TwinPower Turbine® Ultra Series

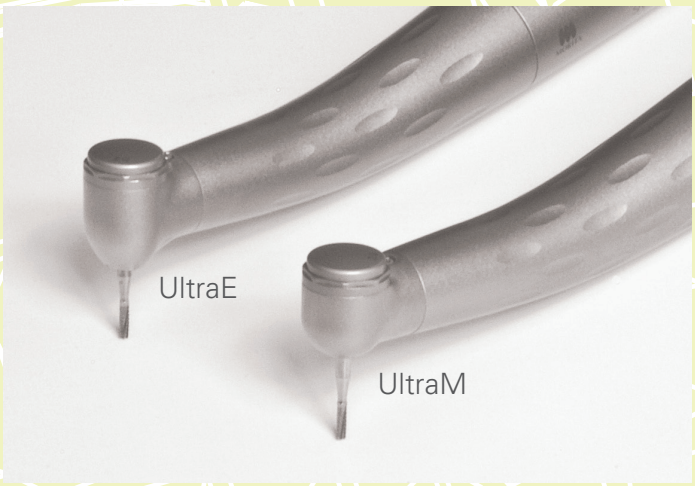
Even Smaller Design with More Power

Thinking ahead. Focused on life.

MORITA

Features at a Glance

Compact Head Design
Powerful
Quiet
Durable
Zero Suck Back



Powerful Micro Head
The TwinPower Turbine Ultra Series handpieces offer a small compact head size for improved access and views in the oral cavity. This product line includes the new UltraM and UltraE. Although these handpieces are mini in design, their power is equal to or greater than many high torque turbines.

Unique TwinPower Technology
The torque produced by TwinPower technology provides steady, effective, and efficient drilling with a light touch.

Quick Stop Braking
Rotation stops within 2 seconds even at the highest speeds. This feature offers added safety and prevents excessive drilling.

Bur Flexibility
UltraM, which has the smallest head, accepts standard burs up to 20 mm in length as well as short shank burs. UltraE utilizes standard burs.

Zero Suck Back
Unique, built-in technology prevents the intake of contamination and cutting debris when the handpiece stops rotating.

Long-lasting Ceramic Ball Bearings
The ceramic ball bearings are exceptionally hard and light, making the bearings faster and more durable.

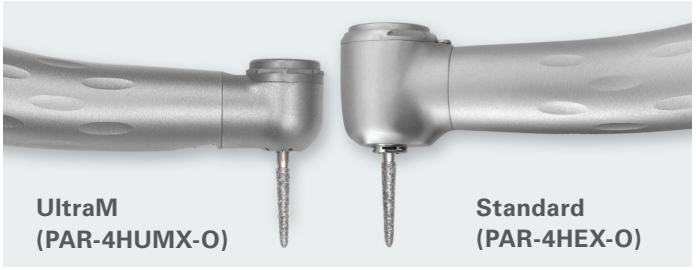
Aero-skirt
The aero-skirt cuts down on the flow of air towards the treatment area. This, in turn, regulates the spray delivered to the treatment area and provides more efficient drilling and improved cooling.

Quiet
Advanced fluid dynamic technology and high precision machining has significantly reduced the noise level in the 6,000 to 7,000 Hz range. This makes treatment more comfortable for the patient.

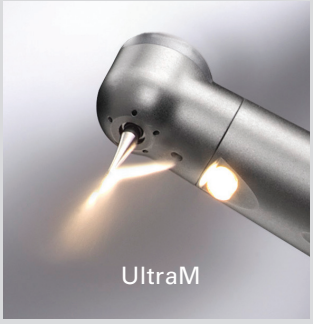
Glass Rod Optics
The glass rod optics offer autoclave safe, highly focused and stable illumination (25,000 LUX).

Compact, Powerful Design: UltraM and UltraE

The TwinPower Turbine Ultra Series is twice as powerful as other popular mini head handpieces.



The UltraM head is approximately 30% smaller than a TwinPower Turbine standard head. This gives the dentist a much better view of the treatment area. The UltraM head accepts a standard bur up to 20 mm in length. The usable portion of the bur (the part extending out of the head) is the same as that of a standard head.



