

endo★*star*

Instruments and materials

endostar.eu

A large, solid blue five-pointed star is positioned in the bottom right corner of the page, partially overlapping the footer text.



Everyday thousands of dentists use our files all over the world

For 28 years we have designed and produced instruments for root canal treatment. Our manufacturing facility is located in Poland, country for several years belonging to the European Union. Our machinery is based on a proprietary technology developed in the R&D POLDENT department. It uses modern components, some developed by NASA and allows for an annual production of 1 million packages of instruments shown in our catalogue, currently consisting of 16 000 items.

For many years we have been using multi-stage quality control system, through which each blade of the produced file is precisely controlled. Therefore, an experienced team, imported materials, modern production line and precise control and measuring equipment ensure the best production process and reliability of each our product, certified by ISO and CE.





DESCRIPTION	PRODUCT	PAGE
Rotary systems	Endostar E3 Basic Rotary System	06
	Endostar E3 Small Apical Rotary System	08
	Endostar E3 Big Apical Rotary System	10
	Endostar NT2 NiTi Two Rotary System	12
	Endostar RE Re Endo Rotary System	14
Root canal treatment hand instruments	Endostar S-files	16
	Endostar NiTi S-files	17
	Endostar H-files	18
	Endostar NiTi H-files	19
	Endostar K-files	20
	Endostar NiTi K-files	21
	Endostar K-reamers	22
	Endostar NiTi K-reamers	23
	Endostar Unique S-files	24
	Endostar Barbed Broaches	24
	Endostar Unique K-files	25
Endostar Canal Locator	25	
Root canal irrigation and disinfection	Endostar Spreader Sonic Files	26
Root canal obturation instruments	Endostar Finger Pluggers	27
	Endostar NiTi Finger Pluggers	27
	Endostar Finger Spreaders	28
	Endostar NiTi Finger Spreaders	28
	Endostar Paste Fillers with safety spring (PFL)	29
	Endostar Paste Fillers without spring (PFN)	30
Coronal preparation instruments	Endostar Gates Glidden	31
	Endostar Peeso Reamers	31
Endoboxes	Endostar ENDObox with instruments	32
	Endostar ENDObox without instruments	32
Complementary products	Endostar ENDOstand	32
	Endostar ENDOcalibrator	33
	Endostops	33
	Endogrips	33
	Multigrips	33
Points	Endostar Gutta Percha Points	34
	Endostar Paper Points	34
Wireless handpiece	Endostar PROendo	35



Endostar E3 Basic Rotary System

Endostar E3 Rotary System is a set of modern rotary files used for effective and efficient root canal preparation. They are manufactured from a highest quality nickel-titanium alloy, which provides durability and flexibility. The files can easily fit even strongly curved canals, this way minimizing the risk of canal perforation. The modified shape of the NiTi S file with two 90-degree cutting edges ensures efficient cutting, transport of debris up the canal and decreases preparation time. The inactive tip allows safe preparation, minimizing the risk of a via falsa, perforations and zipping. Easy-to-read taper value (number of stripes on the handle) and ISO size (color stripes) enables effortless use of the instruments. The Endostar E3 Basic Rotary System should be used with normal width, straight or slightly curved canals.

The size, taper and the length of individual files				
Instrument	Number of stripes	Taper (%)	ISO size	Length
No 1	1	8	30	18 mm
No 2	2	6	25	23 / 25 / 28 mm
No 3	3	4	30	23 / 25 / 28 mm

Endostar E3 Basic Rotary System	
Intro Set, 30/08 (18 mm), 25/06, 30/04, 3 pcs, 23 mm	E323
Intro Set, 30/08 (18 mm), 25/06, 30/04, 3 pcs, 25 mm	E3
Intro Set, 30/08 (18 mm), 25/06, 30/04, 3 pcs, 28 mm	E328

Endostar E3 Basic Rotary System	
Refills, 30/08, 6 pcs, 18 mm	E3300818
Refills, 25/06, 6 pcs, 23 mm	E3250623
Refills, 25/06, 6 pcs, 25 mm	E3250625
Refills, 25/06, 6 pcs, 28 mm	E3250628
Refills, 30/04, 6 pcs, 23 mm	E3300423
Refills, 30/04, 6 pcs, 25 mm	E3300425
Refills, 30/04, 6 pcs, 28 mm	E3300428

Recommended number of use:

Maximum of 5-10 times, depending on the size (see Table), provided that visual inspection performed by the practitioner prior to use shows that the instrument remains undamaged, is not bent, deformed, does not show signs of blade wear and can be securely attached to the handpiece. If the file has been subjected to high torsion force, especially in highly curved canals the instrument should be used only once.

Recommended number of use			
File number	1	2	3
	10	5	5

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Clinical instruction for use

Rinse the canal each time after the file is used. Clean the files of any debris repeatedly.

> **Cavity preparation.**

Prepare the cavity. Use a rubber dam.

> **Location of canals.**

Locate all canal orifices. Lubricate the canals.

> **Specifying the working length of the canal.**

Specify the working length of the canal using your method of choice.

> **Preparing the canal with hand instruments.**

Continue to shape the root canal with hand files up to size 20. This way, you will create a glide path for rotary instruments. This will also reduce the risk of breaking the rotary file.

> **Preparation of the upper part of the root canal.**

Shape the canal orifice with the Endostar E3 Basic File No. 1 (08/30) until you reach a maximum of 1/2 of the total canal depth. Do not use this file when the canal is highly curved (in such cases use the Endostar E3 Small Apical Rotary System).

> **Preparation of the middle part of the root canal.**

Begin to work with file No. 2 (06/25). Perform up-and-down movements. Shape the canal up to 2/3 of the working length. Inspect the working length with the size 15 hand file and apex locator. Next, insert file No. 2 at full working length.

> **Shaping of the apical part of the root canal.**

Use file No. 3 (04/30) to widen the apical portion of the canal until full working length is reached. Confirm that full working length was reached with hand file size 15 and apex locator. Next, finish work with a nickel-titanium hand file size 30. Check if the file can be inserted at full working length without obstructions, and if wedging can be felt. If a wider preparation of the apex is needed, continue to work with larger hand instruments size 35, 40 etc. or consider using the Endostar E3 Big Apical Rotary System.

Recommended torque

File number	Standard torque (Ncm)	Advanced torque (Ncm)
1 (30/08)	2.4	3.0
2 (25/06)	2.1	3.0
3 (30/04)	0.9	2.1

Files should be used with motor speed between 150 and 300 rpm. The torque settings indicated in the table above are for example only and may vary according to each user preferences and motor capabilities. Do not exceed the upper torque limit which is different for each instrument. If precise torque settings cannot be set, and only manufacturer-specific torque levels are available, be sure to select one that does not exceed the recommended limit.



Endostar E3 Small Apical Rotary System

The Endostar E3 Small Apical Rotary System is not a separate rotary system. This is an extension of the Endostar E3 Basic Rotary System for use with very narrow and curved canals. The canal should be first shaped with the use of Endostar E3 Basic files.

