SURGICAL

Surgic Pro × VarioSurg3

Surgical Micromotor System

Ultrasonic Bone Surgery System

Synergy in Implantology

Two linked surgical systems that use a single foot control.
A brand new approach to implant and surgical treatment.

Link 2 Systems

Surgic Pro and VarioSurg3 Generating Synergies Through Link Function

The Link function allows operation between the Surgic Pro oral surgery and implant micromotor system and the VarioSurg3 ultrasonic bone surgery system using a single foot control. A common interface controls each system, allowing synergy in diverse surgical procedures and greatly streamlining treatment. Each system is available separately and is easily linked as required, making the system expandable and very affordable.

Link Function Easily Connects Two Systems

The Link function is easy to set up. Just connect the Surgic Pro and VarioSurg3 units with the link cable. The two systems can be installed together using the compact Link Stand.

Hands-free Program Adjustments Via Foot Control

The two systems can be operated using the single foot control which offers hands-free operation of functions such as ultrasonic wave ON/OFF, forward and reverse selection, coolant flow selection and program selection.

Large and Clear Display for Enhanced Safety

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

Surgic Pro Surgical Micromotor System

The Professional Choice

NSK offers advanced technology to greatly enhance clinical performance. Surgic Pro is compact, lightweight and powerful to reliably deliver everything that professionals demand.

Calibration

NSK's Drive for Accuracy Ensures Safe Treatment Through Accurate Torque Correction

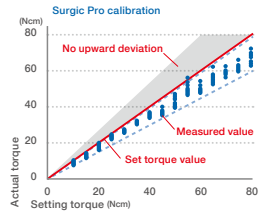
Maintaining Accurate Torque with AHC

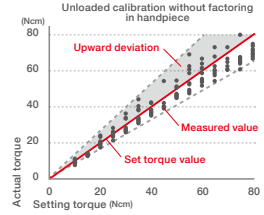
NSK's proprietary Advanced Handpiece Calibration (AHC) ensures the correct torque value required for specific treatments.
There is normally a small misalignment between pre-set and actual torque values owing to friction between bearings and contra-angle gear. AHC corrects this misalignment to guarantee accurate torque values.

High-precision Calibration

Unloaded, loaded and speed level adjustments improve the precision of calibration, which can be according to handpiece usage.

NSK's Safe Calibration Approach Factors in Handpiece Usage Conditions





Surgic Pro Surgical Motor

Shorter, Lighter and More Powerful Consistently Excellent Clinical Performance

An Advanced Surgical Motor for Demanding Clinical Environments

NSK developed the Surgic Pro SGL70M by analyzing feedback from clinicians to ensure that this 5th generation surgical micromotor satisfies professional requirements. The light and compact Surgic Pro SGL70M features an LED light for high visibility, with up to 80 Ncm of torque for diverse surgical procedures, paving the way for an advanced treatment environment.

SGL70M / 81.9 mm, 280 g*

SGL50M / 98.1 mm, 322 g*

*Including motor cord

Well-balanced, with a Compact and Lightweight Micromotor

Streamlining efforts reduced the size by 16.2 mm and the weight by 42 g to improve balance during use the Surgic Pro motor, greatly reducing any strain on clinicians.

LED Optics for Safer, More Accurate Treatment

NSK LEDs generate natural daylight-quality light to illuminate the treatment area, enabling more precise surgery and shortened operation times. The lights increase safety because they do not overheat and are long-lasting.

Optic	MODEL SGL70M	ORDER CODE E1023
Non-Optic	MODEL SG70M	ORDER CODE E1025

• Solid titanium body • with Cord 2 m

Washable in the thermodisinfector

Autoclavable up to 135°C

Surgic Pro Control Unit

Control Unit Incorporating an Array of Sophisticated Functions

Compact Body and Large LCD Display

The compact control unit features a sophisticated design including a large, high visibility backlight LCD panel and intuitive control buttons to contribute a safer and user friendly working environment.

Advanced Irrigation Pump

The pump allows easy set-up of irrigation tubes and is extremely quiet during operation.

Memorises Eight Different Implant Systems

The Surgic Pro memorises eight different implant systems and a total of 64 programs. The programmable parameters are gear ratio, speed, rotation direction, torque limit, coolant solution volume and illumination intensity. This is extremely useful when using two or more implant brands. Once you complete programming, simply push a button to call procedures up.

Data Log Function

The Surgic Pro's data log function can record and store speed, torque values, and other patient treatment data. Such efficient data management helps ensure safe clinical practices.

*Maximum internal memory capacity is 100 minutes

Data Management

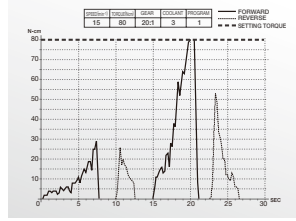
Treatment data can be easily accessed and downloaded using a USB stick. Files can be transferred and added to patient records.

