Create it ◢

SURGICAL

NSK

INDEX

Surgic Pro2

Go beyond.

The internationally acclaimed Surgic Pro surgical micromotor system has evolved into "Surgic Pro2".
There are 3 progress points, 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.

SAFETY

Synonymous with Surgic Pro safer procedures are made possible with increased torque precision combined with the "Osseointegration Monitoring Device, Osseo 100+".

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.
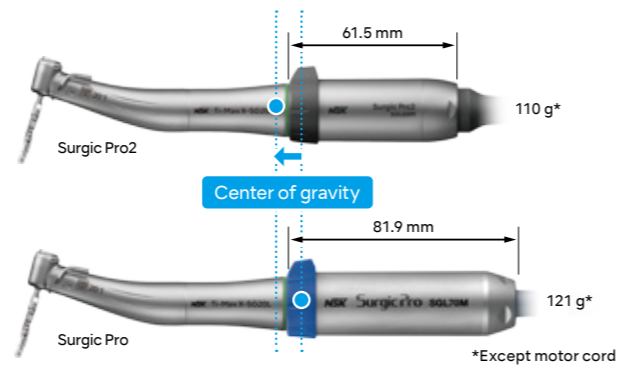

Improved operability A more compact new motor

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 strain-free, 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

The Osseointegration Monitoring Device, Osseo 100+ for more predictable treatment

Osseo 100+ measures implant stability and osseointegration to enhance decisions about when to load. Especially important when using protocols with shorter treatment time and treating 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.

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.
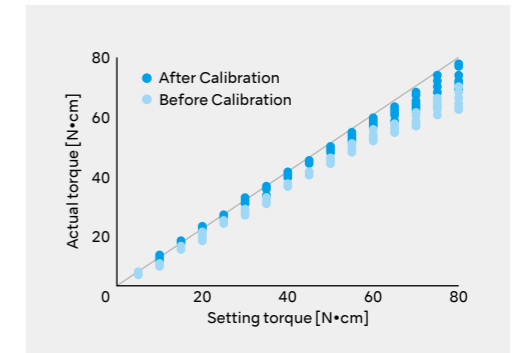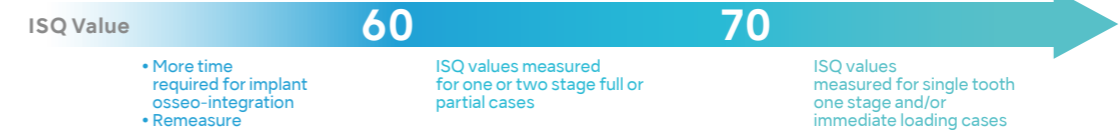
High color rendering LED   Standard White LED

*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 3
Ultrasonic Bone Surgery

FOOT CONTROL
WIRELESS

Surgic Pro2

Osseo 100+
Osseointegration Monitoring Device

iPad

Linked with the "VarioSurg 3" ultrasonic bone surgery system

Surgic Pro2 can easily be linked with the NSK ultrasonic surgical system VariosSurg 3 by adding our bluetooth link module. With the NSK link stand the two units can be safely stacked to save space.

Two devices can be controlled with only one Foot Control.

You can easily switch between Surgic Pro2 and VarioSurg 3 for improved flexibility and workflow.

Link Stand 2   Link Module

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 Osseointegration Monitoring Device, Osseo 100+

The Osseointegration Monitoring Device, "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+.
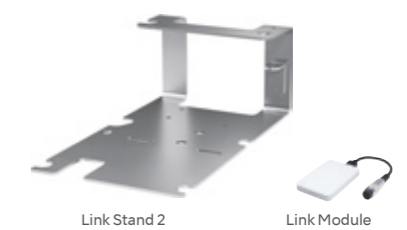
Linked with a wireless foot control

Bluetooth connectivity allows selection of the optimal 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

iPad is trademarks of Apple Inc.
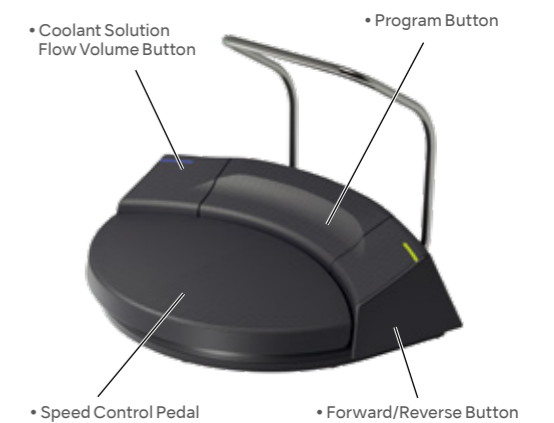
Surgic Pro2

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

OPTIONAL EXTRA

Wireless Link Tools [Surgic Pro2 + VarioSurg 3]

Connecting via the compact Wireless Link Set allows for operation of 2 surgical systems with a single wireless foot control.