The size, taper and the length of individual files

Instrument	Number of stripes	Taper (%)	ISO size	Length
No 1	2	6	20	23 / 25 / 28 mm
No 2	3	4	25	23 / 25 / 28 mm
No 3	3	4	20	23 / 25 / 28 mm

Endostar E3 Small Apical Rotary System

Intro Set, 20/06, 25/04, 20/04, 3 pcs, 23 mm	E3S23
Intro Set, 20/06, 25/04, 20/04, 3 pcs, 25 mm	E3S
Intro Set, 20/06, 25/04, 20/04, 3 pcs, 28 mm	E3S28

Endostar E3 Small Apical Rotary System

Refills, 20/06, 6 pcs, 23 mm	E3200623
Refills, 20/06, 6 pcs, 25 mm	E3200625
Refills, 20/06, 6 pcs, 28 mm	E3200628
Refills, 25/04, 6 pcs, 23 mm	E3250423
Refills, 25/04, 6 pcs, 25 mm	E3250425
Refills, 25/04, 6 pcs, 28 mm	E3250428
Refills, 20/04, 6 pcs, 23 mm	E3200423
Refills, 20/04, 6 pcs, 25 mm	E3200425
Refills, 20/04, 6 pcs, 28 mm	E3200428

Recommended number of use:

Maximum of 5 times, provided that visual inspection performed by the practitioner prior to use shows that the instrument remains undamaged, is not bent, deformed, does not show signs of blade wear and can be securely attached to the handpiece. If the file has been subjected to high torsion force, especially in highly curved canals the instrument should be used only once.

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Clinical instruction for use

Rinse the canal each time after the file is used. Clean the files of any debris repeatedly.

1. Prepare the cavity, locate the orifices and specify the working length of the canal. Next, prepare the canal with hand instruments as specified in the Endostar E3 Basic Rotary System clinical instruction.

2. Preparation of the upper part of the root canal.

Shape the canal orifice with the use of the Endostar E3 Basic Rotary System No. 1 (08/30) file until delicate resistance is detectable. Do not apply excessive force to the instrument especially in highly curved canals.

3. Preparation of the middle portion of the root canal.

Begin to work with file No. 2 from the Endostar E3 Basic Rotary System (06/25). Perform up and down movements. Work to maximum of 1/2 of working length. Inspect the working length with the size 15 hand file and apex locator. Next, with the use of file No. 3 which is part of the E3 Basic Rotary System (04/30), try to go a few millimeters deeper down the canal. If the file can not go deeper down the canal, do not force it. Finish the preparation with the Endostar E3 Basic Rotary System and continue with the Endostar E3 Small Apical Rotary System.

4. Shaping of the apical part of the root canal.

With the use of file No. 1 from the Endostar E3 Small Apical Rotary System (06/20) shape the canal a few millimeters down. Do not force the instrument down the canal. Take file No. 2 (04/25) and continue to shape the canal. Stop working 2 mm before reaching full working length. Use file No. 3 (04/20) until full working length is reached. File No. 3 (04/20) allows shaping even of very narrow and extremely curved canals. Next, go back to file No. 2 (04/25) and use it until full working length is reached.

5. Widening the root canal.

After checking the apical width with the NiTi file, consider widening the canal with file No. 3, which is part of the Endostar E3 Basic Rotary System (04/30) set. Skip this step in extremely curved canals and finish shaping at size 04/25.

Recommended torque

File number	Standard torque (Ncm)	Advanced torque (Ncm)
1 (20/06)	0.9	2.1
2 (25/04)	0.9	2.1
3 (20/04)	0.9	2.1

Files should be used with motor speed between 150 and 300 rpm. The torque settings indicated in the table above table are for example only and may vary according to each user preferences and motor capabilities. Do not exceed the upper torque limit which is different for each instrument. If precise torque settings cannot be set, and only manufacturer-specific torque levels are available, be sure to select one that does not exceed the recommended limit.



Endostar E3 Big Apical Rotary System

The Endostar E3 Big Apical Rotary System is not a separate rotary system. This is an extension of the Endostar E3 Basic Rotary System and is used for shaping wide canals, for which final preparation to size 30 is not sufficient. It should always be preceded by initial preparation performed with the Endostar E3 Basic System.

The size, taper and the length of individual files

Instrument	Number of stripes	Taper (%)	ISO size	Length
No 1	3	4	35	23 / 25 / 28 mm
No 2	3	4	40	23 / 25 / 28 mm
No 3	3	4	45	23 / 25 / 28 mm

Endostar E3 Big Apical Rotary System

Intro Set, 35/04, 40/04, 45/04, 3 pcs, 23 mm	E3B23
Intro Set, 35/04, 40/04, 45/04, 3 pcs, 25 mm	E3B
Intro Set, 35/04, 40/04, 45/04, 3 pcs, 28 mm	E3B28

Endostar E3 Big Apical Rotary System

Refills, 35/04, 6 pcs, 23 mm	E3350423
Refills, 35/04, 6 pcs, 25 mm	E3350425
Refills, 35/04, 6 pcs, 28 mm	E3350428
Refills, 40/04, 6 pcs, 23 mm	E3400423
Refills, 40/04, 6 pcs, 25 mm	E3400425
Refills, 40/04, 6 pcs, 28 mm	E3400428
Refills, 45/04, 6 pcs, 23 mm	E3450423
Refills, 45/04, 6 pcs, 25 mm	E3450425
Refills, 45/04, 6 pcs, 28 mm	E3450428

Recommended number of use:

Maximum of 5 times, provided that visual inspection performed by the practitioner prior to use shows that the instrument remains undamaged, is not bent, deformed, does not show signs of blade wear and can be securely attached to the handpiece. If the file has been subjected to high torsion force, especially in highly curved canals the instrument should be used only one.

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Clinical instruction for use

Rinse the canal each time after the file is used. Clean the files of any debris repeatedly.

- > After preparation of the canal with the use of file No. 3 from the set of Endostar E3 Basic is completed, evaluate apex width. For this purpose, use a size 30 NiTi hand file. Insert it at full working length and gently twist it. If the file rotates - this means that the canal is wider than size 30 and should be expanded.
- > Shape the canal with instrument No. 1 from the Endostar E3 Big Apical Rotary System (04/35) until full working length is reached.
- > Shape the canal by inserting instrument No. 2 (04/40) at full working length.
- > Check the width of the tip using a size 40 NiTi hand file. Insert the instrument at full working length and apply a gentle twist. If the instrument does not rotate, stop shaping the canal. However if the instrument still rotates - continue with shaping.
- > Shape the canal using instrument No. 3 from the Endostar E3 Big Apical Rotary System (04/45) until you reach full working length.
- > Check the apex width with a size 45 NiTi hand file. Insert the instrument at full working length and apply a gentle twist. If the instrument does not rotate, stop shaping the canal. However if the hand file does rotate, continue shaping with larger-sized NiTi hand files such as size 50, 55, 60 etc.

Recommended torque

File number	Standard torque (Ncm)	Advanced torque (Ncm)
1 (35/04)	2.1	3.0
2 (40/04)	2.1	3.0
3 (45/04)	2.1	3.0

Files should be used with motor speed between 150 and 300 rpm.

The torque settings indicated in the table above are for example only and may vary according to each user preferences and motor capabilities. Do not exceed the upper torque limit which is different for each instrument. If precise torque settings cannot be set, and only manufacturer-specific torque levels are available, be sure to select one that does not exceed the recommended limit.



Endostar RE Re Endo Rotary System

Endostar RE Re Endo Rotary System is a rotary system used to efficiently remove old fillings from the canal during root canal retreatment. The kit contains 4 instruments, with tapers from 04 to 12 and size 30. It was designed to work with the crown-down technique.

The kit includes:

- > Two K-type files with a square cross-section, with 4 cutting edges and good elasticity.
- > Two files with a S-type blade with two edges distributed symmetrically 180 degrees to the axis of symmetry and a cutting channel at an angle of 90 degrees. They present with great cutting ability, a non-cutting apex and very good elasticity.

