ION WIPER that incorporates a high-frequency AC type lonizer and a built-in air curtain to maintain workplace cleanliness, along with highly efficient removing static electricity, dust removal, and dust collection in a single unit box.



Creceed ION WIPER





A4•A3 Desktop Clean Unit

ION WIPER prevents defects before they have a chance to occur due to electrical charges and dust adhering LCD, molded plastic, electronic, and other components. This model provides charge removal, dust removal and a dust collection box in a new design. This small box configuration improves workspace economy and work efficiency, as well as quality and productivity.



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An air curtain inside the box creates a local clean





Static electricity removing unit "Ionizers"

These static electricity removing unit "lonizers", which boast a history of performance and reliability, are also available in blow, fan, air gun, and other types. A high-frequency AC system (68,000 Hz) produces outstanding ion generation balance and stability. Low output voltage of approximately 2 kV virtually eliminates noise. (EN55011: Satisfies 1998 Group1 Class A.)



Perfect for desktop operation

200 mm [7.9 in] wide, 285 mm [11.2 in] deep, 333 mm [13.1 in] high A4-size type ion wiper. Installation of a single unit reduces charge removal and dust removal equipment running costs and production costs, while saving work process space. Perfect for allowing a single operator to perform cellular production within a desktop space. An ion wiper that creates the production facility of the future, today.



Supports in-line production

Insertion of a workpiece activates an air curtain at the top of the box front and sides, which isolates the interior from the work site. This eliminates worries about dust scattering after blowing. Transparent anti-static covers on the sides provides good visibility during operations when required. The side covers can be removed for an in-line setup for even better operational efficiency time.

environment without scattering of post-blow dust.



Charge removal performance^{Note}

1000V→100V Sec (0.5 MPa [72 psi], 50 mm [1.969 in])

Note: Under Koganei measurement conditions.



Output terminal (No-voltage a contact 24 VDC 2 A max)

- ERROR (Emergency stop) Conduction when there is an lon wiper error stop.
- ION END (ionizer operation ended)
- Conduction for about 0.2 seconds when ion air blower is ended. Can be used for an operation count or other process management.
- ③ VAC START (external device operation) Conduction during the period from workpiece insertion to process end. Can be used to sync operation with an external dust collection device, etc.
- Ari IN port (\$\$ mm [0.315 in] quick fitting)



Ionizer operating time switch

Throttle valve (flow adjustment)

Can be used to select one of three settings (1 second, 2 seconds, continuous) to suit the workpiece.

Reset button

For Ionizer

This button can be used to reset after an error stop.

Exhaust duct

Exhaust outlet for collected dirt. The piping port outside diameter is ϕ 76.3 mm [3.004 in] (recommended exhaust host nominal diameter: ϕ 75 mm [2.953 in]). If you have a dust collector, select the type without blower fan.

- Built-in dust collection blower fan type (A4-size type: DTY-WCM-S; A3-size type: DTY-WCM-L)
 Without blower fan
 - (A4-size type: DTY-WC-S; A3-size type: DTY-WC-L)

Ion wiper operation steps Inserting a workpiece sequentially executes each function. **Operation sequence** (Workpiece insertion) Dust collection blower fan start (External device operation signal ON) 2 (Air curtain operation) Select from among: 1 second. **Ionizer** operation 2 seconds, continuous (Error signal and stop when an ion wiper abnormality occurs.) 4 **lonizer stop** Ionizer operation end signal output for approximately 0.2 seconds Air curtain stop

Blower stop

 Dust collection blower fan stop (External device operation signal OFF)

Workpiece removal — Charge removal and dust removal operation end

* For details about operation steps, refer to page 56.

A3-size type that's perfect for large workpieces



Two lonizers built into a unit with an installation area of 400 (W) \times 366 (D) [15.7 (W) \times 14.4 (D)], which is just about A3-size.



Examples of ion wiper uses



Ion wiper operation steps explained

Operation Example: Ionizer operation time setting: 2 seconds. Dust removal blower built-in type.

Inserting a workpiece executes each function in the sequence illustrated below.

* Steps ① to ② (Sensor detection \rightarrow Blower operation \rightarrow Air curtain operation \rightarrow lonizer operation start) are executed in approximately 0.5 seconds.



A4 Type: Ion Wiper

DTY-WC-S (Without blower fan)

DTY-WCM-S (Built-in dust collection blower fan type)



Specifications

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Model			DTY-WC-S	DTY-WCM-S		
Blower fan			None	Built in		
Power supply			100 VAC ±10% (50/60 Hz)			
Consumption current mA		Approx. 650	Approx. 700			
Built-in ionizer			DTRY-ELL01 (1 unit)			
Ion balance ^{Note} V			±15			
Media			Air			
Decay time ^{Note}			1sec(1000V→100V, 0.5 MPa [73 psi], 50 mm [1.969 in])			
Operating pressure range MPa [psi]		0.2 to 0.7 [29 to 102]				
Ionizer set pressure range MPa [psi]		0.05 to 0.5 [7 to 73]				
Port size mr		mm [in]	ϕ 8 [0.315] Quick fitting			
lonizer operating time (switch)			1s, 2s, continuous			
External output	ERROR (emergency stop)		No-voltage a contact (24 VDC, 2 A max)			
	ION END (ionizer operation ended)		No-voltage a contact (24 VDC, 2 A max)			
	VAC START (external device operation)		No-voltage a contact (24 VDC, 2 A max)			
Mass kg [lb]		6.7 [14.771]	7.3 [16.094]			
Other			Ionizer error stop function (with reset button)			
Note: Values measured under Koganei measurement conditions. Values are not guaranteed						

Note: Values measured under Koganei measurement conditions. Values are not guaranteed values.

Dimensions (mm [in])



A3 Type: Ion Wiper

DTY-WC-L (Without blower fan)

DTY-WCM-L (Built-in dust collection blower fan type)



Model			DTY-WC-L	DTY-WCM-L		
Blower fan			None	Built in		
Power supply			100 VAC ±10% (50/60 Hz)			
Consumption current mA		mA	Approx. 600	Approx. 650		
Built-in ionizer			DTRY-ELL01 (2 units)			
Ion balance ^{Note} V			±15			
Media			Air			
Decay time ^{Note}			1sec(1000V→100V, 0.5 Mpa [73 psi], 50 mm [1.969 in])			
Operating pressure range MPa [psi]		0.2 to 0.7 [29 to 102]				
Ionizer set pressure range MPa [psi]		0.05 to 0.5 [7 to 73]				
Port size mm [in]		ϕ 8 [0.315] Quick fitting				
lonizer operating time (switch)			1s, 2s, continuous			
External output	ERROR (emergency stop)		No-voltage a contact (24 VDC, 2 A max)			
	ION END (ionizer operation ended)		No-voltage a contact (24 VDC, 2 A max)			
	VAC START (external device operation)		No-voltage a contact (24 VDC, 2 A max)			
Mass kg [lb]		13.9 [30.644]	14.5 [31.967]			
Other			lonizer error stop function (with reset button)			
Note: Values measured under Koganei measurement conditions. Values are not guaranteed						

values.

Specifications

Dimensions ((mm [in])

Power switch