MODEL	ORDER CODE
Link Module	Z1402001

• Link Box • Link Cable

MODEL	ORDER CODE
Link Stand2	Z1452001

Sterilization Cassette

The sterilization Cassette is designed for the safe processing and storage of Surgic Pro2 components.

MODEL	ORDER CODE
SG-CASE	S900040

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

Carrying Case

Carrying case for componets and accessories of Surgic Pro2

MODEL	ORDER CODE
Carrying Case	Y1004219

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

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

• Dimensions : H 101.65 cm • Weight : 16.5 kg

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.

Surgic Pro and VarioSurg 3 Generating Synergies Through Link Function

The Link function allows operation between the Surgic Pro oral surgery and implant micromotor system and the VarioSurg 3 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 VarioSurg 3 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.

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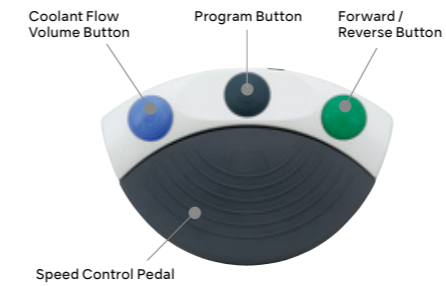
MODEL	ORDER CODE
FC-78	**Z1102001**

• 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

SG Link Set (Optional Extra)
[Surgic Pro + VarioSurg 3]

SG Link Stand · SG Link Cable
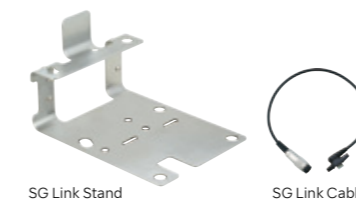
MODEL	ORDER CODE
VarioSurg3 Link set (E)	**Y1002729**

• SG Link Stand • SG Link Cable

iCart Duo (Optional Extra)

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

MODEL	ORDER CODE
iCart Duo	**S9090**

• Dimensions : H 101.65 cm • Weight : 16.5 kg

Implant Handpieces

Surgical 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 DURACOAT
- Cellular Glass Optics • Double Sealing System • Push Button Chuck
- External and internal cooling

Gear Ratio	Optic	MODEL	ORDER CODE
20:1 Reduction	●	X-SG20ML	CA13030001

- Max. Torque : 80 Ncm • Max. Speed : 2,000 min^{-1}
- Titanium Body with Scratch Resistant DURAGRIP
- Cellular Glass Optics • Double Sealing System • Push Button Chuck
- External and internal cooling
- * Internal Spray Nozzle is sold separately

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

Gear Ratio	Optic	MODEL	ORDER CODE
20:1 Reduction	—	SG20M	CA13020001

- Max. Torque : 80 Ncm • Max. Speed : 2,000 min^{-1}
- Stainless Steel Body • Double Sealing System • Push Button Chuck
- External and internal cooling
- * Internal Spray Nozzle is sold separately

Speed Increasing Surgical 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 DURACOAT
- 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 Surgical Handpieces

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

- Max. Speed : 40,000 min^{-1}
- Titanium Body with Scratch Resistant DURACOAT
- 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 DURACOAT
- 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 to support 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.

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.

Stand-alone
Osseo 100

By mounting a MulTipeg™ the measurement is made in a second. A numerical result appears on an LED screen and that indicates how well the implant has integrated.

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

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.

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.

Stand-alone

MODEL	REF
Osseo 100	Y1004175

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 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.
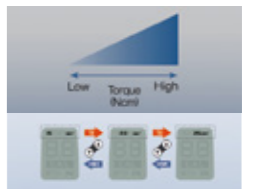
Ergonomic extension ON/OFF switch lever

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°C The heads are autoclavable

VarioSurg 3

Evolved Potential

Embodying the Pursuit of Perfection

Ultrasonic bone surgery systems are essential in modern surgical and implant treatment.
The powerful VarioSurg 3 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

Outstanding 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 VarioSurg 3 effortlessly balances these three elements for the ultimate in ultrasonic performance.

Stabilizing the Power Balance for More Efficient Procedures

Maximum power 150%

The VarioSurg 3 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.

VarioSurg

150% High Power!

VarioSurg 3

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.

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.
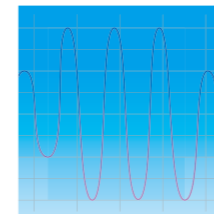
Advanced BURST mode

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.
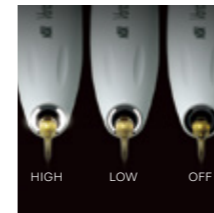
Illumination intensity adjustable LED light

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 75mL 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.

