

VarioSurg 3

NAKANISHI INC.
www.nsk-inc.com
700 Shimohinata
Kanuma-shi
Tochigi 322-8666,
Japan
TEL : +81 (0)289-64-3380
FAX : +81 (0)289-62-5636

EC REP
NSK Europe GmbH
www.nsk-europe.de
Elly-Beinhorn-Strasse 8
65760 Eschborn,
Germany
TEL : +49 (0)6196 77606-0
FAX : +49 (0)6196 77606-29

NSK United Kingdom Ltd
www.nsk-uk.com
Office 5, Gateway1000,
Arlington Business Park,
Whittle Way,
Stevenage, SG1 2FP, UK
TEL : +44 (0)1438 310670
FAX : +44 (0)1438 310671

NSK Dental LLC
www.nskdental.com
1800 Global Parkway
Hoffman Estates, IL 60192,
USA
TEL : +1 888 675 1675
FAX : +1 800 838 9328

NSK Oceania Pty Ltd
www.nskoceania.com.au
Unit 22, 198-222 Young St.
Waterloo, Sydney,
NSW 2017, Australia
TEL : +61 (0)2 8306 3000
FAX : +61 (0)2 8306 3030

NSK Middle East
www.nsk-inc.com
Room 6EA-701, 7th Floor,
East Wing No.6
Dubai Airport Free Zone,
PO Box 54316 Dubai, UAE
TEL : +971 (0)4-204-5507
FAX : +971 (0)4-204-5508

NSK Asia
www.nsk-inc.com
1 Maritime Square,
#09-33 HarbourFront Centre,
Singapore 099253
TEL : +65-6376-5018
FAX : +65-6376-0233

Specifications are subject to change without notice.

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VarioSurg3

Non stop evolution

An ultrasonic bone surgery system is indispensable when performing implant procedures. VarioSurg3, the latest advance in the VarioSurg range, maintains the light weight and slim handpiece design of its predecessor and the same excellent balance and grip but has 50% more power than the previous model. The feedback and auto-tuning functions, combined with a wide range of tips, ensure faster, more precise treatments. VarioSurg3 also features the world's first dynamic link feature, which enables you to operate both VarioSurg3 and Surgic Pro via a single foot control.
Intuitive controls and a large and clear backlit LCD screen makes VarioSurg3 really easy to operate and takes the strain out of delicate procedures.
VarioSurg – continuously evolving.



50% Increased Power – Focus on the Procedure

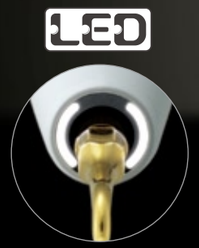
Applications

- Bone surgery
- Sinus lifts
- Extraction
- Implant preparation

NSK's twin LEDs deliver natural daylight-quality illumination, and significant advantages to the way you work

Clearer : LEDs generate natural daylight-quality light, which ensures clearer vision than halogen light sources.

More Durable : LED light sources are longer lasting and more durable than halogen bulbs.

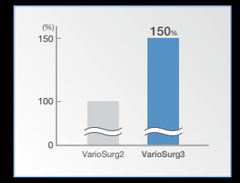


Twin LED lights

Major Power Boost – Up 50 Percent

Capable of generating a maximum of 150 percent of the power its predecessor produced (in Surg Mode), the VarioSurg3 effectively shortens treatment time in combination with any of the sharp tips available.

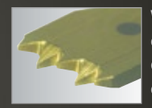
*When setting power level more than 100 percent, please make sure to use tips that correspond to high power.



Comfortable Grip Handpiece

The superior ergonomics of the VarioSurg3 handpiece, including its slim and lightweight body, ensure minimal hand fatigue and greater accessibility to difficult to reach areas. The twin LEDs integrated in the handpiece produce outstanding visibility, leading to safer and more precise treatments. Advanced ultrasonics produce oscillation at the handpiece tip that eliminates heat at the operation site, allowing for minimally invasive procedures.

Tips - Products of NSK's Meticulous Manufacturing



We maximize the sharpness of our tips through three-dimensional cutting (toothing) of the blade's edge.

