

AIR TURBINES





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

Ti-Max Z

Premium



POWERFUL

Evolving to Redefine Performance

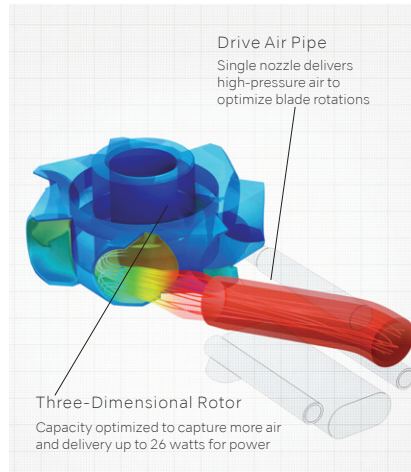
Z turbines deliver consistent power, and due to their ergonomic design they are easier to handle and give a more comfortable patient experience.

Z series turbines deliver everything and more than you would expect from a high performance air turbine.

All of this is the result of our ethos of consistently aiming to exceed expectations, uncompromising product design and ultra precision manufacturing technology to deliver ever improving levels of comfort for clinicians and patients.

With up to an incredible 26 watts* of output, our air turbines will revolutionize your dental practice.

*With the Z900L

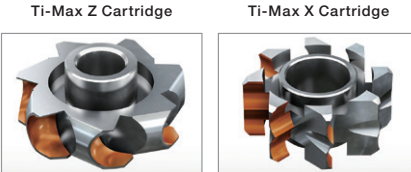


Miniature Parts for Maximum Power, Reflecting NSK's Pursuit of The Optimum Rotor Shape

New Three-Dimensional Rotor

We harnessed the latest computer analysis software to develop a rotor with higher output. We created a new three-dimensional curved shape after relentless simulations and pilot production. The blade is 50% larger than that of the Ti-Max X Air Turbine. With this new rotor, the air turbine delivers an amazing 26 watts *of power.

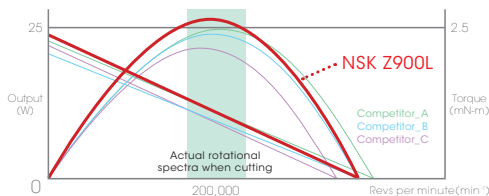
*With the Z900L



Blade surface 50% larger

High Output for Smoother Cutting

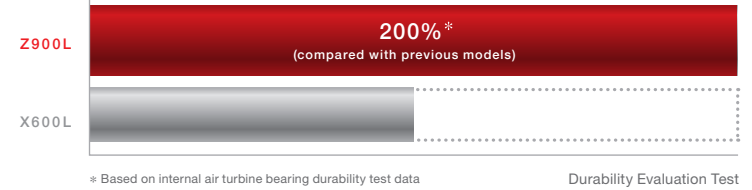
The 26 watts power output from the new rotor significantly enhances the performance during clinical applications. This can dramatically reduce treatment time and noticeably improve treatment comfort for the clinician and patient alike.



DURABLE

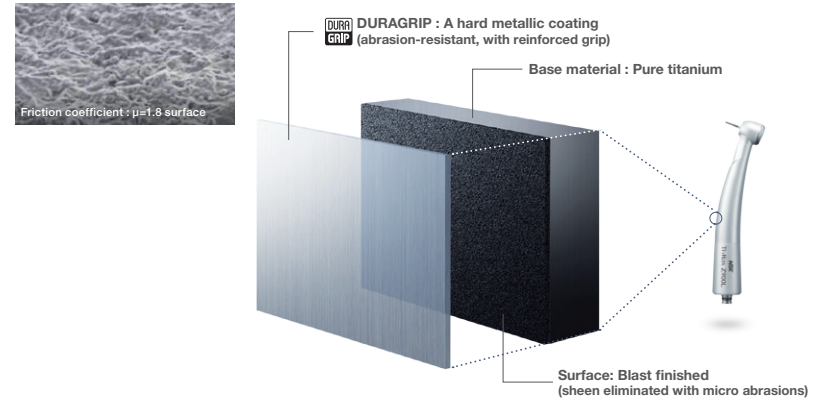
Advanced Technology a Key Factor in Significantly Increased Durability of Ti-Max Z

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 thermosinfector and autoclave usage.

