

CONTRA-ANGLES

CONTRA-ANGLES

Which handpiece?

Choose the handpiece that matches your hand.

	Ti·Max Z	Ti·Max Z45L	Ti·Max X	S·Max M	FXseries
					
Rank	Premium	Special	Advanced	Advanced	Basic
Head Size	ø8.9 x H13.4 mm (Super mini)	ø9.6 x H14.5 mm	ø8.9 x H12.3 mm	ø10.0 x H14.6 mm	ø9.6 x H13.4 mm
Body	Titanium	Titanium	Titanium	Stainless	Stainless
DURAGRIP	●	●			
DURACOAT			●		
DLC Coating	●	●			
Anti Heat System	●	●			
Ceramic Bearings	●	●		●	
Cellular Glass Optics	●	●	●	●	
Clean Head System	●	●	●	●	●
Push Button Chuck	●	●	●	●	●
Water Spray	Quattro	Quattro (Water Jet / Mist)	Single	Quattro	
Microfilter	●	●	●		
Ergo Grip	●	●	●	●	●



Ti·Max **Z**
Contra-angle Series

DURABLE

A stunningly durable and reliable handpiece

NSK has combined advanced design and world-class processing technology to create incredibly durable instruments. The gear is coated with special diamond-like carbon to make wear resistance up to five times greater than on previous models. NSK's advanced technologies have boosted sterilization resistance, delivering even better reliability for dental practices.



COMFORT

The ultimate in handpieces
The result of invaluable clinical feedback

The handpiece is more user-friendly, cleaner, and safer. By reviewing everything from the shape of the instrument, to hygiene aspects and safety features using the most advanced technologies, we have made the contra-angle more ergonomic and comfortable for the clinician and safer for the patient, reducing stress for clinicians and patients alike. Only NSK's Ti-Max Z premium range offers these unique features.



ADVANCED TECHNOLOGY

Amazingly Silent Operation

Amazing silence and minimal vibration: The marriage of micro-precision parts and gears has lowered noise and vibration even more to provide comfort for clinicians and patients alike.



Anti Heat System (Z95L, Z85L, Z84L)

Our proprietary Anti Heat System dramatically reduces the heat typically experienced with speed increasing contra-angles. This feature improves patient safety without compromising manoeuvrability.

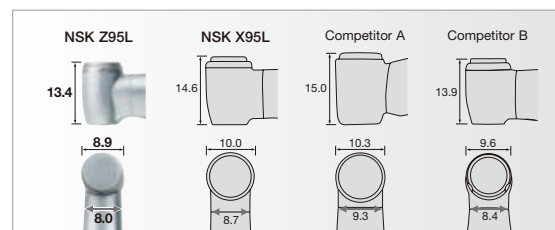
OUTSTANDING OPERABILITY

The Smallest Head

The head is angled 2° more than on the X95L for much better visibility and accessibility even for molars and other areas that are difficult to treat.

The Slimmest Neck

The slimmer neck provides much better visibility compared to existing products, delivering wide visibility of all treatment areas.



TECHNOLOGY & FUNCTION

Anti Heat System

Our proprietary Anti Heat System dramatically reduces heat generation to prevent burning.

(With Z95L/Z85L/Z84L)

DLC Coating

We have boosted anti-wear performance by coating the gear with special diamond like carbon.
(Only in models with increasing gear ratios.)

DURAGRIP

Our proprietary scratch- and abrasion-proof surface treatment increases durability and ensures a secure 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 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.

Amazing Silence and Minimal Vibration

The marriage of micro-precise parts and gears has lowered noise and vibration even more.

Ti·Max Z

- Titanium Body with Scratch Resistant DURAGRIP
- Cellular Glass Optics • Clean Head System (Exclude Z84L)
- Push Button Chuck • Microfilter



Quattro Spray



Optic MODEL **Z95L** ORDER CODE **C1034**

- 1:5 Increasing** • Exceptional Durability • Quattro Spray
- For FG burs (ø1.6) • Ceramic Bearings • DLC Coating
 - Anti Heat System • Max Speed: 200,000 min⁻¹

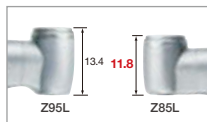


Single Spray



Optic MODEL **Z85L** ORDER CODE **C1062**

- 1:5 Increasing** • Exceptional Durability • Single Spray • Miniature Head
- For FG burs (ø1.6) • Ceramic Bearings • DLC Coating
 - Anti Heat System • Max Speed: 200,000 min⁻¹
- *Short Shank burs only



Head size comparison
Z85L offering extraordinary
visibility and accessibility.

