

AIR TURBINES





	Ti-Max Z	S-Max M	Ti-Max X450	S-Max Pico	Pana-Max Plus	Pana-Max2
Grade	PREMIUM	ADVANCED	SPECIAL	SPECIAL	BASIC	BASIC
Body	Titanium	Stainless	Titanium	Stainless	Stainless	Stainless
DURAGRIP	●					
DURACOAT			●			
Quick Stop	●					
Ceramic Bearings	●	●	●	●	●	●
Cellular Glass Optics	●	●	●	●		
Clean Head System	●	●	●	●	●	●
Push Button Chuck	●	●	●	●	●	●
Water Spray	Quattro	Quattro	Triple	Single	Quattro	Single
Microfilter	●					
Ergo Grip	●	●	●	●	●	●

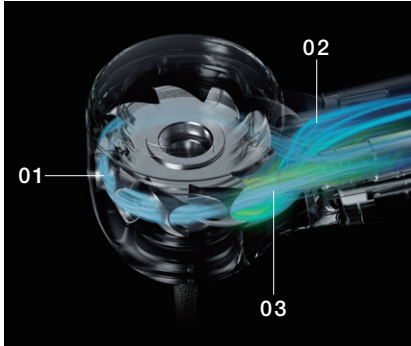
Ti-Max Z

Premium



DYNAMIC POWER SYSTEM

Equipped with a new system, the “DYNAMIC POWER SYSTEM” that provides a revolutionary cutting feel. The enlarged exhaust port, optimized nozzle structure, and enlarged rotor chamber achieve the highest rotational power in its category.



01. Expanded Rotor Blade Surface

The air exposure area is twice that of conventional models. The large chamber surface takes in air with no waste to achieve high torque.

02. Expanded Exhaust Groove

The enlarged exhaust groove quickly discharges air received by the chamber. A smooth exhaust improves torque in the low rpm range.

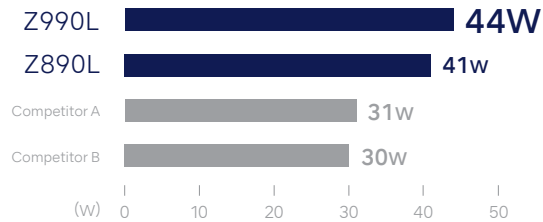
03. Extended Cylindrical Nozzle

The optimized nozzle structure reduces air. Air power is converted into highly efficient rotational power.

The best technologies are combined to bring outstanding power.

“DYNAMIC POWER SYSTEM” ha sido desarrollado con los softwares de simulación de fluidos más avanzados para permitir una eficaz conversión del aire en potencia y conseguir un aumento significativo de la potencia de 26W a 44W*. Al incorporar todos los avances tecnológicos de NSK, como la fusión del torque y una potencia sin precedentes, el ángulo del cabezal y el agarre, el nuevo modelo se ha convertido en el emblema de NSK, especialista en instrumental rotatorio.

● Power comparison with competitive products (in-house research)*

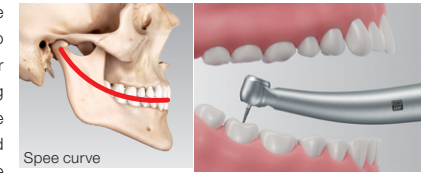


*Air pressure at 0.42 MPa

USABILITY

Lightweight titanium body and 100° angle head

The internal structure has been revised and the weight has been reduced by 16% compared to the previous model (the lightest metal exterior in major competitive comparisons). Considering the physiological curves of the oral cavity (Curve of Spee and Curve of Wilson), the 100° angled head enables easier access and high-torque cutting for efficient treatment in the oral cavity.



