

# Uhandy

ユーハンディー



URAWA CORPORATION

## Human Engineering

Urawa Corporation introduces the *Uhandy* series of handpieces and power controllers that represent the latest in engineering and design. The *Uhandy* series features ergonomic design that combines state-of-the-art technology with easy-to-use equipment to perfectly match user requirements.



Research and Development



Head Office

## Extensive Experience

Urawa Corporation was the first company in the world to develop the Micro Motor. Exports to users in the dental field began in 1966. Further developments gave rise to the production of a Micro Motor for industrial use in 1970. In Japan, the Urawa Micro Motor has consistently achieved higher sales than any other company in the industry. Today, the Urawa Micro Motor is exported to over 40 countries.



Factory

## STANDARD *handy*

- \* General purpose handpieces that are suitable for a wide variety of applications.
- \* Motorunit incorporates a Self-Cooling Fan.
- \* One touch collet release mechanism
- \* Mounted Collet Chuck :  $\phi 2.35\text{mm}$   
Optional Collet Chuck :  $\phi 3.0\text{mm}$ ,  $\phi 3.175\text{mm}$

### UM131 (HIGH SPEED)



Speed : ★★★★★ Speed : 3,500~35,000RPM  
Power : ★★★★★ Dimensions :  $\phi 27.5 \times 153.5\text{mm}$   
Utility : ★★★★★ Weight : 235g not including connection cord

### UM231 (HIGH SPEED & HIGH TORQUE)



Speed : ★★★★★ Speed : 3,000~30,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 165.5\text{mm}$   
Utility : ★★★★★ Weight : 290g not including connection cord

### UM121 (MEDIUM SPEED)



Speed : ★★★ Speed : 2,000~20,000RPM  
Power : ★★★★★ Dimensions :  $\phi 27.5 \times 153.5\text{mm}$   
Utility : ★★★★★ Weight : 235g not including connection cord

### UM211 (MEDIUM SPEED & HIGH TORQUE)



Speed : ★★ Speed : 1,500~15,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 165.5\text{mm}$   
Utility : ★★★★★ Weight : 290g not including connection cord

## SLENDER *handy*

- \* Ideal for delicate and precision work.
- \* Motorunit incorporates a Self-Cooling Fan.
- \* One touch collet release mechanism
- \* Mounted Collet Chuck :  $\phi 2.35\text{mm}$   
Optional Collet Chuck :  $\phi 3.0\text{mm}$ ,  $\phi 3.175\text{mm}$

### UM052 (ULTRA HIGH SPEED)



Speed : ★★★★★ Speed : 5,500~55,000RPM  
Power : ★★ Dimensions :  $\phi 27.5 \times 140.0\text{mm}$   
Utility : ★★★★★ Weight : 190g not including connection cord

### UM142 (HIGH SPEED)



Speed : ★★★★★ Speed : 4,500~45,000RPM  
Power : ★★★★★ Dimensions :  $\phi 27.5 \times 151.5\text{mm}$   
Utility : ★★★★★ Weight : 220g not including connection cord

### UM132 (HIGH SPEED)

Motorunit is the same as UM131 Handpiece



Speed : ★★★★★ Speed : 3,500~35,000RPM  
Power : ★★★★★ Dimensions :  $\phi 27.5 \times 151.5\text{mm}$   
Utility : ★★★★★ Weight : 220g not including connection cord

### UM232 (HIGH SPEED & HIGH TORQUE)

Motorunit is the same as UM231 Handpiece



Speed : ★★★★★ Speed : 3,000~30,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 163.5\text{mm}$   
Utility : ★★★★★ Weight : 275g not including connection cord

### UM122 (MEDIUM SPEED)

Motorunit is the same as UM121 Handpiece



Speed : ★★★ Speed : 2,000~20,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 163.5\text{mm}$   
Utility : ★★★★★ Weight : 220g not including connection cord

## HEAVYDUTY *handy*

- \* Designed for applications requiring high torque.
- \* Motorunit incorporates a Self-Cooling Fan.
- \* One touch collet release mechanism
- \* Mounted Collet Chuck :  $\phi 6.0\text{mm}$   
Optional Collet Chuck :  $\phi 2.35$ ,  $\phi 3.0$ ,  
 $\phi 3.175$ ,  $\phi 6.35\text{mm}$