*USB memory stick not included.

Easy Treatment Data Handling

No specific software is required to display CSV or bitmap files.

*File formats : csv or bmp



Surgic Pro+ Optic Complete Sets with data storage facility

X-DSG20L Optic Handpiece

Optic

Surgic Pro+ Complete Sets with X-DSG20L Optic Handpiece

MODEL Surgic Pro+ OPT-D (120 V) ORDER CODE Y1002095
MODEL Surgic Pro+ OPT-D (230 V) ORDER CODE Y1002096
MODEL Surgic Pro+ OPT-D (230 V) For EU ORDER CODE Y1003585

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

Specifications

Control Unit with AHC
- Power Supply : AC 120 V or 230 V 50/60 Hz
- Max. Pump Output : 75 mL/min
- Programs : 8 Programs / Implant Systems
- Dimensions : W 268 x D 220 x H 100 (mm)
- USB I/F : 1 port
- Built in Memory : 100 min

Micromotor
- Torque : 5-80 Ncm
- Motor Speed : 200~40,000 min^{-1}
- Light Power (LED Micromotor): over 32,000 LUX

Foot Control
- Foot Control Functions : Program Button, Speed Control Pedal
  Coolant Flow Volume Button
  Forward / Reverse Button

Surgic Pro Complete Sets Optic / Non-Optic

X-SG20L Optic Handpiece

Optic

Surgic Pro Complete Sets with X-SG20L Optic Handpiece

MODEL Surgic Pro OPT (120 V) ORDER CODE Y1001949
MODEL Surgic Pro OPT (230 V) ORDER CODE Y1001933
MODEL Surgic Pro OPT (230 V) For EU ORDER CODE Y1003586

Contents

- Control Unit without data storage facility • SGL70M LED Micromotor • FC-78 Foot Control
- X-SG20L Optic Handpiece (20:1 Reduction) • Irrigation tube (5 pcs.) and other accessories

Non-Optic

Surgic Pro Complete Sets with SG20 Handpiece

MODEL Surgic Pro NON-OPT (120 V) ORDER CODE Y1001950
MODEL Surgic Pro NON-OPT (230 V) ORDER CODE Y1001934
MODEL Surgic Pro NON-OPT (230 V) For EU ORDER CODE Y1003587

Contents

- Control Unit without data storage facility • SG70M Non-Optic Micromotor • FC-78 Foot Control
- SG20 Handpiece (20:1 Reduction) • Irrigation tube (5 pcs.) and other accessories

Specifications

Control Unit with AHC
- Power Supply : AC 120 V or 230 V 50/60 Hz
- Max. Pump Output : 75 mL/min
- Programs : 8 Programs / Implant Systems
- Dimensions : W 265 x D 220 x H 100 (mm)

Micromotor
- Torque : 5-80 Ncm
- Motor Speed : 200~40,000 min^{-1}
- Light Power (LED Micromotor) : over 32,000 LUX

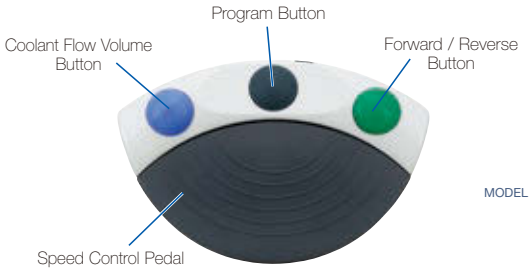
Foot Control
- Foot Control Functions : Program Button, Speed Control Pedal
  Coolant Flow Volume Button
  Forward / Reverse Button

Surgic Pro Accessories

Foot Control

Stay in Control

The Foot Control is user friendly and allows operation of all functions within the preset parameters without touching the control panel to avoid accidental activation of the micromotor outside the preset limits. The Surgic Pro/Surgic Pro+ is certificated according to IPX8.



MODEL **FC-78** ORDER CODE **Z1102001**

• With 2 m cord

Handle Set (Optional)

Easy to attach foot control handle. Hanger can easily be moved with the foot control.

MODEL **Handle Set** ORDER CODE **Z1027001**

Sterilization Cassette (Optional)

The NSK Surgic Sterilization Cassette can accommodate the micromotor with cable, straight and contra-angles handpieces ready for sterilization.

MODEL **SG-CASE** ORDER CODE **20001348**

• Dimensions : W 281 x D 171.5 x H 47 (mm)

Carrying Case (Optional)

The NSK Carrying Case can accommodate all Surgic Pro components as well as the optional sterilization cassette.