The size, taper and the length of individual files

Instrument	Number of stripes	Taper (%)	ISO size	Length
No 1	1	12	30	17 mm
No 2	2	08	30	23 / 25 / 28 mm
No 3	3	06	30	23 / 25 / 28 mm
No 4	4	04	30	23 / 25 / 28 mm

Endostar RE Re Endo Rotary System

Intro Set, 30/12 (17 mm), 30/08, 30/06, 30/04, 4 pcs, 25 mm	RE
Intro Set, 30/12 (17 mm), 30/08, 30/06, 30/04, 4 pcs, 23 mm	RE23
Intro Set, 30/12 (17 mm), 30/08, 30/06, 30/04, 4 pcs, 28 mm	RE28

Endostar RE Re Endo Rotary System

Refills, 30/12, 6 pcs, 17 mm	RE301217
Refills, 30/08, 6 pcs, 23 mm	RE300823
Refills, 30/06, 6 pcs, 23 mm	RE300623
Refills, 30/04, 6 pcs, 23 mm	RE300423
Refills, 30/08, 6 pcs, 25 mm	RE300825
Refills, 30/06, 6 pcs, 25 mm	RE300625
Refills, 30/04, 6 pcs, 25 mm	RE300425
Refills, 30/08, 6 pcs, 28 mm	RE300828
Refills, 30/06, 6 pcs, 28 mm	RE300628
Refills, 30/04, 6 pcs, 28 mm	RE300428

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Clinical instruction for use

Rinse the canal each time after the file is used. Clean the files of any debris repeatedly.

- > Make sure you have proper access to the gutta-percha filled canal.
- > Add a few drops of chloroform or other substance in order to dissolve the gutta percha.
- > Use the Endostar RE Re Endo Rotary System - numbers 1-4 combined with the crown-down technique. Starting with file No. 1, then work your way down to file No. 4.
- > Make sure the old filling is entirely removed from the canal. We recommend that an x-ray image is taken.
- > Perform final cleaning of the canal. Chloroform cannot be used at this stage. Rinse with solutions normally used for canal rinsing during endodontic treatment.

Excessive use of chloroform may pose a certain risk to the patient and should therefore be used with caution.

Recommended torque	
File number	Torque (Ncm)
1 (30/12)	3.0 - 4.0
2 (30/08)	2.0 - 3.0
3 (30/06)	1.0 - 2.0
4 (30/04)	0.5 - 1.0

Files should be used with motor speed between 150 and 300 rpm.

The torque settings indicated in the table above table are for example only and may vary according to each user preferences and motor capabilities. Do not exceed the upper torque limit which is different for each instrument. If precise torque settings cannot be set, and only manufacturer-specific torque levels are available, be sure to select one that does not exceed the recommended limit.

Recommended number of use:

Maximum of 5-10 times, depending on the size (see Table), provided that visual inspection performed by the practitioner prior to use shows that the instrument remains undamaged, is not bent, deformed, does not show signs of blade wear and can be securely attached to the handpiece. If the file has been subjected to high torsion force, especially in highly curved canals the instrument should be used only once.

Recommended number of use				
File number	1	2	3	4
	10	10	5	5



Endostar NT2 NiTi Two Rotary System

Endostar NT2 NiTi Two Rotary System is an economical nickel-titanium file system for simple and fast mechanical processing of root canals, mainly with the traditional method. The system consists of 6 files. It is characterized by a constant 02 taper and a non-cutting tip. The set is most commonly used as an extension of the Endostar E3 Rotary System.

The size, taper and the length of individual files

Instrument	Number of stripes	Taper (%)	ISO size	Length
No 1	2	02	15	23 / 25 mm
No 2	2	02	20	23 / 25 mm
No 3	2	02	25	23 / 25 mm
No 4	2	02	30	23 / 25 mm
No 5	2	02	35	23 / 25 mm
No 6	2	02	40	23 / 25 mm

Endostar NT2 NiTi Two Rotary System

Intro Set, 15/02, 20/02, 25/02, 30/02, 35/02, 40/02, 6 pcs, 25 mm	NT2
Intro Set, 15/02, 20/02, 25/02, 30/02, 35/02, 40/02, 6 pcs, 23 mm	NT223

Endostar NT2 NiTi Two Rotary System

Refills, 15/02, 6 pcs, 23 mm	NT2150223
Refills, 20/02, 6 pcs, 23 mm	NT2200223
Refills, 25/02, 6 pcs, 23 mm	NT2250223
Refills, 30/02, 6 pcs, 23 mm	NT2300223
Refills, 35/02, 6 pcs, 23 mm	NT2350223
Refills, 40/02, 6 pcs, 23 mm	NT2400223
Refills, 15/02, 6 pcs, 25 mm	NT2150225
Refills, 20/02, 6 pcs, 25 mm	NT2200225
Refills, 25/02, 6 pcs, 25 mm	NT2250225
Refills, 30/02, 6 pcs, 25 mm	NT2300225
Refills, 35/02, 6 pcs, 25 mm	NT2350225
Refills, 40/02, 6 pcs, 25 mm	NT2400225

Recommended number of use:

Maximum of 5 times, provided that visual inspection performed by the practitioner prior to use shows that the instrument remains undamaged, is not bent, deformed, does not show signs of blade wear and can be securely attached to the handpiece. If the file has been subjected to high torsion force, especially in highly curved canals the instrument should be used only one.

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Clinical instruction for use

Rinse the canal each time after the file is used. Clean the files of any debris repeatedly.

- > Prepare the cavity. Use a rubber dam.
- > Locate all canal orifices. Fill the canal orifice with a lubricant.
- > Specify the working length of the canal with your method of choice.
- > Make sure all canals are patent up to a depth of 2-3 mm from the apex with the help of the K15 file. For very curved and narrow canals, use a different hand instrument, size 06, 08, or 10.
- > Create access to the canal orifice using rotary files with a greater taper (06, 08) or with the use of Gates-Glidden drills.
- > Start working with the 02/15 or 02/20 file until you reach full working length and then switch to other instruments (02/25, 02/30, etc.) until you reach the desired canal size.

Recommended torque

File number	Torque (Ncm)
1 (15/02)	0.3
2 (20/02)	0.3
3 (25/02)	0.3 - 0.4
4 (30/02)	0.4 - 0.5
5 (35/02)	0.5 - 0.6
6 (40/02)	0.6 - 0.7

Files should be used with motor speed between 150 and 300 rpm.

The torque settings indicated in the table above are for example only and may vary according to each user preferences and motor capabilities. Do not exceed the upper torque limit which is different for each instrument. If precise torque settings cannot be set, and only manufacturer-specific torque levels are available, be sure to select one that does not exceed the recommended limit.



Endostar S-files

Endostar S-files are the most effective instruments with a very high cutting ability for root canal instrumentation. They are designed as composition of two cutting edges of H-file. The S-files are used to enlarge the canal with a up and down movement or a rotational cutting action.

- > Great cutting ability.
- > Very high removal of dentin debris.
- > Precisely cut shape made of very hard, yet flexible stainless steel alloy.
- > 2 cutting edges angled 90° (edges distributed symmetrically at 180° on the long axis).
- > Cross-section: ●
- > Non cutting tip.
- > Good flexibility.
- > Millimeter scale etched on the blade (18 to 25 mm from the tip), which facilitates the determination of the working length.
- > Ergonomic handle with ISO symbols.

