

# Introduction to Micronfilter & KUBE

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# OUR PARTNER: MICRONFILTER

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*MicronFilter, an esteemed Italian company, boasts a legacy of over 50 years in operation. They are a proud member of the Coral Group S.p.A., a consortium comprising more than 32 companies.*

*MicronFilter's mission is to advance in innovative designs, cutting edge air and coolant filtration systems, tailored for all types of machine tools. They are committed to building a work environment where quality and efficiency always comes first.*



# What is Oil Mist?

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Oil mist is generated when machine tools spray pressurized oil and coolants onto metal components to maintain optimal temperatures during milling, drilling, turning and grinding processes.

The presence of oil mist poses significant health hazards to machine operators and contributes to the deterioration of the overall workplace environment.



Inhaling oil mist can harm your lungs (causing coughing, wheezing, and possibly asthma), and skin contact can lead to irritation and dermatitis.



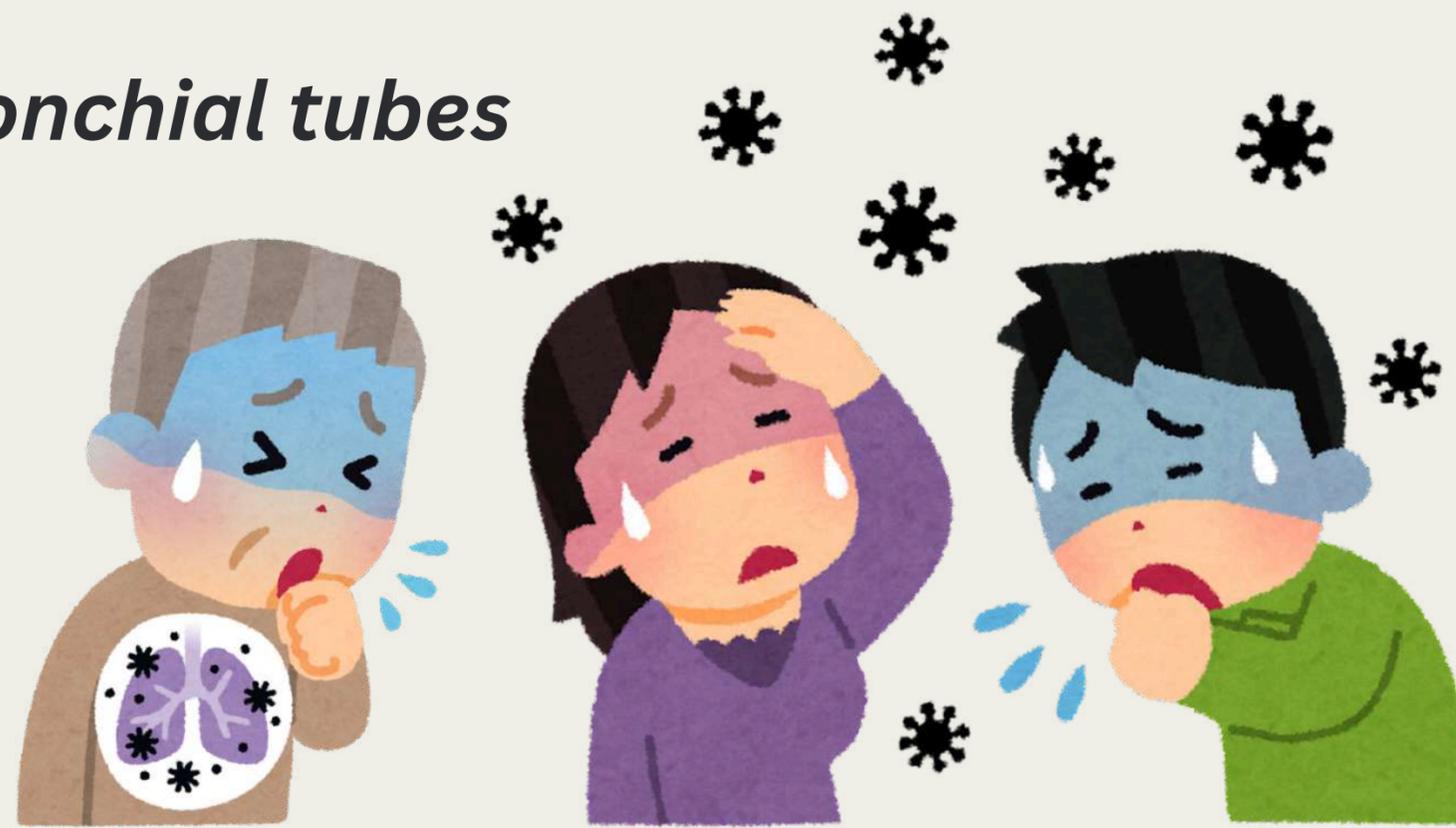
# Hazard of Oil Mist

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➤ **Oil Mist > 3.5 Microns**  
*Will be separated by the throat and nasal cavity*

➤ **Oil Mist 1 > < 3.5 Microns**  
*Remains in the throat, lungs and bronchial tubes*

➤ **Oil Mist < 1 Microns**  
*Absorbed into the bloodstream*



# Additional Hazards

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**Slippery walkways increase the risk of accidents and pose a safety hazard in the workplace.**