Shorter, Lighter Handpiece

VarioSurg3's slim LED-equipped handpiece gives you extraordinary accessibility and visibility during procedures, and its ergonomic shape and fine balance are designed to minimize hand and finger fatigue even during extended use.



Optic MODEL: **VS3-LED-HPSC** ORDER CODE: **E1133**
• with 2m cord

135°C
Washable in the thermodisinfector
Autoclavable up to 135°C

VarioSurg3

Exceptional Power for Faster, More Accurate Procedures

The exceptional power VarioSurg3 that enables precise, stress-free surgical procedures even when approaching hard bone in delicate areas.
The compact body offers a wide variety of functions. The large backlit LCD display and intuitive controls help reduce operating errors and make procedures safer.

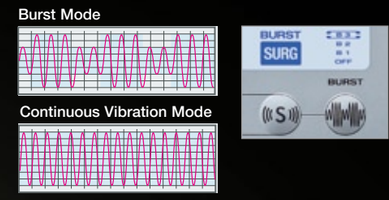


Main Features

- Major Power Boost
- 3 Modes (SURG, ENDO, PERIO)
- Selectable Burst Mode
- 9 Programs
  (SURG x 5, ENDO x 2, PERIO x 2)
- Adjustable LED Light Intensity
- Automatic Cleaning Mode
- Feedback Function
- Auto Tuning Function
- Dynamic Link Feature

Selectable Burst Mode

You can switch modes instantly from Surg Mode to Burst Mode even during the procedure. Burst Mode creates a hammer drill effect capable of cutting through even the hardest tissues. Select any of three types of Burst Mode according to the procedure and the condition of the bone.

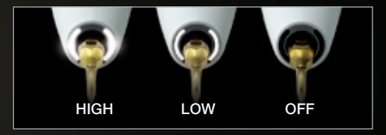


Feedback Function

The Feedback Function constantly monitors the performance parameters of the ultrasonic unit during operation and simultaneously controls the power output, to optimise the level of power depending on the procedure.

Adjustable Light Intensity

Switch effortlessly between three levels of light intensity to suit the procedure.



Variable Water Volume

Select any of five water volume modes depending on the power setting and oral condition to efficiently cool the selected tip. Maximum water volume flows at 75ml per minute, preventing the tip from overheating and damaging tissue.

Memory Function

You can store settings for procedures or tips within each program and easily call up the settings by pressing the program button.

Surgic Pro+ × VarioSurg3

Dual Power and Performance

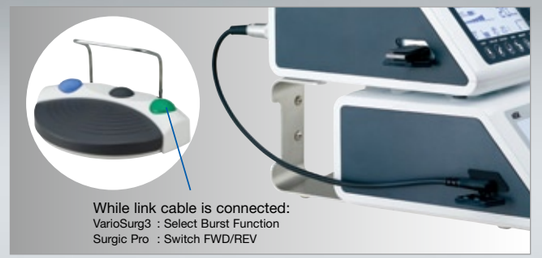
NSK's LINK STAND TECHNOLOGY allows you to conveniently link two supremely powerful and versatile surgical units for convenience and space saving while maintaining independence when needed.

VarioSurg3 is NSK's most powerful ultrasonic surgical unit with 150% power increase compared to its pre-decessor.

Surgic Pro+ is NSK's premium surgical unit for implant placement and general surgical procedures with added peace of mind due to AHC (Advanced Handpiece Calibration system).

The Link Function

You can operate both the implant motor Surgic Pro and VarioSurg3 ultrasonic bone surgery system with a single foot control by linking the two units with the link cable. Put the two units on the Link Stand and create a compact and space saving, all encompassing surgical treatment centre. The two systems can also be installed together compactly with a Link Stand that takes up minimal space.



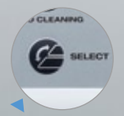
While link cable is connected:
VarioSurg3 : Select Burst Function
Surgic Pro : Switch FWD/REV

Safe Operation

The user-friendly display clearly indicates which system is active and ensures safe and accurate operation.



VarioSurg3's display indicates that Surgic Pro is active



Press the 'SELECT' button to switch between VarioSurg3 and Surgic Pro mode.

