

TIME & ECOLOGY  
**AMANO**



Hosoe Facility in JAPAN

# MISTRIA

MZ series  
MIST COLLECTOR

**ENERGY-SAVING  
SMALLER ENERGY YET THE SAME AIRFLOW  
AS DOES A HIGHER POWER MODEL**



**AGE OF NEW  
ENVIRONMENTAL-AWARENESS**

For an age when a company is rated on its  
environmental awareness!

# ENERGY-SAVING

SMALLER ENERGY YET THE SAME AIRFLOW  
AS DOES A HIGHER POWER MODEL



MZ-10

Just compare  
The motor is smaller yet  
the power is greater in this class

**MZ-10**

Maximum airflow / 8m<sup>3</sup>/min  
(0.4kW)

**MZ-15**

Maximum airflow / 13m<sup>3</sup>/min  
(0.75kW)

**MZ-30**

Maximum airflow / 20m<sup>3</sup>/min  
(1.5kW)

\* Airflow above are at 60Hz

HERE'S WHAT MAKES  
DIFFERENT 1

THE MORE YOU USE MISTRIA - THE MORE YOU SAVE!

## Powerful just with a smaller motor in Size! (in-house comparison)

An innovative fan developed for high-efficiency provides the same powerful airflow as do our prior models of 0.75KW models and MZ-10 (0.4KW) models, saving much more energy than before. The smaller motor yet gives the same airflow to capture mists. And you can save power costs.

## Minimum consumables (in-house comparison)

Consumable parts are now just the primary and secondary filters so you can cut down on running costs. The primary and secondary filters can also be reused just by washing them.



HERE'S WHAT MAKES  
DIFFERENT 2

ONE HANDED, ONE-MINUTE REPLACEMENT OF FILTERS

## Easy Maintenance, No Tools Needed

Even points located higher on the unit such as the top machine section can be serviced.

- Filter replacement without removing the duct
- So easy that anyone can do it.
- Easy access as the cover opens wide
- No screws or parts to lose



1. Release the 2 clamps and open the cover.

Just 15 seconds  
if only replacing the filter.



START



2. Remove the diffusing cone unit



5 seconds



3. Remove the primary filter and replace it with a new one.



10 seconds



3. Remove the secondary filter inside the fan section and replace it with a new one.



15 seconds

Exhaust vent  
Motor terminal block  
Motor  
Holding hook  
Secondary filter  
High-efficiency fan