**Accumulation of oil on surfaces presents a potential fire hazard.**

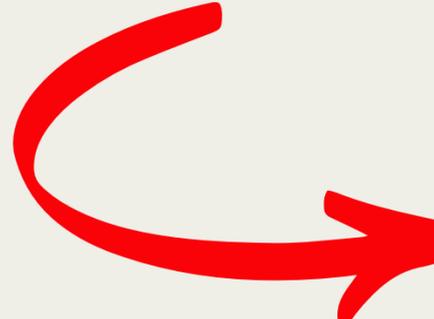


**Oil mist can infiltrate electrical control panels, potentially leading to malfunctions or system faults.**



# Mist Collector

# KUBE Series

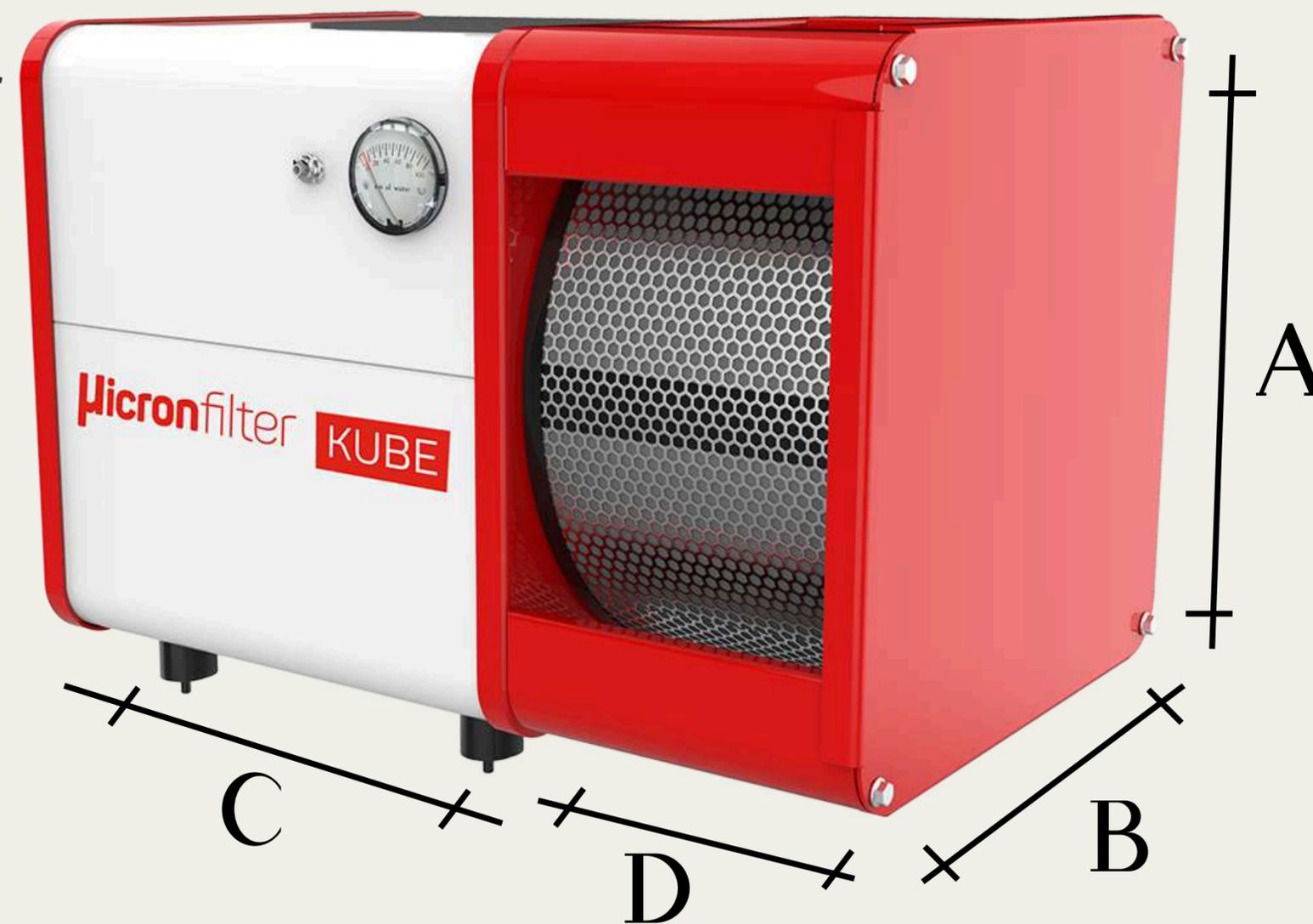


Mist Collectors are specially designed devices used to capture and remove airborne liquid droplets, like oil mist or coolant mist, from industrial environments.