VarioSurg 3

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 VarioSurg 3 handpiece delivers appropriate power from the generator to the tip without loss while minimising heat generation.

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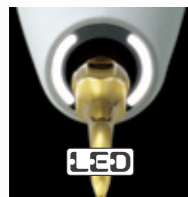
NSK LEDs generate natural daylight-quality light to perfectly illuminate the treatment area, enabling more precise treatments and shortening treatment times. LEDs are safe and do not overheat, even during extended use, and are economical due to their long life. Proprietary twin LED lights eliminate shadows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

Superior materials to withstand constant decontamination

Compliance with autoclaving and thermo-disinfection requirements to guarantee patient safety.

Ultrasonic Surgery Tips

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

BONE SURGERY

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.

SCRAPER

EXTRACTION

SINUS LIFT

IMPLANT PREPARATION

SOCKET LIFT (CREST APPROACH)

SINUS MEMBRANE DETACHMENT

SCALING

PERIO

PERIO-CONTROL

ENDO

Visit the following site for tip details: http://www.nsk-dental.com

VarioSurg 3

VarioSurg 3

Complete Set

Optic	MODEL	ORDER CODE
●	**VarioSurg 3**	**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)

Complete Set without Foot Control

Optic	MODEL	ORDER CODE
●	**VarioSurg 3 Non FT**	**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 : 230 V 50/60 Hz
- Irrigation Flow Rate : 10-75 mL/min
- Programs : SURG × 5, ENDO × 2, PERIO × 2
- Dimensions : W 265 × D 220 × H 103 mm

ACCESSORIES

Hands-Free Program Adjustments Via Foot Control

The VarioSurg 3 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.

Coolant Flow Volume Button
Program Button
Burst output selection Button
Ultrasonic ON-OFF Button
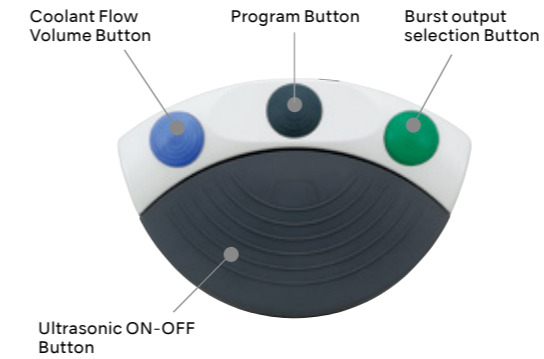
MODEL	ORDER CODE
FC-78	**Z1102003**

• With 2 m cord

Sterilization Cassette

The Sterilization Cassette is designed for the safe processing and storage of VarioSurg 3 components.

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 (Optional Extra)

The Carrying Case neatly stores all VarioSurg 3 components.

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

• Dimensions : W534 x D 427 x H 207 mm

iCart Duo (Optional Extra)

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**

• Dimensions : H 101.65 cm • Weight : 16.5 kg

Spare Parts and Accessories

Surgic Pro2

MODEL	PRODUCTS	ORDER CODE
SGL80M Optic Motor & Cord		Y1004211
SG80M Non-Optic Motor & Cord		Y1004212
Motor cord		E1198061
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
Calibration Bur		Z1057101

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

Surgic Pro2 / VarioSurg 3

MODEL	PRODUCTS	ORDER CODE
Link Stand2		Z1452001

MODEL	PRODUCTS	ORDER CODE
Link Module		Z1402001

Surgic Pro

MODEL	PRODUCTS	ORDER CODE
SGL70M Optic Motor & Cord		E1023
SG70M Non-Optic Motor & Cord		E1025
Motor cord		E1023061
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
Calibration Bur		Z1057101

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

Surgic Pro / VarioSurg 3

MODEL	PRODUCTS	ORDER CODE
SG Link Stand		Z1176

MODEL	PRODUCTS	ORDER CODE
SG Link Cable		Z1189

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
Spray Nozzle For X-SG20ML		CA13030107
Spray Nozzle For SG20M		CA13020115

MODEL	PRODUCTS	ORDER CODE
Y-Connector		C823752
Cleaning Wire		20000512

Osseo 100+ / 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 3

MODEL	PRODUCTS	ORDER CODE
VS3-LED-HPSC with 2m cord		E1133
E Tip Replacement Wrench For V10-S		Z217399
CR-40 VS Tip Wrench For SG1A, SG8A, Socket Lift Tip		Z305350
CR-30 Tip Wrench		10000977

MODEL	PRODUCTS	ORDER CODE
Tips Holder		Z221086
Handpiece Stand		Z1029201
Saline Solution Hanger Post		U564152

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

Spare Parts