MODEL **Carrying Case (Surgic Pro)** ORDER CODE **Y1001952**

• Dimensions : W 534 x D 427 x H 207 (mm)

Install Both Systems on a Special Cart

iCart Duo (Optional)

Install the control unit and accessories on the cart.

MODEL **iCart Duo**

ORDER CODE **S9090**

Specifications

• Dimensions : H 101.65 cm
• Weight : 16.5 kg

SG Link Set (Optional)

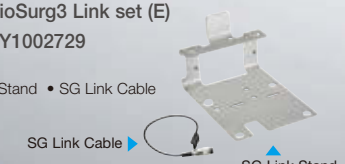
Surgic Pro × VarioSurg3

MODEL **VarioSurg3 Link set (E)**

ORDER CODE **Y1002729**

Contents

• SG Link Stand • SG Link Cable



Specifications

SG Link Stand	SG Link Cable
• Dimensions : W 210 x D 300 x H 180 (mm) • Weight : 1.85 kg	• Length 355 (mm)

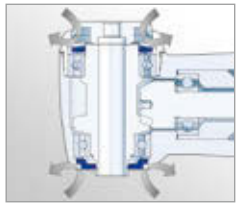
Implant Handpieces

Dismantlable Contra-angle Handling up to 80 Ncm of Torque

The Ti-Max X-DSG20 series can be easily disassembled for internal cleaning.

Easy to Disassemble and Clean

The DSG20 contra-angle can be disassembled with a simple twist for easy internal cleaning. NSK's unique locking mechanism prevents accidental disassembly during operation.



Double Sealing System

NSK's unique double sealing system prevents blood and other contaminants from entering the instrument head to ensure longevity of the instruments.

Washable in the thermodisinfector

Autoclavable up to 135°C

Ti-Max X-DSG20L 80N

Dismantling Surgical Handpiece

Optic MODEL **X-DSG20L** ORDER CODE **C1068**
Non-Optic MODEL **X-DSG20** ORDER CODE **C1067**

20:1 Reduction
- Titanium Body with Scratch Resistant DURACOAT
- Cellular Glass Optics
- Push Button Chuck
- External and internal cooling (Kirschner and Meyer)
- Double Sealing System
- Max. Torque : 80 Ncm
- Max. Speed : 2,000 min^{-1}

■ This handpiece is used only for the NSK Surgical Unit with torque calibration. (eg. Surgic Pro series)

80N Can be use up to 80 Ncm

Washable in the thermodisinfector

Autoclavable up to 135°C

Implant Handpieces

Ti-Max X-SG20L 80N

Optic MODEL **X-SG20L** ORDER CODE **C1003**

20:1 Reduction • Titanium Body with Scratch Resistant DURACOAT • Cellular Glass Optics • Push Button Chuck • External and internal cooling (Kirschner and Meyer) • Double Sealing System • Max. Torque : 80 Ncm • Max. Speed : 2,000 min^{-1}

Ti-Max nanoSG20LS 80N

Shorter, Perfectly Balanced Surgical Handpiece

Optic MODEL **nanoSG20LS** ORDER CODE **C1103**

20:1 Reduction • Titanium Body with Scratch Resistant DURAGRIP • Cellular Glass Optics • Push Button Chuck • External and internal cooling (Kirschner and Meyer) • Double Sealing System • Max. Torque : 80 Ncm • Max. Speed : 2,000 min^{-1}

nano Series instruments are compatible with NSK motor line up (NLX nano, NLX plus, M40LED, NBX, NBX N, X205L, M205LG and SGL70M micromotors) and other motors with insert less than 23 mm.

■ This handpiece is used only for the NSK Surgical Unit with torque calibration. (eg. Surgic Pro series)

S-Max SG20 80N

Non-Optic MODEL **SG20** ORDER CODE **C1010**

20:1 Reduction • Stainless Steel Body • Push Button Chuck • External and internal cooling (Kirschner and Meyer) • Double Sealing System • Max. Torque : 80 Ncm • Max. Speed : 2,000 min^{-1}

■ This handpiece is used only for the NSK Surgical Unit with torque calibration. (eg. Surgic Pro series)

Implant Handpieces

Ti-Max X-SG93L

Triple Spray

Optic MODEL **X-SG93L** ORDER CODE **C1004**
Non-Optic MODEL **X-SG93** ORDER CODE **C1007**

1:3 Increasing • Titanium Body with Scratch Resistant DURACOAT
• For FG burs (ø1.6) • Cellular Glass Optics (X-SG93L)
• Clean Head System • Push Button Chuck
• External cooling • Max. Speed : 120,000 min^{-1}

Ti-Max X-SG65L Straight Handpiece

Optic MODEL **X-SG65L** ORDER CODE **H1009**
Non-Optic MODEL **X-SG65** ORDER CODE **H1038**

