





Power, Safety & Accuracy,  
No compromise



# VarioSurg

Non stop evolution

NSK Research & Development is a continuous evolution and materialization of ideas driven by professionals' feedback, new treatment procedures and new production technology.

VarioSurg, with LED illumination, is a fine example of the momentum achieved by NSK R&D.

The latest VarioSurg system has been upgraded to further improve the ease of clinical application and integrated technology to deliver even safer minimally invasive treatment.

# VarioSurg Handpieces **Optic / Non-Optic**

A Powerful Ultrasonic Surgical System with LED

## Applications

- Bone surgery
- Sinus lifts
- Periodontal surgery
- Endodontic surgery



**LED**

Twin LED lights



**NSK LED delivers natural daylight quality light bringing significant advantages to the way you work**

**Clearer** : LEDs generate natural daylight quality light which assures clearer vision when compared to halogen light.

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

## Comfortable Grip Handpiece

Superior ergonomics of the VarioSurg handpiece, including the slim and lightweight body, ensures minimal hand fatigue and greater accessibility to difficult oral regions. The twin LEDs integrated at the head allows for outstanding visibility, thus treatment is safer and precisely accurate. Oscillation at the tip of the handpiece due to advanced ultrasonics eliminates heat at the operation site, allowing for minimally invasive procedures.

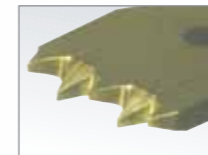
## Shorter and Lighter Handpiece

A shorter and lighter NSK LED handpiece achieves a perfect balance. Surgical procedures are easier and stress free to help you provide more precise and efficient treatment.



## The Special Tip of VarioSurg made by NSK's High Construction Accuracy

Maximizing sharpness of tips through the three-dimensionally cutting (toothing) to the blade edge.



**Optic** MODEL: **VS-LED-HPSC** ORDER CODE: **E1084**  
• with Cord 2m

**Non-Optic** MODEL: **VA-SGN-HPSC** ORDER CODE: **E377**  
• with Cord 2m



Washable in the thermodisinfector  
Autoclavable up to 135°C

# The Advanced Ultrasonic Technology of NSK

VarioSurg is equipped with various advanced functions of ultrasonic bone surgery through its specially-made engine. The Feedback & Auto Tuning Function achieve high cutting efficiency through the automatic power control to exacting levels according to grinding surface. The Burst Function generates the "hammer effect", which adds more powerful vibration to the vibrating tip, thus improving the ability to cut hard tissue.

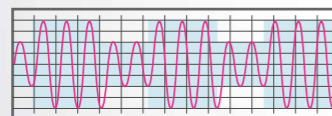
## Advantages

- Power:** superior cutting capability shortens treatment time
- Minimally invasive:** eliminates heat generation during bone dissection
- Safe:** avoids damage to soft tissue even during accidental contact
- Precision:** cavitations effect of irrigation solution keeps surgical site blood free

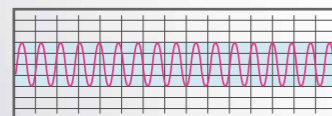
## Burst Mode

Burst Mode creates a hammer drill effect promoting cutting of the hardest tissues. Superior cutting capability of the burst mode facilitates cutting of hard tissue without stress, and effectively shortens treatment time.

Burst mode



Continuous vibration mode



## Feedback Function

Feedback Function constantly checks the performance parameters of the ultrasonic unit during operation. Simultaneously it controls the power output, which enables to supply the power suited for bone cutting procedure.