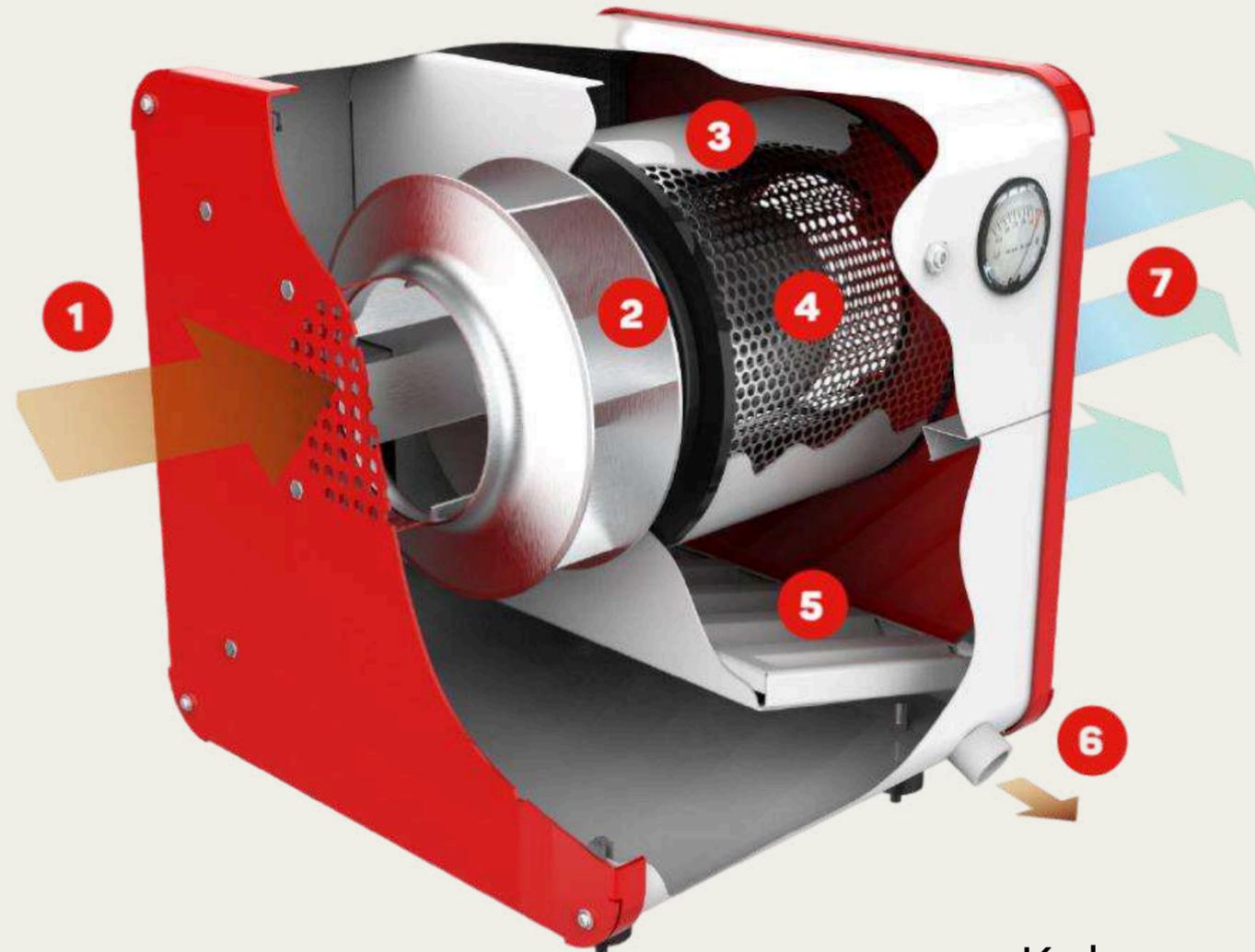
All motors in the Kube series are energy-efficient and deliver performance comparable to higher-priced alternatives.



## Main Dimensions

Model	<b>A</b> (mm)	<b>B</b> (mm)	<b>C</b> (mm)	<b>D</b> (mm)	Air Flow (m <sup>3</sup> /h)	Power (Kw)	Filtering Area (m <sup>2</sup> )	Ø Inlet (mm)	Noise Level (dBa)	Weight (Kg)
<b>Kube 400</b>	335	331	349	216	400	0,25	2	120	69	25
<b>Kube 800</b>	468	468	450	268	800	0,37	6	150	69	40
<b>Kube 1200</b>	468	468	450	268	1200	0,55	6	150	69	45
<b>Kube 2000</b>	610	610	552	473	2000	0,75	12	200	69	60
<b>Kube 2500</b>	610	610	552	473	2500	1,1	12	200	69	65

# KUBE - Stages of Filtration



1. Oil Mist Entry
2. Backward-Bladed Impeller
3. Labyrinth prefilter
4. Coalescing prefilter
5. Cellulose filter cartridge
6. Recondensed oil drainage
7. Purified air outlet

Kube uses an inverted-blade impeller to direct contaminated air through a 4-stage filtration system.

The labyrinth prefilter captures larger particles while the coalescing prefilter removes micro-particles of pollutant and extends the life of the main cartridge filter.

Re condensed oil is recovered from the drainage pipe.

