Which Handpiece?
Choose the handpiece that matches your hand.

<table>
<thead>
<tr>
<th>Grade</th>
<th>PREMIUM</th>
<th>ADVANCED</th>
<th>SPECIAL</th>
<th>SPECIAL</th>
<th>BASIC</th>
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<tr>
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<tr>
<td>DURAGRIP</td>
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<tr>
<td>DURACOAT</td>
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<td>Cellular Glass Optics</td>
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<td>Quattro</td>
<td>Triple</td>
<td>Single</td>
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<td>Ergo Grip</td>
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</table>
The 26 watts power output from the new rotor significantly enhances the performance during clinical applications. This can dramatically reduce treatment time and noticeably improve treatment comfort for the clinician and patient alike.

High Output for Smoother Cutting
The 26 watts power output from the new rotor significantly enhances the performance during clinical applications. This can dramatically reduce treatment time and noticeably improve treatment comfort for the clinician and patient alike.
DURABLE
Our Powerful and Durable Air Turbines Maintain Long-term Comfort and Stability

Advanced Technology a Key Factor in Significantly Increased Durability of Ti-Max Z

We completely redesigned the shape and found better materials for the bearing retainer to reduce frictional resistance and developed a new type of bearing to almost double the durability to accommodate constant thermodisinfector and autoclave usage.

DURAGRIP Non-Slip, Scratch-Resistant Surface Treatment Technology
We blast-finish the pure titanium body surface utilising micro-abrasion before applying the DURAGRIP surface finish. The micro-abrasion enhances resistance to scratches and contributes to the firm, reliable non-slip grip.
TECHNOLOGY & FUNCTION

New Bearings
These bearings enable outstanding high-speed rotation and stability and are twice as durable as existing counterparts.

DURAGRIP
Our proprietary scratch- and abrasion-resistant surface treatment increases durability and ensures a reliable grip.

New Three-Dimensional Rotor
We created a three-dimensional curved rotor to deliver an impressive 26 watts power output.

Microfilter
A 0.3 mm diameter microfilter keeps contaminants out of the water spray system, dramatically reducing blockages and enhancing treatment hygiene.

Clean Head System
The patented NSK Clean Head System automatically keeps oral fluids and other contaminants out of the instrument head, prolonging the life of the bearing and ensuring more hygienic treatment.

Compatible with Other Couplings
The line-up features models that are compatible with most coupling systems currently available in the market.
Ti-Max Z

Connect to NSK Couplings

- Titanium Body with Scratch Resistant DURAGRIIP
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray
- Microfilter

Optic - MODEL Z800L - ORDER CODE P1110

Miniature Head: Power: 23 W, Speed: 360,000~440,000 min⁻¹, Head Size: ø10.8 x H 12.1 mm

Optic - MODEL Z900L - ORDER CODE P1111

Standard Head: Power: 26 W, Speed: 320,000~400,000 min⁻¹, Head Size: ø12.5 x H 13.1 mm

Optic - MODEL Z800KL - ORDER CODE P1112

Miniature Head: Power: 21 W, Speed: 360,000~440,000 min⁻¹, Head Size: ø10.8 x H 12.1 mm

Optic - MODEL Z900KL - ORDER CODE P1113

Standard Head: Power: 24 W, Speed: 320,000~400,000 min⁻¹, Head Size: ø12.5 x H 13.1 mm

Autoclavable up to 135°C
Washable in the thermodisinfector
Ti-Max Z PREMIUM

- Titanium Body with Scratch Resistant DURAGRIIP
- Cellular Glass Optics • Ceramic Bearings
- Clean Head System • Push Button Chuck
- Quattro Spray • Microfilter

Miniature Head: Power : 21 W, Speed : 360,000–440,000 min⁻¹, Head Size : ø10.8 x H 12.1 mm
Standard Head: Power : 24 W, Speed : 320,000–400,000 min⁻¹, Head Size : ø12.5 x H 13.1 mm

Connect Direct to Sirona® Coupling

Connect Direct to Bien-Air® Coupling

Connect Direct to W&H® Coupling
S-Max M series air turbines feature unrivalled cutting performance, a slim ergonomically designed body and excellent visibility. It has been developed to realize what dentists need in their practice. For easy maintenance of S-Max M air turbines, cartridges can be replaced easily in your practice helping you to control cost and down-time. S-Max M series has been designed without compromise to pay attention to every detail.