SG Link Set (Optional)

MODEL: **VarioSurg3 Link set (E)**

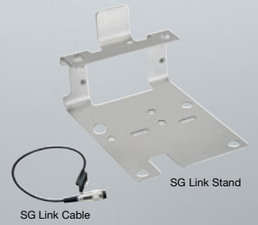
ORDER CODE: **Y1002729**

Contents: • SG Link Stand • SG Link Cable

Specifications

SG Link Stand
- Dimensions : W210 x D300 x H180 (mm)
- Weight : 1.85 kg

SG Link Cable
- Length 355 (mm)



SG Link Stand

SG Link Cable



VarioSurg3

VarioSurg3 Complete Sets Optic

MODEL: **VarioSurg3 (120V)** ORDER CODE: **Y1002725**
MODEL: **VarioSurg3 (230V)** ORDER CODE: **Y1002726**

Contents

• Control Unit • LED Handpiece with 2m cord • FC-78 Foot Control • Sterilization Cassette
• Handpiece Stand • Irrigation tube (5 pcs.) and other accessories
• Basic H-S Kit (H-SG1, SG3, SG5, SG6D, SG7D, SG11 and Tip holder)

VarioSurg3 Complete Sets without Foot Control Optic

MODEL: **VarioSurg3 (120V) Non FT** ORDER CODE: **Y1002247**
MODEL: **VarioSurg3 (230V) Non FT** ORDER CODE: **Y1002248**

Contents

• Control Unit • LED Handpiece with 2m cord • Sterilization Cassette
• Handpiece Stand • Irrigation tube (5 pcs.) and other accessories
• Basic H-S Kit (H-SG1, SG3, SG5, SG6D, SG7D, SG11 and Tip holder)



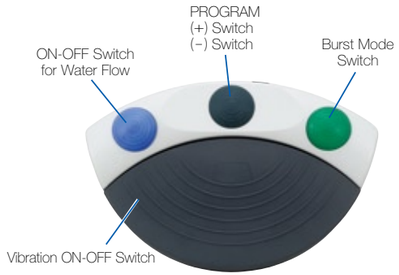
Specifications

Control Unit	
• Frequency	: 28-32 kHz
• Power Supply	: AC120V or 230V 50/60 Hz
• Irrigation Flow Rate	: 10~75 mL / min
• Programs	: SURG x 5, ENDO x 2, PERIO x 2
• Dimensions	: W265 x D220 x H100 (mm)

Foot Control

Hands-Free Program Adjustments Via Foot Control

The VarioSurg3 foot control conforms with the IPX8 standard for medical foot control systems. All functions are clearly marked and allow accurate and hands-free operation of the unit within the pre-set parameters. Using the metal bar the foot control can easily be re-positioned at any time.



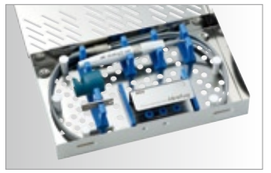


MODEL: **FC-78** ORDER CODE: **Z1102003**
• With 2m cord

Sterilization Cassette

The Sterilization Cassette is designed for the safe processing and storage of VarioSurg3 components.





MODEL: **VA-SG-CASE** ORDER CODE: **20001326**

• Dimensions : W281 x D171.5 x H47 (mm)
• Has dedicated compartments for the handpiece, cord, tip replacement wrench and tip holders

Carrying Case (Optional)

The Carrying Case neatly stores all VarioSurg3 components.



MODEL: **Carrying Case (VarioSurg3)** ORDER CODE: **Y1002768**

• Dimensions : W534 x D427 x H207 (mm)

Surgic Pro+ with data storage feature

Precision control for today's specialist procedures

The NSK Surgic Pro+ is a compact, stylish and fully integrated system incorporating our unique Advanced Handpiece Calibration (AHC). The inbuilt availability of a wide range of speed and torque settings allows clinicians to use Surgic Pro+ with any implant system brand.