Endostar S-files, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BSFH154021	BSFH154025	BSFH154028	BSFH154031
Assorted 45-80	BSFH458021	BSFH458025	BSFH458028	BSFH458031
Assorted 90-140	BSFH901421	BSFH901425	BSFH901428	on request
6	BSFH000621	BSFH000625	BSFH000628	BSFH000631
8	BSFH000821	BSFH000825	BSFH000828	BSFH000831
10	BSFH001021	BSFH001025	BSFH001028	BSFH001031
15	BSFH001521	BSFH001525	BSFH001528	BSFH001531
20	BSFH002021	BSFH002025	BSFH002028	BSFH002031
25	BSFH002521	BSFH002525	BSFH002528	BSFH002531
30	BSFH003021	BSFH003025	BSFH003028	BSFH003031
35	BSFH003521	BSFH003525	BSFH003528	BSFH003531
40	BSFH004021	BSFH004025	BSFH004028	BSFH004031
45	BSFH004521	BSFH004525	BSFH004528	BSFH004531
50	BSFH005021	BSFH005025	BSFH005028	BSFH005031
55	BSFH005521	BSFH005525	BSFH005528	BSFH005531
60	BSFH006021	BSFH006025	BSFH006028	BSFH006031
70	BSFH007021	BSFH007025	BSFH007028	BSFH007031
80	BSFH008021	BSFH008025	BSFH008028	BSFH008031
90	BSFH009021	BSFH009025	BSFH009028	on request
100	BSFH010021	BSFH010025	BSFH010028	on request
110	BSFH011021	BSFH011025	BSFH011028	on request
120	BSFH012021	BSFH012025	BSFH012028	on request
130	BSFH013021	BSFH013025	BSFH013028	on request
140	BSFH014021	BSFH014025	BSFH014028	on request

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Endostar NiTi S-files

Endostar NiTi S-files are made of nickel-titanium alloy. They are extremely flexible, universal and safe. Their resistance to bending is around 10 times greater than resistance of stainless steel instruments. NiTi S-files are recommended for treatment of curved root canals, which can't be treated with stainless steel instruments. There is no need to pre-bend Endostar NiTi S-files. They are very efficient in root canal instrumentation and have a great cutting ability.

- > Precisely cut shape.
- > Made of nickel-titanium alloy with shape memory.
- > Great cutting ability.
- > Two cutting edges angled 90° (edges distributed symmetrically at 180° on the long axis).
- > Cross-section: ●
- > Great dentin debris extraction.
- > Great flexibility ensured by nickel-titanium alloy.
- > Non cutting tip.
- > Millimeter scale etched on the blade (18 to 25 mm from the tip), which facilitates the determination of the working length.
- > Ergonomic handle with ISO symbols.

Endostar NiTi S-files, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BNFH154021	BNFH154025	BNFH154028	on request
Assorted 45-80	BNFH458021	BNFH458025	BNFH458028	on request
10	BNFH001021	BNFH001025	BNFH001028	on request
15	BNFH001521	BNFH001525	BNFH001528	on request
20	BNFH002021	BNFH002025	BNFH002028	on request
25	BNFH002521	BNFH002525	BNFH002528	on request
30	BNFH003021	BNFH003025	BNFH003028	on request
35	BNFH003521	BNFH003525	BNFH003528	on request
40	BNFH004021	BNFH004025	BNFH004028	on request
45	BNFH004521	BNFH004525	BNFH004528	on request
50	BNFH005021	BNFH005025	BNFH005028	on request
55	BNFH005521	BNFH005525	BNFH005528	on request
60	BNFH006021	BNFH006025	BNFH006028	on request
70	BNFH007021	BNFH007025	BNFH007028	on request
80	BNFH008021	BNFH008025	BNFH008028	on request

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Endostar H-files

Endostar H-files are very effective and invasive hand instruments for root canal instrumentation. The H-file has a great cutting ability and it is designed in a shape proposed by Dr Hedström.

The Hedström file is designed to be used with longitudinal filing and rotary cutting (up to 1/4 turn) actions. It is particularly recommended in pediatric dentistry.

- > Great cutting ability.
- > One cutting edge angled at 90°.
- > Cross-section: ●
- > Extraction of dentin debris improved by increasing feed of cutting edge.
- > Precisely cut shape made of very hard, yet flexible stainless steel alloy.
- > Flexibility increased by cylindrical shape.
- > Ergonomic handle with ISO symbols.

Endostar H-files, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BHFH154021	BHFH154025	BHFH154028	BHFH154031
Assorted 45-80	BHFH458021	BHFH458025	BHFH458028	BHFH458031
Assorted 90-140	BHFH901421	BHFH901425	BHFH901428	on request
6	BHFH000621	BHFH000625	BHFH000628	BHFH000631
8	BHFH000821	BHFH000825	BHFH000828	BHFH000831
10	BHFH001021	BHFH001025	BHFH001028	BHFH001031
15	BHFH001521	BHFH001525	BHFH001528	BHFH001531
20	BHFH002021	BHFH002025	BHFH002028	BHFH002031
25	BHFH002521	BHFH002525	BHFH002528	BHFH002531
30	BHFH003021	BHFH003025	BHFH003028	BHFH003031
35	BHFH003521	BHFH003525	BHFH003528	BHFH003531
40	BHFH004021	BHFH004025	BHFH004028	BHFH004031
45	BHFH004521	BHFH004525	BHFH004528	BHFH004531
50	BHFH005021	BHFH005025	BHFH005028	BHFH005031
55	BHFH005521	BHFH005525	BHFH005528	BHFH005531
60	BHFH006021	BHFH006025	BHFH006028	BHFH006031
70	BHFH007021	BHFH007025	BHFH007028	BHFH007031
80	BHFH008021	BHFH008025	BHFH008028	BHFH008031
90	BHFH009021	BHFH009025	BHFH009028	on request
100	BHFH010021	BHFH010025	BHFH010028	on request
110	BHFH011021	BHFH011025	BHFH011028	on request
120	BHFH012021	BHFH012025	BHFH012028	on request
130	BHFH013021	BHFH013025	BHFH013028	on request
140	BHFH014021	BHFH014025	BHFH014028	on request

Sterilization
 Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Endostar NiTi H-files

Endostar NiTi H-files are flexible, safe and invasive. They are made of nickel-titanium alloy. Their resistance to bending is around 10 times greater than resistance of stainless steel instruments.

Endostar NiTi H-files are recommended for treatment of curved root canals, which can't be treated with stainless steel instruments. There is no need to pre-bend NiTi H-files. They are very effective and they have great cutting ability.

- > Precisely cut shape.
- > Made of nickel-titanium alloy with shape memory.
- > Very good cutting ability.
- > One cutting edge angled 90°.
- > Cross-section: ●
- > Extraction of dentin debris improved by increasing feed of cutting edge.
- > Very good flexibility greater than stainless steel instruments.
- > Ergonomic handle.

Endostar NiTi H-files, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BNHH154021	BNHH154025	BNHH154028	on request
Assorted 45-80	BNHH458021	BNHH458025	BNHH458028	on request
15	BNHH001521	BNHH001525	BNHH001528	on request
20	BNHH002021	BNHH002025	BNHH002028	on request
25	BNHH002521	BNHH002525	BNHH002528	on request
30	BNHH003021	BNHH003025	BNHH003028	on request
35	BNHH003521	BNHH003525	BNHH003528	on request
40	BNHH004021	BNHH004025	BNHH004028	on request
45	BNHH004521	BNHH004525	BNHH004528	on request
50	BNHH005021	BNHH005025	BNHH005028	on request
55	BNHH005521	BNHH005525	BNHH005528	on request
60	BNHH006021	BNHH006025	BNHH006028	on request
70	BNHH007021	BNHH007025	BNHH007028	on request
80	BNHH008021	BNHH008025	BNHH008028	on request

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Endostar K-files

Endostar K-files are safe instruments with four cutting edges. They are recommended for finding and shaping of narrow canals. Traditionally, this group of instruments have been made from stainless steel and they were designed in a shape proposed by Dr Kerr.

- > 4 cutting edges.
- > Made of stainless steel.
- > Cross section: ■
- > Good flexibility.
- > Safe, noninvasive (not too aggressive).
- > Ergonomic handle with ISO symbols.

