



ACTECH
WWW.AI-PART.COM



康德威
KDW
SMT 接料专家

www.smtsplicetape.com / www.ai-part.com

MT-2024 Automatic Nozzle Cleaner CATALOG

To serve global electronics based on innovation

To build the China first brand of KDW SMT accessories





Cleaning Principle:

With its special mechanical design, MT-2024 using hydrodynamic water fragmentation, producing very fine water mist, with the speed of sound of ($V = 360\text{m/s}$) to form a strong momentum jet to the nozzle, nozzle for cleaning at the top of the formation of a continuous field, crushing the internal surface of dirt (the nozzle will not be damaged because of its independent device). During the cleaning process, the used cleaning water (deionized water or distilled water) discharge automatically.

Multifunctional Improved Functions:

1. Easy to operate; with Taiwan TP operation interface and PLC programme control.
2. Pneumatic parts are Japan SMC , this gurantee the stability and efficiency of the machine.
3. Main parts of the machine, like cleaning room; water tank; nozzle and jet head rotation mechanism and installation base are made of SUS304, special parts used SUS316 from Japan, to ensure that the machine will not rust due to the water, to avoid other security risks and get longer lifespan.

Functions:

1. Cleaning capacity; 24 nozzles per load
2. Thoroughly clean the dirt on nozzles which ultrasonic cleaner can not clean.
3. Strong clean power for nozzles ,even the smallest nozzle hole.
4. Very good cleaning effectiveness, extend lifespan of the nozzles.
5. Prevent damages to the coating layer of the nozzle and its reflective plate.
6. Only use DI water or distilled water .
7. Auto clean and dry.
8. Intelligent water storage level detection.
9. Easy operation.
10. Applicable for all kind of mounter nozzles .

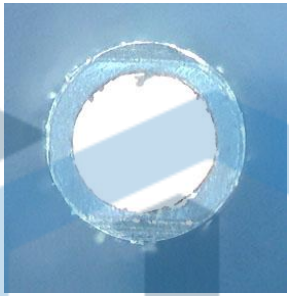
Economic Benefits:

1. Nozzle cost reduction; MT-2024 cleaning machine can clean dirty nozzle very well, to prolong nozzle life.
2. Manual labor/operation reduction; As the machine clean full automatically, the machine complete the whole process by itself.
3. Reduce reject rate and defective rate of products effectively, improve SMT productivity; The dirty and uneven nozzle may easy make the production line cast material or mount shift, and cause poor welding. Use this cleaning machine, it can keep the nozzle always looks new, greatly improve the production efficiency.

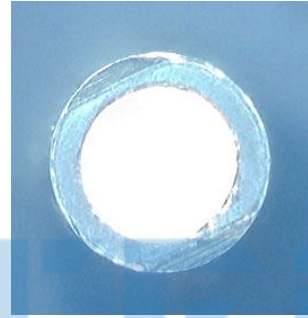
Comparison: With Ultrasonic Cleaning Machine

1. Nozzles easily collide with each other during cleaning process resulting damage to the black surface coating of the nozzles.
2. The cleaning liquid will damage the nozzle, greatly shorten the lifespan of the nozzle.
3. It can not clean nozzle surface and the inner hole thoroughly.
4. It can not clean 01005 and 0201 nozzles very well, as the inner hole of the nozzle is too small, vacuum bubbles cannot be discharged when using ultrasonic cleaning.

CLEANING RESULT COMPARISON: Ultrasonic Cleaner and MT-2024 Nozzle Cleaner



ULTRASONIC CLEANER



MT-2024



ULTRASONIC CLEANER



MT-2024

COMPARISON: MT-2024 Nozzle Cleaner And TNW-1204 (Japan Brand)

Characteristics	MT-2024	TNW-1204
Air Supply	plant compressed air	plant compressed air+ blower
Pressure Range	0.5-0.65Mpa	0.5~0.7Mpa
Jet Pressure	≤0.55Mpa	≤0.55Mpa
Environment	0 ~ 55	0 ~ 55
Cleaning Liquid		
Water Comsumption	≤150cc/Hour 2jet systems	< 200cc/Hour 1jet system
Power	AC220-240V	AC220-240V
Watt	≤0.2KW	≤0.2KW
Nozzle Range	φ 0.07mm	φ 2.0mm
Jig Spec	24pcs	12pcs
Dimension (mm)	655(L) x 560(W) x 475(H)	W 400*D 320*H 450
Weight (kg)	40	35

