Create it ◢

ORAL SURGERY

NSK

INDEX

Surgic Pro2

Go beyond.

The internationally acclaimed Surgic Pro implant and oral surgery micromotor system has evolved into "Surgic Pro2".
There are 3 developments, in operation, safety and wireless extensibility. As well as further improving the basic performance of Surgic Pro, its supreme adaptability in connecting to various external devices offers improved safety, efficiency and operator comfort during treatment. Professionals depend on the reliability of their equipment on a daily basis. With Surgic Pro2 NSK have taken reliability to the next level.

OPERABILITY

There are a range of upgrades to ensure even greater comfort during implant treatment. These specifications put the needs of professionals first.

Improved operability A more compact new motor

Significant size and weight reductions were achieved for the motor with NSK's proprietary micro-motor technology. Operability during treatment has been greatly improved by moving the center of gravity closer to the head of the handpiece. This increases efficiency and alleviates the stress during prolonged operation for effortless operation.

Length	Weight
24.9% DOWN	9.1% DOWN

61.5 mm
Surgic Pro2
110 g*
Center of gravity
81.9 mm
Surgic Pro
121 g*
*Except motor cord
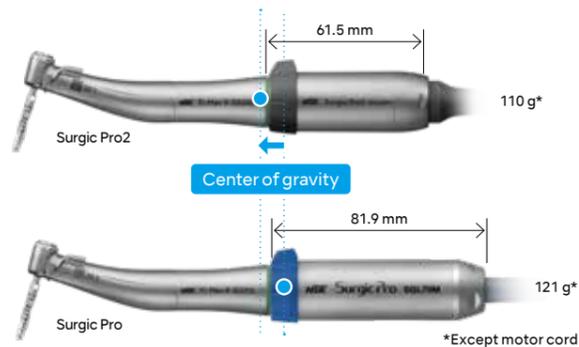
Superb visibility and operability Large color LCD panel

Visibility is guaranteed with the large, back-lit, high-contrast, LCD panel. The display can be adjusted in 10 brightness levels. The display's intuitive and easy-to-understand icons allow for smooth operation.

Silent and Smooth Irrigation Pump

The irrigation pump provides consistent and steady flow operating quietly in the background. Irrigation tube set-up is simple and straight-forward and the pump fits seamlessly in the compact and elegant design of Surgic Pro2.

Visibility is significantly improved with the high-resolution color LED.

Use of high-resolution color LED allows blood and gums to be seen as if naturally-lit, thereby providing increased visibility during treatment. The LED light source generates a minimal amount of heat and has excellent life expectancy.
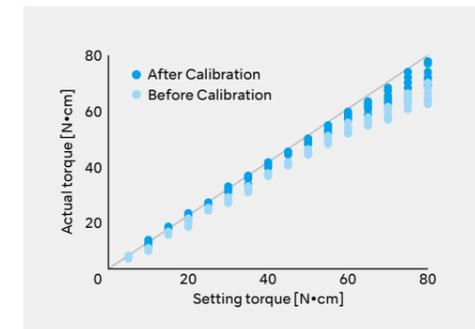
High color rendering LED   Standard White LED

SAFETY

Synonymous with Surgic Pro safer procedures are made possible with increased torque precision combined with the Osseo 100+, measuring the stability of dental implants.

NSK's Drive for Accuracy Ensure Safe Treatment through Accurate Torque Correction

The displayed torque value accuracy is dependent on the state of handpiece bearings and gear abrasion. Surgic Pro2 torque calibration allows for this to be taken into account to display more accurate values.
NSK's 'Advanced Handpiece Calibration' (AHC) function corrects the differences in actual handpiece condition using automatic calibration with no load current and load-bearing calibration to achieve accurate torque values for succesful implant surgery.
Minimizing the discrepancy between the set torque value and the actual output helps improve treatment outcomes.