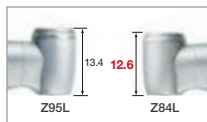


Quattro Spray



Optic MODEL **Z84L** ORDER CODE **C1135**

- 1:4.5 Increasing** • Exceptional Durability • Quattro Spray • Miniature Head
- For FG burs (ø1.6) • Ceramic Bearings • DLC Coating
 - Anti Heat System • Max Speed: 180,000 min⁻¹
- *Short Shank burs only



Head size comparison
Z84L offering extraordinary
visibility and accessibility.



Single Spray



Optic MODEL **Z25L** ORDER CODE **C1038**

- 1:1 Direct Drive** • Single Spray • For CA burs (ø2.35)
- Max Speed: 40,000 min⁻¹



Optic MODEL **Z24L** ORDER CODE **C1126**

- 1:1 Direct Drive** • Single Spray • Miniature Head
- For CA burs (ø2.35) • Max Speed: 40,000 min⁻¹



Optic MODEL **Z15L** ORDER CODE **C1039**

- 4:1 Reduction** • Single Spray • For CA burs (ø2.35)
- Max Speed: 10,000 min⁻¹



Optic MODEL **Z10L** ORDER CODE **C1040**

- 16:1 Reduction** • Single Spray • For CA burs (ø2.35)
- Max Speed: 2,500 min⁻¹



Washable in the
thermosdisinfectant



Autoclavable
up to 135°C



Washable in the
thermosdisinfectant



Autoclavable
up to 135°C

Ti-Max Z45L

45-Degree Angled Head Supplies Superior Accessibility and Maximum Visibility

The world's first 45-degree contra-angle, Ti-Max Z45L provides effortless access to hard-to-reach molars that a standard contra-angle simply can't match. The slim-form Ti-Max Z45L also offers excellent visibility and high operability, creating more space between adjacent teeth and the handpiece body. Ti-Max Z45L's powerful and consistent cutting shortens treatment time for time-consuming sectioning and third-molar extractions compared to standard contra-angles, dramatically reducing stress for both clinicians and patients.

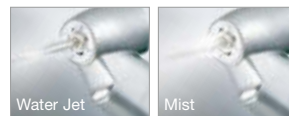


Superior Accessibility

The 45-degree angled head allows easy access to the molar region, minimizing interference from the front teeth and adjacent teeth.

- Titanium Body with Scratch Resistant DURAGRIP
- 45° Angle Head
- Cellular Glass Optics
- Ceramic Bearings
- Clean Head System
- Push Button Chuck
- Quattro Spray (Water Jet / Mist)
- Microfilter
- Anti Heat System
- DLC Coating

Two-Way Spray Function



The world's first two-way spray function allows you to instantly choose a mist or jet spray depending on the conditions and procedure with an enclosed dedicated tool. The water jet spray prevents subcutaneous emphysema in surgical procedures, and the mist spray effectively cools the bur while cutting.



Optic MODEL **Z45L** ORDER CODE **C1064**

1:4.2 Increasing • For FG burs (ø1.6)
• Max Speed: 168,000 min⁻¹

Superior Accessibility Enables a Vast Variety of Clinical Applications



Sectioning a Mandibular Left Impacted Third Molar

You can gain a comfortable finger rest without stress thanks to the extra space the slim Ti-Max Z45L creates between the front teeth. It is also easy to maintain the bur at an optimal angle and achieve precise sectioning, even when the operating depth is close to apex.



Caries Removal from Maxillary Left Second Premolar on Palatal Side

When working on the palatal side of a second premolar, Ti-Max Z45L ensures that you can operate smoothly and have plenty of working space between the maxillary adjacent teeth.



Caries Removal from a Maxillary Left Lateral Incisor's Cervical Area

Securing a solid finger rest on a front tooth enables stable cutting without interference from other teeth. Since you can also freely control the angle of the bur, minimal intervention treatments are also possible.



Clarifying the Root Canal Orifice of a Mandibular Right Second Premolar

Ti-Max Z45L enables you to prep smoothly without interference from the rubber dam clamp. Its flexibility also makes treatments safer and more precise.