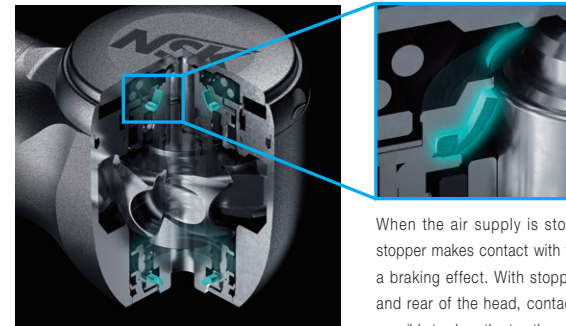
Comparison with previous model



SAFETY & INFECTION CONTROL

Quick Stop

The Quick-stop function, which stops high-speed rotation in approximately 1 second, is mounted on the front and back of the head. The two Quick-stop functions allow for a abrupt stop to prevent inertial rotation and to reduce the risk of intraoral entrapment and suck back, thus ensuring an extremely safe treatment. *The two Quick-stop functions only Z990L / Z890L.



When the air supply is stopped, the rubber of the stopper makes contact with the rotating shaft to apply a braking effect. With stoppers attached to the front and rear of the head, contact is increased, making it possible to abruptly stop the rotation.

TECHNOLOGY AND FUNCTION

QUICK STOP FUNCTION

The two Quick-stop functions allow for a abrupt stop to prevent inertial rotation and to reduce the risk of intraoral entrapment and suck back, thus ensuring an extremely safe treatment.

DYNAMIC POWER SYSTEM

The high power of 44W and the "Dynamic Power System" + open cartridge maintain unprecedented cutting power. In addition, the unit is durable enough to withstand air pressure of 0.42 MPa.

DURAGRIP

The unique non-slip, non-scratch surface treatment improves durability and ensures a comfortable grip.

Microfilter

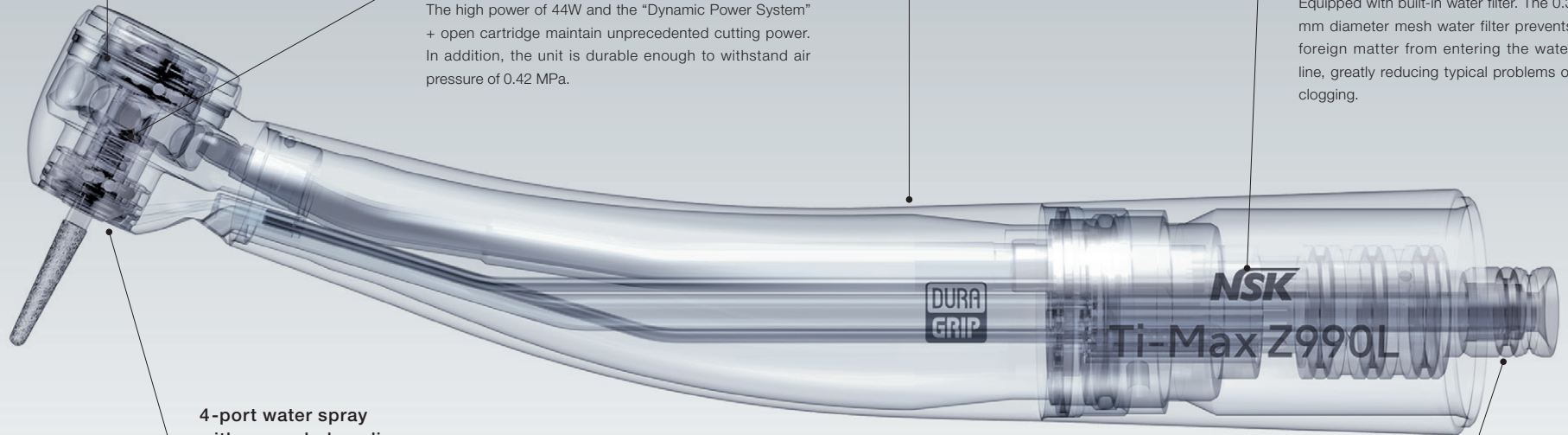
Equipped with built-in water filter. The 0.3 mm diameter mesh water filter prevents foreign matter from entering the water line, greatly reducing typical problems of clogging.