Endostar K-files, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BKFH154021	BKFH154025	BKFH154028	BKFH154031
Assorted 45-80	BKFH458021	BKFH458025	BKFH458028	BKFH458031
Assorted 90-140	BKFH901421	BKFH901425	BKFH901428	on request
6	BKFH000621	BKFH000625	BKFH000628	BKFH000631
8	BKFH000821	BKFH000825	BKFH000828	BKFH000831
10	BKFH001021	BKFH001025	BKFH001028	BKFH001031
15	BKFH001521	BKFH001525	BKFH001528	BKFH001531
20	BKFH002021	BKFH002025	BKFH002028	BKFH002031
25	BKFH002521	BKFH002525	BKFH002528	BKFH002531
30	BKFH003021	BKFH003025	BKFH003028	BKFH003031
35	BKFH003521	BKFH003525	BKFH003528	BKFH003531
40	BKFH004021	BKFH004025	BKFH004028	BKFH004031
45	BKFH004521	BKFH004525	BKFH004528	BKFH004531
50	BKFH005021	BKFH005025	BKFH005028	BKFH005031
55	BKFH005521	BKFH005525	BKFH005528	BKFH005531
60	BKFH006021	BKFH006025	BKFH006028	BKFH006031
70	BKFH007021	BKFH007025	BKFH007028	BKFH007031
80	BKFH008021	BKFH008025	BKFH008028	BKFH008031
90	BKFH009021	BKFH009025	BKFH009028	on request
100	BKFH010021	BKFH010025	BKFH010028	on request
110	BKFH011021	BKFH011025	BKFH011028	on request
120	BKFH012021	BKFH012025	BKFH012028	on request
130	BKFH013021	BKFH013025	BKFH013028	on request
140	BKFH014021	BKFH014025	BKFH014028	on request

Sterilization
 Steam autoclave 134°C. Recommended
 sterilization time 35-40 minutes.





Endostar NiTi K-files

Endostar NiTi K-files are made of nickel-titanium alloy and are very flexible and safe. Their resistance to bending is around 10 times greater than the resistance of stainless steel instruments.

They are recommended for treatment of curved root canals, which can't be treated with stainless steel instruments. There is no need to pre-bend NiTi K-files. Great flexibility of NiTi instruments decreases the tendency to straighten the root canal. The risk of wedging instruments or perforation of the root canal is lower.

- > Made of nickel-titanium alloy with shape memory.
- > 4 cutting edges.
- > Cross-section: ■
- > Very good flexibility.
- > Very safe, noninvasive.
- > Ergonomic handle.

Endostar NiTi K-files, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BNKH154021	BNKH154025	BNKH154028	on request
Assorted 45-80	BNKH458021	BNKH458025	BNKH458028	on request
15	BNKH001521	BNKH001525	BNKH001528	on request
20	BNKH002021	BNKH002025	BNKH002028	on request
25	BNKH002521	BNKH002525	BNKH002528	on request
30	BNKH003021	BNKH003025	BNKH003028	on request
35	BNKH003521	BNKH003525	BNKH003528	on request
40	BNKH004021	BNKH004025	BNKH004028	on request
45	BNKH004521	BNKH004525	BNKH004528	on request
50	BNKH005021	BNKH005025	BNKH005028	on request
55	BNKH005521	BNKH005525	BNKH005528	on request
60	BNKH006021	BNKH006025	BNKH006028	on request
70	BNKH007021	BNKH007025	BNKH007028	on request
80	BNKH008021	BNKH008025	BNKH008028	on request

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Endostar K-reamers

Endostar K-reamers are used to enlarge root canals. K-reamers are most effective as a rotary cutting instruments.

- > Very high ability of dentin debris removal.
- > High ability of enlarge the root canal.
- > 3 cutting edges.
- > Cross-section: ▲
- > Made of stainless steel.
- > Ergonomic handle with ISO symbols.

Endostar K-reamers, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BKRH154021	BKRH154025	BKRH154028	BKRH154031
Assorted 45-80	BKRH458021	BKRH458025	BKRH458028	BKRH458031
Assorted 90-140	BKRH901421	BKRH901425	BKRH901428	on request
6	BKRH000621	BKRH000625	BKRH000628	BKRH000631
8	BKRH000821	BKRH000825	BKRH000828	BKRH000831
10	BKRH001021	BKRH001025	BKRH001028	BKRH001031
15	BKRH001521	BKRH001525	BKRH001528	BKRH001531
20	BKRH002021	BKRH002025	BKRH002028	BKRH002031
25	BKRH002521	BKRH002525	BKRH002528	BKRH002531
30	BKRH003021	BKRH003025	BKRH003028	BKRH003031
35	BKRH003521	BKRH003525	BKRH003528	BKRH003531
40	BKRH004021	BKRH004025	BKRH004028	BKRH004031
45	BKRH004521	BKRH004525	BKRH004528	BKRH004531
50	BKRH005021	BKRH005025	BKRH005028	BKRH005031
55	BKRH005521	BKRH005525	BKRH005528	BKRH005531
60	BKRH006021	BKRH006025	BKRH006028	BKRH006031
70	BKRH007021	BKRH007025	BKRH007028	BKRH007031
80	BKRH008021	BKRH008025	BKRH008028	BKRH008031
90	BKRH009021	BKRH009025	BKRH009028	on request
100	BKRH010021	BKRH010025	BKRH010028	on request
110	BKRH011021	BKRH011025	BKRH011028	on request
120	BKRH012021	BKRH012025	BKRH012028	on request
130	BKRH013021	BKRH013025	BKRH013028	on request
140	BKRH014021	BKRH014025	BKRH014028	on request

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Endostar NiTi K-reamers

Endostar NiTi K-reamers made of nickel-titanium alloy are used to enlarge root canals. They are more flexible than stainless steel instruments (more than 10 times). NiTi K-reamers are the first instruments to enter the root canals. They are recommended to check patency and width of root canals.

NiTi K-reamers are used as a rotary cutting instruments more than NiTi K-files. The nickel-titanium alloy is more resistance than steel, therefore instruments which are made of this alloy can enlarge 2-3 times more root canals.

- > Very good dentin debris removal.
- > 3 cutting edges.
- > Cross-section: ▲
- > Made of nickel-titanium alloy with shape memory.
- > Relatively low flexibility better than stainless instruments.
- > Ergonomic handle.

Endostar NiTi K-reamers, 6 pcs				
Size	21 mm	25 mm	28 mm	31 mm
Assorted 15-40	BNRH154021	BNRH154025	BNRH154028	on request
Assorted 45-80	BNRH458021	BNRH458025	BNRH458028	on request
15	BNRH001521	BNRH001525	BNRH001528	on request
20	BNRH002021	BNRH002025	BNRH002028	on request
25	BNRH002521	BNRH002525	BNRH002528	on request
30	BNRH003021	BNRH003025	BNRH003028	on request
35	BNRH003521	BNRH003525	BNRH003528	on request
40	BNRH004021	BNRH004025	BNRH004028	on request
45	BNRH004521	BNRH004525	BNRH004528	on request
50	BNRH005021	BNRH005025	BNRH005028	on request
55	BNRH005521	BNRH005525	BNRH005528	on request
60	BNRH006021	BNRH006025	BNRH006028	on request
70	BNRH007021	BNRH007025	BNRH007028	on request
80	BNRH008021	BNRH008025	BNRH008028	on request

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Endostar Unique S-files

Endostar Unique S-files are very special endodontic instruments. Unique S-file has a 'S file' configuration in cross section and it has non-standard ISO sizes- so-called 'half-size'. It helps to match the file to specific clinical case.

- > Non-standard ISO-sizes: 12.5, 17.5 and 22.5.
- > Great cutting ability.
- > Great removal of dentin debris.
- > 2 cutting edges angled 90° (edges distributed symmetrically at 180° on the long axis).
- > Cross-section: ●
- > Precisely cut shape made of very hard, yet flexible stainless steel alloy,
- > Avoidance of making steps in root canal.
- > Non cutting tip.
- > Millimeter scale etched on the blade (18 to 25 mm from the tip), which facilitates the determination of the working length.