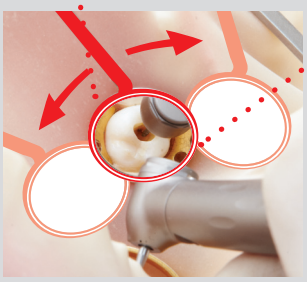
Head Type Comparison

UltraM
UltraM delivers 18 watts, twice the power of some other popular mini handpieces, and offers an extremely compact head height for exceptional posterior access.

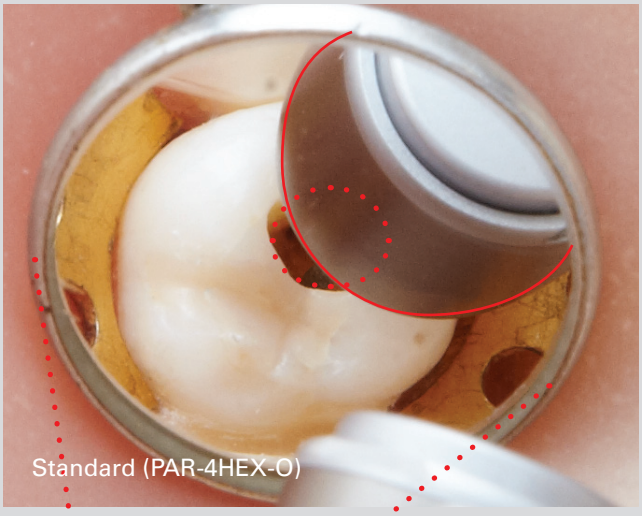
UltraE
UltraE is a bit larger and more powerful at 20 watts, but still offers a compact head that improves the clinician's view when using a mirror or microscope.

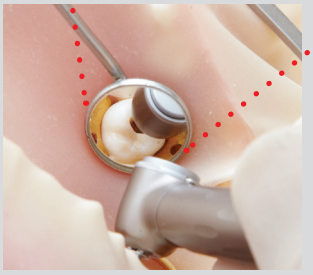
Improved Access and Visibility

Case 1. Tooth 16 Pulp Chamber Opening



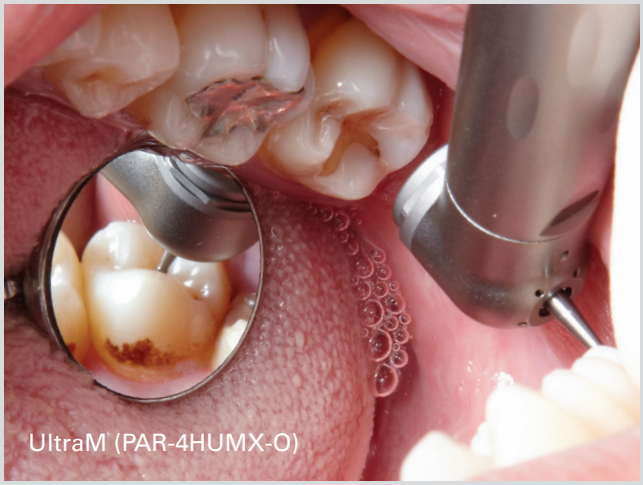
The UltraE head facilitates an improved view with a mirror or a microscope. The bur can easily be seen while accessing the pulp chamber. The small head allows for improved mirror positioning and better vision.

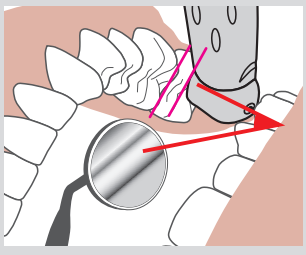




When using a standard sized head, the bur must be slanted for visibility which results in removal of more tooth structure than necessary.

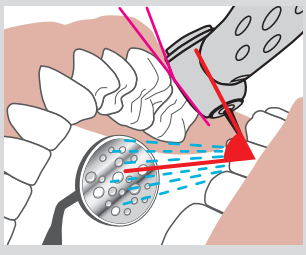
Case 2. Tooth 17 Cavity Preparation





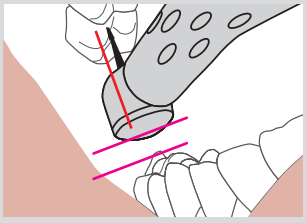
With UltraM, the bur can be held upright for use on molars (including wisdom teeth) or for patients who have limited opening.