### UM233 (HIGH SPEED & HIGH TORQUE)

Motorunit is the same as UM231 Handpiece



Speed : ★★★★★ Speed : 3,000~30,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 171.0\text{mm}$   
Utility : ★★★★★ Weight : 325g not including connection cord

### UM213 (MEDIUM SPEED & HIGH TORQUE)

Motorunit is the same as UM211 Handpiece



Speed : ★★ Speed : 1,500~15,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 171.0\text{mm}$   
Utility : ★★★★★ Weight : 325g not including connection cord

## ANGLE *handy*

- \* Applications include the polishing and finishing of flat surfaces, curved surfaces and ends.
- \* Motorunit incorporates a Self-Cooling Fan.
- \* One touch collet release mechanism
- \* Mounted Collet Chuck :  $\phi 3.0\text{mm}$   
Optional Collet Chuck :  $\phi 2.35\text{mm}$ ,  $\phi 3.175\text{mm}$

### UM215 (MEDIUM SPEED & HIGH TORQUE)

Motorunit is the same as UM211 Handpiece



Speed : ★★ Speed : 1,500~15,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 153.0\text{mm}$   
Utility : ★★★★★ Weight : 275g not including connection cord

### UM216 (MEDIUM SPEED & HIGH TORQUE)

Motorunit is the same as UM211 Handpiece



Speed : ★★ Speed : 1,500~15,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 160.5\text{mm}$   
Utility : ★★★★★ Weight : 375g not including connection cord

### UM217 (MEDIUM SPEED & HIGH TORQUE)

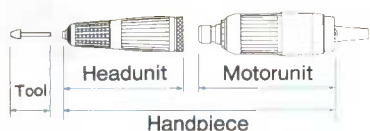
Motorunit is the same as UM211 Handpiece



Speed : ★★ Speed : 1,500~15,000RPM  
Power : ★★★★★ Dimensions :  $\phi 31.6 \times 169.5\text{mm}$   
Utility : ★★★★★ Weight : 385g not including connection cord

## CONNECTION SYSTEM

In this catalogue ...



The handpiece comprises of the headunit and the motorunit. The headunit and motorunit is interchangeable with a simple one touch operation which provides maximum versatility.

**UT01 STANDARD HEAD**  
Mounted Collet :  $\phi 2.35\text{mm}$   
NOTES : ②



**UT02 SLENDER HEAD**  
Mounted Collet :  $\phi 2.35\text{mm}$   
NOTES : ①



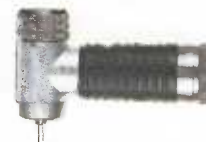
**UT03 HEAVYDUTY HEAD**  
Mounted Collet :  $\phi 6.0\text{mm}$   
NOTES : ③



**UT05 90° ANGLE HEAD**  
Mounted Collet :  $\phi 3.0\text{mm}$   
NOTES : ④



**UT06 90° HEAVYDUTY ANGLE HEAD**  
Mounted Collet :  $\phi 3.0\text{mm}$   
NOTES : ④



**UT07 120° HEAVYDUTY ANGLE HEAD**  
Mounted Collet :  $\phi 3.0\text{mm}$   
NOTES : ④



## HEADUNITS

## POWER CONTROLLER

- \* Variable Speed Control (DC3-30V) .
- \* Automatic feedback circuit that ensures constant revolutions under a variety of working conditions.
- \* The following safety features are provided:
  - (1) A fuse to safeguard against an AC circuit short or an abnormal electric current in the primary circuit.
  - (2) A thermal fuse is located in the transformer to protect against overheating.
  - (3) A thermal sensor that temporarily switches off the current in the event of the output circuit overheating.
  - (4) An electronic circuit breaker that will temporarily stop the current in the event of an excessive load being applied to the handpiece.
- \* Dust proof system for all controls.
- \* Variable Foot Controller (VC10) and On-Off Foot Switch (FS18) are optional.
- \* Quick stop circuit system enables the handpiece to stop as soon as the operator removes his/her foot from VC10, FS18, or turns off the power switch.

### UC500

UC500 Power Controller accepts all Handpieces except for the UM052 (Ultra High Speed) Handpiece.



2 Handpiece Holders (PA31-748) included with unit.

Input : AC120V, 220V, 240V, 50/60Hz  
Output : DC3-30V  
Dimension : W170×D195×H110mm  
Weight : 2.4kg

### UC200

UC200 Power Controller accepts only the UM052 (Ultra High Speed) Handpiece.