Primary filter

Cover

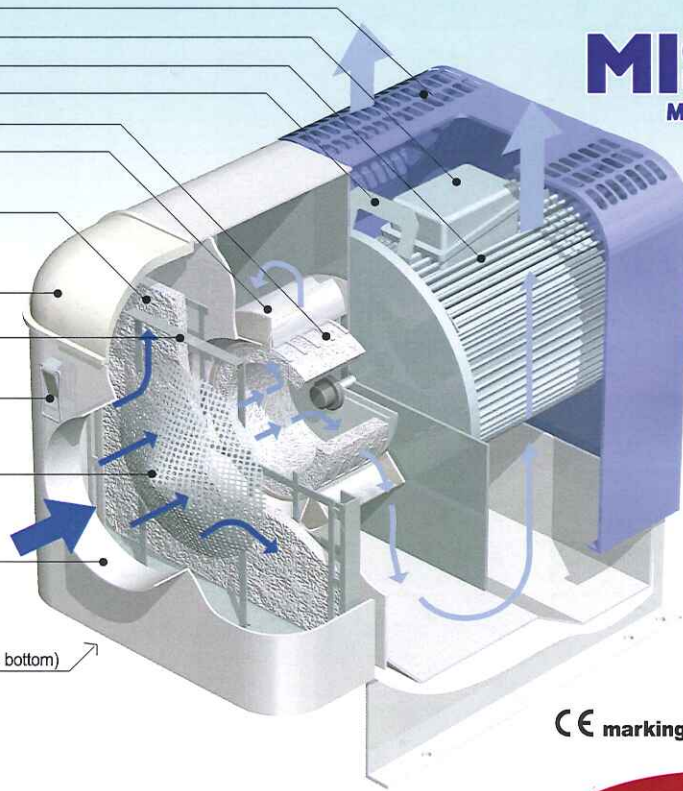
Diffusing cone unit

Clamp

Diffusing cone

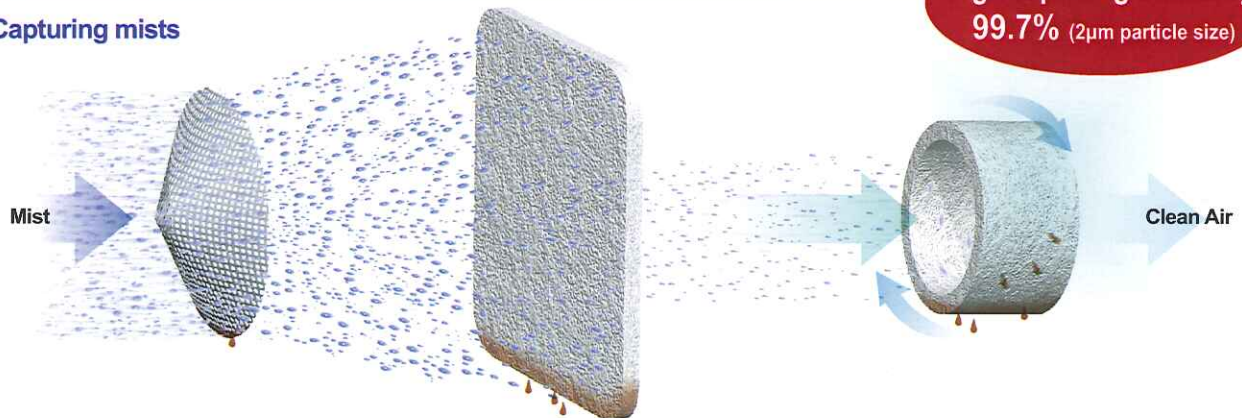
Inlet

Oil drain (two ports at front and rear sides of the bottom)



CE marking support (except MZ-30)

### Capturing mists



High capturing efficiency  
99.7% (2µm particle size)

#### 1 DIFFUSING CONE (Patent pending)

Diffusing cone controls the airflow while diffusing air containing mists against the entire area of the primary filter. Sudden reversal of the airflow provides "collision effect," to efficiently separate cutting chips from large spray particles.

#### 2 PRIMARY FILTER

Relatively large mist particles in the air are captured at the entire surface of the filter, which has an ideal perforation to provide balanced operation between filter performance and cycles of filter replacement.

#### 3 SECONDARY FILTER (Patent pending)

Located at the back of the fan, the secondary filter rotates in sync with the fan, filtering and condensing fine mists, followed by centrifugal separation. The collision effect brought by high-speed rotation of the secondary filter is high enough to separate fine mists.

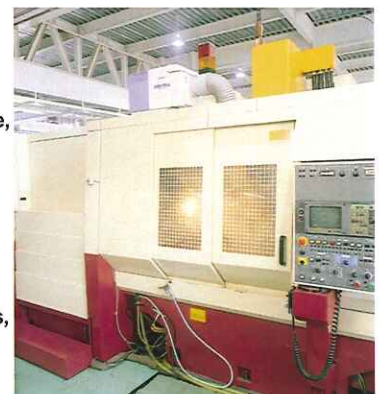
### Afterfilter (Option)

Install and use the optional afterfilter when the sucking of oil mist of highly concentrated water soluble mist is required.

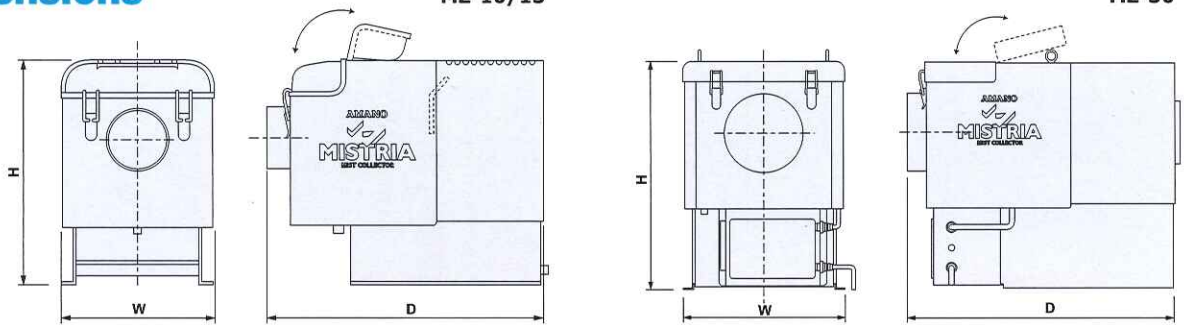


### APPLICATIONS

- MACHINE TOOLS  
NC, CNC lathes, general-purpose lathes, machining centers, NC mills, mills, electric discharge machine, thread grinding machine, internal cylindrical grinding machine.
- SPRAYING JOBS  
washing, anticorrosion, oil film application, cooling
- OTHERS  
Oiling bearings on large machines, drawing die process, bleeding pneumatic cylinders, lens chamfering, lens polishing, etc.