The bur must be slanted with a standard head to gain access which leads to excessive drilling of the tooth structure. The mirror is placed to the side of the handpiece head and gets wet resulting in poor visibility.

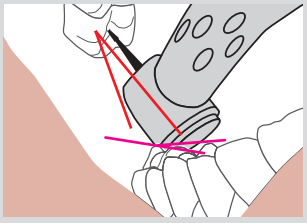


More Comfortable for Patients

Case 3. Tooth 47 Treatment Area

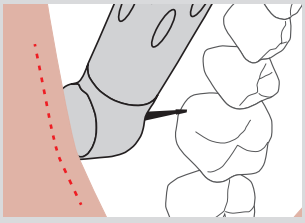


The UltraM head is more comfortable for patients and offers better access in the posterior region. It is especially helpful on the occlusal surface when the patient has limited opening.

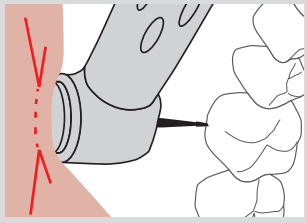


A standard sized head strikes opposing teeth in the treatment area. The sensation of this can be stressful and uncomfortable for patients.

Case 4. Tooth 46 Caries Treatment



The handpiece head may be placed perpendicular to the tooth even in the posterior region. The labial and buccal gingiva do not prevent this due to the small head size of UltraM.



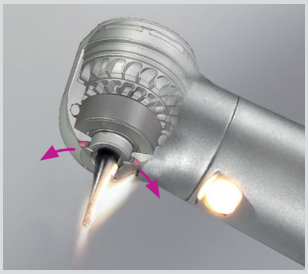
A standard size head presses up against the labial and buccal gingiva, which can be unpleasant for the patient.

15° head angle to hold bur parallel to tooth axis
This is the ideal angle to hold the bur parallel to the tooth axis when resting your little finger on a tooth.

TwinPower Turbine Technology

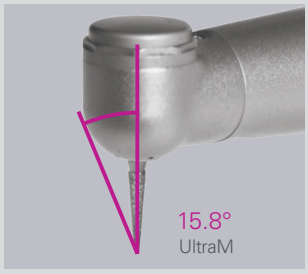
Push Button Chuck

The metal push button chuck is durable and bur replacement is quick and easy.



Aero-skirt

The aero-skirt cuts down on the flow of air towards the treatment area. This, in turn, regulates the spray and provides more efficient drilling and improved cooling.

