

# **Technical Specifications**

Model: Kanta-100F Auto Abrasive Cutter

Space	1.5m x 1m x 2m (W, D, H) or more
Electric	3 phases, 220V
	Electricity circuit breaker
Coolant	N/A
Remark	- Space of movement
	- Air facility for hydraulic/air vice (Offer by user)

#### Kanta-100F, Auto Abrasive Cutter

Kanta-100F is an exclusive cutting device for metallography using 10"/12" abrasive wheel for various materials such as metal, plastic, ceramic, composite material, etc. Kanta-100F has user convenience using LCD Touch screen and can be used as digital and manual type. Kanta-100F can also be changed as digital type for set-point saving and motor spin speed depending on the materials. The vice can be moved in full detail using a joystick for an accurate specimen setting, and the precision control motor cuts a specimen automatically.

#### **Features**

- Optimum point of cutting to mount a specimen quickly & accurately using automatic vice
- User convenience control using 5.6" TFT LCD Touch screen
- Memory setting & saving (Cut-off speed, Oil, Lamp On/Off, Acceleration & Retardation time, Cut-off load, etc.)
- Maximized transparent glass on the upper and front side to observe the blade part
- Automatic cutting using high precision servo motor
- Emergency stop for user safety
- Digital type control for motor spin speed
- ALC (Automatic Load Control)
- Stage moving for user convenience using joystick



#### 1. Frame Specification

Electric: 220 V, 60Hz, 3 phases, 15A

Motor: SIEMENS waterproof motor 2.2kW

Emergency stop button

Wheel spin: Max. 3,500RPM (Digital type control)

Wheel size: 10, 12"

Standalone type

Automatic door lock

Large transparent & tempered polycarbonate cover

Sliding type front door

ALC (Automatic Load Control)

Color LED lamp to observe process

One touch vice

Slanted base frame lean for good drainage

Cutting size: Plank - 150mmW x 100mmL, Rod -80mm (10" standard)



## 2. Specimen Lock-up Table

4-ways movement and lock-up vice

T-slot bed

4-way rotation vice head

Stage Y-axis automatic control

Y-axis speed range: 0.005 ~ 5mm/sec(0.005 mm/step)

Y-axis stroke: 250mm

## 3. Digital Controller

Control panel: 5.6" TFT LCD Touch screen(640x480)

Data base: 5 storage space

X, Y-axis moving position setting (Option: X-axis)

Joystick position movement

Joystick high & low speed setting

Joystick high & low control button

Touch button: START, STOP, Coolant On/Off,





- Sleep mode (Power down, Logo display)
- Automatic breaker: Cut off completion, Cover open
- Automatic set-point saving
- Start/Stop, Coolant, LED lamp On/Off
- Specimen setup and setup value saving
- Cut off condition setting and saving according to specimen tyr
- Manual spin & cutting speed setting
- Trouble and error display
- Automatic sequential cutting on a cycle by cycle cutting control (X-axis automatic selection)
- Feeding rate control
- Automatic load adjustment
- Spin speed: 4 Digit digital
- Cut off position: Digital display (Minimum unit: 0.001mm)
- Emergency stop



#### 4. Service and Remark

- 1 year warranty
- Operation manual (1copy)
- Installation and education at the shipping place (3 hours)
- Coolant oil and tool(Spanner, Fixture stick, Wrench, Tool box)

# **Option Part**

### 1. Cooling device and Foreign substance separator

- High pressure coolant pump (Discharge: 40 Liter/min)
- Forced circulation
- Sludge removal filter
- Steel scrap removal using permanent magnet
- Internal outlet line

#### 2. Air grip vice (User arrangement: Air supply system)

- 2 air cylinder each
- 2 air solenoid valve each
- Air switch installation
- Maximum force: 80kg



#### 3. Hydraulic vice (User arrangement: Air supply system)

- 2 air cylinder each
- 2 air solenoid valve each
- Air-Hydraulic booster installation
- Lock / Unlocking switches installation
- Maximum force: 500kg



### 4. Automatic cleaning

- Automatic cleaning using water splash
- Cleaning capacity: 40 Liter/min
- Cleaning range: Horizontal 360degree, Rostro caudal 240degree



### 5. Stage X-axis automatic control

- X- axis moving range: 50mm
- X-axis speed range: 0.005 ~ 500mm/min
- Motor: 100W Servo motor
- Control accuracy: 0.01mm
- Continuous cut-off range: Maximum 50mm, Unlimited amount

### 6. Stage X-axis manual control

- X-axis moving distance: 50mm
- X-axis speed range: 0.005 ~ 500mm/min
- Manual handle control
- Control display accuracy: 1mm gradation seal

#### 7. 3-color light bar to check out operation

- Green light: Standby
- Red light: Operating
- Orange light: Occurrence of malfunction