4-port water spray with expanded cooling range

Efficiently cools the entire bur without impairing visibility. Water injected from two directions allows for proper cooling of burs of varying lengths.

Compatible with Other Couplings

The line-up features models that are compatible with most coupling systems currently available in the market.



Ti-Max Z Premium



DYNAMIC POWER SYSTEM*

- Head at a 100° angle
- Quick Stop
- Titanium Body
- DURAGRIP
- Cellular Glass Optics
- Ceramic Bearings
- Push Button Chuck
- Quattro Spray
- Simple Cartridge Change
- Clean Head System
- Microfilter*

*Only Z990L / Z890L



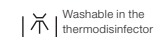
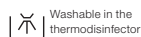
Micro Head
 Power : 20 W
 Speed : 380,000-450,000 min⁻¹
 Head Size : ø9.0 x H 10.8 mm

Miniature Head
 Power : 41 W
 Speed : 320,000-400,000 min⁻¹
 Head Size : ø10.6 x H 10.8 mm

Standard Head
 Power : 44 W
 Speed : 280,000-360,000 min⁻¹
 Head Size : ø12.1 x H 12.7 mm

NSK Couplings	Head	Optic	MODEL	ORDER CODE
	Micro	●	Z micro	PA2357
	Miniature	●	Z890L	PA23720001
	Standard	●	Z990L	PA23730001
KaVo® Coupling	Head	Optic	MODEL	ORDER CODE
	Micro	●	Z micro KL	PA2358
	Miniature	●	Z890KL	PA23740001
	Standard	●	Z990KL	PA23750001
Sirona® Coupling	Head	Optic	MODEL	ORDER CODE
	Micro	●	Z micro SL	PA2359
	Miniature	●	Z890SL	PA23760001
	Standard	●	Z990SL	PA23770001
W&H® Coupling	Head	Optic	MODEL	ORDER CODE
	Miniature	●	Z890WL*	PA23860001
	Standard	●	Z990WL*	PA23870001
Bien-Air® Coupling	Head	Optic	MODEL	ORDER CODE
	Miniature	●	Z890BL*	PA23840001
	Standard	●	Z990BL*	PA23850001

*Compatible Turbines with Integral LED



S-Max M

Advanced



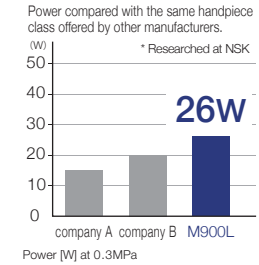
MORE POWERFUL



The rotor design is optimized using a rotating air flow simulation, resulting in 26W of power through the efficient use of air supply energy.

26W power

The internal structure is completely redesigned to achieve superior noise and vibration reduction, including the 26W high power rotor.



DURABILITY

All stainless body

The handpiece body is stainless steel, making it corrosion resistant and sturdy. Its satin-like finish fits comfortably in your hand.

Ceramic bearings

The ceramic bearings are 25% harder than steel and around half the weight, meaning very little wear, which helps the cartridge to last longer.

Clean Head System

The Clean Head System has an anti-suck back mechanism that stops blood and foreign matter from entering the head from the oral cavity. As a result, the ball bearings and mechanical parts last longer.

USABILITY

Simple cartridge change

The handpiece is designed with barrel type cartridge. The cartridge is easy to replace. Changing the cartridge also eliminates water blockage.

Quattro spray

Sprays more effectively over the entire bur for better cooling.

Push Button Chuck

The bur is released easily with the responsive and tactile push button.