## ■ Dimensions



## ■ SPECIFICATIONS

MISTRIA Models listed below deliver the same airflow as do our prior models, with much smaller power consumption

Model	MZ-10	MZ-15	MZ-30
Power (Volts, Hertz)	200 volt 3-phase on both 50/60 Hz (220 volt 3-phase power can only use 60 Hz)		
Output (kW)	0.4	0.75	1.5
Maximum capacity (m <sup>3</sup> /min)	50Hz	8.3	20 (Inverter control)
	60Hz	10	
Maximum static pressure (kPa)	50Hz	1.0	1.8
	60Hz	1.3	
Noise (dB[A])	72±2 or less		
Primary filter	Polyester (1 sheet)		
Secondary filter	Polyester (1 sheet)		
Collecting efficiency	99.7% (soluble oil mist of 2μm or larger)		
Collecting mist	Water soluble mists (use the optional after-filter for oil mists)		
Suction temperature	Max. intake temperature 75°C (Temperature around the motor should not exceed 40°C)		
MAX. intake temperature(°C)	0~40		
Power cord	Option (4-core)		
Suction inlet diameter (mm)	φ 123	φ 148	φ 198
Oil drain	16mm dia. (two locations), no threads (with hose inserted)		
Standard accessories	Antivibration rubber 4 pieces		
	spare filters 2 sets (two each of primary and secondary filters)		
	oil drainage hose (5 meters long and 15 mm in diameter) 2 hose clamps		
Size W × D × H (mm)	306 × 556 × 450	356 × 581 × 460	407 × 685 × 575
Weight (kg)	27	33	63
Paint color	JPMA J11-833 (main unit Y25-90A, exhaust box U77-60L)		

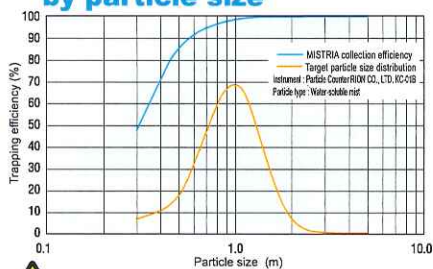
\* Listed are for standard units, and those may change, depending on custom requirements.

\* The configuration of CE certified model differs from that of standard model.

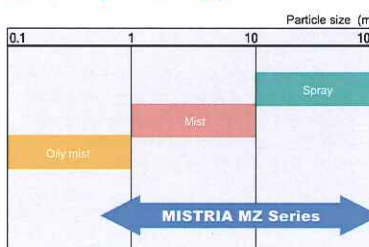
**Amano self declares that the models are in compliance with CE Specifications for low voltage directives (only for MZ-10/15) Other standards apply accordingly but with no specific approval.**

\* Please contact us concerning power-supply specification.

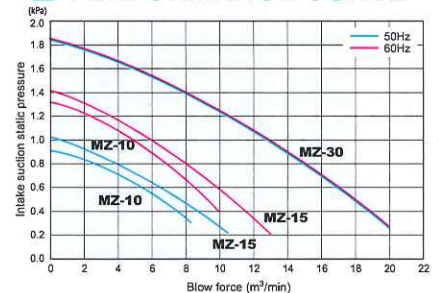
### ■ Capturing efficiency by particle size



### ■ Scope of application



### ■ PERFORMANCE CURVE



### For Your Safety

- Read OPERATION MANUAL very carefully prior to operation of your mist collector.
- Use this machine for the purpose of suctioning in water-soluble mist and oil-based mist.
- If suctioning in oily mist, please install the after-filter (option).
- DO NOT suck the following materials:
  - Inflammable material: Gasoline, thinner, benzene, kerosene, paint, etc.
  - Powdery dust : fumes
  - Igneous materials : cigarette butts, ashes, etc.
  - Others : water, steam and chemicals
  - Oil and mist of low flash point (80°C or less).
- DO NOT use your mist collector at or near a place where inflammable, explosive or corrosive fumes, smokes or gases can stay stagnant.
- Always secure GND for protection from electric shock.
- Make sure that your pipe work is straight not to allow oil to accumulate, with a proper diameter and shortest length to your mist collection.
- Always turn off the power before performing inspections or replacing filters and other parts. Always make sure that fan has completely stopped rotating before starting work.

Specifications and descriptions contained in this catalog may be subject to change without notice.

Please direct any questions to:

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