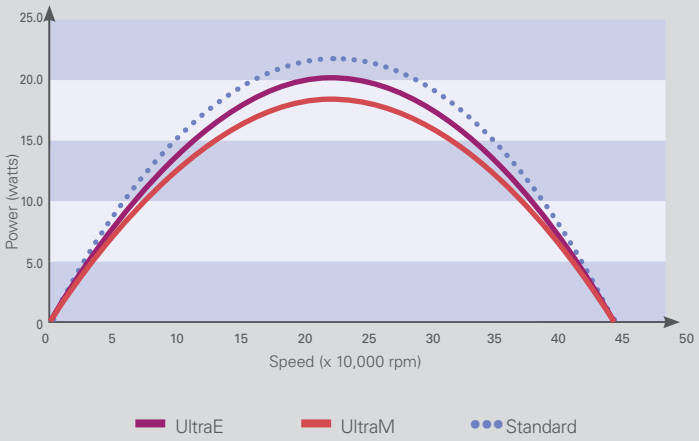


Wide Field of View

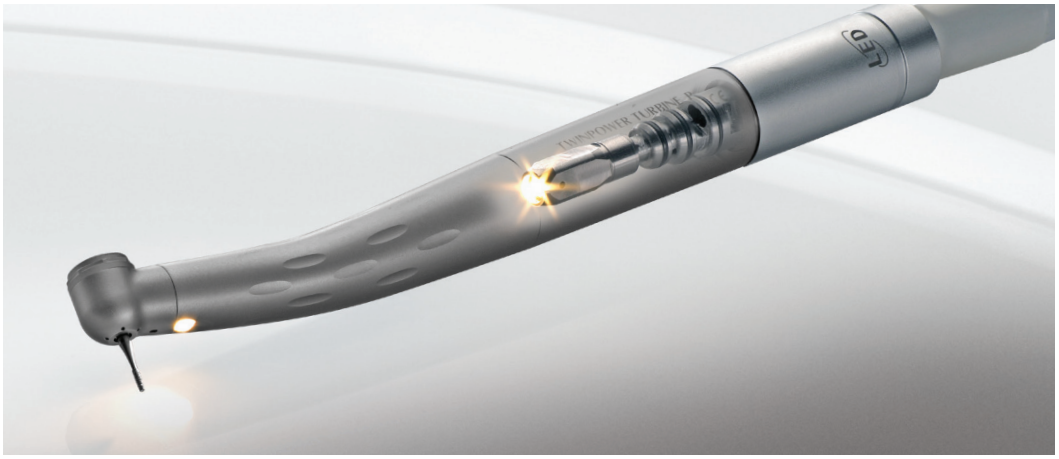
A compact head leaves a wide field of view in line with the axis of the tooth. The dentist can see the tip of the bur during procedures.

(shown with 19 mm bur)

Compact but Powerful Design



TwinPower technology provides exceptional torque for the UltraM (18 W) and UltraE (20 W) heads. Steady and powerful, these heads can be used for both ceramic and metal prosthetics.



All TwinPower Turbines can be equipped with LED lights

The LED coupler offers a bright, natural colored light with a wide field of illumination. This consistent and even lighting results in less eye fatigue and makes it easier to identify caries, diseases, and abnormalities.

Connection and Coupling Options

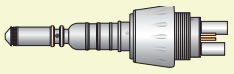
TwinPower Turbine 4H coupling

4-Hole Coupling (with LED light)

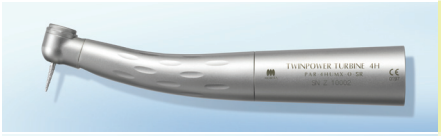
CP4-LD, CP4-W-LD

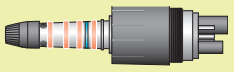
- Water adjustment valve (CP4-W-LD)
- Extremely smooth 360° axis rotation
- Coupling for 4-hole ISO 9168 Type 3 (formerly Type C) hose connection with non-retraction valve

* KaVo MULTIflex LUX is a registered trademark of Kaltenbach & Voight GmbH.
Sirona is a registered trademark of Sirona Dental Systems GmbH.
W&H and Roto Quick are registered trademarks of W&H Dental Bürmoos GmbH.
**NSK and Phatelus are registered trademarks of NAKANISHI INC.
Name of the coupling varies by country.

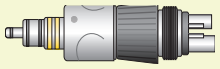


KaVo® MULTIflex LUX®*

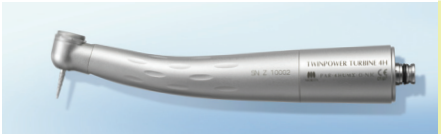


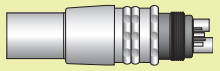


Sirona® Quick coupling*



W&H® Roto Quick®*





NSK® Mach/Phatelus®Coupling**

Specifications and Ordering Information

Specifications

Product Name	TwinPower Turbine 4H	
Head Types	 UltraM	 UltraE
Chuck Types	Push Button Chuck	
Models	PAR-4HUMX-O	PAR-4HUEX-O
Tube Connection	Morita, KaVo, Sirona, W&H, NSK	
Weight (g)	48 - 57 depending on connection type	
Suck Back* (mm / Aq)	0	
Stop Time	Less than 2 seconds	
Angle of View** (°)	15.8	16.6
Maximum Power *** (watts)	approx. 18	approx. 20
Speed *** (rpm)	370,000 ± 30,000	
Chip Air Ports	5	3
Water Ports	1	3
Head Diameter (mm)	9.0	
Head Height (mm)	10.6	12.7
Drive Air Pressure (MPa)	0.20 - 0.29	

* Suction pressure
** With 19 mm bur
*** Power and speed depend on pressure of drive air

Diagnostic/Imaging Equipment

Treatment Units

Handpieces and Instruments

Laser Equipment

Laboratory Devices

Educational and Training Systems

Auxiliaries

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