

Features
 • Cellular Glass Optics • Ceramic Ball Bearings • Solid Titanium Body* • Clean Head System
 • Ultra Push Chuck • Triple Spray • In-surgery replacement turbine cartridge
 ※ Non-Optic Versions for NSK FlexiQuik Coupling are also available.

solid titanium handpieces

For NSK FlexiQuik Coupling



MODEL	ORDER CODE
A500L	P665

• Miniature Head

MODEL	ORDER CODE
A600L	P666

• Standard Head

MODEL	ORDER CODE
A700L	P667

• Torque Head



MODEL	ORDER CODE
PTL-CL-4HV-T	P401-081

• Light bulb included in coupling

MODEL	ORDER CODE
PTL-CL-III-T	P425-081

• Light bulb included in coupling
 • With water volume adjuster

For All Brand Coupling



M • Miniature Head

S • Standard Head

T • Torque Head

		KaVo®	Sirona®	W&H®	Bien-Air®
M	MODEL	AK500L	AS500L	AW500L	AB500L
	ORDER CODE	P463	P822	P828	P825
S	MODEL	AK600L	AS600L	AW600L	AB600L
	ORDER CODE	P464	P823	P829	P826
T	MODEL	AK700L	AS700L	AW700L	AB700L
	ORDER CODE	P465	P824	P830	P827



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 Sirona® is a registered trademark of Sirona Dental Systems GmbH, Germany.
 W&H® and Roto Quick® are registered trademarks of W&H Dentalwerk Bürmoos GmbH, Austria.
 Bien-Air® and Unifix® are registered trademarks of Bien-Air Dental S.A., Switzerland.

Ti-Max Series Cartridges

MODEL	ORDER CODE
Ti-MU03	P057

• For Miniature Head

MODEL	ORDER CODE
Ti-SU03	P058

• For Standard Head

MODEL	ORDER CODE
Ti-TU03	P059

• For Torque Head

*Only external body component is titanium.



All NSK handpieces are built to have excellent durability against repeated autoclaving at temperatures of 135°C.

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Expect Perfection®



Introducing the cutting edge... the new solid titanium Ti-Max handpiece range

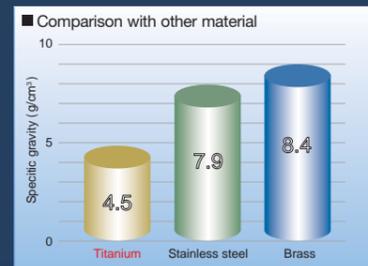
The highest level of handpiece performance has now been raised

After extensive in-house research, experimentation and testing, NSK has selected Titanium as the perfect material for the new NSK Ti-Max handpiece series. Titanium is lightweight, durable and corrosion resistant. These inherent qualities make Titanium the ideal material for the Aerospace industry, nuclear power plants, and many other industrial applications where metal components must endure and function under extreme conditions. Due to complex and costly production procedures, the application of solid Titanium has, until now, been virtually non-existent in dental instrumentation.

Now NSK has developed and perfected the advanced new level of production technology required to precisely and economically produce the first solid titanium handpiece body series ever in the world. This NSK achievement is the result of decades of accumulated experience plus an investment in specially designed automated production machinery. The new automated machinery has the capability to precisely craft solid titanium into high performance, superbly balanced, high speed and low speed handpiece bodies. This achievement places NSK at the cutting edge of handpiece precision production technology.

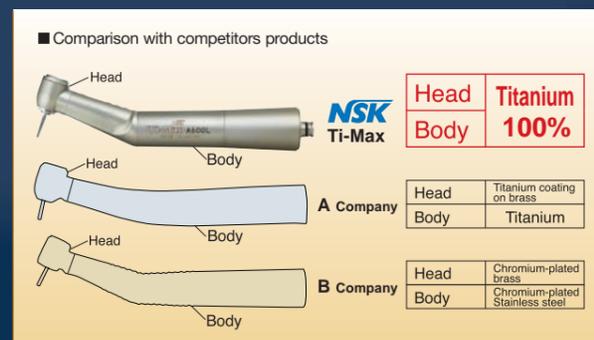
Ti-Max handpieces offer the perfect weight and balance for all Clinicians

The very nature of Titanium allows for a firm, tactile grip even when held in gloved hands. Using Titanium allows NSK to produce handpieces that are lighter in weight, yet stronger and more durable than other handpieces. 30% lighter than stainless steel, the Ti-Max titanium body, combined with exceptional balance, results in a handpiece that will significantly reduce hand and wrist fatigue caused by prolonged and complex clinical procedures.