20:1

• After Calibration
• Before Calibration

Actual torque [N•cm]
80
60
40
20
0   20   40   60   80
Setting torque [N•cm]

Osseo 100+ for more predictable treatment

Osseo 100+ measures implant stability to support decision making about when to load. Especially important when using protocols with shorter treatment time and treating at risk patients.
By connecting with the Surgic Pro2 it is possible to share and manage the measured ISQ value on external terminals.
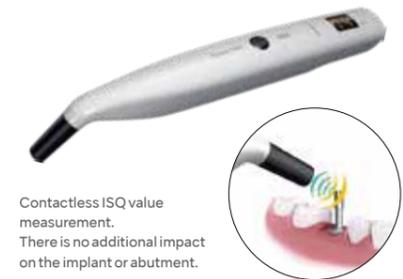
Contactless ISQ value measurement.
There is no additional impact on the implant or abutment.

*The below is not a clinical recommendation from NSK.

Decreasing micro mobility with increasing ISQ values
By taking a baseline value at implant placement and another before loading, the degree of osseointegration can be measured.

ISQ Value   60   70

• More time required for implant osseo-integration
• Remeasure

ISQ values measured for one or two stage full or partial cases

ISQ values measured for single tooth one stage and/or immediate loading cases

1. Sennerby L Prof., Implantologie 2013; 21(1): 21-23 2. Kokovic V, Jung R, Feloutzis A, Todovoric V, Jurisic M, Hämmerle C. Clinical Oral Implants Research, 00, 2013, 1–6 3. M Bornstein, C Hart, S Halbritter, D Morton, D Buser, Prof. Dr. med. dent. Clin Implant Dent Relat Res 2009 4. Serge Baltayan, Joan Pi-Anfruns, Tara Aghaloo, Peter Moy. J Oral Maxillofac Surg 74:1145-1152, 2016 5. P O Ostman, Private practitioner, Falun- and Biomaterial Group, Sahlgrenska Academy Gothenburg. Clinical Implant Dentistry and Related Research, Volume 7, Supplement 1, 2015 6. Daniel Rodrigo, Luis Aracil, Conchita Martin, Mariano Sanz. Clin. Oral Impl. Res. 21, 2010; 255–261 7. Pagliani L, Sennerby L, Petersson A, Verrocchi D, Volpe S & Andersson P. Journal of Oral Rehabilitation 2012 8. P Trisi Phd, T Carlesi DDS, M Colagiovanni DDS, G Perfetti MD, DDS. Journal of Osteology and Biomaterials, Volume 1, Number 3, 2010 9. S Hicklin, E Schneebeli, V Chappuis, S Francesco, M Janner, D Buser, U Brägger. Clin. Oral Impl. Res. 00, 2015; 1–9 10. L. Milillo, C. Fiandaca, F. Giannoulis, L. Ottria, A. Lucchese, F. Silvestre, M. Petruzzi. Oral & Implantology - anno IX - n. 3/2016

WIRELESS EXTENSIBILITY

Wireless connection with multiple devices significantly broadens the scope of implant treatment.

VarioSurg 4
Ultrasonic Bone Surgery

FOOT CONTROL WIRELESS

Surgic Pro2

Osseo 100+

iPad

Surgic Pro2 and VarioSurg 4 Link Function

Surgic Pro2 features built-in Bluetooth® functionality, allowing it to be easily linked with the ultrasonic bone surgery system, VarioSurg 4. This enables the operation of both units with one single wireless foot control. Easily switch between the two systems, ensuring a smooth and efficient workflow.

Link Stand3

Linked with iPads

Installing a dedicated application and connecting an iPad to the control unit enables real-time display of detailed procedural data, such as the rotation speed and the torque range. Procedural data can also be saved. Data can also be displayed and saved when connecting with Osseo 100+. Traceability data management of procedural details allows implant treatment to be tailored to individual patients.