Ti-Max X

Clean Head System

The patented NSK Clean Head System is a special mechanism designed to automatically prevent the entry of oral fluids and other contaminants into the handpiece head prolonging the life of the bearings.

Microfilter

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

Block particles
by Microfilter

Ti-Max X

- Titanium Body with Scratch Resistant DURACOAT
- Cellular Glass Optics • Clean Head System (Exclude X35L / X35)
- Push Button Chuck (Exclude X65L / X65) • Microfilter (Exclude X65L / X65)



Single Spray



- | | | |
|------------------|------------|-----------------|
| Optic | MODEL X12L | ORDER CODE C606 |
| Non-Optic | MODEL X12 | ORDER CODE C616 |
- 10:1 Reduction** • Single Spray • For CA burs (ø2.35)
• Max Speed: 4,000 min⁻¹

Straight Handpiece



- | | | |
|------------------|------------|-----------------|
| Optic | MODEL X65L | ORDER CODE H273 |
| Non-Optic | MODEL X65 | ORDER CODE H274 |
- 1:1 Direct Drive** • Single Spray • For HP burs (ø2.35)
• For CA burs (ø2.35)* • Max Speed: 40,000 min⁻¹
*Need to insert the supplied bur stopper

Endodontic Handpiece



- | | | |
|------------------|------------|-----------------|
| Optic | MODEL X35L | ORDER CODE C620 |
| Non-Optic | MODEL X35 | ORDER CODE C624 |
- 10:1 Reduction** • Single Spray • For Hand File & Engine File
• 60° Twist • Max Speed: 4,000 min⁻¹



MODEL QF Adaptor ORDER CODE C877701

■ Please keep the rotation speed with your file manufactures designate.



Washable in the
thermosanitizer



135°C
Autoclavable
up to 135°C

Ti-Max X

- Titanium Body with Scratch Resistant DURACOAT
- Cellular Glass Optics • Microfilter (Exclude X57L / X57)

Prophylaxis Handpieces



With Tip Lock Mechanism



Optic MODEL X55L ORDER CODE C608
Non-Optic MODEL X55 ORDER CODE C618

- 4:1 Reduction** • Single Spray • For Profin / EVA Tips
- Vertical Reciprocating (Stroke Length 1.4mm)
 - Lamineer Tips not included
 - Max Speed: 10,000 min⁻¹



Special dust proof



Optic MODEL X57L ORDER CODE C609
Non-Optic MODEL X57 ORDER CODE C619

- 16:1 Reduction** • For Screw-in Cups and Brushes
- 360° Rotation • w/o Spray
 - Max Speed: 2,500 min⁻¹



S·Max M

Incomparable Powerful Cutting and Superb Grip

S·Max M Series contra-angles allow cost-effective powerful cutting. Durable and quiet the ergonomic and well balanced instrument allows good accessibility and has superb grip. The NSK S·Max M Series has been designed without compromise. Experience it for yourself.



S·Max M

- Stainless Steel Body
- Cellular Glass Optics
- Clean Head System
- Push Button Chuck (Exclude M65)



Quattro Spray



Optic MODEL **M95L** ORDER CODE **C1023**
Non-Optic MODEL **M95** ORDER CODE **C1026**

1:5 Increasing • Quattro Spray • For FG burs (ø1.6)
 • Ceramic Bearings • Max Speed: 200,000 min⁻¹



Single Spray



Optic MODEL **M25L** ORDER CODE **C1024**
Non-Optic MODEL **M25** ORDER CODE **C1027**

1:1 Direct Drive • Single Spray • For CA burs (ø2.35)
 • Max Speed: 40,000 min⁻¹



Optic MODEL **M15L** ORDER CODE **C1025**
Non-Optic MODEL **M15** ORDER CODE **C1028**

4:1 Reduction • Single Spray • For CA burs (ø2.35)
 • Max Speed: 10,000 min⁻¹

Straight Handpiece



Non-Optic MODEL **M65** ORDER CODE **H1008**

1:1 Direct Drive • Single Spray • For HP burs (ø2.35)
 • For CA burs (ø2.35)* • Max Speed: 40,000 min⁻¹
 *Need to insert the supplied bur stopper

FX series

Integrated Handpieces : Ergonomic : Functional : Reliable

After 35 years of outstanding global success, the classic NSK EX handpiece series has now evolved into a new stage. - NSK FX handpiece series - a modernization of the EX series. The traditional NSK simple design technology, functional reliability, durability, and cost effective pricing still remains, but FX has been updated to an integrated design in response to modern demands.



