

COOLBIT



Air Defense Solution Your Health Shield



IAC-7025

BAC-2021

HAC-7025

The Spark in the Auditorium

In the summer of 2019, sunlight streamed through the tall windows of the Taichung Municipal Industrial High School auditorium, illuminating the youthful faces filled with energy and hope.

Inside, the COOLBIT seminar was in full swing. The seats were packed with eager mechanical engineering students, their eyes shining with longing for the future.

Their laughter and conversations intertwined into a vibrant rhythm of life, making the entire hall feel alive.

On the stage stood Founder Shih, gazing at the young audience, waves of emotion rising in his heart.

He recalled the CNC machining clusters of Taichung—the familiar land where the air was always heavy with the scent of metal and machine oil, where workers labored day after day in noisy workshops.

Perhaps one day, these very students would step into that same world, continuing the lifeline of the industry with sweat and wisdom.

Yet, within him stirred a deep unease. They deserved a better environment, a bigger stage. At that moment, Founder Shih turned toward Director Huang of the Ministry of Digital Affairs, his eyes resolute.

He whispered, “We must do something—to give these young people a different kind of beginning.”

Director Huang nodded, as if she understood exactly what was in his heart.

That very day, Founder Shih announced a bold decision—the launch of the “Ten-Million Love & Care Initiative”, channeling resources into the future of these young students.

It was more than a donation—it was the planting of dreams.

He hoped that these mechanical students could learn and grow in a better environment, and with their own hands, build a future of brilliance.

From that day onward, the journey of a machine quietly began.

It was not merely a cold piece of equipment—but a vessel carrying the Founder’s expectations for the younger generation, and the emotions born in that very auditorium.

This machine seemed to have life, telling a story about love and the future.

Proudly Manufactured in Taiwan

Durable Mechanical Structure

All-Metal Construction with 10-Year Guarantee

About

2000年

Established the COOLBIT brand.

2003年

Designed the Mechanical Liquid Cooling Series (AH Series).

Introduced concepts more than a decade ahead of today's AI and GPU liquid cooling systems.

2008年

Certified by SGS and CE, affirming international standards compliance.

To this day, COOLBIT remains a leading brand across the Taiwan Strait.

2012年

Launched the first generation of the Air Hazard Prevention Machine.

2014年

Visited the Milan Cathedral in Italy, receiving the "Angel's Mark."

A decade later, this inspiration evolved into the Health Shield.



2024年

Released the new generation of the Health Shield.

2025年

Upholding the philosophy of Dr. Kuo Shou-Jen, a respected leader in the medical field,

COOLBIT continues to optimize and promote the Air Hazard Prevention Machine – Health Shield.

NOW Awarded official recognition by the Ministry of National Defense.

Designated as part of the Military Procurement Standards after rigorous evaluation.



In cities, buildings,
or indoor spaces,
environmental
health and safety come first.

Executive Consultant
陳文亮 教授



Craftsmanship in Design,
Consistent Excellence.

Creative Director
施禮羽



Lung health is irreversible.
Clean air is the cure.

Chief Consultant
郭守仁 醫師

Challenge 1

The Risk of Cross-Infection

In an office without the Air Hazard Prevention Machine, droplets spread freely — like **"indirect kissing."**



Challenge 2

Vehicle Emissions Everywhere

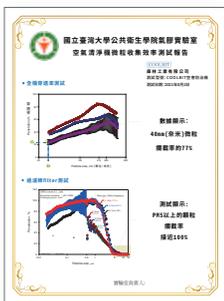


Toxic Vehicle Fumes — Invisible, Inescapable.

Nox Sox CO PM2.5 NMHC



National Taiwan University Laboratory Test Report



「Complete Machine Testing | Verified by NTU Laboratory」

- The NTU Aerosol Laboratory conducted full-machine testing and provided the official report.
- In 2024, the NTU Circular Innovation Materials Pilot Laboratory was inaugurated and selected COOLBIT equipment.

Legal Regulations

OUT DOOR

Article 15, Regulations on Air Pollution Control Facilities for Construction Projects

During the construction period, the project owner shall install a cyclone separator, baghouse dust collector, or other effective dust collection equipment at exhaust shafts or air outlets that emit particulate pollutants.

2021
07 | Taichung Environmental Protection Bureau
Outdoor Air Purification Application



09 | Shui-Nan International Convention and Exhibition Center
New Construction



2023
11 | Taichung Metro Transfer Station
New Construction

11 | Taichung Football & Recreation Park
New Construction



2024
10 | Taichung District Prosecutors Office
New Construction

Taichung City Government Environmental Protection Bureau
Application in Construction Projects.

Reliable equipment, battle-tested for years across construction sites.

IN DOOR

Article 23, Paragraph 1 – Air Pollution Control Act

Public and private premises shall effectively collect various air pollutants and ensure the proper operation of their air pollution control facilities or monitoring equipment.
The maximum operating capacity of stationary pollution sources shall not exceed the maximum treatment capacity of the air pollution control facilities.



