

Create it 

ORAL SURGERY

NSK



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Surgic Pro2

Go beyond.

The internationally acclaimed Surgic Pro surgical micromotor system enters its next generation with the Surgic Pro2. Advancements in operability, safety, and wireless connectivity elevate the treatment experience, while maintaining the reliability clinicians have come to trust. With enhanced compatibility across external devices, the Surgic Pro2 delivers greater efficiency, improved workflow flexibility, and increased operator comfort throughout surgical procedures.

OPERABILITY

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

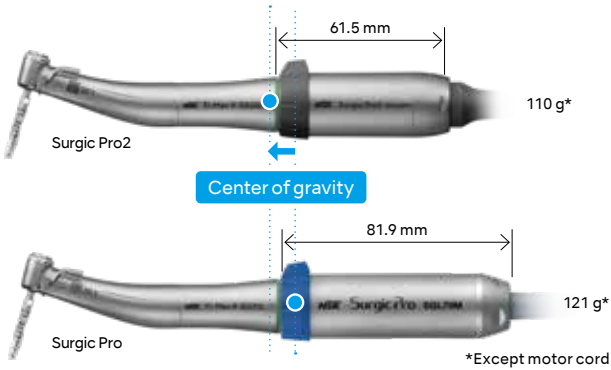


Improved Operability A New, More Compact Motor

Significant size and weight reductions were achieved on the motor with NSK's proprietary micro-motor technology. Operability during treatment has been improved by moving the center of gravity closer to the head of the handpiece

Length
24.9% DOWN

Weight
9.1% DOWN



Large Color LCD Touch 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 in the design of Surgic Pro2.

Improved High-Resolution Color LED

The use of high-resolution color LEDs improve the color rendering properties, making it easier to see color contrasts.

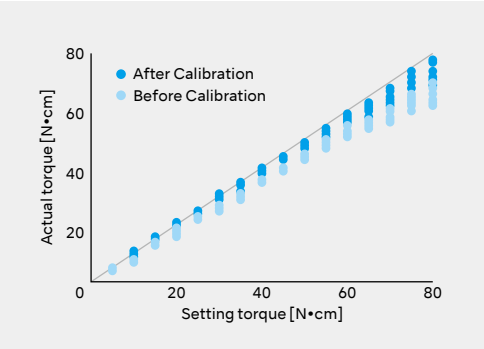


SAFETY

With Surgic Pro2, safer procedures are made possible with increased torque precision combined with the "Osseointegration Monitoring Device, Osseo 100+".

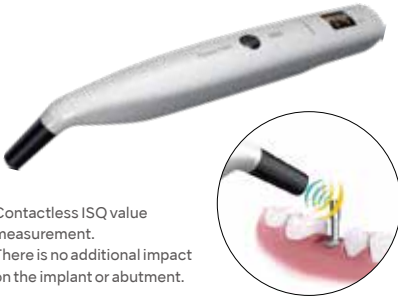
NSK's Drive for Accuracy Treatment through Accurate Torque Correction

The displayed torque value accuracy is dependent on the state of the 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 implant surgery. Minimizing the discrepancy between the set torque value and the actual output helps improve treatment outcomes



Osseo 100+ for more predictable treatment

Osseo 100+ measures implant stability to support decisions on when to load an implant. This is especially important when working with shorter treatment time or managing risk patients. 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.



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

*The below is not a clinical recommendation from NSK.

1. Sennerby L Prof., Implantologie 2013; 21(1): 21-23 2. Kokovic V, Jung R, Feloutzis A, Todovic V, Jurisic M, Hammerle 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, Verocchi 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 Bragger. Clin. Oral Impl. Res. 00, 2015; 1-9 10. L. Milillo, C. Fiandaca, F. Giannoulis, L. Ottria, A. Lucchese, F. Silvestre, M. Petrucci. 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

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+.



Surgic Pro2 and VarioSurg 4 Link Function

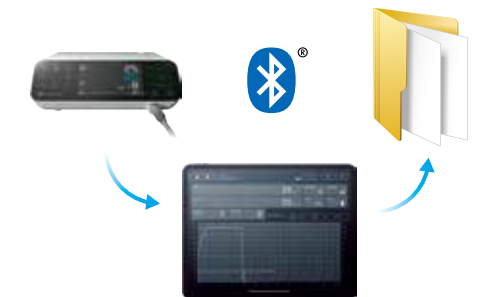
VarioSurg 4 features built-in Bluetooth® functionality and can be linked to the Surgic Pro2 surgical micromotor system. This enables the operation of both units with one single wireless foot control. You can switch between the two systems.



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® connection allows operation without coecting cables. The wireless foot control is 400g lighter (including hanger) than the wired foot control. ConnThe "Coolant Solution Flow Level Button", "Program Button" and "Burst Mode Button" are also located on the foot control. It is powered by 3 AAA batteries that last for approximately 6 months. A light on the control panel flashes 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



Surgic Pro2



Complete Set with X-SG20ML

Optic	MODEL	ORDER CODE
●	Surgic Pro2 OPT	Y1500763

- Contents**
- Control Unit • SGL80M Optic Micromotor
 - X-SG20ML Optic Handpiece (20:1 Reduction)
 - FOOT CONTROL WIRELESS
 - Other accessories

Complete Set with SG20M

Optic	MODEL	ORDER CODE
—	Surgic Pro2 NON-OPT	Y1500764

- Contents**
- Control Unit • SG80M Non-Optic Micromotor
 - SG20M Handpiece (20:1 Reduction)
 - FOOT CONTROL WIRELESS
 - Other accessories

Specifications

- [Control Unit with AHC]
- Power Supply : AC 120V 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	ZA16230001