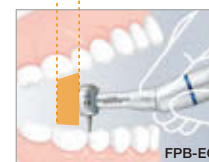
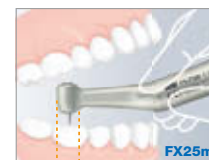
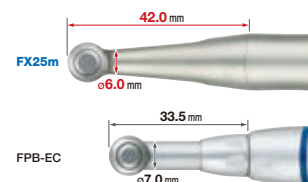
Durable Stainless Steel Body

Stainless is lighter and more durable than brass. Handpiece weight is considerably reduced and ergonomic hand comfort is greatly enhanced with a realistic tactile sense.

Improved visibility : Ideal balance

The extra slim head and body design greatly improves direct and indirect visibility to the oral operational field. This includes increased visibility of even difficult access areas in the oral cavity.

The slim, lighter weight design delivers an entirely comfortable ergonomic balance, especially when used in conjunction with the new NSK FX Mini Air motor.



Maximum accessibility

Easy Cartridge Replacement

In some instances cartridges are easily replaced in surgery with the accessory tools supplied with the new product. Service costs and downtime are reduced (FX25m).



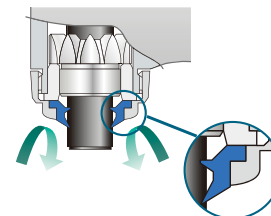
Clean Head System

The patented NSK Clean Head System is a special mechanism designed to automatically prevent the entry of oral fluids and other contaminants into the handpiece head prolonging the life of the bearings. (FX25m / FX15m / FX65m)



FX57m Paste Defense System

The prophylaxis handpiece head incorporates the unique NSK Paste Defense System which prevents dust and polishing paste debris from entering the handpiece. In addition, the NSK DLC coating on the rotor prevents possible breakage caused by surface abrasions from the polishing paste. These are some features that illustrate extended FX handpiece durability.

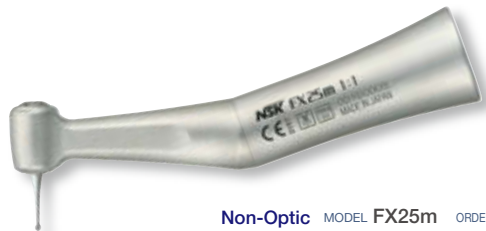


FX series

General Applications Handpiece

External Water Spray

1:1 Direct Drive



Non-Optic MODEL **FX25m** ORDER CODE **C1052001**

- For CA burs (ø2.35) • Push Button Chuck
- Stainless Steel Body • Clean Head System
- Ball Bearing • Max Speed: 40,000 min⁻¹

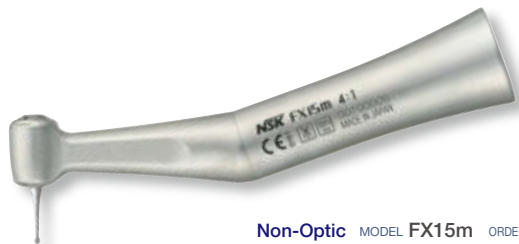
1:1 Direct Drive



Non-Optic MODEL **FX22** ORDER CODE **C1129001**

- For CA burs (ø2.35) • Latch type
- Max Speed: 30,000 min⁻¹

4:1 Reduction



Non-Optic MODEL **FX15m** ORDER CODE **C1053001**

- For CA burs (ø2.35) • Push Button Chuck
- Stainless Steel Body • Clean Head System
- Ball Bearing • Max Speed: 10,000 min⁻¹

Endodontic Handpiece

External Water Spray

16:1 Reduction



Non-Optic MODEL **FX75m** ORDER CODE **C1055001**

- Miniature Head • For engine files • Stainless Steel Body
- 360° Rotation • Push Button Chuck
- Max Speed: 1,250 min⁻¹

Prophylaxis Handpiece

4:1 Reduction



Non-Optic MODEL **FX57m** ORDER CODE **C1054001**

- For screw-in cups and brushes • Stainless Steel Body
- 360° Rotation • w/o Spray • Paste Defense System
- Max Speed: 5,000 min⁻¹