1 Handpiece Stand (KQ-803) included with unit.

Input : AC120V, 220V, 240V, 50/60Hz  
Output : DC3-30V  
Dimension : W130×D132×H87mm  
Weight : 1.7kg

## HEADUNITS

### UT08 SWING HEAD

Toolholder accepts tool shanks from  $\phi 2.0$ - $\phi 4.7$ mm  
NOTES : ⑤



### UT11 LONG SLENDER HEAD

Mounted Collet :  $\phi 3.0$ mm  
NOTES : ①



### UT13 HEAVYDUTY CLAMP HEAD

Mounted Collet :  $\phi 6.0$ mm  
NOTES : ③



### UT15 1/4 REDUCTION JOINT

To be connected between Motor-unit and Headunit  
NOTES : ③



### UT10 AIR HEAD

Mounted Collet :  $\phi 3.0$ mm  
NOTES : ①



### UT12 STANDARD CLAMP HEAD

Mounted Collet :  $\phi 3.0$ mm  
NOTES : ③



### UT14 LOCK NUT CLAMP HEAD

Mounted Collet :  $\phi 6.0$ mm  
NOTES : ③



### NOTES :

- ① : To be connected with Motorunits of a maximum 55,000RPM
- ② : maximum 35,000RPM
- ③ : maximum 30,000RPM
- ④ : maximum 15,000RPM
- ⑤ : maximum 8,000RPM

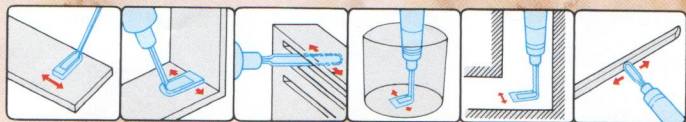
## SWING *handy*

- \*Side-to-Side stroke
- \*Lateral Stroke : 0-1.6mm.
- \*Toolholder accepts tool shanks from  $\phi 2.0$ -  $\phi 4.7$ mm.

- \*Motorunit incorporates a Self-Cooling Fan.
- \*A variety of Headunits can be attached to the Motorunit.

### UM208 (LOW SPEED & ULTRA HIGH TORQUE)

Motor Speed	800-8,000RPM
Lateral Stroke	0-1.6mm
Frequency	800-8,000 swings/min
Dimensions	$\phi 31.6 \times 182$ mm
Weight	315g not including connection cord



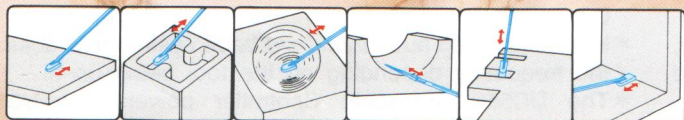
UM208 can be used with various types of Headunits and with the Reduction Joint.

## RECIPRO *handy*

- \*Reciprocating Stroke
- \*Toolholder accepts tool shanks from  $\phi 2.0$ -  $\phi 6.35$ mm.

- \*The locking mechanism allows for fixed or free floating operation.
- \*Motorunit incorporates a Self-Cooling Fan.

	RE35 STROKE TYPE	RE55 SPEED TYPE
Reciprocating Stroke	0-6mm	0-2mm
Frequency	420-4,200 strokes/min	700-7,000 strokes/min
Dimensions	Length 140×Height 128mm	
Weight	675g not including connection cord	






## BELT *handy*

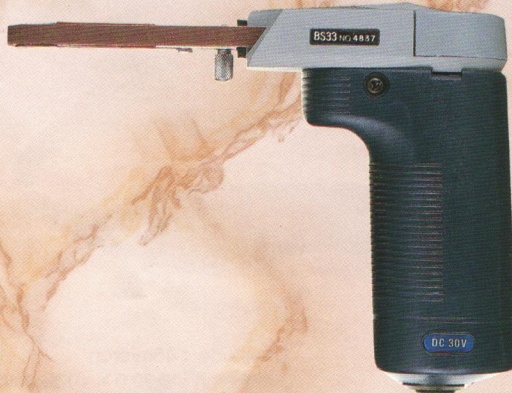
- \*Suitable for a wide variety of applications that range from deburring to polishing.
- \*The different types of Belt Arms allow for maximum versatility.

- \*The Belt Arm incorporates a spring loaded mechanism that enables the rapid changing of abrasive belts.
- \*Motorunit incorporates a Self-Cooling Fan.