Linked with a wireless foot control

Bluetooth® connectivity allows the flexibility of position without worrying about cable length. The foot controller is 400g lighter than the previous model (hangar included) making it easy to reposition. You can keep your focus on the treatment. The "Coolant Solution Flow Volume Button", "Program Button" and "Forward/Reverse Button" may be customized using the 3 installed buttons allowing the operator to choose their preferred mode of operation. The energy-efficient power supply uses 3 AAA batteries, which last about 6 months.
A flashing light indicates when the batteries are running low.

| Energy-Efficient Design (3 AAA batteries / 6 months) | A flashing light indicates when the batteries are low | Water-resistance and IPX8 compatibility |

Coolant Solution Flow Volume Button

Program Button

Speed Control Pedal

Forward/Reverse Button

Linked with Osseo 100+

Osseo 100+ measures the implant stability quotient contactlessly and can be connected using Bluetooth®, permitting ISQ confirmation over a shared interface. You can share and manage the data of those measured ISQ scores on other terminals through Surgic Pro2.
Surgic Pro2 itself offers such high extensibility as like this ISQ function is already equipped inside. It only takes 3 easy steps to use the Osseo 100+.

iPad is trademarks of Apple Inc.

Surgic Pro2

Complete Set with X-SG20L

Optic	MODEL	ORDER CODE
●	**Surgic Pro2 OPT**	**Y1004195**

Contents
- Control Unit • SGL80M Optic Micromotor
- X-SG20L Optic Handpiece (20:1 Reduction)
- FOOT CONTROL WIRELESS
- Irrigation tube (Pack of 3) and other accessories

Complete Set with SG20

Optic	MODEL	ORDER CODE
—	**Surgic Pro2 NON-OPT**	**Y1004196**

Contents
- Control Unit • SG80M Non-Optic Micromotor
- SG20 Handpiece (20:1 Reduction)
- FOOT CONTROL WIRELESS
- Irrigation tube (Pack of 3) and other accessories

Specifications

[Control Unit with AHC]
- Power Supply : AC100-240V 50/60 Hz
- Max. Pump Output : 75 mL/min
- Programs : 8 Programs / Implant Systems
- Dimensions : W 245 × D 235 × H 90 mm
- Weight : 2.1 kg

[Micromotor]
- Torque : 5-80 Ncm
- Motor Speed : 200-40,000 min^{-1}
- Light Power : over 32,000 LUX (Optic Micromotor)
- Weight : 0.2 kg (with motor cord)

[FOOT CONTROL WIRELESS]
- Foot Control Functions :
  Coolant Solution Flow Volume Button, PRG(Program) Button, Forward/Reverse Button, Speed Control Pedal
- Dimensions : W 260 x D 185 x H 65 mm
- Weight : 1.1 kg (with hanger)
- Electric Power Source :
  Three AAA/Micro/LR03, 1.5V alkaline batteries

FOOT CONTROL

Wireless foot control for Surgic Pro2

MODEL	ORDER CODE
FC-81	**Z1401001**

Link Stand3

with the Link Stand3 the Surgic Pro2 and VarioSurg 4 can be safely stacked to save space.

MODEL	ORDER CODE
Link Stand3	**Z1623001**

Sterilization Cassette

Designed for processing the NSK surgical motor/cord and surgical handpieces.
- Dimensions : W 279 x D 183 x H 34 mm

MODEL	ORDER CODE
SG-CASE	**S900040**

iCart Duo

The Surgic Pro2 and VarioSurg 3 surgical systems and their accessories are efficiently and functionally housed in specialist carts.

MODEL	ORDER CODE
iCart Duo	**S9090**

Carrying Case for Surgic Pro2

Carrying case for componets and accessories of Surgic Pro2
- Dimensions :
  W 534 x D 427 x H 207 mm

MODEL	ORDER CODE
Carrying Case	**Y1004219**

Surgic Pro

Unlimited Accuracy

Extremely accurate speed and torque for maximum safety during operation.

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.

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.

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.