Durable and corrosion resistant

Titanium has excellent resistance to corrosion caused by acidity and alkalinity. Ti-Max handpieces maintain their original "new" appearance, and will not degenerate even when exposed to various chemicals used in dental clinics. The stress of repeated autoclaving has virtually no effect on titanium.



Clean Head System



The NSK Clean Head System (Patented) is located in the handpiece head section. It is a special mechanism designed to prevent air retraction, and therefore the entry of oral fluids and other minute foreign substances into the turbine head.

This is automatically and instantly effective when the air pressure changes as the turbine stops spinning. An additional application is to prolong the life of the turbine bearings since micro contaminants can never enter the turbine. Since the handpiece itself automatically prevents air retraction, infection control is greatly enhanced. The validity of the NSK Clean Head System has been proven and documented by experiments performed by renowned Universities worldwide.

Ceramic Ball Bearings



Because ceramic is 25% harder than stainless steel, it resists damage should debris enter the turbine. Ceramic is also 50% lighter in weight than stainless steel and therefore results in reduced friction with the bearing retainer. In combination, these factors are responsible for significantly extending bearing life.

Tactile Sense Increases



The nature of Titanium allows for a firm, tactile grip even in gloved hands. Using Titanium allows NSK to manufacture handpieces that are lighter in weight, yet stronger than other handpieces on the market. When using Ti-Max handpieces, Clinicians will notice a marked increase in their tactile sense.

Cellular Glass Optics



NSK Cellular Glass Optic rods are 20% brighter than conventional fibre optic technology. Light intensity will not deteriorate even after repeated autoclaving.

Other Features

• New Cartridge Design



As a result of many years of NSK research, a new higher performance turbine has been developed, offering increased torque in all head sizes.

• Bur Runout : Less than 10 Microns

Strict quality control, and ultra-precision micro production technology, ensures bur runout of less than 10 microns, which is essential to ensuring precise cutting and grinding.

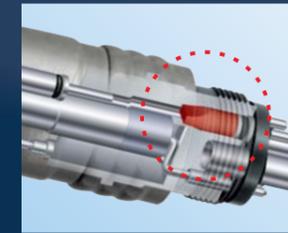
• Greater Convenience

The head design is very compact, and the cartridge style turbine allows easy in-surgery replacement.

• Quiet and Smooth

NSK ultra-precision micro machining technology ensures remarkably reduced vibration and reduced noise level, resulting in increased comfort for patients and Clinicians. The handpieces are noticeably quieter and smoother running since the introduction of the NSK ceramic ball bearing turbines.

Non-Retraction Valve



The NSK Non-Retraction Valve mechanism (Patented) is integrated into the NSK couplings.

This mechanism prevents air retraction of oral contaminants specifically into the water line. It also helps to prevent water drip after the handpiece stops rotating. In combination with the Clean Head System, the Non-Retraction Valve provides an effective method in preventing cross-contamination.

Ultra Push Chuck



NSK triple grip Ultra Push Chuck (Patented) is an original design. The push button auto-chuck mechanism securely grips the bur during grinding conditions, and allows one-touch bur insertion and removal. The auto chuck lock mechanism is designed so that the bur retention capability increases when high load is applied to the bur.

Triple Water Spray



The NSK triple water spray system ensures efficient cooling of the bur and the tooth surface. Through this system the water spray flows virtually parallel to the bur, direct to the tooth preparation site.

Sterilization Durability



NSK titanium and stainless steel turbine handpieces are extremely durable against repeated autoclaving. Handpiece bodies appear in new condition for years.