1:1 Direct Drive • Titanium Body with Scratch Resistant DURACOAT
• For HP burs (ø2.35) • Cellular Glass Optics (X-SG65L)
• Clean Head System • External cooling
• Max. Speed : 40,000 min^{-1}

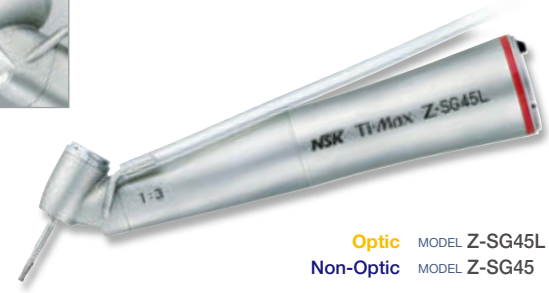
Ti-Max X-SG25L

Optic MODEL **X-SG25L** ORDER CODE **C1011**

1:1 Direct Drive • Titanium Body with Scratch Resistant DURACOAT
• For CA burs (ø2.35) • Cellular Glass Optics
• Clean Head System • Push Button Chuck
• External cooling • Max. Speed : 40,000 min^{-1}

Ti-Max Z-SG45L

Triple Spray



Optic MODEL **Z-SG45L** ORDER CODE **C1107**
Non-Optic MODEL **Z-SG45** ORDER CODE **C1108**

1:3 Increasing • Titanium Body with Scratch Resistant DURAGRIP
• Cellular Glass Optics (Z-SG45L) • Ceramic Bearings
• Clean Head System • Push Button Chuck • External cooling
• For FG burs (ø1.6 / 20-25 mm) • Anti Heat System
• DLC Coating • Max. Speed : 120,000 min^{-1}

Implant Handpieces Non-Optic

SGM-ER20i

MODEL **SGM-ER20i** ORDER CODE **Y110127**

20:1 Reduction • Max. Speed : 2,000 min^{-1}

• External and internal cooling (Kirschner and Meyer)
• with Wrench for handpiece attachment

SGMS-ER20i With Depth Indicator

2 types of Depth Indicators are available. Both are easy to attach and detach for smooth operation.

MODEL **SGMS-ER20i** ORDER CODE **Y110147**

20:1 Reduction • Max. Speed : 2,000 min^{-1}

• External and internal cooling (Kirschner and Meyer)
• with two Depth Indicators, Wrench for handpiece attachment, Ruler

Washable in the thermodisinfector

Autoclavable up to 135°C

Micro Surgery Handpieces Non-Optic

Straight Handpieces

MODEL **SGS-ES** ORDER CODE **H264**

1:1 Direct Drive • For surgical burs (ø2.35) • Twist chuck
• Max. Speed : 40,000 min^{-1}

MODEL **SGS-E2S** ORDER CODE **H266**

1: 2 Increasing • For surgical burs (ø2.35) • Twist chuck
• Max. Speed : 80,000 min^{-1}

20˚ Angle Handpieces

MODEL **SGA-ES** ORDER CODE **H263**

1:1 Direct Drive • For surgical burs (ø2.35) • Twist chuck
• Max. Speed : 40,000 min^{-1}

MODEL **SGA-E2S** ORDER CODE **H265**

1: 2 Increasing • For surgical burs (ø2.35) • Twist chuck
• Max. Speed : 80,000 min^{-1}

Washable in the thermodisinfector

Autoclavable up to 135°C

Micro Saw Handpieces Non-Optic

1.8 mm Reciprocating

MODEL **SGR2-E** ORDER CODE **SH162**

3:1 Reduction • With External Spray Nozzle
• Max : 12,600 strokes/min

17° Oscillating

MODEL **SGO2-E** ORDER CODE **SH164**

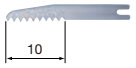
3:1 Reduction • With External Spray Nozzle
• Max : 12,800 strokes/min

3° Sagittal

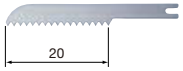
MODEL **SGT2-E** ORDER CODE **SH163**

3:1 Reduction • With External Spray Nozzle
• Max : 12,600 strokes/min

SGR2-E Blades for Reciprocating



MODEL **SGR-1** ORDER CODE **Y900072**
• Blade thickness 0.35 mm • Pack of 10 blades



MODEL **SGR-2** ORDER CODE **Y900073**
• Blade thickness 0.35 mm • Pack of 10 blades

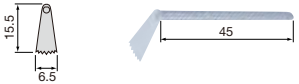
MODEL **SGR-3** ORDER CODE **Y900074**
• Blade thickness 0.35 mm • Pack of 10 blades