Automatic Nozzle Cleaner

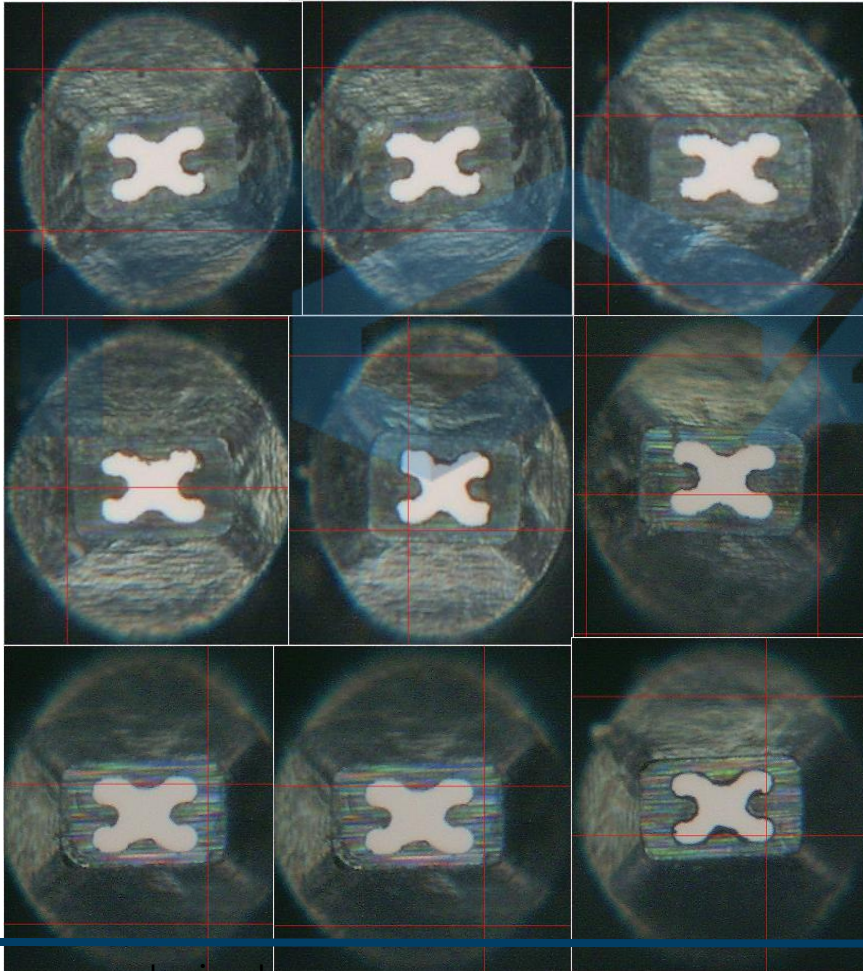
COMPARISON: MT-2024 Nozzle Cleaner And TNW-1204 (Japan Brand)

CLEANING DATA	MT-2024	TNW-1204
(S) Cycle Cleaning Time	clean time 360s(clean and dry time 480s)	clean time 300s(clean and dry time 600s)
Cycle Cleaning Number	24pcs	12pcs
(S) Average Cleaning Time/Pcs	15sec	25sec
Cleaning Results	Clean	Clean
Nozzle Fixed Mode	jig+seperate plate	jig+slide plate
Visible	LDE, can not see but can add LED light	LDE can see,have LED light
RF Cleaning Mode	clean and then dry	clean and then dry

COMPARISON: MT-2024 Nozzle Cleaner And TNW-1204 (Japan Brand)

MT-2024

Panasonic225 after cleaning



TNW-1204

Panasonic225 after cleaning




MAIN TECHNICAL PARAMETERS:

Model	MT-2024
Air Supply	0.5~0.7Mpa
Power Supply	AC220V,1A
Clean Liquid	Purified Water or D.I. Water
Clean Time	2~3min
Dry Time	1~3min
Jet Pressure	≤0.55Mpa
Water Consumption	≤150cc/hour
Nozzle Range	Min. 01005~Max. Inner Diameter \varnothing 2.0mm
Jig Spec	Small Nozzle 24 Holes / Big Nozzle 12 Holes
Machine Size	L665*W555*H475(mm)
Machine Weight	40KG

CLEANING RESULT A

CLEAN TIME	NOZZLE TYPE	BEFORE CLEAN	AFTER CLEAN	REMARKS
60Sec	110S			normal dirt nozzles, when pressure is about 0.5Mpa. 1st time clean about 1 minute; 2nd time clean time reduce to 90s

CLEANING RESULT B

CLEAN TIME	NOZZLE TYPE	BEFORE CLEANING	AFTER CLEANING	REMARKS
60/s	225 /nozzle			normal dirt nozzles,when pressure is about 0.5Mpa. 1st time clean about 1 minute;2nd time clean time reduce to 90s
				
				

PRECAUTIONS:

1. Never open the inlet cover of the water tank during cleaning process, water will be spray out as the water tank has high water pressure.
2. Please use DI water or distilled water, never use mineral water or tap water, mineral substance or bleaching powder in it can bring damage to the nozzles.
3. Blow and remove remaining water in the cleaning tank by using air gun after cleaning.
4. Please check whether nozzles is set right on to the jig hole each time.
5. Please avoid hitting the stretch cyliner jet head when placing nozzle jig into the rotation plate; the level/elevation of the jet heads and nozzle jig is adjusted and set/calibrated by beam sensor in our factory, if hit is not serious, it will not affect it; if hit seriously and affect the elevation, please contact us or our agent for proper adjustment method.
6. Please replace the air filter each year. The regular filter replace time is 1 year but it varies depending on the quality of air supply sources of the factory; If filter turns yellow or black, it must be replaced immediately.