected by the temperature, so they open harder when they are cold. The oil in the joint that has got thickened during a longer period of no use worsens openability as well.
9. **The ultrasonic method is the most effective way to clean the pliers**, by using the proper cleaning solutions, the attached contaminations can be removed even from the hidden spots by it. However one must look after the edges, because in many cases the interaction of the ultrasound and the solution might damage the edges, therefore we stipulate that the ultrasonic cleaning of cutters cause the voidance of warranty. The cutters, but naturally all the other pliers can be cleaned by brush (e.g. toothbrush) and halogen-free detergent (e.g. dish soaps) along with running water rinse. We don't recommend using metal sponges or brass wire brushes. During the cleaning method, open and close the pliers at least five times in the cleaning solution and during the rinse under running water, to get the joint cleaned better.
10. The carbide inserts are made of very hard, abrasion-resistant, but very rigid materials, and their edges and tips might break when snapped together or when fell down on the hard floor. Therefore the pliers should be stored on the racks or storages designed for this purpose, if possible.
11. When transporting the pliers, please use a bag or box designed for this purpose to prevent them from colliding with each other.
12. When used as intended, there is no side effects arising from direct contact with the devices. The base material doesn't contain nickel, however its chrome content is 14-15%, which in very rare cases can cause allergic reaction, but its not even closely as frequent as nickel allergy.
13. In order to ensure the long, trouble-free, „pleasant“ use, if the „play“ of the joint prevented the pliers from fulfilling their function, please send the pliers back to us for re-assembly and re-sharpening. Although we perform these corrections for a fee, your pliers will regain their full value again.

STERILIZATION, DISINFECTION:

The cleaning, disinfection and sterilization, and to observe the given country's regulations regarding sterilization are completely the user doctor's scope of authority and responsibility. Savaria-Dent Ltd. investigates the matter from the viewpoint of the protection of its produced instruments and of maintaining the warranty only. **Before sterilization and disinfection the pliers must be thoroughly cleaned according to Section 9.**

After sterilization, before we put aside the pliers, it is recommended to examine if there is any damage on the edges or any other irregularity. It is practical to use individual packaging.

Sterilization:

Dry heat sterilization on max. 185°: the pliers won't yet damage on 185°, however there might be very slight goldish discolouration occurring on them. This discolouration can be wiped off with a sponge and in no way affects the pliers' functionality. Using the dry heat sterilization method a very lot can lead to 1-2 HRC hardness loss of the pliers, thus rather use steam-sterilization, if possible.

Steam sterilization: any sterilization units can be used, but the user must be sure the water used is distilled, and must observe the prescriptions of Section 7 regarding lubrication. It is practical to perform the sterilization with the pliers packaged individually.

Gas-sterilization: it is allowed to use, and this method is the least dangerous to pliers.

Ultrasonic sterilization: it is not recommended as it can lead to the loss of warranty for the cutters and pliers with inserts.

Cold sterilization is FORBIDDEN, because most of the chemicals given for this purpose clearly cause corrosion because of their high concentration, long impact time and the very aggressive, combined active agents; and this leads to the loss of warranty and the damage of mainly the carbide inserts and their edges.

Disinfection:

The pliers must be open for disinfection. The pliers should be completely submerged in the disinfectant and they should not contact each other if possible.

The pH value of the disinfectants (and detergents) should be between 5 and 9. We do not recommend the use of phenol, hydrogen-peroxide, halogen-derivatives and substances containing strongly oxidising agents, mainly for the inserted pliers! Any given disinfectant's instructions must be fully observed! Exceeding the instructed concentration or impact time will evidently lead to corrosion. After removing the pliers from the disinfectant solution, they must be immediately washed with tap water in order to remove all the residues of chemicals. Then the water drops may be soaked up with a paper towel, and **the pliers should be totally dried by blowing through with compressed air** (see Section 6 and 7) (in the joint tool), if possible. To finish the procedure, it is recommended to lubricate the rotating parts with one drop of oil. Water with high ferrum-content might cause ferrum-oxide migration on the pliers, which is more intensive in the case of oxidising agent residues.

WARRANTY:

The warranty period for the pliers is 5 years from the date of purchase. During this period Savaria-Dent Ltd. undertakes to repair or exchange faulty pliers free of charge, in case the cause of damaging has arisen due to material or manufacturing fault. Re-sharpenings and the exchange of worn out parts are not covered by warranty, however can only be done by the manufacturer (see Section 3). The pliers to be sent back with warranty problems had to be sterilized beforehand and returned to our company in a ziplock bag together with the warranty card or its copy. For our internal investigation procedure performed according to our applied Quality Management System, please describe the noticed failure and its cause in writing. In the case of breakage, please also put the broken down part into the bag, if possible.

Warranty conditions:

The product can lose its warranty if it was used not as intended (for ex. beyond its capacity given by manufacturer). It can also lead to warranty loss when the product was disinfected, cleaned, lubricated and maintained not as prescribed. Manufacturer is not responsible for repairing or exchanging products under warranty, if they were repaired, re-sharpened or amended by anyone else independently from him. Along normal usage, sharpening cutters and correcting little marks on surface are considered as routine maintenance tasks which are not covered by warranty. Warranty is only valid together with the warranty card.

Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

**SD 1004 Ligature Cutter**

- Max. capacity: .014" SOFT
- Fine, thin tungsten-carbide tip
- Only for ligatures

**SD 1000 Ligature & Wire Cutter**

- Tungsten-carbide insert
- Combination of ligature and wire cutter
- The tip is only for ligatures
- From min. 3mm below the tip it is able to cut wires up to .022"

**SD 1007 Wire Cutter**

- Tungsten-carbide insert
- Max. capacity: .028"
- For cutting steel wires

**SD 1010 Heavy Cutter**

- Max. capacity: 1,2 mm
- Effective lever ratio
- Only minor force is needed
- Can be applied inside the mouth too

**SD 1016 Distal Safety**

- Precise joint fitting, burr-free cut surface on the arch end
- .022" or .028" capacity (SD 1016/.022" or SD 1016/.028")
- .022" - shorter arch residue behind the tube and less loud „click“ sound in the mouth when cutting
- .028" - appropriate for cutting any type of orthodontic arch



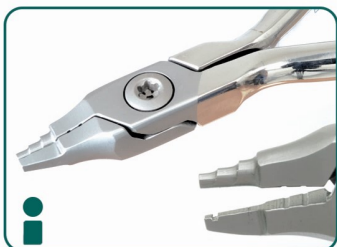
SD 140 Light Wire

- For fine loops and bends



SD 150 Jarabak

- For fine loops and bends
- For utility arches too



SD 314 Young

- For bending wires and making helixes
- Cylindrical nose part in order to avoid torsions



SD 313 Helix

- Similar to the Young pliers, but thankfully to its concave design it is more precise and holds the wire more firmly



SD 139 Bird Beak

- Optionally can be ordered with groove too (SD 139/G)
- Because of the great holding force it is easier to make the wires and bends
- Strong construction, even for 0,9 mm wire

SD 900 Penguin



The SD 900 Plier

- For activating the S-Garian inside the mouth
- 1, 2, 3 mm activation without removing the S-Garian (SD 900/1, 2, or 3)
- Can be safely applied inside the mouth.

S-Garian



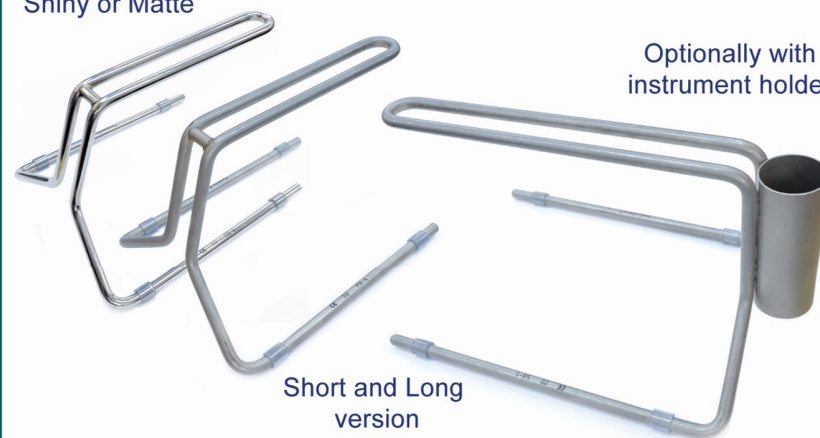
Advantages of S-Garian

- More flexible so forces are lower; longer spring travel; rarer controll
- More setting possibilities
- Can be safely activated in mouth, without removing
- Rotation is possible in both directions
- Optionally with arms to involve the side zone in the treatment
- Fits straight and curved tubes too
- 12 sizes
- Greater intrusion pressure is possible
- Can be made of more types of wire, with different flexibility
- 5 years of clinical experience

Plier Racks

Shiny or Matte

Optionally with instrument holder



Short and Long version



SD 505 Adams



SD 139 Bird Beak

**SD 811 Tweed**

- Precise design for the correct torque control
- Long lifespan even without carbide insert
- Nose thickness: 1 mm
- Short nose - stable grip

SD 158/T Weingart
TechnicalSD 200/T Aderer
Technical**SD 812 Tweed Double**

- Precise design for the correct torque control
- Long lifespan even without carbide insert
- Two nose sizes in one plier
- The outer nose part's thickness: 1 mm

**SD 230 Nance**

- For creating a staircase shape on the side and guiding the down bend
- Five vertical nose heights in one instrument with 1 mm steps
- Rounded edges

SD 314/T Young
TechnicalSD 159 Lingual
Arch Placing Straigh**SD 200 Aderer**

- Extra Fine max .014" (SD 200/XF)
- Fine max .016" (SD 200/F)
- Medium >.016" (SD 200/M)
- Technical max 0,9mm (SD 200/T)
- Appropriate for Ni-Ti wires too



SD 1010 Heavy Cutter



SD 562 Flat Plier

**SD 200C Aderer Curved**

- For bending up the arch-ends behind the tube
- Available with Left (L) and Right (R) curve
- Extra Fine max .014" (SD 200C/XF/L or R)
- Fine max .016" (SD 200C/F/ L or R)
- Medium >.016" (SD 200C/M/L or R)
- Appropriate for Ni-Ti wires too