SGO2-E Blades for Oscillating

MODEL **SGO-1** ORDER CODE **H174034**
• Blade thickness 0.3 mm • Single blade

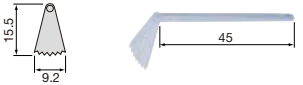
MODEL **SGO-2** ORDER CODE **H174044**
• Blade thickness 0.3 mm • Single blade

MODEL **SGO-3** ORDER CODE **H174031**
• Blade thickness 0.3 mm • Single blade



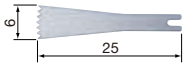
MODEL **SGO-4** ORDER CODE **H174041**
• Blade thickness 0.3 mm • Single blade

MODEL **SGO-5** ORDER CODE **H174032**
• Blade thickness 0.35 mm • Single blade

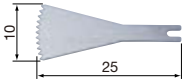


MODEL **SGO-6** ORDER CODE **H174042**
• Blade thickness 0.35 mm • Single blade

SGT2-E Blades for Sagittal



MODEL **SGT-1** ORDER CODE **Y900075**
• Blade thickness 0.35 mm • Pack of 10 blades



MODEL **SGT-2** ORDER CODE **Y900076**
• Blade thickness 0.35 mm • Pack of 10 blades

*Do not exceed the Maximum Strokes Allowance.
*Blades are sold separately.

Washable in the thermodisinfector

Autoclavable up to 135°C

iSD900 Cordless Prosthodontic Screwdriver

Faster and Safer

Faster and Safer Implant Treatments

NSK's iSD900 cordless screwdriver helps to safely place and remove cover screws, healing caps and abutments during dental implant procedures, making treatment up to 50% faster.

Advantages

- Universal to major implant systems
- Reliable and durable contra-angle handpiece with excellent accessibility
- Audible beeping noise to indicate reverse rotation
- Standard battery (AAA Ni-MH) is easily replaced on site
- LCD control panel offering outstanding visibility and operability

Faster Treatment

NSK's iSD900 cordless screwdriver safely inserts and removes cover screws, healing caps and abutments during implant procedures, making treatment up to 50% faster.

Accommodating Diverse Operative Fields

It can be difficult to maintain good visibility of the operating field when retracting the buccal mucosa when using a conventional ratchet wrench with both hands. The iSD900 allows single-handed operations to ensure better visibility across the whole operating field.

Torque Calibration System to Guarantee Safety

The unique torque calibration system (TCS) of the iSD900 ensures accurate torque values at all times.

Torque Range Accommodating Diverse Procedures and Three Rotation Speeds

NSK's iSD900 has a torque range of 10 Ncm to 40 Ncm to ensure precise torque adjustments and settings in 1 Ncm or 5 Ncm increments according to procedures. The iSD900 offers 15 min^{-1}, 20 min^{-1}, and 25 min^{-1} speeds according to procedure requirements.

iSD900 Complete Sets

MODEL **iSD900 (120 V)** ORDER CODE **Y1001357**
MODEL **iSD900 (230 V)** ORDER CODE **Y1001358**

Contents
- iSD900 Motor • iSD-HP • Quick Charger for iSD900
- Torque Calibrator • On/Off Switch Lever

Specifications
- Torque : 10 – 40 Ncm in 1 or 5 Ncm increments
- Speed : 15, 20, 25 min^{-1}
- Weight : 148 g (iSD900 Motor + iSD-HP)
- Charging Time : Around 90 min*
- Continuous Operation Time : Max 72 min*

*these may change according to the usage environment.

The heads can be washed in the thermodisinfector
135°C The heads are autoclavable up to 135°C

VarioSurg3 Ultrasonic Bone Surgery System

Evolved Potential

Embodying The Pursuit of Perfection

Ultrasonic bone surgery systems are essential in modern surgical and implant treatment. The powerful VarioSurg3 handpiece features a slim and lightweight body that ensures minimal hand fatigue and outstanding visibility. A variety of tips makes procedures easier and stress-free to help provide more precise and efficient treatment.

Trinity

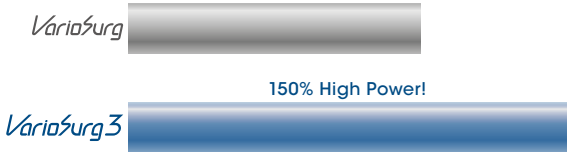
Out Standing Ultrasonic Performance

Wattage is not the only factor determining cutting efficiency and performance in ultrasonic surgery. What is important is the power factor between three elements: control unit frequency, handpiece vibration characteristics and tip design for handling high power and cutting efficiency. The VarioSurg3 effortlessly balances these three elements for the ultimate in ultrasonic performance.