Surgic Pro

Surgic Pro+
Complete Set with X-DSG20L

Optic	MODEL	ORDER CODE
●	Surgic Pro+ OPT-D	Y1003585

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

Surgic Pro
Complete Set with X-SG20L

Optic	MODEL	ORDER CODE
●	Surgic Pro OPT	Y1003586

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

Surgic Pro
Complete Set with SG20

Optic	MODEL	ORDER CODE
—	Surgic Pro NON-OPT	Y1003587

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

Specifications

[Control Unit with AHC]
- Power Supply : AC 230V 50/60 Hz
- Max. Pump Output : 75 mL/min
- Programs : 8 Programs / Implant Systems
- Dimensions : W 265 x D 220 x H 100 mm
- USB I/F : 1 Port (Surgic Pro+ Only)
- Built in Memory : 100 min (Surgic Pro+ Only)

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

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

ACCESSORIES

Foot Control

Coolant Flow Volume Button
Program Button
Forward / Reverse Button
Speed Control Pedal
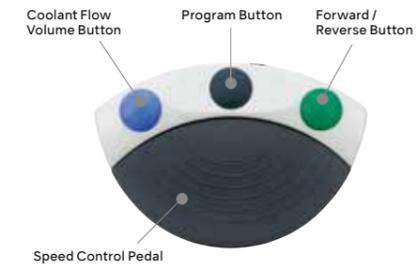
MODEL	ORDER CODE
FC-78	Z1102001

• With 2 m cord

Handle Set (Optional Extra)

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

MODEL	ORDER CODE
Handle Set	Z1027001

Sterilization Cassette (Optional Extra)

The sterilization Cassette is designed for the safe processing and storage of Surgic Pro components.

MODEL	ORDER CODE
SG-CASE	S900040

• Dimensions : W 279 x D 183 x H 34 mm

Carrying Case (Optional Extra)

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

MODEL	ORDER CODE
Carrying Case (Surgic Pro)	Y1001952

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

iCart Duo (Optional Extra)

Install the control unit and accessories on the cart.

MODEL	ORDER CODE
iCart Duo	S9090

• Dimensions : H 101.65 cm • Weight : 16.5 kg

Implant Contra Angles

Implant Contra-angles

Dismantable Contra-angle

Gear Ratio	Optic	MODEL	ORDER CODE
20:1 Reduction	●	**X-DSG20L**	**C1068**
20:1 Reduction	—	**X-DSG20**	**C1067**

• Max. Torque : 80 Ncm • Max. Speed : 2,000 min⁻¹
• Titanium Body with Scratch Resistant DURACOAT
• Cellular Glass Optics (X-DSG20L) • Double Sealing System
• Push Button Chuck • External and internal cooling

Gear Ratio	Optic	MODEL	ORDER CODE
20:1 Reduction	●	**X-SG20L**	**C1003**

• Max. Torque : 80 Ncm • Max. Speed : 2,000 min⁻¹
• Titanium Body with Scratch Resistant DURADRIP
• Cellular Glass Optics • Double Sealing System • Push Button Chuck
• External and internal cooling

Gear Ratio	Optic	MODEL	ORDER CODE
20:1 Reduction	—	**SG20**	**C1010**

• Max. Torque : 80 Ncm • Max. Speed : 2,000 min⁻¹
• Stainless Steel Body • Double Sealing System • Push Button Chuck
• External and internal cooling

Speed Increasing Oral Surgery Contra-angles

Gear Ratio	Optic	MODEL	ORDER CODE
1:3 Increasing	●	**X-SG93L**	**C1004**
1:3 Increasing	—	**X-SG93**	**C1007**

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

Gear Ratio	Optic	MODEL	ORDER CODE
1:3 Increasing	●	**Z-SG45L**	**C1107**
1:3 Increasing	—	**Z-SG45**	**C1108**

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

Direct Drive Oral Surgery Contra-angles and Straight

Gear Ratio	Optic	MODEL	ORDER CODE
1:1 Direct Drive	●	**X-SG25L**	**C1011**

• Max. Speed : 40,000 min⁻¹
• Titanium Body with Scratch Resistant DURAGRIP
• Cellular Glass Optics • Clean Head System
• Push Button Chuck • External cooling • For CA burs (ø2.35)

Gear Ratio	Optic	MODEL	ORDER CODE
1:1 Direct Drive	●	**X-SG65L**	**H1009**
1:1 Direct Drive	—	**X-SG65**	**H1038**

