FLIGHT
DENTAL SYSTEMS



Handpiece Catalogue

DURABLE PRECISION

BOLD SERIES HANDPIECES



Durable Precision

Flight Dental Systems handpieces are meticulously engineered to meet the demanding clinical needs of modern dental professionals. Designed for superior torque, optimal balance, and minimal vibration, these handpieces ensure precise cutting and enhanced tactile control—even during prolonged procedures. Unlike conventional models, Flight handpieces feature aerospace-grade materials and advanced micro-turbine technology that deliver consistent performance and extended service life. With proprietary anti-retraction systems and precision-manufactured components, Flight Dental Systems sets a new benchmark in durability, reliability, and clinical excellence—empowering dentists to perform with confidence, case after case.

Engineered to Perform and Excel

At Flight Dental Systems, our commitment lies in delivering products that exceed clinical expectations. Every device is meticulously designed for long-term reliability and sustained precision—ensuring consistent performance, day after day, procedure after procedure. Built with premium components and rigorous quality standards, our solutions empower dental professionals to work with confidence and efficiency over the long haul.



Zero-Suction
Zero suction in the head prevents cross contamination and extends the service life of the handpiece.

Ceramic Ball Bearing
German Made Deep Groove Ceramic Bearings with nylon cage help to protect against high temperature and corrosion.

Quattro Sprays
Water channel is upgraded to 4 nozzle sprays to achieve the ultimate cooling effect during the treatment.

Dynamically Balanced
The cartridge has been dynamically balanced in a dust-free balancing machine in order to minimizes bur vibration and noise.

3 Points Spring Chucking
Retention strength up to 30-40N during rotation. Concentricity is less than 0.01mm to improve stability and safety during treatment.

100 Degree Head
Provides easier access to molar without the handle and fingers being obstructed by the front teeth.



Durable Precision



Fiber Optic Illumination
Clear & Bright Illumination

Triple Spray
Quick & Efficient Cooing



German Ceramic Bearings
Quality Precision

Push Button Chuck
Easy to Release and Engage Bur

Quiet and Comfortable Operation
Low Noise and Powerful



HIGH SPEEDS

PRECISE • EFFICIENT • LONG LASTING



F-140

Power:	21W
Head:	Standard head (Ø11.2x H 13.5mm)
Max. Speed:	350,000-400,000 RPM
Water:	1 spray
Chuck:	Push Button Auto Chucking
Body:	Chrome/Titanium plated brass
Bearing:	Ceramic Ball Bearing (Made in Germany)
Warranty:	12 months



F-161K

Power:	19W
Head:	Extra-mini head (Ø9.2x H 11.2mm)
Max. Speed:	350,000-400,000 RPM
Water:	4 sprays
Chuck:	Push Button Auto Chucking
Body:	Stainless steel
Bearing:	Ceramic Ball Bearing (Made in Germany)
Warranty:	12 months



F-162K

Power:	21W
Head:	Standard head (Ø11.2x H 13.5mm)
Max. Speed:	350,000-400,000 RPM
Water:	4 sprays
Chuck:	Push Button Auto Chucking
Body:	Chrome/Titanium plated brass
Bearing:	Ceramic Ball Bearing (Made in Germany)
Warranty:	12 months



F-163K

Power:	25W
Head:	Torque head (Ø12.5x H 13.6mm)
Max. Speed:	320,000-360,000 RPM
Water:	3 sprays
Chuck:	Push Button Auto Chucking
Body:	Chrome/Titanium plated brass
Bearing:	Ceramic Ball Bearing (Made in Germany)
Warranty:	12 months

SURGICAL HANDPIECES

45 DEGREE • SURGICAL • PRECISION



F-160K

Power:	25W
Head:	Torque head (Ø12.5x H 13.6mm)
Max. Speed:	350,000-400,000 RPM
Water:	3 jets
Chuck:	Push Button Auto Chucking
Body:	Chrome/Titanium plated brass
Bearing:	Ceramic Ball Bearing (Made in Germany)
Warranty:	12 months

Back Cap Exhaust
Air does not spray out from the front to prevent subcutaneous emphysema.

Ceramic Ball Bearing
German Made Deep Groove Ceramic Bearings with nylon cage help to protect against high temperature and corrosion.

45 Degree
45 degree angled head gives outstanding vision during wisdom teeth extraction, and perfect access to molar region.

Dynamically Balanced
The cartridge has been dynamically balanced by a dust-free balancing machine. In order to minimizes bur vibration and noise.

3 Points Spring Chucking
Retention strength up to 30-40N during rotation. Concentricity is ensure less than 0.01mm to improve stability and safety during treatment.



F-160

FEATURES:

- 350,000 RPM
- Single Water Spray
- Rear Exhaust Air
- 25,000 Lux LED Light - Self Generating
- 4 Hole Midwest Connection
- 21W Torque

COUPLERS

QC-170K - Flight - 6 hole Quick Coupler with LED Light, water control

QC-164K - Flight - 4 hole Quick Coupler, with water control

QC-165K - Flight - 4 Hole Quick Coupler with E-Generator LED Light



LOW SPEEDS

DURABLE • RELIABLE • SATISFACTORY



F-DE01

- Max. speed: 40,000 rpm
- External water channel
- For bur CA 2.35 with 40mm(L)
- Twist tension
- Non-optic



F-DE74

- 20K Air Motor
- No Water
- Works with Flight Contra Angle and Straight Nose

CONTRA-ANGLE



F-DE41PS

- Max. Speed: 10,000rpm
- External water channel
- Ball bearing
- Push button chuck
- Non-optic