Stabilizing the Power Balance for More Efficient Procedures

The VarioSurg3 offers a 50% increase in power in SURG mode compared to previous models, for more effective procedures and shorter treatment times.
(Select tips according to clinical and power requirements)

＊For more than 100% power, you must use the relevant tips.



Stable Cutting Through Feedback and Auto-tuning Functions

Feedback function

This function constantly checks the performance parameters of the ultrasonic unit during operation. It simultaneously controls power output to optimize the level of power depending on the procedure.

Auto-Tuning function

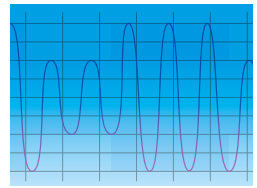
The oscillating frequency is automatically controlled to ensure the set output values are always accurately delivered at the tip to maintain ideal vibration.

VarioSurg3 Control Unit

Advanced Control Unit to Manage High Power

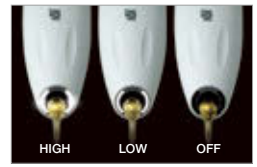
Compact Body and Large LCD Panel

The compact control unit features a sophisticated design including a large, high visibility backlight LCD panel and intuitive control buttons to contribute to a safe and user-friendly working environment.



Advanced BURST Mode

Switching from SURG mode to BURST mode during procedures creates a hammer drill effect capable of cutting through the hardest of tissues. Select from one of three BURST mode levels according to the procedure or density or hardness of the bone.



Illumination Intensity Adjustable LED Light

LED handpiece illumination can be adjusted at the push of a button, with a choice of three intensity levels to suit the procedure.

Three Modes

There is a choice of P (PERIO), E (ENDO) and S (SURG) modes to cover a wide range of applications, from bone cutting to post-surgical maintenance.

Adjustable Irrigation Flow Rate

You can choose from five coolant flow levels with a maximum output of up to 75 mL per minute, to suit operating requirements and tips. Effective irrigation protects bone cells by controlling tip heat .

Memory Functions for Treatment Procedures and Program Setting

Specific treatment parameters can be stored using the unit's memory function, and are easily accessed using the program button.

VarioSurg3 Handpiece

Super-Slim Design for Maximum Potential

Super-slim Ergonomic Handpieces

NSK's super-slim LED handpiece offers superior access and outstanding visibility. Excellent balance and ergonomic design facilitate the most accurate procedures and minimise hand and finger fatigue, especially during long procedures.

Effective Power Transmission with Minimal Heat Generation

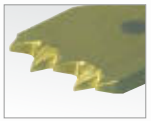
By using innovative materials, the VarioSurg3 handpiece delivers appropriate power from the generator to the tip without loss while minimising heat generation.

LED Illumination for More Precise Treatments

NSK LEDs generate natural daylight-quality light to perfectly illuminate the treatment area, enabling more precise treatments and shortening treatment times. LEDs are safe and do not overheat, even during extended use, and are economical due to their long life. Proprietary twin LED lights eliminate shadows in the treatment area, allowing excellent visibility.

Optic MODEL **VS3-LED-HPSC** ORDER CODE **E1133**

• with 2 m cord



The tips are designed to preserve tissue, maintain cutting speed and easily cut into bone. Saw like teeth on an uneven blade edge enhances bone cutting. This also reduces clogging to maintain cutting speed.

Washable in the thermodisinfector

Autoclavable up to 135°C

VarioSurg3 Complete Sets Optic

VarioSurg3 Complete Sets

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

Contents

- Control Unit • LED Handpiece with 2 m 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

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

Contents

- Control Unit • LED Handpiece with 2 m 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

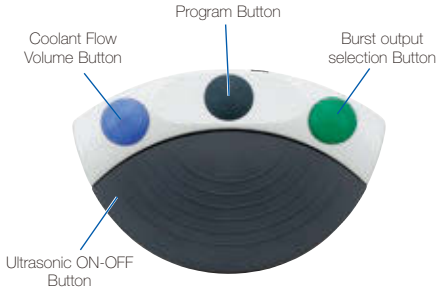
Control Unit

• Frequency	: 28-32 kHz
• Power Supply	: AC 120 V or 230 V 50/60 Hz
• Irrigation Flow Rate	: 10-75 mL/min
• Programs	: SURG x 5, ENDO x 2, PERIO x 2
• Dimensions	: W 265 x D 220 x H 100 (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.

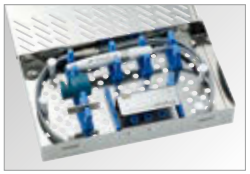


MODEL **FC-78** ORDER CODE **Z1102003**

- With 2 m 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 : W 281 x D 171.5 x H 47 (mm)
- Has dedicated compartments for 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 : W 534 x D 427 x H 207 (mm)

VarioSurg Tip Lineup

Ultrasonic Surgery Tips

Choose from over 50 ultrasonic tips according to the clinical procedure.