# Kube benefits



Efficient for oily mists and fumes

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Flow rate from 400 to 2,500 m<sup>3</sup>/h

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Easy to integrate into tight spaces

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Reduced energy consumption

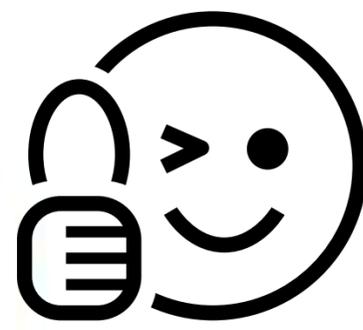
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Standard filter clogging pressure gauge

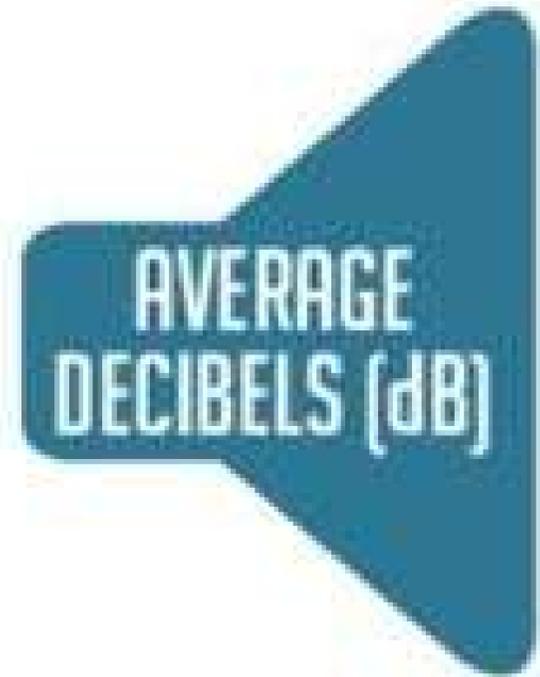
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Vertical or horizontal installation

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## COMFORT FOR YOUR EARS!



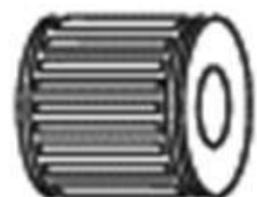
**KUBEs deliver reliable performance at just 69dB (without HEPA)—quieter than a typical conversation. Designed for industrial environments where noise control matters, KUBEs help maintain a more comfortable, focused workspace without sacrificing efficiency.**

S/N	Features	Competitors Brand	KUBE	Advantage
1	Working Principal	Centrifugal type	Centrifugal type	N/A
2	Stages of Filtration	Foam Based Filter (Not certified under ISO)	Stainless steel pre-filter, re-usable coalescence cloth filter, primary ISO certified cartridge filter	KUBE's 3-stage filtration eases the load on the main filter, lowers maintenance needs, and delivers air that's 99.98% pure.
3	Power Consumption	0.55 KW Motor (400 m3/hr capacity)	0.25 KW Motor (400 m3/hr capacity)	55% saving in Power
4	Impeller	Standard	Backward Blade Impeller	Does not cause imbalance and hence is vibration-free. Does not affect the work piece in any way.
5	Filtering Surface	Only one stage, hence lesser area	3 stages mean the filtering area is more	More efficient and user friendly
6	Maintenance	Requires 5 hours	Can be done in 10 minutes	Saves time
7	Consumables	Foam filter cannot be re-used. Hence it is a consumable.	The cloth filter is washable and reusable. The stainless steel pre-filter only needs cleaning.	Lesser maintenance cost in the long run.