SD 204 De La Rosa Triple

- Particular radius for the thin and the thick wires
- A quick and simple tool for bending the front arches
- The precise design excludes the appearance of undesired torque



SD 104 Step

- Tungsten-Carbide insert
- For bending steps
- Can be applied inside the mouth too, as the parallelism remains after the bending too
- Appropriate for steel wires up to .019"x.022"
- Available in six sizes from 0,4 mm to 0,9 mm (SD 104/0,4....0,9)



SD 105 Step Double

- For the quick correction of bracket bonding failures, even in the mouth, because parallelism of the wire remains
- For bending 0,4-0,9 mm steps (SD 105/0,4...0,9)



SD 110 Angulation

- Tungsten-Carbide insert
- For quickly and safely creating a tip into steel wire only, even inside the mouth
- The line and the parallelism of the arch won't change
- Using it in in-out direction we can get an extra rotational bend
- Available in Upper Left (SD 110/4...20/UL) and Upper Right (SD 110/4...20/UR) versions
- We produce it 4-20 degrees; usually 2 pliers are enough (4-20)



SD 200 Aderer



SD 710 Lingual I.



SD 720 Lingual II.



SD 345E Bracket Remover
Extended Curved



SD 160 Weingart Ling



SD 200C Aderer Curved



SD 750 Bond Remover

- To remove bonding materials remained in the interdental gaps from indirect bondings
- Available with Left (SD 750/L) and Right (SD 750/R) curve



SD 347 Band Remover

- If there is a need to reach under the band, it causes less injury
- Available in Normal (*SD 347/N*) and Reduced (*SD 347/R*) version
- The tip can also be sterilized (max. 140°) or exchanged



SD 347E Band Remover Extended

- Extra long face for 2nd molars
- Available in Normal (*SD 347E/N*) and Reduced (*SD 347E/R*) version
- The tip can also be sterilized (max. 140°) or exchanged



SD 345 Bracket Remover

- Tungsten-Carbide insert
- For ceramic brackets too



SD 345E Bracket Remover Extended Curved

- Tungsten-Carbide insert
- Extended face
- Curved tip
- To remove lingual brackets and tubes bonded on 2nd molars



SD 346 Bracket Remover with Pad

- Tungsten-Carbide insert
- For removing the remaining glue



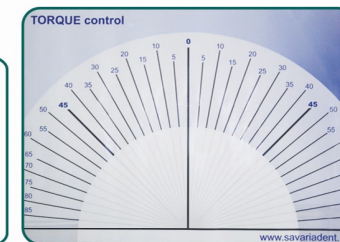
SD 221 V-Stop Triple

- Tungsten-Carbide insert
- For creating dimples with different heights
- The three variations height make three variations of arch shortening, with which we can easily close gaps (e.g. diastema), or we can even correct in the front arch, in asymmetric cases by creating compression in the desired spot
- The line of the arch won't change so it can be applied inside the mouth too



SD 805 Torquing

- Because of the effective lever ratio, the arch won't turn out from the plier
- Torquing key designed for 4 arch thicknesses (.016" .017" .018" .021")
- The result can be checked with the torque control board



SD 201 Aderer Double

- For making the bends needed in the arch, even inside the mouth (e.g. gable, or to-in)



SD 158B Weingart Basic

- Multipurpose pliers with knurled jaw for perfect hold
- One of the most often used pliers in practices
- It has a shorter nose that ensures a more secure and stronger grip



SD 158 Weingart

- Knurled jaw for better hold
- Available in Medium or Extra Fine versions
- The medium (*SD 158/M*) version's thicker head is designed to bear greater forces
- The extra fine (*SD 158/XF*) version is for fine, hard-to-reach tasks



SD 160 Weingart Ling

- Nose optimized for lingual use
- Knurled jaw for better hold



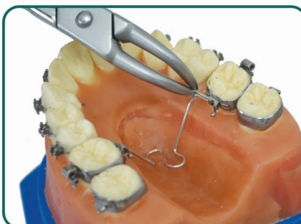
SD 159 Lingual Arch Placing Straight

- For 0,9 mm wire
- Stable grip
- Lower risk of injury
- Rounded corners



SD 155 Lingual Arch Placing Curved

- For 0,9 mm wire
- Stable grip
- Lower risk of injury
- Rounded corners
- Our pulling force acts in the line of the tube



SD 130 Hook Crimping

- Great press force
- Stable fixation
- The arch remains straight thus it can be safely applied inside the mouth too
- For narrow hook too



SD 130C Hook Crimping Curved

- Can be used in the side zone too
- Great press force
- Stable fixation
- The arch remains straight thus it can be safely applied inside the mouth too
- For narrow hook too



SD 135 Crimping

- Appropriate press force



SD 410 Lingual Arch Forming

- Very important for creating, adapting and controlling the connection parts of transpalatal arches
- By its use, wire breakages in the end of the back-bent retention part can be avoided
- Can not be replaced in a correct manner