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Unique S-files, 6 pcs

Size	25 mm
Set 12.5, 17.5, 22.5	BUSF122225
12.5	BUSF001225
17.5	BUSF001725
22.5	BUSF002225



Endostar Barbed Broaches

Endostar Barbed Broaches are basic hand instruments. These instruments represent the oldest forms of root canal instruments. Broaches are used to extirpate the vital pulp. The working part consists of 40 spirally arranged flexible barbs.

- > Great pulp removal.
- > Working part made of soft stainless steel.
- > Cross-section: ★
- > Spirally arranged barbs.
- > Ergonomic handle with ISO symbols.

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Barbed Broaches, 6 pcs

Size	25 mm	Size	25 mm
Set 01-06	BBBR010625	03	BBBR000325
00	BBBR000025	04	BBBR000425
01	BBBR000125	05	BBBR000525
02	BBBR000225	06	BBBR000625



Endostar Unique K-files

Endostar Unique K-files are very special endodontic instruments. Unique K-file has a 'K file' configuration in cross section and it has non-standard ISO sizes- so-called 'half-size'. It helps to match the file to specific clinical case. Using of Unique K-files helps to avoid steps during the root canal preparation. There are following sizes of the instruments: 12,5; 17,5 and 22,5. Endostar Unique K-files are safe instruments with four cutting edges. Traditionally, this group of instruments have been made from stainless steel and they were designed in a shape proposed by Dr Kerr.

- > Non-standard ISO-sizes: 12,5; 17,5 and 22,5.
- > 4 cutting edges.
- > Made of stainless steel.
- > Square cross section: ■
- > Good flexibility.
- > Safe, noninvasive (not too aggressive).

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Unique K-files, 6 pcs

Size	25 mm
Set 12.5, 17.5, 22.5	BUKF122225
12.5	BUKF001225
17.5	BUKF001725
22.5	BUKF002225



Endostar Canal Locator

Endostar Canal Locator are special endodontic instruments recommended for finding, localizing and penetrating root canals. Endostar Canal Locators are thin, flexible and firm. They are very efficient in narrow and curved root canals.

- > Cross-section: ●
- > Good flexibility, non cutting tip.
- > Millimeter scale etched on the blade which facilitates the determination of the working length.
- > Safe, noninvasive (not too aggressive).

Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Canal Locator, 6 pcs

Size	18 mm	21 mm
Set 6, 8, 10	BCLH061018	BCLH061021
6	BCLH000618	BCLH000621
8	BCLH000818	BCLH000821
10	BCLH001018	BCLH001021



Endostar Spreader Sonic Files

Endostar Spreader Sonic Files are instruments recommended for irrigation and disinfection of root canals. They can be used also during the removal of broken instruments from root canal. Sonic Files can be used only with ultrasound devices.

- > Made of special stainless steel.
- > Use of cavitation.
- > Sonic files are designed to be used: up and down.
- > Activation of root canals irrigants.

Important warnings:

- > Endostar Spreader Sonic files are designed for devices like Endo-Chuck 120° or 95° (f.e. Endostar Sonic File Holder 120° or 95°).
- > It is not recommended to use Endostar Spreader Sonic Files for enlarging root canals.
- > It is recommended to rinse the canal with sodium hypochlorite.
- > It is recommended to use ultrasound with minimum power to control the possibility of breakage the file in the canal.
- > File in canal should be passively move up and down (never by force) not to succumb to its curvature or stucked in the canal.
- > It is not recommended to use other energy source while using ultrasonic device.
- > Ultrasonic files should be placed into the root canal always in standby mode, approx. 1-2 mm shorter than the working length. Only then we could turn on ultrasound device.

Endostar Spreader Sonic Files, 6 pcs

Size	33 mm
Set 25 - 35	ESSF253533
25	ESSF002533
30	ESSF003033
35	ESSF003533

Instruction for irrigation and disinfection of root canal:

- > Fill the root canal with wash solution - sodium hypochlorite (circa 1-2 ml).
- > Enter the file to the canal - 2 mm shorter than the working length (leave a small gap, a small space at the tip/apex).
- > Turn on ultrasound device.
- > Activate hypochlorite for 20 seconds, moving with a small amplitude moves (1-2 mm) with a file Endostar Spreader Sonic Files in the canal. Replace hypochlorite for the fresh one (about 1-2 ml). Reactivate the solution for 20 seconds. Again, replace solution for the fresh one. For the third time activate hypochlorite for 20 seconds.

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.





Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Finger Pluggers

Endostar Finger Pluggers are used for vertical (apical) condensation of gutta-percha. Pluggers can be used also for application paste - like materials into the root canal.

- > Made of stainless steel.
- > Slightly tapered and flat-ended metal instruments.
- > Ergonomic handle with ISO symbols.

Endostar Finger Pluggers, 6 pcs	
Size	25 mm
Set 15-40	BPLG154025
15	BPLG001525
20	BPLG002025
25	BPLG002525
30	BPLG003025
35	BPLG003525
40	BPLG004025



Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar NiTi Finger Pluggers

Endostar NiTi Finger Pluggers are used for vertical (apical) condensation of gutta-percha. They are made of nickel-titanium alloy and they are very flexible. NiTi pluggers are recommended for obturation of curved root canals. Pluggers can be used also for application paste - like materials into the root canal.

- > Slightly tapered and flat-ended metal instruments.
- > Ergonomic handle with ISO symbols.

Endostar NiTi Finger Pluggers, 6 pcs	
Size	25 mm
Set 15-40	BPTG154025
15	BPTG001525
20	BPTG002025
25	BPTG002525
30	BPTG003025
35	BPTG003525
40	BPTG004025



Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Finger Spreaders

Endostar Finger Spreaders are used for lateral condensation of gutta-percha. Instruments are produced from stainless steel and special quality plastic materials, which guarantee high products quality.

- > Tapered and pointed instruments.
- > Ergonomic handle with ISO symbols.

Endostar Finger Spreaders, 6 pcs

Size	25 mm
Set 15-40	BSPD154025
10	BSPD001025
15	BSPD001525
20	BSPD002025
25	BSPD002525
30	BSPD003025
35	BSPD003525
40	BSPD004025



Sterilization

Steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar NiTi Finger Spreaders

Endostar NiTi Finger Spreaders are used for lateral condensation of gutta-percha. They are made of nickel-titanium alloy and they are very flexible. NiTi spreaders are recommended for obturation of curved root canals.

- > Tapered and pointed instruments.
- > Ergonomic handle with ISO symbols.

Endostar NiTi Finger Spreaders, 6 pcs

Size	25 mm
Set 15-40	BSTD154025
15	BSTD001525
20	BSTD002025
25	BSTD002525
30	BSTD003025
35	BSTD003525
40	BSTD004025



Endostar Paste Fillers with safety spring (PFL)

Endostar Paste Fillers with safety spring (also called lentulo spirals, a spiral filler or a paste carrier) are used to introduce paste - like materials, cements, sealers into the root canals. The working part is conically shape and its consist of loosely coiled spiral made of thin wire. Paste Fillers with safety spring have an additional, tight spring at the metal handle, for better flexibility and protection from the breaking during the rotational movements in the canal.

- > Golden colour of handles allows easily to distinguish lentulo spirals from other instruments.
- > Application of materials is performed by clockwise movement.
- > Rotation speed - under 800 rpm.
- > Cross-section:


Sterilization
 steam autoclave 134°C. Recommended sterilization time 35-40 minutes.

