Electric Handpiece
Ti-Max Z99L





# Smooth Cutting at Its Peak. Durability at Its Core.

Introducing the Ti-Max Z99L Electric Handpiece, NSK's flagship model with uncompromising quality, designed to meet the rigorous demands of dental professionals.

NSK TI-Max299L

Enhanced with the next generation chuck and gear design, improved durability, gripping strength and enhanced cutting performance can be realized. With meticulous refinements to the head angle, water spray angle, and bur retention force, the Ti-Max Z99L Electric Handpiece delivers an unrivaled treatment experience.

NSK's premium handpiece has arrived, and our confidence and commitment are evident through the industry's most comprehensive 3-Year Worry-Free Warranty.

### The new Ti-Max 799L



### ERGONOMIC

Improved accessibility, visibility, and user comfort - for smoother, more efficient treatments.

#### 100° Angled head - for easy access

Designed with the oral cavity's natural anatomical curves in mind (Curve of Spee and Curve of Wilson), enabling high-torgue cutting for more efficient treatment.



#### "DURAGRIP" non-slip and scratch-resistant surface treatment technology

For a secure, comfortable grip, the pure titanium body features a micro-textured, non-slip surface. NSK's original "DURAGRIP" coating enhances scratch resistance and increases durability.

#### Lightweight – for comfort

The titanium body is lighter than other electric handpieces in its class, resulting in greater comfort for the clinician during treatment.



**Z99L vs Competitors' Weight** (in-house study)

### DURABILITY

To meet the increasing demands of treatments involving zirconia and other high-strength prosthetic materials, NSK perfected the configuration of the chuck mechanism, gears, and bearings. The result is the Z99L - built to deliver powerful, reliable cutting performance while ensuring safe and efficient operation.

#### **DURAPOWER CHUCK**

NSK's DURAPOWER CHUCK delivers a more consistent and powerful grip, reducing the risk of bur slippage compared to conventional models. NSK's proprietary technology creates a 'wedge effect' that improves chuck performance and is designed to firmly grip the bur, preventing slippage during use.

\* The chuck is the part of the handpiece that holds the bur (cutting rod). The new improved chuck mechanism has improved durability.



#### Cutting Endurance Test (in-house study)



## BETTER CUTTING PERFORMANCE

Experience efficient workflows and effective treatment with NSK's high-performance handpieces - trusted for their superior cutting power and precision, backed by decades of manufacturing expertise.



#### **Optimized Gear and Bearing Configuration**

Optimized bearings ensure reduced wear and enhanced performance. The internal gears have been refined to evenly distribute operational loads within the handpiece. Together, these advancements have resulted in enhanced cutting durability.

#### Optimized Gear Structure - for smooth cutting

The handpiece features an optimized internal structure with the ideal number and shape of gears, for more efficient power transmission. This enhances motor torque delivery and provides a smoother cutting experience.

### **IMPROVED SAFETY**

The Z99L's design ensures heat reduction from both the handpiece head and the cutting process, minimizing the risk of thermal damage, supporting safer treatments.

#### Anti-Heat System

Ultra-high-speed handpieces require advanced technology to manage heat generation in the handpiece head. Our unique head design helps to limit heat generation, and disperses heat generated during treatment.

The Z99L's optimized gear arrangement and bearing configuration have lowered the risk of heat generation during operation.

#### **Stirring Heat Measurement**



#### **Quattro Spray**

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Features a four-port water spray system that irrigates from two angles, helping to reduce the risk of cooling failure regardless of bur shape or the conditions inside the oral cavity.

#### NSK's Two-Way Water Function

The Two-Way Water Function allows the operator to switch between jet and mist irrigation with a simple flip of a switch. Jet water irrigation, used without chip air, minimizes the risk of subcutaneous emphysema during invasive procedures. Mist water irrigation, with its strong cooling effect on the bur and tooth surface, helps reduce the risk of thermal damage. This innovative feature offers clinicians greater flexibility in their treatment approach while enhancing patient safety.







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Specifications are subject to change without notice.

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**TECHNICAL DATA** 



#### Ti-Max Z99L

Gear Ratio	Optic	MODEL	ORDER CODE
1:5 Increasing	•	Z99L	CA13140001
• Max Speed: 200,000 min <sup>-1</sup>			
• Head Size: ø8.9 x H 13.4 mm			
Titanium Body with Scratch Resistant DURAGRIP			
• For FG Burs (ø1.6)			
Push Button Chuck			
Ceramic Bearing			
<ul> <li>Quattro Spray (with two-way water function)</li> </ul>			
• Microfilter			
• Anti-Heat System			
Clean Head System			
Cellular Glass Optics			
DURAPOWER CHUCK			
• Head at a 100° angle			



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### **Create it**

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