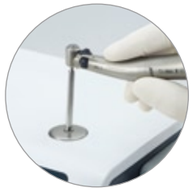
Surgic Pro+ Complete Sets with X-DSG20L Optic Handpiece **Optic**

MODEL: **Surgic Pro+ OPT-D (120V)** ORDER CODE: **Y1002095**

MODEL: **Surgic Pro+ OPT-D (230V)** ORDER CODE: **Y1002096**

Contents

- Control Unit with data storage facility
- SGL70M LED Micromotor
- FC-78 Foot Control
- X-DSG20L Optic Handpiece (20:1 Reduction)
- Irrigation tube (5 pcs.) and other accessories



Advanced Handpiece Calibration (AHC)





VarioSurg Tip Line Up

Ultrasonic Tips

A Wide Choice for Clinical Applications

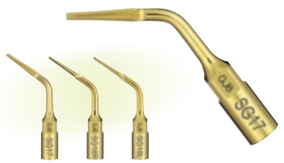
Bone Surgery



Scraper



Extraction



Sinus Lift



Socket Lift Tips



Sinus Membrane Tool



Implant Preparation



Scaling



Perio (Root Planing)

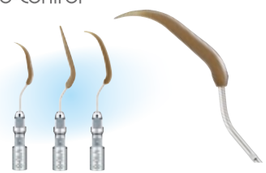


Retrograde Endo



Maintenance (V-Tip)

Perio-Control



Bone Surgery



MODEL: **SG1** ORDER CODE: **Z305101**
150% MODEL: **H-SG1** ORDER CODE: **Z305151**
• TiN coating • Dots mark 3, 6 and 9mm from top of tip
• Five teeth; 0.6mm thick



MODEL: **SG1A** ORDER CODE: **Z305138**
• TiN coating • Dots mark 3, 6, 9,12 and 15mm from top of tip
• Five teeth; 0.6mm thick



MODEL: **SG2R** ORDER CODE: **Z305102**
• TiN coating • Right curved tip*
• Three teeth; 0.6mm thick



MODEL: **SG2L** ORDER CODE: **Z305103**
• TiN coating • Left curved tip*
• Three teeth; 0.6mm thick



MODEL: **SG8** ORDER CODE: **Z305109**
150% MODEL: **H-SG8** ORDER CODE: **Z305155**
• TiN coating • Dots mark 3, 6 and 9mm from top of tip
• Three teeth; 0.6mm thick



MODEL: **SG8A** ORDER CODE: **Z305139**
• TiN coating • Dots mark 3, 6, 9,12 and 15mm from top of tip
• Three teeth; 0.6mm thick



MODEL: **SG14R** ORDER CODE: **Z305122**
• TiN coating • Right curved tip*
• Five teeth; 0.6mm thick



MODEL: **SG14L** ORDER CODE: **Z305123**
• TiN coating • Left curved tip*
• Five teeth; 0.6mm thick

Washable in the thermodisinfector

Autoclavable up to 135°C

150% Tips that correspond to high power can be used up to 150% power setting.



Unilateral anterior mandibular sampling

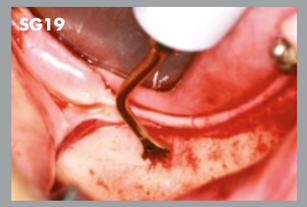


Excision of bone torus



Anterior mandibular harvesting

*The direction of the tip's curve is defined by the tip's anterior view.



Mandibular harvesting at approach stage



The cutting part is bone torus



Ostroplasties

Bone Surgery



MODEL: **SG19** ORDER CODE: **Z305135**
• TiN coating • Dot mark 3mm from top of tip
• Five teeth; 0.8mm thick



MODEL: **SG30** ORDER CODE: **Z305137**
• TiN coating • Sharp edge • 0.5mm thick



MODEL: **SG58** ORDER CODE: **Z305141**
• TiN coating • Dots mark 3, 6 and 9mm from top of tip
• Three teeth; 0.6mm thick

Scraper



MODEL: **SG3** ORDER CODE: **Z305104**
• TiN coating • Triple sided edge spatula tip



MODEL: **SG4** ORDER CODE: **Z305105**
• TiN coating • Edge spatula tip



MODEL: **SG5** ORDER CODE: **Z305106**
• TiN coating • Rounded edge spatula tip

* The direction of the tip's angle is defined by the tip's anterior view.