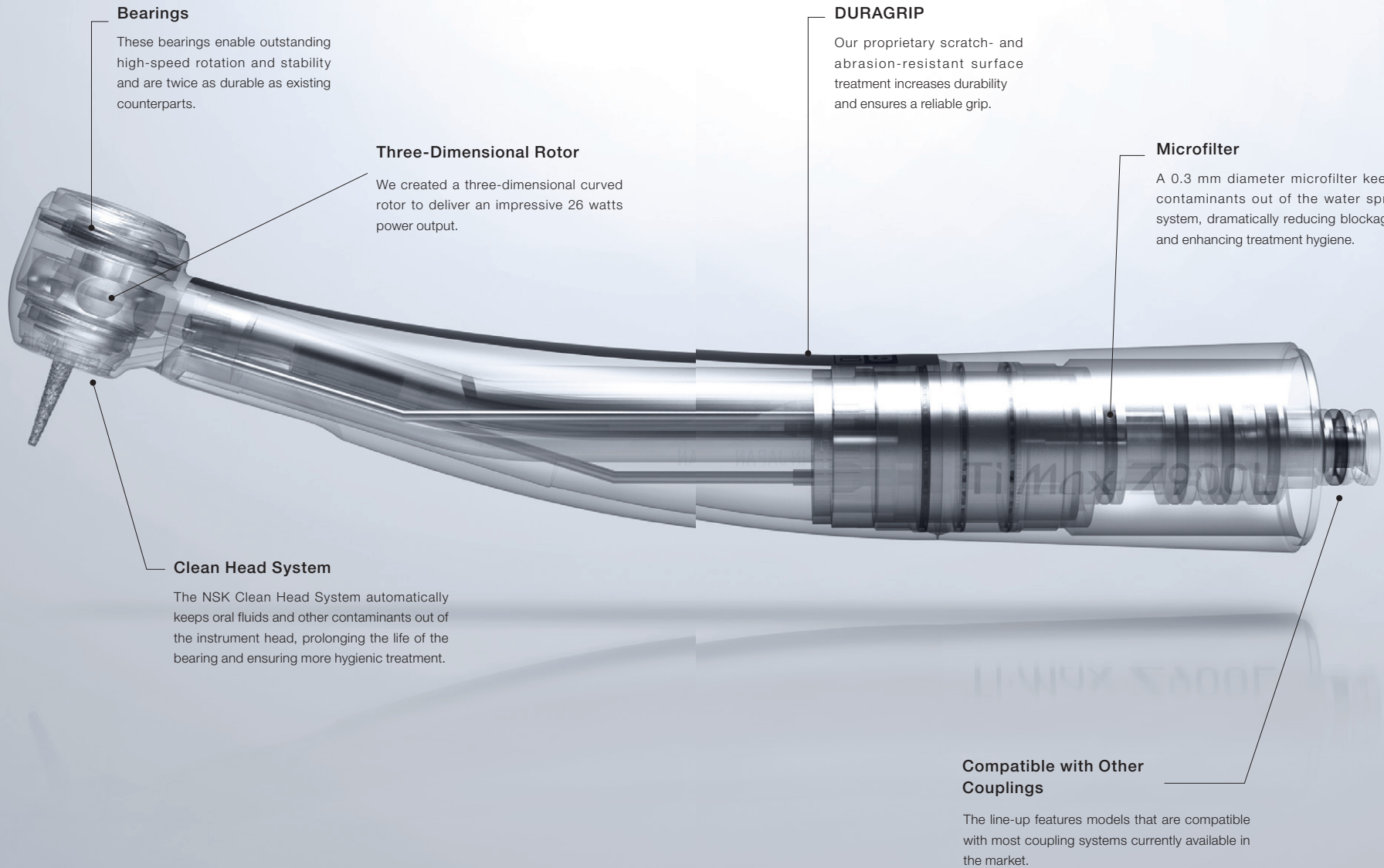


DURAGRIP Non-Slip, Scratch-Resistant Surface Treatment Technology

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



Bearings

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

Three-Dimensional Rotor

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

DURAGRIP

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

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 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 Premium



- Titanium Body
- DURAGRIP
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray



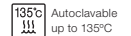
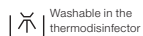
Miniature Head
 Power : 23 W
 : 21 W (except Z800L)
 Speed : 360,000-440,000 min⁻¹
 Head Size : ø10.8 x H 12.1 mm
 Dual use for regular standard bur /
 short shank bur



Standard Head
 Power : 26 W
 : 24 W (except Z900L)
 Speed : 320,000-400,000 min⁻¹
 Head Size : ø12.5 x H 13.1 mm
 Dual use for regular standard bur /
 short shank bur

	Head	Optic	MODEL	ORDER CODE
NSK Couplings	Miniature	●	Z800L	P1110
	Standard	●	Z900L	P1111
KaVo® Coupling	Miniature	●	Z800KL	P1112
	Standard	●	Z900KL	P1113
Sirona® Coupling	Miniature	●	Z800SL	P1114
	Standard	●	Z900SL	P1115
W&H® Coupling	Miniature	●	Z800WL*	P1120
	Standard	●	Z900WL*	P1121
Bien-Air® Coupling	Miniature	●	Z800BL*	P1116
	Standard	●	Z900BL*	P1117