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

Washable in the thermodisinfector   Autoclavable

Implant Handpieces

Zygomatic Implant Handpiece

Gear Ratio	Optic	MODEL	ORDER CODE
20:1 Reduction	—	**SGX-E20R**	**HA1200**

• Max. Torque : 50 Ncm • Max. Speed : 2,000 min⁻¹ • Stainless Steel Body
• Angle Handpiece • Twist Chuck • External Cooling
• For Osteotomy preparation / insertion of Zygoma implants for
  Maxillofacial / oral surgery

Micro Surgery Handpieces

Gear Ratio	MODEL	ORDER CODE
1:1 Direct Drive	**SGS-ES**	**H264**

• Max. Speed : 40,000 min⁻¹ • Twist chuck • Straight Handpiece
• For surgical burs (ø2.35)

Gear Ratio	MODEL	ORDER CODE
1:2 Increasing	**SGS-E2S**	**H266**

• Max. Speed : 80,000 min⁻¹ • Twist chuck • Straight Handpiece
• For surgical burs (ø2.35)

Gear Ratio	MODEL	ORDER CODE
1:1 Direct Drive	**SGA-ES**	**H263**

• Max. Speed : 40,000 min⁻¹ • Twist chuck • 20˚ Angle Handpiece
• For surgical burs (ø2.35)

Gear Ratio	MODEL	ORDER CODE
1:2 Increasing	**SGA-E2S**	**H265**

• Max. Speed : 80,000 min⁻¹ • Twist chuck • 20˚ Angle Handpiece
• For surgical burs (ø2.35)

Micro Saw Handpieces

Gear Ratio	MODEL	ORDER CODE
3.2:1 Reduction	**SGR2-E**	**SH162**

• 1.8 mm Reciprocating • With External Spray Nozzle

Gear Ratio	MODEL	ORDER CODE
3.5:1 Reduction	**SGO2-E**	**SH164**

• 17° Osillating • With External Spray Nozzle

Gear Ratio	MODEL	ORDER CODE
3.2:1 Reduction	**SGT2-E**	**SH163**

• 3° Sagittal • With External Spray Nozzle

Blades for Reciprocating

MODEL	ORDER CODE
SGR-1	**Y900072**

• Blade thickness 0.35 mm • Pack of 10 blades

MODEL	ORDER CODE
SGR-2	**Y900073**

• Blade thickness 0.35 mm • Pack of 10 blades

MODEL	ORDER CODE
SGR-3	**Y900074**

• Blade thickness 0.35 mm • Pack of 10 blades

Blades for Sagittal

MODEL	ORDER CODE
SGT-1	**Y900075**

• Blade thickness 0.35 mm • Pack of 10 blades

MODEL	ORDER CODE
SGT-2	**Y900076**

• Blade thickness 0.35 mm • Pack of 10 blades

Blades for Oscillating

MODEL	ORDER CODE
SGO-1	**H174034**

• Blade thickness 0.3 mm • Single blade

MODEL	ORDER CODE
SGO-2	**H174044**

• Blade thickness 0.3 mm • Single blade

MODEL	ORDER CODE
SGO-3	**H174031**

• Blade thickness 0.3 mm • Single blade

MODEL	ORDER CODE
SGO-4	**H174041**

• Blade thickness 0.3 mm • Single blade

MODEL	ORDER CODE
SGO-5	**H174032**

• Blade thickness 0.35 mm • Single blade

MODEL	ORDER CODE
SGO-6	**H174042**

• Blade thickness 0.35 mm • Single blade

*Blades are sold separately.

Washable in the thermodisinfector   Autoclavable

Osseo 100+

Removes Doubt

Osseo 100+ measures implant stability and osseointegration.
This supports the decision on when to load an implant.
Especially important when working with shorter
treatment time or managing risk patients.

Reduce treatment time

One stage,
immediate loading,
early loading.

3-step procedure

1. The MulTipeg™ is attached to the implant. It screws effortlessly into the implant's internal threads. (approximately 6-8 Ncm of torque).