Extraction



MODEL: **SG17** ORDER CODE: **Z305132**
• TiN coating • 0.7mm thick



MODEL: **SG18R** ORDER CODE: **Z305133**
• TiN coating • Right angled tip*
• 0.7mm thick



MODEL: **SG18L** ORDER CODE: **Z305134**
• TiN coating • Left angled tip*
• 0.7mm thick

Sinus Lift



MODEL: **SG6D** ORDER CODE: **Z305107**
• Diamond coating



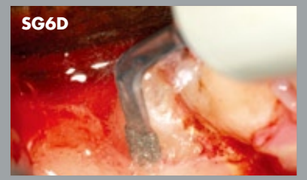
MODEL: **SG7D** ORDER CODE: **Z305108**
• Diamond coating

Washable in the thermodisinfector

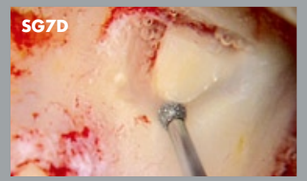
Autoclavable up to 135°C



Extraction



Avulsion of wisdom teeth and impacted teeth



Sinus graft

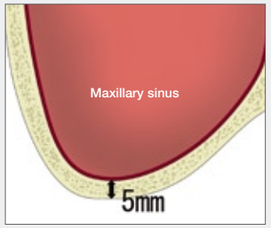
New Specialty Tips Exclusively for Sockets

Used as part of the socket lift method to swiftly perform sinus lift procedures, Nakanishi's new tip lineup is designed for minimal surgical invasiveness.

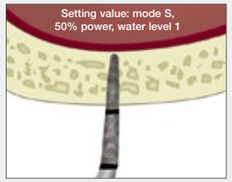
Process example for elevation of maxillary sinus membrane

A type of implant preparation site for a regular size implant **ø4.0mm**.

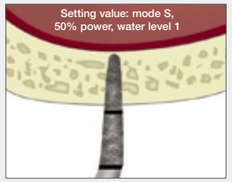
At the case of using VarioSurg



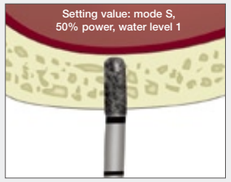
*A case of around 5mm from the base of cortical bone to maxillary sinus.
*Bone tissue is type 3 and good condition.
*In addition to positive diagnosis by CT image, the vertical bone width should be diagnosed well and the implant preparation site could be formed until the base of maxillary antrum.



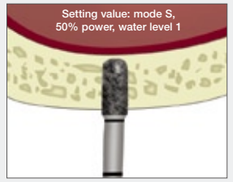
1. Bone cutting to within 1mm to the base of maxillary antrum by using **SG15A** tip.
Please be careful not to push the tip too much.



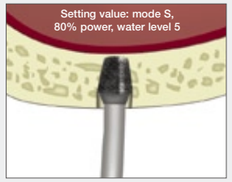
2. Repeat bone cutting using **SG15B** tip to increase width.
Please be careful not to push the tip too much.



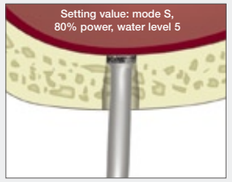
3. Bone cutting by using **SG16A** tip.
The implant preparation site is formed until little of the base of cortical bone remains.



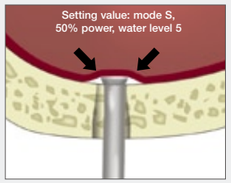
4. Repeat bone cutting by using **SG16B** tip.
The implant preparation site is formed until little of the base of cortical bone remains.



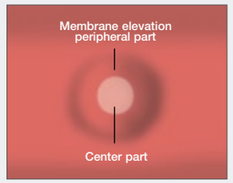
5. Using sufficent water irrigation, the implant preparation site is formed by using **SCL2D** tip.
The water level is set to 5.
Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane.
At the case of using drilling, this step is excluded.



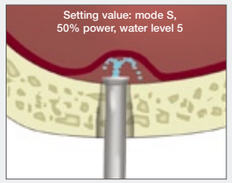
6. Using sufficent water irrigation, the implant preparation site is continued to be formed by using **SCL1D** tip.
The water level is set to 5.
The cavity floor of the implant preparation site is cut by using the edge of the top of the tip.
Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane.



