Innovative Ultrasonic Surgery
A Powerful Ultrasonic Surgical System with Illumination

Advantages
Power: superior cutting capability shortens treatment time
Visibility: optic handpiece assures safe and easy surgical procedures
Minimally invasive: eliminates heat generation during bone dissection
Safe: avoids damage to soft tissue even during accidental contact
Comfort: for patients – operation can be performed under local anesthesia and no collateral damages to soft tissues offers simpler post operative care
for clinicians – light weight and ergonomic design handpiece reduces operator stress
Precision: cavitation effect of irrigating solution keeps surgical site blood free

Applications
• Bone surgery
• Sinus lifts
• Periodontal surgery
• Endodontic surgery
• Orthodontics

Powerful Partners®

Variosurg is the only ultrasonic surgical system with an optic handpiece.™ The powerful NSK cellular optics offers improved visibility of the target site which helps to provide more precise and efficient treatment.

Optic Handpiece

As of Jan. 2008
VarioSurg Ultrasonic Tips

**Bone Surgery**

- **MODEL SG1**  
  **ORDER CODE Z305-101**  
  • TiN coating  
  • Dots mark 3mm and 9mm and 18mm from tip  
  • Five teeth; 0.5mm thick

- **MODEL SG2R**  
  **ORDER CODE Z305-102**  
  • TiN coating  
  • Right curved tip  
  • Three teeth; 0.5mm thick

- **MODEL SG2L**  
  **ORDER CODE Z305-103**  
  • TiN coating  
  • Left curved tip  
  • Three teeth; 0.5mm thick

- **MODEL SG8**  
  **ORDER CODE Z305-109**  
  • TiN coating  
  • Dots mark 3mm, 6mm and 9mm from tip  
  • Three teeth; 0.5mm thick

- **MODEL SG14R**  
  **ORDER CODE Z305-112**  
  • TiN coating  
  • Right curved tip  
  • Five teeth; 0.5mm thick

- **MODEL SG14L**  
  **ORDER CODE Z305-113**  
  • TiN coating  
  • Left curved tip  
  • Five teeth; 0.5mm thick

**Scraper**

- **MODEL SG3**  
  **ORDER CODE Z305-104**  
  • TiN coating  
  • Triple sided edge spatula tip

- **MODEL SG4**  
  **ORDER CODE Z305-105**  
  • TiN coating  
  • Flattened spatula tip

- **MODEL SG5**  
  **ORDER CODE Z305-106**  
  • TiN coating  
  • Rounded edge spatula tip

**Sinus Membrane Tool**

- **MODEL SG9**  
  **ORDER CODE Z305-110**  
  • Flat circular conical elevator  
  • Angled at 90°

- **MODEL SG10**  
  **ORDER CODE Z305-111**  
  • Flat circular conical elevator  
  • Angled at 135°

- **MODEL SG11**  
  **ORDER CODE Z305-112**  
  • Cone compressor

**Sinus Lift**

- **MODEL SG6D**  
  **ORDER CODE Z305-107**  
  • Diamond coating

- **MODEL SG7D**  
  **ORDER CODE Z305-108**  
  • Diamond coating

**Scaling**

- **MODEL G1-S**  
  **ORDER CODE Z305-113**  
  • Sinus graft

**Perio (Root Planning)**

- **MODEL P20-S**  
  **ORDER CODE Z305-114**  
  • Straight tip

- **MODEL P25R-S**  
  **ORDER CODE Z305-115**  
  • Right curved tip

- **MODEL P25L-S**  
  **ORDER CODE Z305-116**  
  • Left curved tip

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

Burst Function

Ultrasonic vibration is pulsed in blocks to offer greater impact to the hard tissue and improve cutting efficiency, thus shortens treatment time. Clinicians can choose from three types of burst mode depends on the bone density. Making the mode selection is easy through the control keyboard during the surgery.

FC-51 Foot Control

Hands-free Program Adjustments Via Foot Control

The new FC-51 foot control is user-friendly and allows perfect control while performing delicate surgical procedures. The VarioSurg foot control meets IPX8 Standards for medical foot control systems. The attractively shaped FC-51 is equipped with a bracket enabling it to be easily raised or moved with the foot.

Sterilisation Cassette

The sterilisation cassette is designed for the safe processing and storage of VarioSurg components.
NSK’s VarioSurg offers numerous compelling advantages, the first of which is strong, precise cutting power enhanced with TiN (Titanium Nitride) coated bone cutting tips. Applying a TiN coating to the tips increases the cutting efficiency, reduces the cutting time and leaves a sharp cutting surface which helps with bone formation. VarioSurg not only employs ultrasonic cavitation of the irrigation solution but also features an industry first optic handpiece to provide enhanced visibility of the surgical field. Using an ultrasonic device for surgery reduces heat generation, minimising osteonecrosis and avoiding damage to any surrounding soft tissue. When an area requires special attention, precise cutting is assured, fast and stress free, while bone can be treated mechanically with VarioSurg’s ultrasonic surgical techniques. Activating Auto Cleaning Mode after surgery assures that the irrigation lines are flushed through to avoid clogging.

NSK VarioSurg — new solution for osteotomy and osteoplasty.

Main Features
- 3 modes (Surg, Endo, Perio)
- Burst function
- 9 programmes (Surg x 5, Endo x 2, Perio x 2)
- Auto Cleaning Mode
- Optic Handpiece
- Automatic tuning
- Wide tip range (including TiN coated bone cutting tips)

Feedback Function
A newly developed feedback function in the control unit constantly checks the performance parameters of the ultrasonic unit while in operation and simultaneously controls the power output based on the feedback information. This feature makes it possible to continuously supply the power which is best suited for each bone cutting procedure.

Specifications are subject to change without notice.