2. Just aim for the magnet on top of the MulTipeg™. Non-invasive, objective, accurate and repeatable. The peg is responding by magnetic pulses and vibrates due to the stiffness in the contact area between the bone and the implant surface.

3. An ISQ value is generated and shown on the display. This reflects the level of stability on the universal ISQ scale – from 1 to 99. The higher the ISQ value, the more stable the implant.

1.   2.   3.

The uncomplicated procedure that measures ISQ allows the implant loading period to be planned in advance. The reconstruction of crowns and bridges can be monitored to optimize timing to decrease the risk for failures. Measurements can be made without unnecessary impact since the equipment does not come into physical contact with the implant or abutment.

Wireless connection with Surgic Pro2

Osseo 100+

Connectivity with Surgic Pro2

The ISQ value is transferred automatically when connected with Surgic Pro2. The Bluetooth® connection means that clinical procedures will be undisturbed.

Wireless data management

The measured ISQ can be shared and processed with data on external terminals via Surgic Pro2.

Reusable MulTipeg™

- For all major implant systems *
- Tissue friendly, durable titanium
- Autoclavable appx. 20 times
- Optimal platform fit
- ISQ Standard Calibrated

*There are different MulTipegs™ available made to fit different implant system and types.
 Please refer to the updated list from the supplier.

MulTipeg
assortment

Wireless connection with Surgic Pro2

MODEL	REF
Osseo 100+	Y1004176

Contents
- Osseo 100+ Instrument • MulTipeg Driver • Mains adapter and plugs
MulTipeg™ is not included, sold separately.

Specifications
- Power input : 5VDC, 1 VA
- Charger input : 100-240 VAC, 5VA
- Instrument weight : 78 g
- Battery full charge time : appx. 3 hours.*
- Battery continuous drive time : appx. 1 hour.*
 *Varies depending on usage situations.

iSD900

Faster and Safer

Faster and Safer Implant Treatments

NSK's iSD900 cordless prosthodontic 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

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.
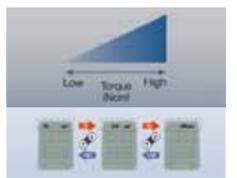
Ergonomic extension ON/OFF switch lever

The extended ON/OFF switch lever makes work easier inside the oral cavities and is removable if necessary. The lever can be autoclaved and thermo-disinfected.

Advanced non-contact quick charger

The advanced non-contact quick charger charges the instrument in just 90minutes.

iSD900 Complete Set

MODEL	ORDER CODE
iSD900	**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*
*May change according to usage environment

Torque Calibrator

The heads can be washed in the thermodisinfector   135℃ 111 The heads are autoclavable

VarioSurg 4

## The Essential Ultrasonic Bone Surgery System

The VarioSurg ultrasonic bond surgery system has evolved with the introduction of the VarioSurg 4. With pioneering high power ultrasonic technology and a diverse lineup of tips for various procedures, the VarioSurg 4 allows for swift and intricate bone removal and shaping.

The technique is minimally invasive limiting damage to surrounding soft tissue compared to traditional procedures. With new practical advantages like wireless foot control, integration and compatibility with Surgic Pro2, and a refined, stylish design, the VarioSurg 4 is set to exceed clinicians' expectations while creating a stress-free environment

Burst Mode With Three Different Frequency Levels

Burst Mode delivers small, periodic vibrations in response to a consistent vibration, creating a suitable 'hammer effect' for cutting hard cortical bone by introducing variations in vibration. This mode is switchable during procedures, and with three adjustable Burst Mode levels, it allows for easy mode and level selection based on the needs of the surgical procedure and bone conditions.

Burst Mode

Continuous Vibration Mode
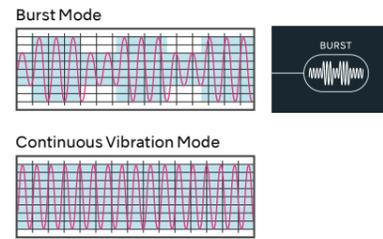
Feedback & Auto-Tuning Functions for Consistent Cutting Performance and Stability

Optimal power is supplied to the tip as it automatically senses the condition of the surgical site.
Oscillation frequency is also automatically controlled, maintaining the specified output value at the tip and sustaining the vibration state. These features ensure a stable, consistent power supply and enhance the efficiency of the procedure.