Bone Surgery

Scraper

Extraction

Sinus Lift

Socket Lift Tips (Crestal Approach)

Sinus Membrane Detachment

Implant Preparation

Scaling

Perio (Root Planing)

Maintenance (V-Tip)

Perio-Control

Endodontics

VarioSurg Ultrasonic Surgery Tips (TiN coating) — Bone Surgery

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

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

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

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

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

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

150% MODEL **H-SG8R** ORDER CODE **Z305156**
• Marking every 2 and 4 mm from top of tip (Single side)
• Right curved tip* • Three teeth; 0.6 mm thick

150% MODEL **H-SG8L** ORDER CODE **Z305157**
• Marking every 2 and 4 mm from top of tip (Single side)
• Left curved tip* • Three teeth; 0.6 mm thick

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

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

Washable in the thermodisinfector

Autoclavable up to 135°C

SURGICAL

VarioSurg Ultrasonic Surgery Tips (TiN coating) — Bone Surgery

MODEL **SG14R** ORDER CODE **Z305122**

• Right curved tip* • Five teeth; 0.6 mm thick

MODEL **SG14L** ORDER CODE **Z305123**

• Left curved tip* • Five teeth; 0.6 mm thick

MODEL **SG19** ORDER CODE **Z305135**

• Dot mark 3 mm from top of tip • Five teeth; 0.8 mm thick

MODEL **SG30** ORDER CODE **Z305137**

• Sharp edge • 0.5 mm thick

MODEL **SG58** ORDER CODE **Z305141**

• Dots mark 3, 6 and 9 mm from top of tip • Three teeth; 0.6 mm thick

MODEL **SG68** ORDER CODE **Z305143**

• Marking every 2 and 4 mm from top of tip (Single side)
• Three teeth; 0.6 mm thick

VarioSurg Ultrasonic Surgery Tips (TiN coating) — Scraper

MODEL **SG3** ORDER CODE **Z305104**

• Triple sided edge spatula tip

MODEL **SG4** ORDER CODE **Z305105**

• Edge spatula tip

MODEL **SG5** ORDER CODE **Z305106**

• Rounded edge spatula tip

VarioSurg Ultrasonic Surgery Tips (TiN coating) — Extraction

MODEL **SG17** ORDER CODE **Z305132**

• 0.7 mm thick

MODEL **SG18R** ORDER CODE **Z305133**

• Right angled tip* • 0.7 mm thick

MODEL **SG18L** ORDER CODE **Z305134**

• Left angled tip* • 0.7 mm thick

Washable in the thermodisinfector

Autoclavable up to 135°C

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

Washable in the thermodisinfector

Autoclavable up to 135°C

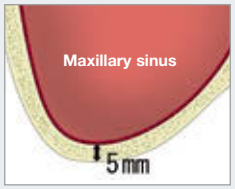
New Specialty Tips Exclusively for Sockets

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

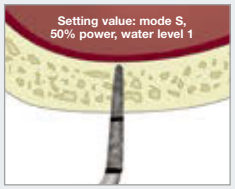
Process example for elevation of maxillary sinus membrane

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

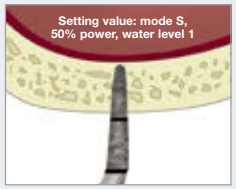
At the case of using VarioSurg



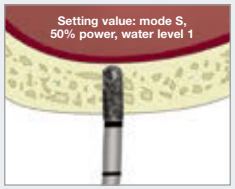
*A case of around 5 mm from the base of cortical bone to maxillary sinus.
*Bone tissue is type 3 and good condition.
*In addition to positive diagnosis by CT image, the vertical bone width should be diagnosed well and the implant preparation site could be formed until the base of maxillary antrum.



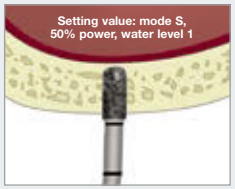
1. Bone cutting to within 1 mm to the base of maxillary antrum by using **SG15A** tip.
Please be careful not to push the tip too much.



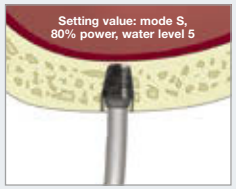
2. Repeat bone cutting using **SG15B** tip to increase width.
Please be careful not to push the tip too much.



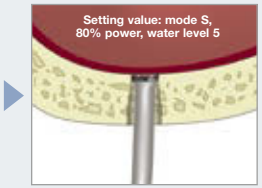
3. Bone cutting by using **SG16A** tip.
The implant preparation site is formed until little of the base of cortical bone remains.