*Compatible Turbines with Integral LED



S-Max M

Advanced



MORE POWERFUL

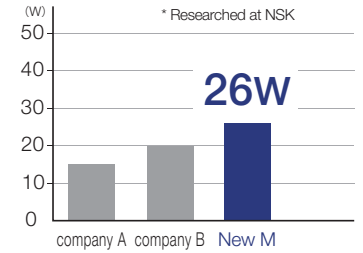


The new rotor design is optimized using a rotating air flow simulation, resulting in 26W of power through the efficient use of air supply energy.

26W power

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

Power compared with the same handpiece class offered by other manufacturers.



Power [W] at 0.3MPa

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

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

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

*Compatible Turbines with Integral LED



S-Max pico

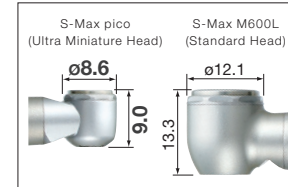
Special



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



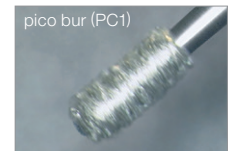
The ultra mini head delivers expanded operational visibility and greater flexibility. Patient comfort is increased.

In combination with mirror technique



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.



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

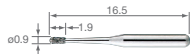


Power : 9 W
 Speed : 380,000-450,000 min⁻¹
 Head Size : ø8,6 x H 9,0 mm
 • For short shank burs / ultra short shank burs

NSK Couplings	Optic	MODEL	ORDER CODE
	●	S-Max pico	P1140
KaVo® Coupling	Optic	MODEL	ORDER CODE
	●	S-Max pico KL	P1142
QD Couplings	Optic	MODEL	ORDER CODE
	—	S-Max pico QD	P1173
Midwest 4 hole (Direct-connect / Screw-on Type)	Optic	MODEL	ORDER CODE
	—	S-Max pico M4	P1217
Borden 2 hole (Direct-connect / Screw-on Type)	Optic	MODEL	ORDER CODE
	—	S-Max pico B2	P1218

*Compatible Turbines with Integral LED

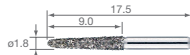
pico bur



MODEL	ORDER CODE
PC1	Y1001817
• Pack of 3	



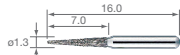
MODEL	ORDER CODE
PC2	Y1001818
• Pack of 3	



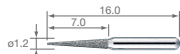
MODEL	ORDER CODE
PC3	Y1001819
• Pack of 3	



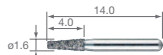
MODEL	ORDER CODE
PC3ff	Y1002019
• Extra fine bur • Pack of 3	



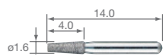
MODEL	ORDER CODE
PC4	Y1001820
• Pack of 3	



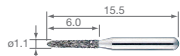
MODEL	ORDER CODE
PC4ff	Y1002020
• Extra fine bur • Pack of 3	



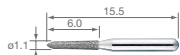
MODEL	ORDER CODE
PC5	Y1001821
• Pack of 3	



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	



MODEL	ORDER CODE
pico bur set	Y1001816
• P1-6/1 pcs.each	

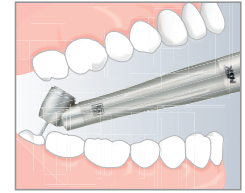


Ti-Max X450

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.

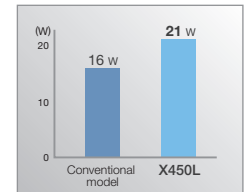


Superior Accessibility

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.



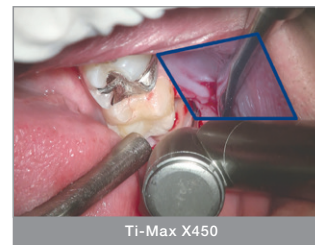
Triple Water Jets & Cellular Glass Optics

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



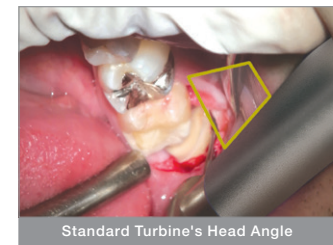
The Ti-Max X450 Permits Optimal Access to Molars and a Diverse Range of Operative Procedures.