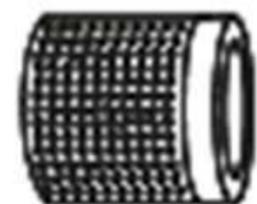
# Accessories for KUBE



**PREFILTER -  
POLYPROPYLENE ABSORBENT**



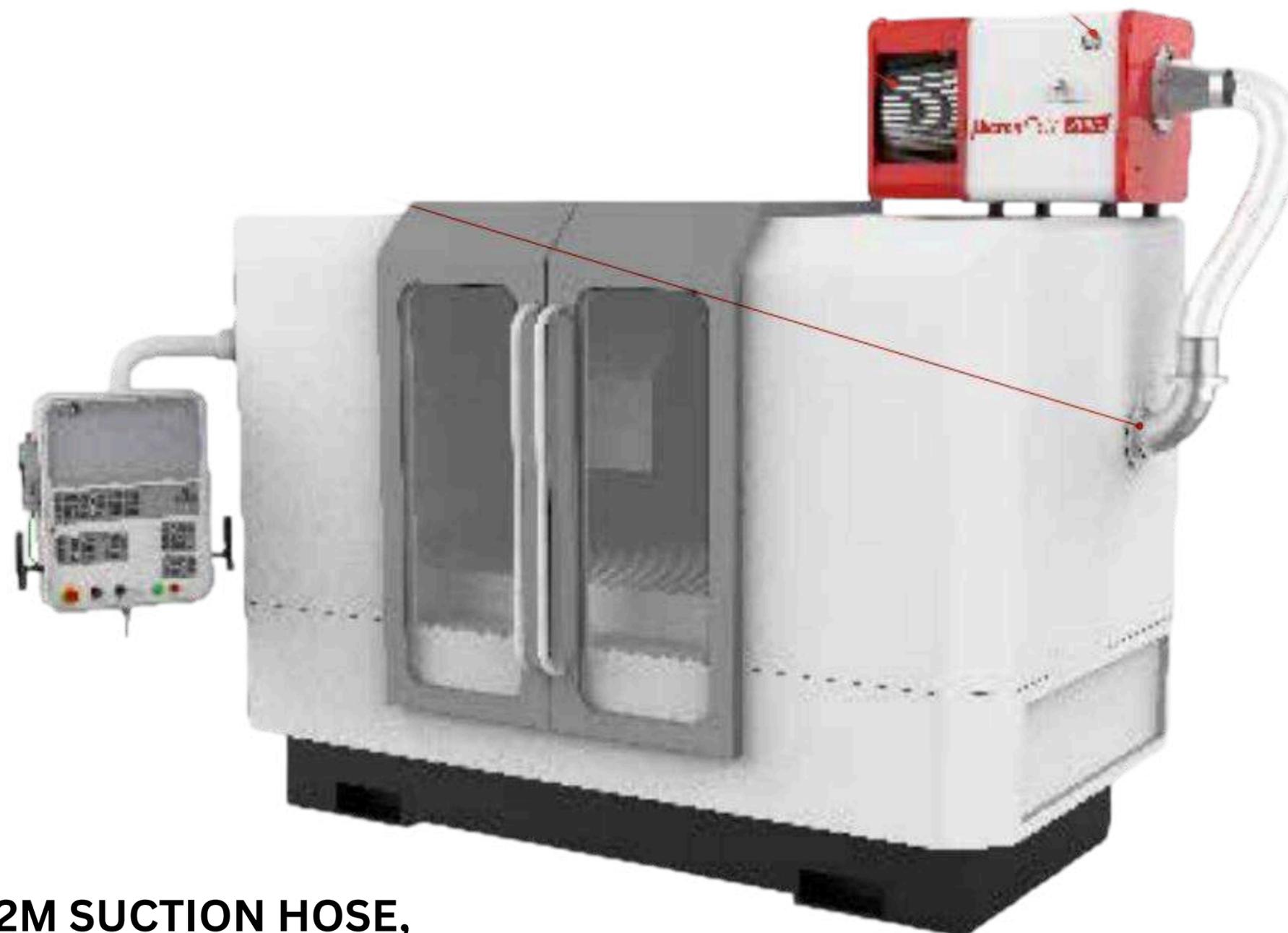
**INTERNAL FILTER  
CARTRIDGE - CELLULOSE**



**POST FILTER CARTRIDGE - HEPA**



**HORIZONTAL INSTALLATION KIT:  
INCLUDES 2 FLANGED SLEEVES, 2M SUCTION HOSE,  
3M DRAINAGE PIPE, CABLE TIES, HOSE CLAMP**



**\*\* Able to be purchased separately**

# Application of KUBE



*Advanced filtration for smoke and dust*

# Application of KUBE



*Recycling Purified Air*



THANK  
YOU

**Contact us for more information!**

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