Endostar Paste Fillers with safety spring, 4 pcs				
Size	17 mm	21 mm	25 mm	29 mm
Assorted 25-40	EPFL254017	EPFL254021	EPFL254025	EPFL254029
25, 1 pc of each 17, 21, 25, 29 mm	EPFL002500			
25	EPFL002517	EPFL002521	EPFL002525	EPFL002529
30	EPFL003017	EPFL003021	EPFL003025	EPFL003029
35	EPFL003517	EPFL003521	EPFL003525	EPFL003529
40	EPFL004017	EPFL004021	EPFL004025	EPFL004029



Endostar Paste Fillers without spring (PFN)

Endostar Paste Fillers without spring (also called lentulo spirals, a spiral filler or a paste carrier) are used to introduce paste - like materials, cements, sealers into the root canals. The working part is conically shape and its consist of loosely coiled spiral made of thin wire.

- > Golden colour of handles allows easily to distinguish lentulo spirals from other instruments.
- > Application of materials is performed by clockwise movement.
- > Rotation speed - under 800 rpm.
- > Cross-section: 

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Paste Fillers without spring, 4 pcs				
Size	17 mm	21 mm	25 mm	29 mm
Assorted 25-40	EPFN254017	EPFN254021	EPFN254025	EPFN254029
25, 1 pc of each 17, 21, 25, 29 mm	EPFN002500			
25	EPFN002517	EPFN002521	EPFN002525	EPFN002529
30	EPFN003017	EPFN003021	EPFN003025	EPFN003029
35	EPFN003517	EPFN003521	EPFN003525	EPFN003529
40	EPFN004017	EPFN004021	EPFN004025	EPFN004029



Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Gates Glidden

Endostar Gates Glidden drills are engine-driven instruments and they are used to enlarge root canals orifice and coronal third of the canals. These instruments represent the oldest forms of root canal instruments. Gates Glidden drills are small - flame shaped cutting instruments used in conventional hand piece.

- > Slightly flexible.
- > Rotation speed: 450-800 rpm.
- > Non cutting tip.

Endostar Gates Glidden, 6 pcs	
Size	19 mm
Set 01-06	BGAE010619
01	BGAE000119
02	BGAE000219
03	BGAE000319
04	BGAE000419
05	BGAE000519
06	BGAE000619



Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar Peeso Reamers

Endostar Peeso Reamers drills are engine-driven instruments and they are used to enlarge root canals orifice and coronal third of the canals. Peeso reamers differ from Gates Glidden drills in that the blades spread over a wide surface and the shape is cylindrical.

- > Slightly flexible.
- > Rotation speed: 800-1200 rpm.
- > Non cutting tip.

Endostar Peeso Reamers, 6 pcs	
Size	19 mm
Set 01-06	BPPE010619
01	BPPE000119
02	BPPE000219
03	BPPE000319
04	BPPE000419
05	BPPE000519
06	BPPE000619



Endostar ENDObox without/with instruments

ENDObox is used for holding endodontic instruments and for their sterilization. A two piece box (bottom and top part) is made out of anodized aluminium and has a movable endodontic insert.

ENDObox with instruments consists 28 endodontic instruments for root canal treatment:

- > 9 rotary files - Endostar E3 Rotary System (Basic, Big Apical, Small Apical).
- > 12 K-files with endostops, length 25 mm and sizes: 06 rose, 08 grey, 10 violet, 15 white, 20 yellow, 25 red.
- > 6 NiTi K-files with endostops, length 25 and sizes: 25 red, 30 blue, 35 green, 40 black, 45 white.
- > 1 Endostar Canal locator, length 18 and size: 10 violet.

Sterilization

steam autoclave 134°C. Recommended sterilization time 35-40 minutes.



Endostar ENDObox with instruments		EEB1
Endobox		1 pc
Instruments		28 pcs

Endostar ENDObox without instruments		EEB
Endobox		1 pc

Endostar ENDOstand

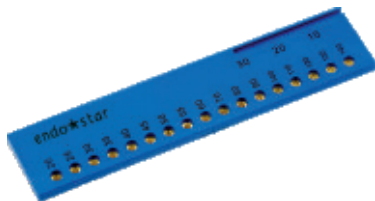
Hinged stand with lid holds endodontic files and reamers.

Stand with a ruler to measure stop positions easily from either direction.

Sterilization in steam autoclave 134°C.



Endostar ENDOstand		EES
ENDOstand		1 pc

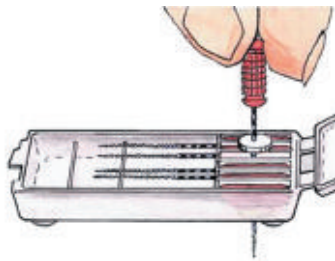


Endostar ENDOcalibrator

Gauge is used to customize accessory sized gutta percha to ISO sizes, and to measure files, gutta percha points and absorbent points.

Sterilization in steam autoclave 132°C.

ENDOfalibrator	EEC
Calibrator	1 pc



ENDOfstops

Round, white silicon rubber, stoppers, used for marking the working length on a file or reamer. Easily visible on RTG.

Sterilization in steam autoclave 134°C.

ENDOfstops	ESW
Box	100 pcs



ENDOfgrips

Ergonomical sleeves used for increasing handle diameter. Made of a sterilizable silicon rubber, for easier grip of an endodontic instrument, especially when working in surgical gloves.

ENDOfgrips	EGP
Box	12 pcs



Multigrip

Multigrip is a multi-purpose instrument for facilitating many dental procedures. Made of aluminum, very light, can be used with Endostar Canal Locator when localizing root canal or with many other small instruments (brushes, dental picks etc.), when working in hard-to-reach mouth areas.

Multigrip	MGP
Box	1 pc



Endostar Gutta Percha Points

For root canal obturation. ISO coded.

- > Ideal for vertical and lateral root canal obturation.
- > Biocompatible and hygienic.
- > With high dimensional stability.
- > Firm and elastic.
- > Available in 12 sizes (15, 20, ..., 80) and/or assorted 15-40, 45-80, packed in compartment boxes, with standard 2% taper, 120 pcs/box or with taper 4% and 6%, 60 pcs/box.
- > Calibrated, with the length marking on the point.

Gutta Percha Points		CE 0120
Size / ISO		15-80
Taper		2% / 4% / 6%
Packing		Single size or assorted
Quantity in package		120 pcs / 60 pcs



Endostar Paper Points

Paper points for drying the root canal with a very high absorption capacity.

- > Used for drying root canal.
- > ISO coded.
- > Highly absorbent.
- > Firm and elastic.
- > Available in 12 sizes (15, 20, ..., 80) and/or assorted 15-40, 45-80, packed in compartment boxes, with standard 2% taper, 200 pcs/box or with taper 4% and 6%, 100 pcs/box.

Paper Points		CE 0120
Size / ISO		15-80
Taper		2% / 4% / 6%
Packing		Single size or assorted
Quantity in package		200 pcs / 100 pcs



Endostar PROendo

Cordless endodontic handpiece. Compatible with all rotary systems, designed and programmed specifically for Endostar E3 system.

- > Mobile, narrow, ergonomic.
- > Automatic stop and autoreverse functions ensure safe work in patient's mouth.
- > Easy-to-read LCD panel.
- > Memory with 6 adjustable programs.
- > Contra-angle head is steam autoclavable at 135 °C.
- > Adjustable Rotary speed (min-1): 120-2000 rpm.
- > Torque (N/cm): 0.1-4.0
- > Operating time on a full charge: approx. 80 minutes.
- > Fast charging: approx. 90 minutes.
- > Handpiece turns off after 10 minutes of inactivity.