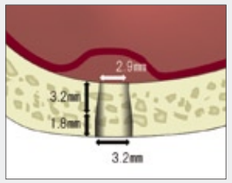
7. The maxillary antrum membrane is exfoliated by using **SCL1** tip.
The water level is set to 5.
Slowly insert the top of the tip between the membrane and bone. Moving the tip along the wall of the implant preparation site will exfoliate the membrane.
Please be careful, since the membrane can be torn at the edge (arrow part) between the bone and the membrane.



This image shows the elevated membrane which you will see from the maxillary antrum side.
Please check the condition of maxillary antrum membrane using the endoscope.



8. The Maxillary antrum membrane can now be elevated by using **SCL1** tip.



9. The completed formation of the implant preparation site.
At the case of using drilling, the straight implant preparation site of 3.2mm is formed.

Socket Lift Tips



MODEL: **SCL1** ORDER CODE: **Z305170**
• Internal irrigation



MODEL: **SCL1D** ORDER CODE: **Z305171**
• Internal irrigation • Diamond coating



MODEL: **SCL2D** ORDER CODE: **Z305182**
• Internal irrigation • Diamond coating



MODEL: **SCL3** ORDER CODE: **Z305172**
• Internal irrigation



MODEL: **SCL3D** ORDER CODE: **Z305173**
• Internal irrigation • Diamond coating



MODEL: **SCL4D** ORDER CODE: **Z305184**
• Internal irrigation • Diamond coating



MODEL: **SCL5** ORDER CODE: **Z305174**
• Internal irrigation

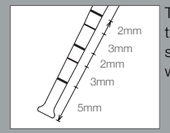


MODEL: **SCL5D** ORDER CODE: **Z305175**
• Internal irrigation • Diamond coating

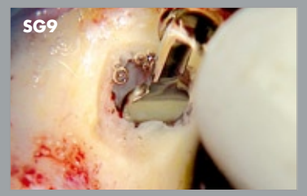
Washable in the thermodisinfector
Autoclavable up to 135°C



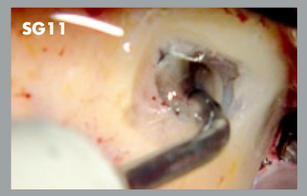
Before the mucous membrane of maxillary sinus is elevated



The estimated depth of the implant preparation site can be measured with the scale on the Tip.



Sinus membrane



Sinus graft

Sinus Membrane Tool



MODEL: **SG9** ORDER CODE: **Z305110**

• Flat circular convex elevator • Angled at 90°



MODEL: **SG10** ORDER CODE: **Z305111**

• Flat circular convex elevator • Angled at 135°



MODEL: **SG11** ORDER CODE: **Z305112**

• Cone compressor

Implant Preparation



MODEL: **SG15A** ORDER CODE: **Z305124**

• Diamond coating • Diameter of the tip end; 0.7mm



MODEL: **SG15B** ORDER CODE: **Z305125**

• Diamond coating • Diameter of the tip end; 1.3mm



MODEL: **SG15C** ORDER CODE: **Z305126**

• Diamond coating • Diameter of the tip end; 0.9mm



MODEL: **SG15D** ORDER CODE: **Z305127**

• Diamond coating • Diameter of the tip end; 1.3mm



MODEL: **SG16A** ORDER CODE: **Z305128**

• Diamond coating • Diameter; 2.0mm



MODEL: **SG16B** ORDER CODE: **Z305129**

• Diamond coating • Diameter; 2.6mm

Washable in the thermodisinfector

135°C Autoclavable up to 135°C



Conical preparations for implant osteotomies



Implant preparation

Scaling



MODEL: **G1-S** ORDER CODE: **Z305113**

Perio (Root Planing)



MODEL: **P20-S** ORDER CODE: **Z305114**

• Straight tip



MODEL: **P25R-S** ORDER CODE: **Z305115**

• Right curved tip*



MODEL: **P25L-S** ORDER CODE: **Z305116**

• Left curved tip*

* The direction of the tip's curve is defined by the tip's anterior view.