S-Max M Advanced



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



Miniature Head
 Power : 23 W
 Speed : 380,000-450,000 min⁻¹
 Head Size : ø10.6 x H 12.4 mm

Standard Head
 Power : 26 W
 Speed : 325,000-430,000 min⁻¹
 Head Size : ø12.1 x H 13.3 mm

NSK Couplings	Head	Optic	MODEL	ORDER CODE
	Miniature	●	M800L	P1253
		—	M800	P1255
	Standard	●	M900L	P1254
		—	M900	P1256

KaVo® Coupling	Head	Optic	MODEL	ORDER CODE
	Miniature	●	M800KL	P1257
		●	M900KL	P1258
	Standard	—	M900K	P1259

Sirona® Coupling	Head	Optic	MODEL	ORDER CODE
	Miniature	●	M800SL	P1261
		●	M900SL	P1262

W&H® Coupling	Head	Optic	MODEL	ORDER CODE
	Miniature	●	M800WL*	P1265
		●	M900WL*	P1266
	Standard	—	M900W	P1287

Bien-Air® Coupling	Head	Optic	MODEL	ORDER CODE
	Miniature	●	M800BL*	P1263
		●	M900BL*	P1264

*Compatible Turbines with Integral LED

S-Max pico

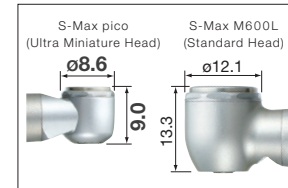
Special



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.

Comparison of head sizes



Improve The Accuracy of Operation with The Microscope



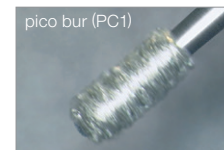
The ultra mini head delivers expanded operational visibility and greater flexibility. Patient comfort is increased.

In combination with mirror technique



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.



Original bur of high precision
(Rotational speed: 400,000 min⁻¹)

S-Max pico Special



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

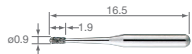


Power : 9 W
 Speed : 380,000-450,000 min⁻¹
 Head Size : ø8.6 x H 9.0 mm
 • For short shank burs / ultra short shank burs

NSK Couplings	Optic	MODEL	ORDER CODE
	●	S-Max pico	P1140
KaVo® Coupling	Optic	MODEL	ORDER CODE
	●	S-Max pico KL	P1142
Sirona® Coupling	Optic	MODEL	ORDER CODE
	●	S-Max pico SL	P1143
W&H® Coupling	Optic	MODEL	ORDER CODE
	●	S-Max pico WLED*	P1145
Bien-Air® Coupling	Optic	MODEL	ORDER CODE
	●	S-Max pico BLED*	P1144

*Compatible Turbines with Integral LED

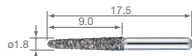
pico bur



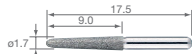
MODEL	ORDER CODE
PC1	Y1001817
• Pack of 3	



MODEL	ORDER CODE
PC2	Y1001818
• Pack of 3	



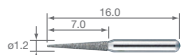
MODEL	ORDER CODE
PC3	Y1001819
• Pack of 3	



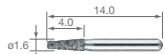
MODEL	ORDER CODE
PC3ff	Y1002019
• Extra fine bur	
• Pack of 3	



MODEL	ORDER CODE
PC4	Y1001820
• Pack of 3	



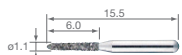
MODEL	ORDER CODE
PC4ff	Y1002020
• Extra fine bur	
• Pack of 3	



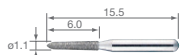
MODEL	ORDER CODE
PC5	Y1001821
• Pack of 3	



MODEL	ORDER CODE
PC5ff	Y1002021
• Extra fine bur	
• Pack of 3	



MODEL	ORDER CODE
PC6	Y1001822
• Pack of 3	



MODEL	ORDER CODE
PC6ff	Y1002022
• Extra fine bur	
• Pack of 3	



Ti-Max X450

Special

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.

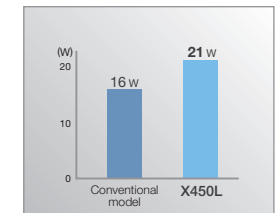


Superior Accessibility

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

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.