Adjustable Light Intensity

Switch effortlessly between three levels of light intensity.

Silent and Smooth Irrigation Pump

The quiet irrigation pump provides a consistent and steady flow of coolant. Setting-up the NSK irrigation tubing is simple, fitting seamlessly into the elegantly designed VarioSurg 4.

Variable Water Levels

Operate from the screen or foot control five water volume levels to suit the procedure, while keeping the the selected tip cool to prevent tissue damage.
Maximum water flow is at 76ml per minute.

Smart and Intuitive Control Panel

Excellent screen visibility with smooth operation thanks to the introduction of a large, backlit LCD screen and touch panel with intuitive icon buttons, ensures excellent visibility and smooth operation.

High power handpiece with super-slip design

This super-slim, lightweight handpiece with twin LEDs provides exceptional accessibility and visibility. It's well-balanced ergonomic design minimises hand fatique during extended treatments.

Optic	MODEL	ORDER CODE
●	VS4-LED-HPSC	EA1417001

• with 2m cord

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

Clearer :   LEDs generate natural daylight-quality, which ensures clearer vision than halogen light sources.
More Durable : LED light sources are longer lasting than halogen bulbs

Twin LED lights

Tips - The result of NSK's Precision Manufacturing

We maximize the sharpness of our tips through three-dimensional-cutting (toothing) of the blade's edge.
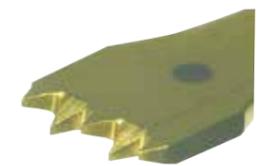
A Wide and Versatile Range of Tips

We offer an extensive lineup of specialized tips for bone surgery, plus tips for periodontal and endodontic procedures.

VarioSurg 4

Variosurg 4 Complete Set

Optic	MODEL	ORDER CODE
●	**VarioSurg 4 (230V)**	**Y1500706**

Contents :
• Control Unit
• LED Handpiece with 2m cord
• FC-86 Foot Control (cordless)
• Sterilization Cassette
• Handpiece Stand
• Irrigation tube (3 pcs.) and other accessories
• Basic H-S Kit (H-SG1, SG3, SG5, SG6D, SG7D, SG11 and Tip holder)

Variosurg 4 Complete Set without Foot Control

Optic	MODEL	ORDER CODE
●	**VarioSurg 4 w/o FC (230V)**	**Y1500712**

Contents :
• Control Unit
• LED Handpiece with 2m cord
• Sterilization Cassette
• Handpiece Stand
• Irrigation tube (3 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 : AC100 - 240V 50/60 Hz
• Max. Pump Output : 76 mL / min
• Programs : SURG x 5, ENDO x 2, PERIO x 2
• Dimensions : W 245 x D 235 x H 90 mm

Surgic Pro2 and VarioSurg 4 Link Function

VarioSurg 4 features built-in Bluetooth® functionality, allowing it to be easily linked with the implant and oral surgery micromotor system, Surgic Pro2. This enables the operation of both units with one single wireless foot control. Easily switch between the two systems, ensuring a smooth and efficient workflow.

Foot Control

MODEL	ORDER CODE
FC-86	**ZF16040001**

MODEL	ORDER CODE
FC-78	**Z1102003**

• with 2m cord

Link Stand

MODEL	ORDER CODE
Link Stand3	**ZA16230001**

Sterilization Cassette

MODEL	ORDER CODE
VA-SG-CASE	**Z313102**

• 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

MODEL	ORDER CODE
Carrying Case (VarioSurg 4)	**Y1500783**

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

iCart Duo

MODEL	ORDER CODE
iCart Duo	**S9090**

• Dimensions : H 101.65 cm • Weight : 16.5 kg

VarioSurg 4

Spare Parts and Accessories

Surgic Pro2

MODEL	PRODUCTS	ORDER CODE
SGL80M Optic Motor & Cord		Y1004211
SG80M Non-Optic Motor & Cord		Y1004212
Tube Holder		E1198105
FC-81 FOOT CONTROL WIRELESS		Z1401001