**Slim Ergonomic Design and Unrivalled Cutting Performance**

- Stainless Steel Body
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray

**Connect to NSK Couplings**

**Miniature Head**: Power: 16 W, Speed: 380,000~450,000 min⁻¹, Head Size: ø10.6 x H 12.4 mm

**Standard Head**: Power: 20 W, Speed: 360,000~400,000 min⁻¹, Head Size: ø12.1 x H 13.3 mm
**S·Max M**

**Connect Direct to KaVo® Coupling**

- **Optic**
  - Model: M500KL
  - Order Code: P1005
- **Non-Optic**
  - Model: M500K
  - Order Code: P1007

**Miniature Head**
- Power: 16 W
- Speed: 380,000~450,000 min⁻¹
- Head Size: ø10.6 x H 12.4 mm

**Standard Head**
- Power: 20 W
- Speed: 360,000~430,000 min⁻¹
- Head Size: ø12.1 x H 13.3 mm

---

**Connect Direct to Sirona® Coupling**

- **Optic**
  - Model: M600SL
  - Order Code: P1010

**Connect Direct to W&H® Coupling**

- **Optic**
  - Model: M600WLED
  - Order Code: P1096

**Connect Direct to Bien-Air® Coupling**

- **Optic**
  - Model: M600BLED
  - Order Code: P1057
The Innovative Air Turbine with Ultra Mini Head and Super Slim Body Shape

The NSK S-Max pico series has been developed for the operation of Minimal Intervention (M.I.). The ultra mini head and super slim handpiece design is the result of fine NSK precision engineering allowing a wider view of the operational field, and greater flexibility for dexterity.

Size Specifications of The S-Max pico Series

Dedicated Burs for S-Max pico Series

NSK has developed special ultra short shank burs to operate specifically with the pico handpiece. These high quality precision burs are concentric and durable. Use of NSK ultra short shank burs maximises the mini advantage of the pico handpiece.
**NSK | AIR TURBINES**

**S/M**

**pico**  
SPECIAL

Connect to NSK Couplings

![Image of S/M pico](image1)

- Stainless Steel Body
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Single Spray

**Optic**  
**MODEL S-Max pico**  
**ORDER CODE P1140**

Power: 9 W, Speed: 380,000–450,000 min⁻¹, Head Size: ø8.6 x H 9.0 mm
- For short shank burs / ultra short shank burs

**pico bur**  
product lineup

<table>
<thead>
<tr>
<th>MODEL</th>
<th>ORDER CODE</th>
<th>PACK OF</th>
</tr>
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<tr>
<td>PC2</td>
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<td>PC6ff</td>
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**Optic**  
**MODEL S-Max pico WLED**  
**ORDER CODE P1145**

Compatible Turbines with Integral LED

**Optic**  
**MODEL S-Max pico BLED**  
**ORDER CODE P1144**

**Connect Direct to KaVo® Coupling**

![Image of KaVo coupling](image2)

**Connect Direct to Sirona® Coupling**

![Image of Sirona coupling](image3)

**Connect Direct to W&H® Coupling**

![Image of W&H coupling](image4)

**Connect Direct to Bien-Air® Coupling**

![Image of Bien-Air coupling](image5)
Unique 45-degree Angled Head Provides Incredible Accessibility

The slim-form Ti-Max X450 series possesses a unique 45-degree angled head specially designed to access hard-to-reach areas for sectioning and extraction of third molars and other impacted teeth. The X450’s robust 21 watts of cutting power and effective cooling system - featuring triple water jets - ensure safe and effective treatment during a variety of surgical procedures.

A Potent 21 W of Cutting Power

NSK’s original twin-nozzle head fully transmits the power of the air turbine to the X450’s rotor, generating the high torque needed for powerful, consistent cutting.