### BS33

Belt Speed	1.2-12m/sec
Dimensions	Length 160×Height 119mm
Weight	400g not including connection cord

Thin Belt Arm BS1-100-1		Belt Width : 4-6mm
Standard Belt Arm BS1-100-2		Belt Width : 6-8mm
Angle Belt Arm BS1-100-3		Belt Width : 6-8mm



BS33 comes with a Standard Belt Arm.

# Uhandy

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## ULTRASONIC SYSTEM

### ULTRASONIC *handy*

- \* Light, well balanced and easy to use.
- \* Significantly speeds up polishing and finishing.
- \* Applications include the finishing of plastic moulds, diecasts, presstools, ceramic, nonferrous metals and precious metals.
- \* Ideal for deburring, polishing and removing the hard crust that results from EDM finishing.

### ULTRASONIC CONTROLLER

- \* All the features that are standard on the UC500 Power Controller.
- \* Incorporates an automatic feed back system that adjusts the frequency depending on the tool being used.
- \* The UC550 Ultrasonic Controller powers the US55 Ultrasonichandy and all handpieces except UM052 (Ultra High Speed)

### US55



Amplitude : 45micron  
 Dimension :  $\phi 29.0 \times \phi 139.0\text{mm}$   
 Weight : 180g not including connection cord

### UC550



Input : AC120V, 220V, 240V, 50 60Hz  
 Output : AC60V, 22.6kHz  
 DC3-30V  
 2 Handpiece  
 Holders (PA31-748)  
 included with the  
 unit.  
 Dimension : W170 X D195 X H110mm  
 Weight : 2.5kg

## OPTIONAL ACCESSORIES

### VARIABLE FOOT CONTROLLER

**VC10**



Optional with  
UC200, UC500 and UC550

### ON-OFF FOOT SWITCH

**FS18**



Optional with  
UC200, UC500 and UC550

### ON-OFF FOOT SWITCH

**FS10** AC100V use only



Optional with  
UC200, UC500 and UC550  
(Primary Connection)

### EXTENSION CURLED CORD

**KE50-113** Length : 2m



For all Handpieces except US55

### EXTENSION STRAIGHT CORD

**KE50-114** Length : 3m



For all Handpieces except US55

### EXTENSION STRAIGHT CORD

**KE50-115** Length : 5m



For all Handpieces except US55

### HANDPIECE STAND

**KQ-803**



Rubber Stand

### HANDPIECE HOLDER

**PA31-748**



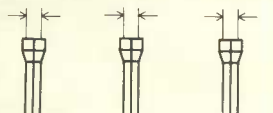
Adjustable in the  
range of 0°, 45° and 90°

## COLLET CHUCK

For the following Handpieces:  
Standardhandy, Slenderhandy,  
Anglehandy (UM216 and UM217)



φ2.35 φ3.0 φ3.175mm



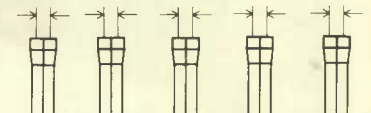
KP-036B KP-032B KP-033B

For the following Headunits:  
UT01, UT02, UT06, UT07,  
UT10, UT11, UT12

For the following Handpieces:  
Heavydutyhandy



φ2.35 φ3.0 φ3.175 φ6.0 φ6.35mm



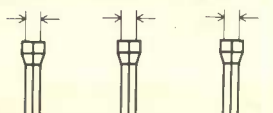
KP-061 KP-062 KP-063 KP-060 KP-

For the following Headunits:  
UT03, UT13

For the following Handpieces:  
Anglehandy (UM215)



φ2.35 φ3.0 φ3.175mm



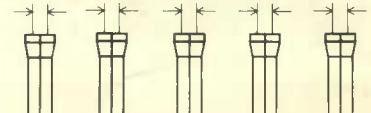
KP-021 KP-022 KP-023

For the following Headunits:  
UT05

For the following Headunits:  
UT14



φ2.35 φ3.0 φ3.175 φ6.0 φ6.35mm



KP-121 KP-122 KP-123 KP-126 KP-127

## CONTACT...



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- The specifications and designs in this catalogue are subject to change without notice.
- As the photograph is printed, the colors are slightly different from the actual ones.
- Please read the Operation Manual before using the equipment.

CA91-003