MODEL	PRODUCTS	ORDER CODE
Coolant Solution Hanger Post		U370152
Irrigation Tube (Pack of 5)		Y900113
AC Power Cord		U260414
Handpiece Stand		Z1402110

MODEL	PRODUCTS	ORDER CODE
Calibration Bur		Z1057101
Tube Holder (Pack of 7)		Y900083
Protection Plug Sterilization Cassette		10001595
SG-CASE Sterilization Cassette		S900040

Surgic Pro2 / VarioSurg 4

MODEL	PRODUCTS	ORDER CODE
Link Stand3		ZA16230001

Surgic Pro

MODEL	PRODUCTS	ORDER CODE
SGL70M Optic Motor & Cord		E1023
SG70M Non-Optic Motor & Cord		E1025
Tube Holder		E295105
FC-78 Foot Control		Z1102001

MODEL	PRODUCTS	ORDER CODE
Handle Set		Z1027001
Coolant Solution Hanger Post		U370152
Irrigation Tube (Pack of 5)		Y900113
Handpiece Stand		Z1029201

MODEL	PRODUCTS	ORDER CODE
Calibration Bur		Z1057101
Tube Holder (Pack of 7)		Y900083
Protection Plug		10001595
SG-CASE Sterilization Cassette		S900040

Zygomatic Implant Handpiece

MODEL	PRODUCTS	ORDER CODE
Spray Nozzle For SGX-E20R		HA12000122

Micro Saw Handpieces

MODEL	PRODUCTS	ORDER CODE
Spray Nozzle For SGR, SGT, SGO		SH162035

MODEL	PRODUCTS	ORDER CODE
Spanner 8x5		K040751

Micro Surgery Handpieces

MODEL	PRODUCTS	ORDER CODE
Spray Nozzle For SGS, SGA		H263018

Implant Handpieces

MODEL	PRODUCTS	ORDER CODE
Internal Spray Nozzle		10000324
Nozzle Holder For X-DSG20L, X-DSG20 X-SG20L		20000396
Nozzle Holder For SG20		20000357

MODEL	PRODUCTS	ORDER CODE
Y-Connector		C823752
Cleaning Wire		20000512

Osseo 100+

MODEL	PRODUCTS	ORDER CODE
MulTipeg Driver		55003
Sterile cover		55105
Mains adapter		55263

MODEL	PRODUCTS	ORDER CODE
EU plug		55264
UK plug		55265

MODEL	PRODUCTS	ORDER CODE
AU plug		55266
US plug		55267

iSD900

MODEL	PRODUCTS	ORDER CODE
Quick Charger for iSD900		U1070001
iSD900 Motor		E1060001
iSD-HP		C1060001

MODEL	PRODUCTS	ORDER CODE
Power Cord		U439550
Torque Calibrator		Z1056001
Calibration Bur		Z1057101

MODEL	PRODUCTS	ORDER CODE
On/Off Switch Lever		Z1070001
Ni-MH Rechargeable Battery (Pack of 2)		Y900103

* Utilizzare solo batterie ricaricabili formato AAA Ni-MH (Nickel Metal Hydride.). Non utilizzare batterie non ricaricabili.

VarioSurg 4

MODEL	PRODUCTS	ORDER CODE
E Tip Replacement Wrench For V10-S		Z217399
CR-40 For SG1A, SG8A, Socket Lift Tip VS Tip Wrench		Z305350
CR-30 Tip Wrench		10000977
FC-86		ZF16040001

MODEL	PRODUCTS	ORDER CODE
FC-78		Z1102003
VS4-LED-HPSC		EA14170001
Tips Holder		Z221086
Handpiece Stand		Z1029201

MODEL	PRODUCTS	ORDER CODE
Coolant Solution Hanger Post		U370152
Irrigation Tube (Pack of 5)		Y900113
Tube Holder (Pack of 7)		Y900767
VA-SG-CASE Sterilization Cassette		Z313102

Spare Parts