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
	—	X450	P1088
KaVo® Coupling	●	X450KL	P1079
	—		
Sirona® Coupling	●	X450SL	P1080
	—		
QD Couplings	—	X450QD	P1086
	—		
Midwest 4 hole (Direct-connect / Screw-on Type)	—	X450M4	P1092
	●		





DynaLED

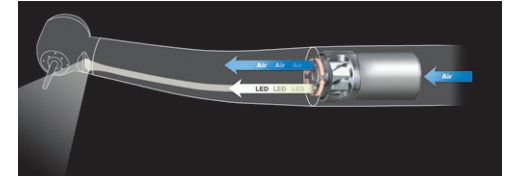
Special

DynaLED Product Highlights NSK long life micro power generator – high efficiency and long term durability

NSK has applied the very latest technologies and materials to achieve long term efficiency and reliability.

Micro power generator is electronically calculated to produce the correct power source for highly effective LED illumination.

The performance of the handpiece is not influenced by the micro power generator.

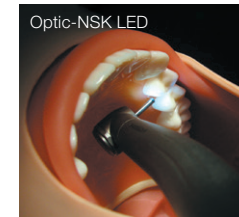


DynaLED – a perfectly balanced turbine handpiece

Even with the integrated power generator, NSK DynaLED is a perfectly balanced, high performance turbine handpiece. Clinicians will notice no weight nor balance difference when compared to a conventional turbine handpiece.

LED durability

The LED light source is significantly more durable than quartz, replicating daylight illumination quality.



DynaLED Special



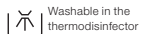
- Stainless Steel Body
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray



Miniature Head
 Power : 15 W (M4, B2) / 13 W (QD)
 Speed : 380,000-450,000 min⁻¹
 Head Size : ø10.6 x H 12.4 mm, 25,000 LUX
 *Both standard and short shank burs are applicable.



Standard Head
 Power : 16 W (M4, B2) / 14 W (QD)
 Speed : 330,000-430,000 min⁻¹
 HeadSize : ø12.1 x H 13.3 mm, 25,000 LUX



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



Head	MODEL	ORDER CODE
Miniature	M500LG M4	P1105
Standard	M600LG M4	P1104

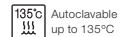
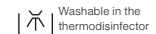
Borden 2 hole
(Direct-connect / Screw-on Type)



Head	MODEL	ORDER CODE
Miniature	M500LG B2	P1107
Standard	M600LG B2	P1106

QD Couplings

Head	MODEL	ORDER CODE
Miniature	M500LG QD	P1109
Standard	M600LG QD	P1108



FX PLUS Basic



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



Miniature Head
 Speed : 380,000-450,000 min⁻¹
 Head Size : ø10.6 x H 12.4 mm
 *Both standard and short shank burs are applicable



Standard Head
 Speed : 325,000-410,000 min⁻¹
 Head Size : ø12.1 x H 13.3 mm

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



Borden 2 hole
 (Direct-connect / Screw-on Type)



QD Couplings

Head	MODEL	ORDER CODE
Miniature	FXP-MU M4	PA2300

Standard	FXP-SU M4	PA2301
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Head	MODEL	ORDER CODE
Miniature	FXP-MU B2	PA2302

Standard	FXP-SU B2	PA2303
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Head	MODEL	ORDER CODE
Miniature	FXP-MU QD	PA2304

Standard	FXP-SU QD	PA2305
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PanaAir FX

Basic

Unsurpassed Durability

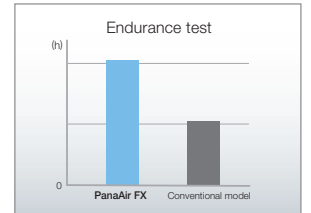
Built to Excel in Clinical Situations.
Featuring a Scratch-resistant
Stainless Steel Body and Sturdier Turbine Head.

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



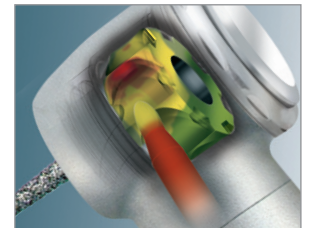
Exceptional Longevity.

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



30% Power Boost

PanaAir FX 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.



PanaAir FX Basic



- Stainless Steel Body
- Ceramic Bearings
- Clean Head System (Push Button Type)
- Push Button Chuck (except Wrench Type)
- Single Spray
- Air Pressure Regulating Valve (except QD Type)



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

Push Button Type

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



MODEL	ORDER CODE
PAF-SU M4	P1225

Borden 2 hole
 (Direct-connect / Screw-on Type)



MODEL	ORDER CODE
PAF-SU B2	P1226

QD Couplings

MODEL	ORDER CODE
PAF-SU QD	P1227

Wrench Type

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



MODEL	ORDER CODE
PAF-S M4	T1069

Borden 2 hole
 (Direct-connect / Screw-on Type)



MODEL	ORDER CODE
PAF-S B2	T1070