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

Implant Contra-Angles

Implant Contra-Angles



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

- 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 • Mini head



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

- 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 • Mini head

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)

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)

Microsurgery 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)

Osseo 100+

Removes Doubt

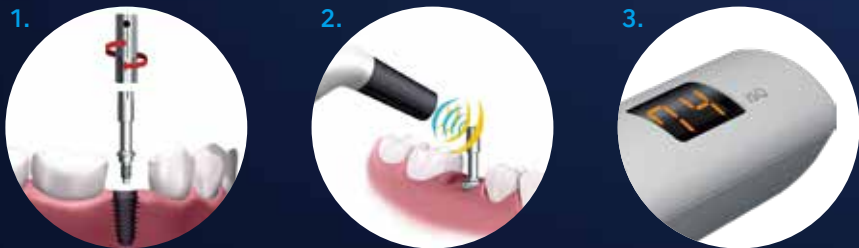
Osseo 100+ measures implant stability and osseointegration. This supports the decision on when to load an implant and is especially important when working with shorter treatment time or managing risk patients.

Reduce treatment time

One stage, immediate and 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. 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.



ISQ measurements help clinicians assess implant stability and determine the optimal time for implant loading and final restorations, such as crowns and bridges. This supports predictable treatment planning and helps reduce the risk of failure. The process is quick, non-invasive, and requires no physical contact with the implant or abutment.

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.



Wireless connection with Surgic Pro2

MODEL	REF
Osseo 100+	Y1004176

Contents

• Osseo 100+ Instrument • Multipeg Driver • AC 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

Accommodates 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.



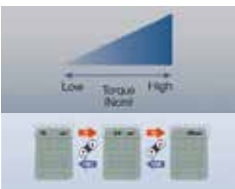
Torque calibration system to guarantee safety

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 wireless charging

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

iSD900 Complete Set

MODEL	ORDER CODE
iSD900	Y1001357

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



The heads can be washed in the thermosinfector

The heads are autoclavable

VarioSurg 4

Ultrasonic Bone Surgery System for Implant Treatment

The development of the VarioSurg ultrasonic bone surgery system continues with the introduction of the VarioSurg 4. With ultrasonic technology and with a lineup of more than 50 tips, the VarioSurg4 allows for swift and intricate bone removal and shaping.

It reduces damage to surrounding soft tissue and reduces invasiveness compared to conventional bone and micro saws. VarioSurg 4 features a wireless foot control and compatibility with Surgic Pro2.



VarioSurg 4

High power handpiece with super-slim design

The handpiece is slimmer and lightweight than the conventional model VarioSurg and is equipped with twin LEDs. Ultrasonic technology produces oscillation of the tip allowing for minimally invasive procedures.

NSK's twin LEDs provide a brightness of 5700K, close to natural daylight quality

Clearer : LEDs supply bright light and illuminate the executives.

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



Twin LED lights

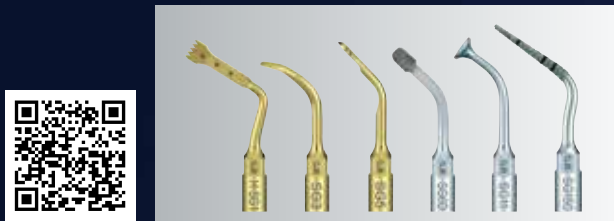
Adjustable Light Intensity

Switch between three levels of light intensity.



Over 50 tips available

We offer a lineup that specializes in bone surgery as well as periodontal and endodontic treatments.



Tips - Products of NSK's Precision Manufacturing

The cutting edge is three-dimensionally cut and machined into teeth.



Irrigation Pump

Setting-up the irrigation tubing is simple .

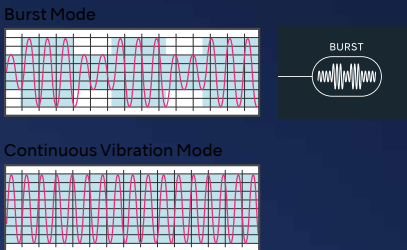


Intuitive Control Panel

The control unit includes a programmable memory function that can be personalized to match the preferences and usage conditions of individual clinicians. It incorporates a 4.6-inch backlit LCD screen and a touch panel with intuitive icon buttons.

Burst Mode With Three Different Frequency Levels

Burst mode creates a "hammer effect" by varying the vibrations, producing small periodic vibrations in response to constant vibrations. This mode can be switched during surgery, with three adjustable burst mode levels to choose from.



Variable Water Levels

Select from five water levels to cool the tip depending on your power setting and oral conditions. Maximum pump output is 76ml per minute.

VarioSurg 4

Optic	MODEL	ORDER CODE
●	VS4-LED-HPSC	EA14170001
• with 2m cord		

VarioSurg 4



Variosurg 4 Complete Set

Optic	MODEL	ORDER CODE
●	VarioSurg 4 (120V)	Y1500705

- 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)

- Specifications :**
- [Control Unit]
- Frequency : 28-32 kHz
 - Power Supply : AC 120V 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 and can be linked to the Surgic Pro2 surgical micromotor system. This enables the operation of both units with one single wireless foot control. You can switch between the two systems.



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

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

Surgic Pro2 / VarioSurg 4

MODEL	PRODUCTS	ORDER CODE
Link Stand3		ZA16230001

MODEL	PRODUCTS	ORDER CODE
Coolant Solution Hanger Post		U370152
Irrigation Tube (Pack of 10)		Y900114
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

Implant Handpieces

MODEL	PRODUCTS	ORDER CODE
Internal Spray Nozzle		10000324
Nozzle Holder For 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
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

Manufacturer

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NSK America Corp. www.nskdental.com
1800 Global Parkway, Hoffman Estates, IL 60192, USA

Specifications are subject to change without notice.