Retrograde Endo



MODEL: **E30RD-S** ORDER CODE: **Z305118**

• Diamond coated
• For posterior teeth (right angled)



MODEL: **E30LD-S** ORDER CODE: **Z305119**

• Diamond coated
• For posterior teeth (left angled)



MODEL: **E31D-S** ORDER CODE: **Z305120**

• Diamond coated
• For anterior and posterior teeth (70°)



MODEL: **E32D-S** ORDER CODE: **Z305121**

• Diamond coated
• For anterior teeth (90°)

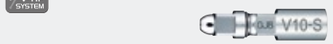
Washable in the thermodisinfector

135°C Autoclavable up to 135°C



Maintenance (V-Tip)

Perio-Control



MODEL: **V10-S** ORDER CODE: **Z305117**
- Includes E-Tip replacement wrench
- Plastic Tip is not included



MODEL: **V-P10** ORDER CODE: **Y900184**
- Pack of 3
- V10-S holder is not included



MODEL: **V-P11R** ORDER CODE: **Y1002165**
- Right curved type*
- Pack of 3
- V10-S holder is not included



MODEL: **V-P11L** ORDER CODE: **Y1002166**
- Left curved type*
- Pack of 3
- V10-S holder is not included



MODEL: **V-P12** ORDER CODE: **Y1002167**
- Pack of 3
- V10-S holder is not included

■ V-P11R/L, V-P12 can be used only for VarioSurg3.

* The direction of the tip's curve is defined by the tip's anterior view.

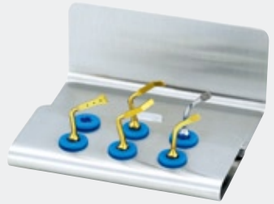
Tip Kits



Bone Surgery
Sinus Lift
Scraper
Sinus Membrane Tool

MODEL: **Basic H-S Kit**
ORDER CODE: **Y1002775**

Contents
- H-SG1, SG3, SG5, SG6D, SG7D, SG11
- Tip holder



Bone Surgery

MODEL: **Bone Cut Kit**
ORDER CODE: **Y900688**

Contents
- SG1, SG2R, SG4, SG2L, SG6D
- Tip holder



Sinus Lift

MODEL: **Sinus Lift Kit**
ORDER CODE: **Y900689**

Contents
- SG1, SG3, SG6D, SG9, SG10, SG11
- Tip holder



Retrograde Endo

MODEL: **Endo-S Kit**
ORDER CODE: **Y900691**

Contents
- G1-S, E30RD-S, E30LD-S, E31D-S, E32D-S
- Tip holder



Implant Preparation

MODEL: **Implant Preparation Kit**
ORDER CODE: **Y900774**

Contents
- SG15A, SG15B, SG16A, SG16B
- Tip holder



Socket Lift Tips

MODEL: **Socket Lift Kit for Regular Size Implant**
ORDER CODE: **Y1002841**

Contents
- SCL1D, SCL2D, SCL1
- VS Tip Wrench
- Tip holder
- Manual



Socket Lift Tips

MODEL: **Socket Lift Kit for Wide Size Implant**
ORDER CODE: **Y1002842**

Contents
- SCL2D, SCL3D, SCL4D, SCL3
- VS Tip Wrench
- Tip holder
- Manual

Washable in the thermodisinfector

135°C Autoclavable up to 135°C

Spare Parts

	MODEL	ORDER CODE
	**VS3-LED-HPSC** LED Handpiece (with 2m cord)	E1133
	**E Tip Replacement Wrench** For V10-S	Z217399
	**VS Tip Wrench** For SG1A, SG8A, Socket Lift Tip (CR-40)	Z305350
	**Tip Wrench** (CR-30)	10000977
	**Tips Holder**	20001327
	**Handpiece Stand**	Z1029201

	MODEL	ORDER CODE
	**Irrigation Tube** (Pack of 5)	Y900113
	**Tube Holder** (Pack of 7)	Y900767
	**VA-SG-CASE** Sterilization Cassette	20001326
	**SG Link Stand**	Z1176
	**SG Link Cable**	Z1189

Washable in the thermodisinfector

Autoclavable up to 135°C