### Simple, intuitive graphic operation panel



## Main Features

- 3 modes (SURG, ENDO, PERIO)
- Burst Mode
- 9 programmes (SURG x 5, ENDO x 2, PERIO x 2)
- Automatic Cleaning Mode
- Ergonomic Handpiece (LED or Non-Optic)
- Feedback Function
- Auto Tuning Function



# VarioSurg Complete Sets **Optic / Non-Optic**

## VarioSurg Complete Sets with LED Handpiece

MODEL: **VSRG OPT(120V)** ORDER CODE: **Y1001928**

MODEL: **VSRG OPT(230V)** ORDER CODE: **Y1001929**

### Contents

- Control Unit • LED Handpiece with 2m cord
- FC-51 Foot Control • Sterilisation Cassette
- Handpiece Stand • Irrigation tube (5 pcs.) and other accessories
- Basic-S Kit (SG1, SG3, SG5, SG6D, SG7D, SG11 and Tip holder)

## VarioSurg Complete Sets with Non-Optic Handpiece

MODEL: **VSRG 120V2(120V)** ORDER CODE: **Y1001939**

MODEL: **VSRG 230V3(230V)** ORDER CODE: **Y1001940**

### Contents

- Control Unit • Non-Optic Handpiece with 2m cord
- FC-51 Foot Control • Sterilisation Cassette
- Handpiece Stand • Irrigation tube (5 pcs.) and other accessories
- Basic-S Kit (SG1, SG3, SG5, SG6D, SG7D, SG11 and Tip holder)



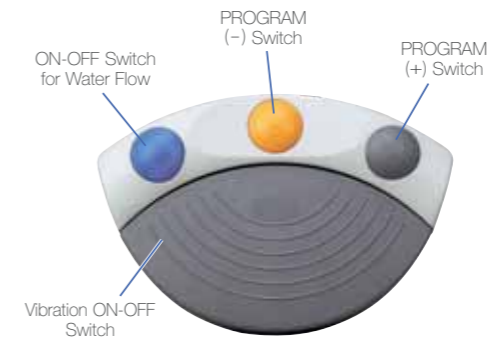
### Specifications

Control Unit		Foot Control	
• Frequency	: 28-32 kHz	• Foot Control Functions :	
• Power Supply	: AC120V or 230V 50/60 Hz	• ON-OFF Switch for Water Flow,	
• Irrigation Flow Rate	: 9-90 mL / min	PROGRAM (+) Switch, PROGRAM (-) Switch	
• Programs	: SURG x 5, ENDO x 2, PERIO x 2	Vibration ON-OFF Switch	
• Dimensions	: W268 x D230 x H103 (mm)		

## Foot Control

### Hands-free Program Adjustments Via Foot Control

The VarioSurg Foot Control, which meets IPX8 Standards for medical foot control systems, allows perfect control during delicate surgical procedures. A bracket enables the Foot Control to be easily raised or moved without using your hands during use.



MODEL: **FC-51** ORDER CODE: **Z316001**  
• With 2m cord

## Sterilization Cassette

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



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

- Dimensions : W281 x D171.5 x H47 (mm)
- With appropriate compartments for handpiece, cord, tip replacement wrench and tip holders

## Carrying Case (Optional)

The NSK Carrying Case can accommodate all VarioSurg components.



















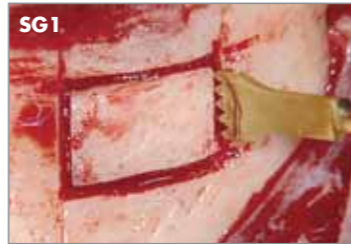
MODEL: **Carrying Case** ORDER CODE: **Y1001907**  
**(VarioSurg)**

- Dimensions : W469 x D344 x H180 (mm)