Triple Water Jets & Cellular Glass Optics

NSK’s Triple Water Jet system efficiently bathes the bur at all operating speeds, providing maximum cooling.

The Ti-Max X450 Permits Optimal Access to Molars and a Diverse Range of Operative Procedures.

Mandibular Right Third Molar Extraction

Superior Accessibility

The 45-degree angled head offers excellent accessibility and visibility during root separation procedures and the removal of hard tissue covering impacted third molars.

The labial and cheek mucous membranes do not interfere with treatment, and the bur can be maintained at a safe and optimal angle due to no contact on the turbine body. The X450’s slim form factor also provides maximum visibility.

Extending the labial or cheek mucous membranes is hard, which makes feel delicate tactile sense while cutting difficult. Maintaining the bur at an optimal angle and direction is also problematic.
Ti-Max X450

Connect to NSK Couplings

• Titanium Body with Scratch Resistant DURACOAT
• 45˚ Angle Head • Cellular Glass Optics
• Ceramic Bearings • Clean Head System
• Push Button Chuck • Triple Water Jet

Power : 21 W, Speed : 380,000~450,000 min⁻¹
Head Size : ø11.2 x H 13.5 mm
• For FG extra-long burs (25 mm) only

Connect Direct to NSK Couplings

Optic MODEL X450L ORDER CODE P1078

Optic MODEL X450KL ORDER CODE P1079

Optic MODEL X450SL ORDER CODE P1080

Optic MODEL X450WLED ORDER CODE P1082

Optic MODEL X450BLED ORDER CODE P1081

Connect Direct to KaVo® Coupling

Connect Direct to Sirona® Coupling

Connect Direct to W&H® Coupling

Connect Direct to Bien-Air® Coupling

Connect Direct to Sirona® Coupling

Connect Direct to W&H® Coupling

Connect Direct to Bien-Air® Coupling

Power : 18 W, Speed : 380,000~450,000 min⁻¹, Head Size : ø11.2 x H 13.5 mm
• For FG extra-long burs (25 mm) only

Optic MODEL X450L ORDER CODE P1078

Optic MODEL X450KL ORDER CODE P1079

Optic MODEL X450SL ORDER CODE P1080

Optic MODEL X450WLED ORDER CODE P1082

Optic MODEL X450BLED ORDER CODE P1081

Compatible Turbines with Integral LED

Washable in the thermodisinfector
Autoclavable up to 135°C
**Pana-Max PLUS**

- Stainless Steel Body
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray

**Non-Optic**

- **Model:** PAP-MU M4  **ORDER CODE:** P1021
  - **Miniature Head:** Speed: 380,000~450,000 min⁻¹
  - **Head Size:** ø10.6 x H 12.4 mm  • Borden 2 hole

- **Model:** PAP-MU B2  **ORDER CODE:** P1023
  - **Miniature Head:** Speed: 380,000~450,000 min⁻¹
  - **Head Size:** ø10.6 x H 12.4 mm  • Borden 2 hole

- **Model:** PAP-SU M4  **ORDER CODE:** P1022
  - **Standard Head:** Speed: 340,000~410,000 min⁻¹
  - **Head Size:** ø12.1 x H 13.3 mm  • Midwest 4 hole

- **Model:** PAP-SU B2  **ORDER CODE:** P1024
  - **Standard Head:** Speed: 340,000~410,000 min⁻¹
  - **Head Size:** ø12.1 x H 13.3 mm  • Midwest 2 hole

**Non-Optic**

- **Model:** PAP-QD MU  **ORDER CODE:** P1015
  - **Miniature Head:** Speed: 380,000~450,000 min⁻¹
  - **Head Size:** ø10.6 x H 12.4 mm

- **Model:** PAP-QD MU M4  **ORDER CODE:** P1021
  - **Miniature Head:** Speed: 380,000~450,000 min⁻¹
  - **Head Size:** ø10.6 x H 12.4 mm  • Midwest 4 hole

- **Model:** PAP-QD SU  **ORDER CODE:** P1016
  - **Standard Head:** Speed: 340,000~410,000 min⁻¹
  - **Head Size:** ø12.1 x H 13.3 mm

**Connect to NSK Couplings**
**Pana·Max2**

**Evolution of PANA-MAX**

Pana-Max2 offers much more endurance and power than previous models, while being just as easy to handle. Its sleek design provides maximum visibility of the operating field, easily reaching all areas of the oral cavity.