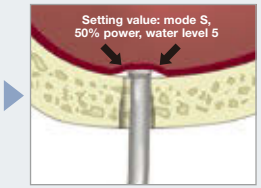
4. Repeat bone cutting by using **SG16B** tip.
The implant preparation site is formed until little of the base of cortical bone remains.



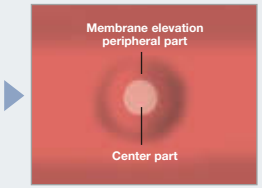
5. Using sufficent water irrigation, the implant preparation site is formed by using **SCL2D** tip.
The water level is set to 5.
Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane.
At the case of using drilling,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



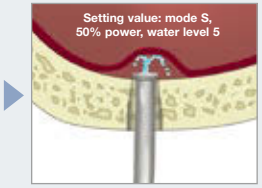
6. Using sufficent water irrigation, the implant preparation site is continued to be formed by using **SCL1D** tip.
The water level is set to 5. The cavity floor of the implant preparation site is cut by using the edge of the top of the tip. Please be careful not to force the tip into the implant preparation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



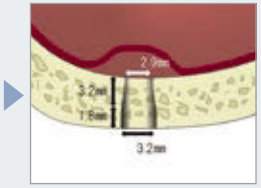
7. The maxillary antrum membrane is exfoliated by using **SCL1** tip.
The water level is set to 5.
Slowly insert the top of the tip between the membrane and bone. Moving the tip along the wall of the implant preparation site will exfoliate the membrane. Please be careful, since the membrane can be torn 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 3.2 mm is formed.

VarioSurg Ultrasonic Surgery Tips **Socket Lift Tips (Crestal Approach)**

MODEL **SCL1** ORDER CODE **Z305170**

• Internal irrigation

MODEL **SCL1D** ORDER CODE **Z305171**

• Internal irrigation • Diamond coating

Washable in the thermodisinfector

Autoclavable up to 135°C

VarioSurg Ultrasonic Surgery Tips **Socket Lift Tips (Crestal Approach)**

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**

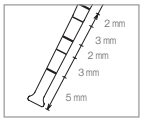
• Internal irrigation • Diamond coating

MODEL **SCL5** ORDER CODE **Z305174**

• Internal irrigation

MODEL **SCL5D** ORDER CODE **Z305175**

• Internal irrigation • Diamond coating



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

VarioSurg Ultrasonic Surgery Tips (Diamond coating) **Sinus Lift**

MODEL **SG6D** ORDER CODE **Z305107**

MODEL **SG7D** ORDER CODE **Z305108**

VarioSurg Ultrasonic Surgery Tips **Sinus Membrane Detachment**

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

Washable in the thermodisinfector

135°C Autoclavable up to 135°C

Washable in the thermodisinfector

135°C Autoclavable up to 135°C

VarioSurg Ultrasonic Surgery Tips (Diamond coating) Implant Preparation

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

• Diameter of the tip end; 0.7 mm

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

• Diameter of the tip end; 1.3 mm

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

• Diameter of the tip end; 0.9 mm

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

• Diameter of the tip end; 1.3 mm

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

• Diameter; 2.0 mm

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

• Diameter; 2.6 mm

VarioSurg Ultrasonic Surgery Tips Scaling

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

VarioSurg Ultrasonic Surgery Tips 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*

Washable in the thermodisinfector

135°C Autoclavable up to 135°C

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

Washable in the thermodisinfector

135°C Autoclavable up to 135°C

VarioSurg Ultrasonic Surgery Tips — Maintenance (V-Tip)

Perio-Control

V-Tip Holder

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-P12 ORDER CODE Y1002167

- 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

■ V-P11R, V-P11L, V-P12 can be used only for VarioSurg3.

Washable in the thermodisinfector

Autoclavable up to 135°C

VarioSurg Ultrasonic Surgery Tips (Diamond coating) — Endodontics

MODEL E30RD-S ORDER CODE Z305118

- For posterior teeth (right angled)

MODEL E30LD-S ORDER CODE Z305119

- For posterior teeth (left angled)

MODEL E31D-S ORDER CODE Z305120

- For anterior and posterior teeth (70°)

MODEL E32D-S ORDER CODE Z305121

- For anterior teeth (90°)

SURGICAL

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

Washable in the thermodisinfector

Autoclavable up to 135°C

VarioSurg Ultrasonic Surgery Tips — Tip Kits

Bone Surgery | Scraper
Sinus Lift | Sinus Membrane Detachment

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

Endodontics

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

Washable in the thermodisinfector
Autoclavable up to 135°C

VarioSurg Ultrasonic Surgery Tips — Tip Kits

Socket Lift Tips (Crestal Approach)

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

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

Socket Lift Tips (Crestal Approach)

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
Autoclavable up to 135°C