E-Type 4:1 Screw-In Prophy



F-DE41

- Max. Speed: 10,000rpm
- External water channel
- For bur CA 2.35
- Ball bearing
- Push button chuck
- Non-optic

E-Type 4:1 BB Latch Prophy



F-DE11

- Max. Speed: 40,000rpm
- External water channel
- For bur CA 2.35
- Ball bearing
- Push button chuck
- Stainless steel body
- Non-optic

E-Type 1:1 BB PB Latch

HIGH SPEEDS



SPECIFICATIONS	MODEL	F-140	F-161K	F-162K	F-163K	F-160K	F-160
Speed RPM (Max)		350,000-400,000	380,000-400,000	350,000-400,000	320,000-360,000	350,000-400,000	350,000-400,000
Drive Air Pressure		35-40psi	35-40psi	35-40psi	35-40psi	35-40psi	35-40psi
Burs Size		"Size: ISO1787-1 Type 3 1.59-1.60mm"	"Size: ISO1787-1 Type 3 1.59-1.60mm"	"Size: ISO1787-1 Type 3 1.59-1.60mm"	"Size: ISO1787-1 Type 3 1.59-1.60mm"	"Size: ISO1787-1 Type 3 1.59-1.60mm"	"Size: ISO1787-1 Type 3 1.59-1.60mm"
Head	**Type**	Standard	Mini Head	Standard Head	Torque Head	45 Degree	45 Degree
	Diameter	11.2mm	9.2mm	11.2mm	12.5mm	11.2mm	11.2mm
	Height	H 13.5mm	H 11.2mm	H 13.5mm	H 13.6mm	H 13.5mm	H 13.5mm
Power	**(w)**	21W	19W	21W	25W	21W	21W
Cooling Systems	**Spray Hole**	1 Spray	4 Spray	4 Spray	3 Spray	3 Spray	1 Spray
Fiber Optics	**Yes/No**	No	Yes	Yes	Yes	Yes	Yes
Material	**Bearings**	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Noise	**Max (dba/-3)**	65db	65db	65db	65db	65db	65db
Weight		54g	43g	52g	53g	52g	54g
Connection	**Compatible with**	Midwest 4 Hole	Kavo-Multiflex LUX	Kavo-Multiflex LUX	Kavo-Multiflex LUX	Kavo-Multiflex LUX	Midwest 4 Hole

LOW SPEEDS



SPECIFICATIONS	MODEL	F-DE01	F-DE11	F-DE41	F-DE41PS	F-DE74
Speed RPM (Max)		40000	40000	10000	10000	20000
Drive Air Pressure		30-35 psi	30-35 psi	30-35 psi	30-35 psi	30-35 psi
Burs Size		2.35 Latch Type Burs	2.35 Latch Type Burs	2.35 Latch Type Burs		
Chuck Type	**Type**	Mechanical Locking Chuck	Push Button	Push Button	Screw-in	
Angle	**Contra/Straight**	Straight	Contra	Contra	Contra	Air Motor
Cooling Systems	**Spray Hole**	None	None	None	None	None
Fiber Optics	**Yes/No**	No	No	No	No	No
Material		Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Weight		52g	52g	74g	68g	65g
Connection	**Compatible with**	E-Type	E-Type	E-Type	E-Type	E-Type

PREMIUM OIL LUBRICATION



LU1011

MK Dent Premium Synthetic Oil
- Spray Can



LU1022

MK Dent Premium Synthetic Oil
- Spray Can Compatible
with Kavo Quattrocare,
Scican Statmatic



O-3205

Flight Premium
Maintenance Oil (1000 ml)

ADAPTERS



PN: LT1014

FG Spindle



PN: LT1013

Slow Speed Attachments



PN: LT1012

Fits Kavo High Speed

AUTOMATIC HANDPIECE MAINTENANCE SYSTEM



Model: HPL-3001

1 Low Speed Connection and
2 Highspeed Connections

Model: HPL-3002

2 Low Speed Connections
and 1 Highspeed Connection

Technical Specifications

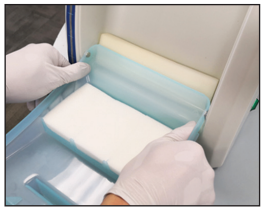
Rated Voltage	AC120V +/-10% 60Hz
Input Voltage	120V: 19VA
Air Pressure	0.35-0.6MPa - (50-85psi)
Dimensions	W 280mm x D275mm x H 360mm W 11″ x D10.8″ x H 14.2″
Weight	6.8kg or 15lbs

PROGRAMMED CYCLES:

S: Short Cycle for High Speed Handpieces (Lubricating and Cleaning Time: 35 seconds)

L: Long Cycle for Low Speed Handpieces (Lubricating and Cleaning Time: 45 seconds)

E: Extra Long Cycle for Speed Reduction Handpieces (Lubricating and Cleaning Time: 50 seconds)



EASY TO CLEAN

The front door can be completely removed to allow fast, easy cleaning of the system.



OIL RESERVOIR

The oil reservoir has a 500ml capacity, reducing the need for frequent refilling. The clean easy to use fill tank also has an oil level indicator to allow the user to see when to add more oil.



FEATURES:

- 2 High speed Connections
- 1 Low speed Connection
- Easy Fill Oil Reservoir
- Clean and mess-free oil sponge
- Compressed Air Input with Easy connection
- Individual programmed Cycles that provides thorough cleaning and lubrication
- Easily detachable door for easy cleaning



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