**Slim-Line Stainless Steel Body**

Pana-Max2's slim-line body guarantees excellent accessibility to the entire oral cavity. As a result, visibility of the treatment area is maximized, allowing you to work with total efficiency.

**Unsurpassed Durability**

**Built to Excel in Clinical Situations. Featuring a Scratch-resistant Stainless Steel Body and Sturdier Turbine Head.**

Thanks to its uniquely designed shock-resistant head design, Pana-Max2's turbine rotor won't get damaged even if dropped from two meters onto a concrete floor.

**Exceptional Longevity.**

Newly designed bearing structure with greater wear resistants and extended lifespan.

**30% Power Boost**

Pana-Max2 is dramatically more powerful than its predecessors thanks to the combination of NSK's air turbine simulation technologies. Rated at a maximum of 20 watts, this new model boasts the highest power rating in its class. That concentrated power, along with the bur's high rotational accuracy, creates a synergistic effect that ensures fast, precise treatments.
**Pana-Max2 BASIC**

Connect to NSK Couplings

- Stainless Steel Body
- Ceramic Bearings
- Clean Head System
- NSK Ultra Push Chuck
- Single Spray

**Non-Optic** MODEL Pana-Max2 PTL ORDER CODE P1211
Speed: 350,000~450,000 min⁻¹, Head Size: ø11.2 x H 13.4 mm

Direct-connect / Screw-on Type

- **Non-Optic** MODEL Pana-Max2 M4 ORDER CODE P1154
  Speed: 350,000~450,000 min⁻¹, Head Size: ø11.2 x H 13.4 mm
  - Midwest 4 hole

Connect Direct to KaVo® Coupling

- **Non-Optic** MODEL Pana-Max2 KV ORDER CODE P1212
  Speed: 350,000~450,000 min⁻¹, Head Size: ø11.2 x H 13.4 mm

- **Non-Optic** MODEL Pana-Max2 B2 ORDER CODE P1155
  Speed: 350,000~450,000 min⁻¹, Head Size: ø11.2 x H 13.4 mm
  - Borden 2 hole

**AIR TURBINES**

- Stainless Steel Body
- Ceramic Bearings
- Clean Head System
- NSK Ultra Push Chuck
- Single Spray

Washable in the thermodisinfector
Autoclavable up to 135°C
**PHATELUS LIGHT PACK**

Compact Unit For Illumination Control of 2 Optic Handpieces.
For Integration Into All Dental Equipment.

**Features**
- Special integrated circuitry to increase the bulb life.
- Illumination intensity is adjustable individually for 2 optic handpieces.
- Automatic activation of handpiece illumination.
- Illumination delay (adjustable between 0.5-4.5 seconds) can be set individually for 2 handpieces.
- Illumination can remain active after the handpiece has stopped rotation.
- Simple installation into any brand of new or existing dental unit.
- Indicator lamp confirms correct operation of the system.
- Phatelus optic hoses fit directly to all brands of LUX handpiece couplings.
- Lightweight Phatelus hose reduces hand fatigue.
- The Phatelus hose may be cleaned with reputable disinfectants.
- Operates all brands of optic handpieces.

**Phatelus Optic Complete Sets**

**Contents**
- PTL Control Module
- Hose (PTL-4HP)
- PTL Adaptor

**Individual Components**

**PTL Control Module**  
- Model: PTL-4HP  
- Order Code: P421
- Dimension: W 50 x D 90 x H 26 (mm)  
- Weight: 120 g

**PTL Adaptor**  
- Model: PTL Adaptor (120 V)  
- Order Code: U360032
- Model: PTL Adaptor (230 V)  
- Order Code: U360033