Straight Handpiece

1:1 Direct Drive



Non-Optic MODEL **FX65m** ORDER CODE **H1014001**

- For HP burs (ø2.35) • Stainless Steel Body
- Clean Head System • Max Speed: 40,000 min⁻¹



MODEL **Spray Nozzle** ORDER CODE **H019711**

- For FX65m (Optional)



Washable in the thermoisinfecteur
(FX25m, FX15m)



Autoclavable
up to 135°C



Washable in the
thermoisinfecteur



Autoclavable
up to 135°C

EX Series Heads & Handpieces

External Water Spray

Heads for General Application Non-Optic



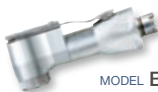
MODEL **FPB-Y** ORDER CODE **C875**

- For CA burs (ø2.35) • Clean Head System
- Push Button Chuck • Ball Bearing
- Max Speed: 40,000 min⁻¹



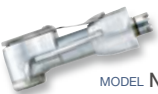
MODEL **NAC-Y** ORDER CODE **C032002**

- For CA burs (ø2.35) • Latch type
- Max Speed: 30,000 min⁻¹



MODEL **BB-Y** ORDER CODE **C037**

- For CA burs (ø2.35) • Latch type
- Ball Bearing • Max Speed: 40,000 min⁻¹



MODEL **NBBW-Y** ORDER CODE **C211**

- For CA burs (ø2.35) • Latch type • Ball Bearing
- With Water Nozzle • Max Speed: 40,000 min⁻¹



MODEL **NM-Y** ORDER CODE **C247**

- Miniature Head • Latch type
- For CA burs (ø2.35) • Max Speed: 30,000 min⁻¹



MODEL **FFB-Y** ORDER CODE **C884**

- For FG burs (ø1.6) • Clean Head System
- Push Button Chuck • Max Speed: 40,000 min⁻¹



MODEL **NRS2-Y** ORDER CODE **C549**

- 10:1 Reduction • For CA burs (ø2.35)
- Clean Head System • Push Button Chuck
- Max Speed: 3,000 min⁻¹

Heads for Prophylaxis Application Non-Optic



MODEL **AR-Y (S)** ORDER CODE **C187**

- For screw-in cups and brushes
- Max Speed: 5,000 min⁻¹



MODEL **AR-Y (K)** ORDER CODE **C188**

- For snap-on cups
- Max Speed: 5,000 min⁻¹



MODEL **EVA-Y** ORDER CODE **C235**

- For Eva tips • Vertical Reciprocating (Stroke Length 1.4mm)
- Max Speed: 10,000 min⁻¹

Spray Nozzle



MODEL **Spray Nozzle**
ORDER CODE **C032701**

- For NAC, BB, FPB, FFB, TEP (Optional)



MODEL **Spray Nozzle**
ORDER CODE **C039701**

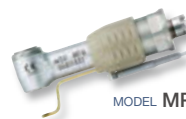
- For NM (Optional)

Heads for Endodontic Application Non-Optic



MODEL **MP-Y** ORDER CODE **C547**

- Miniature Head • Push Button Chuck
- Max Speed: 20,000 min⁻¹



MODEL **MPA-Y** ORDER CODE **C548**

- Connection for Apex locator (For long shank)
- Miniature Head • Push Button Chuck
- Max Speed: 20,000 min⁻¹



MODEL **MPAS-Y** ORDER CODE **C882**

- Connection for Apex locator (For short shank)
- Miniature Head • Push Button Chuck
- Max Speed: 20,000 min⁻¹



MODEL **TEQ-Y** ORDER CODE **C849**

- 80° Twist • For engine files (ø2.35)
- Push Button Chuck
- Max Speed: 4,000 min⁻¹



MODEL **TEP-Y** ORDER CODE **C837**

- 60° Twist • For hand files
- Push Button Chuck
- Max Speed: 4,000 min⁻¹

Handpieces



MODEL **ECM** ORDER CODE **C100007**

- 1:1 Direct Drive



MODEL **ER4M** ORDER CODE **C634002**

- 4:1 Reduction



MODEL **ER10M** ORDER CODE **C635002**

- 10:1 Reduction



MODEL **ER16M** ORDER CODE **C636002**

- 16:1 Reduction



MODEL **ER64M** ORDER CODE **C637002**

- 64:1 Reduction

■ Handpieces and heads are sold separately. You can combine handpieces and heads according to your wishes and the indication.