Endostar ProEndor	PROENDO
Wireless Endostar ProEndo	1 pc

Parameters of Endostar ProEndo

Speed Range (min)	Gear Ratio	Torque Level (Ncm)
550 - 2000	4:1	0.1 - 1.0
230 - 800	10:1	0.2 - 2.0
140 - 500	16:1	0.3 - 3.0
120 - 400	20:1	0.4 - 4.0

Endostar ProEndo settings for Endostar E3 Rotary System

System	File number	Standard torque	Advanced torque	ProEndo setting
E3 BASIC	1 (8/30)	2.4	3.0	1
	2 (6/25)	2.1	3.0	2
	3 (4/30)	0.9	2.1	3
E3 SMALL	1 (6/20)	0.9	2.1	3
	2 (4/25)	0.9	2.1	3
	3 (4/20)	0.9	2.1	3
E3 BIG	1 (4/35)	2.1	3.0	2
	2 (4/40)	2.1	3.0	2
	3 (4/45)	2.1	3.0	2

Recommended number of use

Recommended number of use

Depending on the size (see Table), provided that visual inspection performed by the practitioner prior to use shows that the instrument remains undamaged, is not bent (does not apply to bending the instrument by dentist to the curvature of the canal - stainless steel hand files), deformed, does not show signs of blade wear and can be securely attached to the handpiece. If the file has been subjected to high torsion force, especially in highly curved canals the instrument should be used only once (rotary instruments).

- > Prolonging the life of the instrument more than recommended may result in the blade breaking.
- > Dispose of file which appears to be defective.

Endostar E3 Rotary System									
File number	E3 Basic			E3 Big Apical			E3 Small Apical		
	1	2	3	1	2	3	1	2	3
	10	5	5	5	5	5	5	5	5

Endostar RE Re Endo Rotary System				
File number	1	2	3	4
	10	10	5	5

Endostar NT2 NiTi Two Rotary System						
File number	1	2	3	4	5	6
	5	5	5	5	5	5

Endostar Unique S-files / Endostar Unique K-files			
File number	12.5	17.5	22.5
	1-2	1-2	1-2

Endostar Spreader Sonic Files			
File number	25	30	35
	1-2	2-3	2-3

Endostar Barbed Broaches							
File number	00	01	02	03	04	05	06
	1	2-3	2-3	2-3	4-5	4-5	4-5

Endostar Gates Glidden / Endostar Peeso Reamers					
File number	1	2	3	4	5
	5	5	5	10	10

Recommended number of use

Endostar Hand Files															
Name / ISO	06	08	10	15	20	25	30	35	40	45	50	55	60	70	80
S-files	1	1	1	1-2	1-2	1-2	2-3	2-3	2-3	4-5	4-5	4-5	4-5	4-5	4-5
NiTi S-files	-	-	2	2-3	2-3	2-3	4-5	4-5	4-5	6-8	6-8	6-8	6-8	6-8	6-8
H-files	1	1	1	1-2	1-2	1-2	2-3	2-3	2-3	4-5	4-5	4-5	4-5	4-5	4-5
NiTi H-files	-	-	-	2-3	2-3	2-3	4-5	4-5	4-5	6-8	6-8	6-8	6-8	6-8	6-8
K-files	1	1	1	1-2	1-2	1-2	2-3	2-3	2-3	4-5	4-5	4-5	4-5	4-5	4-5
NiTi K-files	-	-	-	2-3	2-3	2-3	4-5	4-5	4-5	6-8	6-8	6-8	6-8	6-8	6-8
K-reamers	1	1	1	1-2	1-2	1-2	2-3	2-3	2-3	4-5	4-5	4-5	4-5	4-5	4-5
NiTi K-reamers	-	-	-	2-3	2-3	2-3	4-5	4-5	4-5	6-8	6-8	6-8	6-8	6-8	6-8
Canal Locator	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Finger Pluggers	-	-	-	1-2	1-2	1-2	2-3	2-3	2-3	-	-	-	-	-	-
NiTi Finger Pluggers	-	-	-	2-3	2-3	2-3	4-5	4-5	4-5	-	-	-	-	-	-
Finger Spreaders	-	-	1	1-2	1-2	1-2	2-3	2-3	2-3	-	-	-	-	-	-
NiTi Finger Spreaders	-	-	-	2-3	2-3	2-3	4-5	4-5	4-5	-	-	-	-	-	-
Paste Fillers without spring (PFN)	-	-	-	-	-	1-2	4-5	4-5	4-5	-	-	-	-	-	-
Paste Fillers with safety spring (PFL)	-	-	-	-	-	1-2	4-5	4-5	4-5	-	-	-	-	-	-

Endostar Hand Files						
Name / ISO	90	100	110	120	130	140
S-files	8-10	8-10	8-10	8-10	8-10	8-10
NiTi S-files	-	-	-	-	-	-
H-files	8-10	8-10	8-10	8-10	8-10	8-10
NiTi H-files	-	-	-	-	-	-
K-files	8-10	8-10	8-10	8-10	8-10	8-10
NiTi K-files	-	-	-	-	-	-
K-reamers	8-10	8-10	8-10	8-10	8-10	8-10
NiTi K-reamers	-	-	-	-	-	-
Canal Locator	-	-	-	-	-	-
Finger Pluggers	-	-	-	-	-	-
NiTi Finger Pluggers	-	-	-	-	-	-
Finger Spreaders	-	-	-	-	-	-
NiTi Finger Spreaders	-	-	-	-	-	-
Paste Fillers without spring (PFN)	-	-	-	-	-	-
Paste Fillers with safety spring (PFL)	-	-	-	-	-	-

Cleaning, disinfecting and sterilizing instruments

Instructions for cleaning, disinfecting and sterilizing all instruments

All instruments produced by Poldent Sp. z o.o. which are designed for endodontic treatment are not sterile. Before first-time use and after each use the instruments have to be cleaned, disinfected and sterilized according to the following instructions.

INTRODUCTION

Warning

- > The user is responsible for the sterility of the product before first and each subsequent use of the product.
- > For your own safety, we recommend that you use protective equipment such as gloves.
- > You should only use cleaning and sterilizing products which are intended for cleaning dental instruments.
- > Always follow solution manufacturer's instructions when soaking instruments in chemical solutions.
- > Excessive solution concentrations and soaking time (not in accordance with the solution manufacturer's instructions) may lead to damage of the instruments.
- > Plastic handles may melt or deform at temperatures above 200°C.

Recommendations

- > Repeated sterilization of instruments does not affect their condition. The lifetime of the instrument depends on the frequency of its use.
- > Do not exceed the recommended maximum limit of instrument use.
- > Instruments can be disinfected with mild disinfectants and washed in ultrasonic washers.

INSTRUCTIONS FOR CLEANING, DISINFECTING AND STERILIZING INSTRUMENTS

Manual cleaning

- > Remove the dentin residue manually using a soft cloth.
- > Rinse off all larger debris.

Automatic cleaning

- > Place the instruments in an appropriate basket and next place the basket in an ultrasonic cleaner. Follow the device's instructions of use.
- > Use a device that meets ISO 15883 requirements.

Disinfection

- > Place the instruments in the disinfectant solution. Be sure to follow the fluid manufacturer's recommendations regarding the disinfection time.
- > Rinse the files in distilled or demineralised water in order to remove any residual cleaning solution.
- > Dry the instruments.

Evaluation

- > Check the instruments carefully. Discard all instruments which are damaged, broken or bent.

Sterilization

- > All instruments can be repeatedly sterilized in a steam autoclave at 134°C.
- > The recommended sterilization time is 35-40 minutes.
- > Use devices that meet ISO 13060 and ISO 285 requirements.
- > Perform the sterilization procedure in accordance with ISO 17665 standards.

WARNING

Prolonging the life of the instrument more than recommended may result in the blade breaking.



Poldent Co. Ltd.
Dzika 2 Street
00-194 Warsaw, Poland
Ph.: +48 22 351 76 61
Mob.: +48 603 630 090
E-mail: endostar@endostar.eu
www.endostar.eu

endo★star