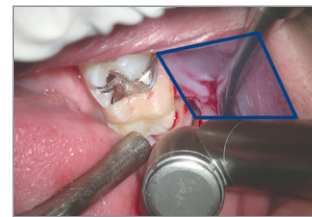
Triple Water Jets & Cellular Glass Optics

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



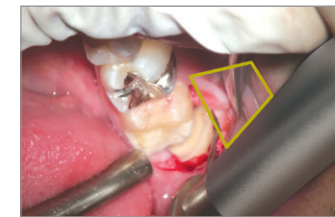
The Ti-Max X450 Permits Optimal Access to Molars and a Diverse Range of Operative Procedures.

Mandibular Right Third Molar Extraction



Ti-Max X450

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.



Standard Turbine's Head Angle

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 Special



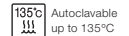
- Titanium Body with Scratch Resistant DURACOAT
- 45° Angle Head
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Triple Water Jet



Power : 21 W
 : 18 W (except X450L)
 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	ORDER CODE
NSK Couplings	●	X450L	P1078
KaVo® Coupling	●	X450KL	P1079
Sirona® Coupling	●	X450SL	P1080
W&H® Coupling	●	X450WLED*	P1082
Bien-Air® Coupling	●	X450BLED*	P1081

*Compatible Turbines with Integral LED





Pana-Max2

Basic

Unsurpassed Durability

Built to Excel in Clinical Situations.

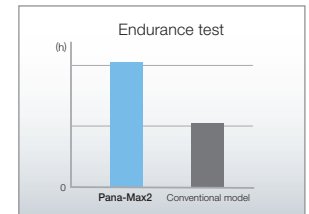
Featuring a Scratch-resistant Stainless Steel Body and Sturdier Turbine Head.

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.



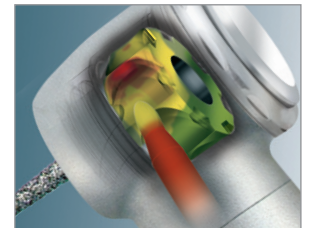
Exceptional Longevity.

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



- Stainless Steel Body
- Ceramic Bearings
- NSK Ultra Push Chuck
- Single Spray
- Clean Head System
- Simple Cartridge Change
- Anti-Retracton Valve(M4/B2)
- Air Pressure Regulating Valve(M4/B2)



Speed : 350,000-450,000 min⁻¹
 Head Size : ø11.2 x H 13.4 mm

NSK Couplings	MODEL	ORDER CODE
	Pana-Max2 PTL	P1211
KaVo® Coupling	MODEL	ORDER CODE
	Pana-Max2 KV	P1212
Midwest 4 hole (Direct-connect / Screw-on Type)	MODEL	ORDER CODE
	Pana-Max2 M4	P1154
Borden 2 hole (Direct-connect / Screw-on Type)	MODEL	ORDER CODE
	Pana-Max2 B2	P1155

Pana-Max PLUS Basic



- Stainless Steel Body
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray
- Anti-Retraction Valve(M4/B2)
- Air Pressure Regulating Valve(M4/B2)



Miniture Head
 Speed : 380,000-450,000 min⁻¹
 Head Size : ø10.6 x H 12.4 mm



Standard Head
 Speed : 340,000-410,000 min⁻¹
 Head Size : ø12.1 x H 13.3 mm

Midwest 4 hole
 (Direct-connect / Screw-on Type)



Head	MODEL	ORDER CODE
Miniature	PAP-MU M4	P1021

Standard	PAP-SU M4	P1022
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Borden 2 hole
 (Direct-connect / Screw-on Type)



Head	MODEL	ORDER CODE
Miniature	PAP-MU B2	P1023

Standard	PAP-SU B2	P1024
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*Light source integrated