# VarioSurg Ultrasonic Tips

## Bone Surgery

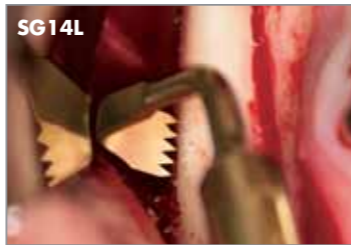
		MODEL: <b>SG1</b> ORDER CODE: <b>Z305101</b> • TiN coating • Dots mark 3, 6 and 9mm from top of tip • Five teeth; 0.6mm thick
		MODEL: <b>SG1A</b> ORDER CODE: <b>Z305138</b> • TiN coating • Dots mark 3, 6, 9, 12 and 15mm from top of tip • Five teeth; 0.6mm thick
		MODEL: <b>SG2R</b> ORDER CODE: <b>Z305102</b> • TiN coating • Right curved tip* • Three teeth; 0.6mm thick
		MODEL: <b>SG2L</b> ORDER CODE: <b>Z305103</b> • TiN coating • Left curved tip* • Three teeth; 0.6mm thick
		MODEL: <b>SG8</b> ORDER CODE: <b>Z305109</b> • TiN coating • Dots mark 3, 6 and 9mm from top of tip • Three teeth; 0.6mm thick
		MODEL: <b>SG8A</b> ORDER CODE: <b>Z305139</b> • TiN coating • Dots mark 3, 6, 9, 12 and 15mm from top of tip • Three teeth; 0.6mm thick
		MODEL: <b>SG14R</b> ORDER CODE: <b>Z305122</b> • TiN coating • Right curved tip* • Five teeth; 0.6mm thick
		MODEL: <b>SG14L</b> ORDER CODE: <b>Z305123</b> • TiN coating • Left curved tip* • Five teeth; 0.6mm thick



Unilateral anterior mandibular sampling



Excision of bone torus



Anterior mandibular harvesting

## Bone Surgery

		MODEL: <b>SG19</b> ORDER CODE: <b>Z305135</b> • TiN coating • Dot mark 3mm from top of tip • Five teeth; 0.8mm thick
		MODEL: <b>SG30</b> ORDER CODE: <b>Z305137</b> • TiN coating • Sharp edge • 0.5mm thick



Mandibular harvesting at approach stage

## Scraper

		MODEL: <b>SG3</b> ORDER CODE: <b>Z305104</b> • TiN coating • Triple sided edge spatula tip
		MODEL: <b>SG4</b> ORDER CODE: <b>Z305105</b> • TiN coating • Edge spatula tip
		MODEL: <b>SG5</b> ORDER CODE: <b>Z305106</b> • TiN coating • Rounded edge spatula tip



Osteoplasties

## Sinus Lift

		MODEL: <b>SG6D</b> ORDER CODE: <b>Z305107</b> • Diamond coating
		MODEL: <b>SG7D</b> ORDER CODE: <b>Z305108</b> • Diamond coating



Avulsion of wisdom teeth and impacted teeth



Sinus graft

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



Washable in the thermodisinfectant



Autoclavable up to 135°C

## 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 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



Extraction



Sinus membrane



Sinus graft

## 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



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\*

## Maintenance (V-Tip)



MODEL: **V10-S** ORDER CODE: **Z305117**

- \*Plastic Tip is not included
- \*Tip wrench is not included



MODEL: **V-P10** ORDER CODE: **Y900184**

- \*Tip wrench is not included
- Pack of 3



MODEL: **V10-S Tip wrench set**  
ORDER CODE: **Y1001918**

- Contents
- V10-S
  - V-P10 (pack of 3)
  - E Tip Replacement Wrench

## 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°)

## Tip Kits



MODEL: **Basic-S Kit**  
ORDER CODE: **Y900687**

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



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

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



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

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



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

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



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

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



# Spare Parts

	MODEL	ORDER CODE		MODEL	ORDER CODE
	<b>VS-LED-HPSC</b> LED Handpiece (with Cord 2m)	E1084		<b>Tips Holder</b>	20001327
	<b>VA-SGN-HPSC</b> Non-Optic Handpiece (with Cord 2m)	E377		<b>Handpiece Stand</b>	Z1029201
	<b>E Tip Replacement Wrench</b> For V10-S	Z217399		<b>Irrigation Tube</b> (Pack of 5)	Y900113
	<b>VS Tip Wrench</b> For SG1A, SG8A (CR-40)	Z305350		<b>Tube Holder</b> (Pack of 7)	Y900767
	<b>Tip Wrench</b> (CR-30)	10000977		<b>VA-SG-CASE</b> Sterilization Cassette	20001326



Washable in the thermodisinfectant



Autoclavable up to 135°C