2025 – Reed Women’s Empowerment
Public Welfare Organization Workshop



2024.03 – Green Building
Application of Fresh Air Supply



2024 – National Sports Training Center
The Training Hall for Olympic Athletes



2024.09 – Taiwan Cup Coffee
Roasting Competition Venue

Benefit Analysis

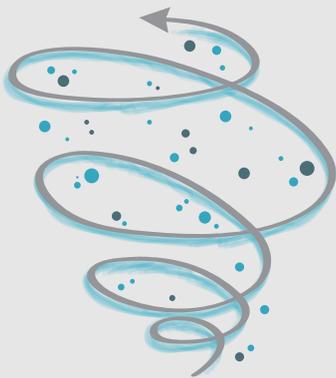
COOLBIT Air Hazard Prevention Machine |

Equipped with 5 Types of Pollutant Purification Capabilities:

Particulate Matter (PM), Volatile Organic Compounds (TVOC), Formaldehyde, Odors (Malodor), Oil Mist / Fume

Purification Efficiency through 4 Mechanical Principles

1. AX Cyclone Separation Technology
2. 3D Negative-Dimension Filter Media
3. Natural Electrostatic Nanofiber Adsorption Filter (absolutely ozone-free)
4. Natural Activated Carbon
 - A. Physical adsorption mechanism
 - B. Chemical reaction: decomposition of formaldehyde and odor molecules



AX Cyclone Metal Separator

Utilizes cyclone separation to remove particulate dust into a collection chamber, making cleaning and maintenance simple and efficient.

3D Negative-Dimension Metal Filter Layer

Porous structure with a porosity of up to 96%. Features:

1. Easy to clean and maintain.
2. Achieves over 90% removal rate for oil mist/fume.
3. Blocks open flames outside the filter, preventing flame penetration.
4. Essential for barbecue restaurants.





Exclusive Highlights | 15 Years Ahead of the Industry

- ▶▶▶ Cyclone Separator
Dust separation without consumables – industry-leading technology.
- ▶▶▶ 3D Negative-Dimension Metal Filter

APA Hotel, Ueno Station, Tokyo
(APA Hotel Keisei Ueno-Ekimae)

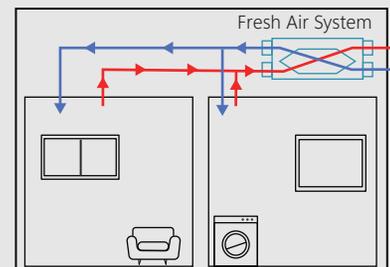


Comprehensive Features

- ▶▶▶ Utilizes low-cost electrostatic polyester fiber filter cotton as the final line of defense, achieving 95% removal efficiency for dust particles above 40 nanometers.
- ▶▶▶ Optionally replaceable with HEPA high-efficiency filter paper to meet market demand, though this compromises the concept of low airflow resistance.
- ▶▶▶ Applies industrial-grade activated carbon usage principles: Different types of TVOCs require different replacement frequencies.
- ▶▶▶ Consumption measured in kilograms or metric tons.

Extended Applications

- ▶▶▶ Pre-treatment solution for cleanrooms
- ▶▶▶ The perfect partner for cleanroom environments



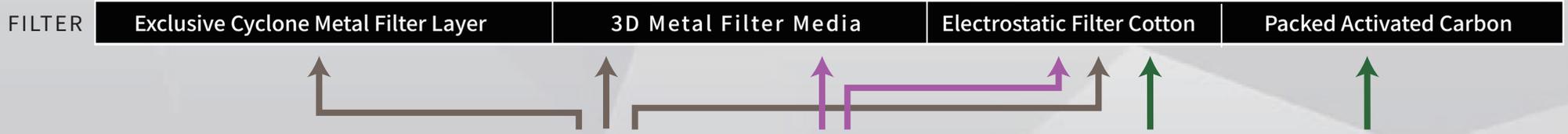
Next-Generation Filtration Media

- Traditional HEPA filters are designed for ultra-clean laboratory environments.
- NVIDIA GB200 has already adopted next-generation filtration media, engineered for real-world environmental conditions without relying on traditional HEPA methods.
- Fresh Air Systems are designed to handle natural environmental air.



Overview of Common Site Pollutants and Control Equipment

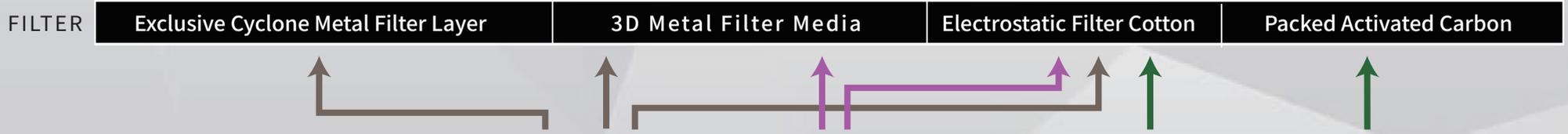
Pollution levels are categorized by color coding:
● Mild ● Moderate ● High Pollution ● Extreme Pollution



Categories	Pollutant Categories	Applicable Models	DUST		Oil Vapor / Oil Mist / Oil Fume		Aerosol			
	Industries \ Pollutants		PM10	PM2.5	Oil Mist	Vehicle Exhaust Fumes	Droplets, Bacteria, Fungal Spores	TVOC	H O C O	Combustion Odors
Government Agencies	Aerospace Industry	IAC-7025	●	●	●	●		●		
	Offices	BAC-2021		●		●		● ●		
	National Defense Units	IAC-7025	●	●		●	●	●	●	
Various Industries	Metalworking	IAC-7025 BW-2000	●	●	●					●
	Laser Cutting Engraving	IAC-7025 PMC-2014	● ● ●	●	●			● ●	●	● ● ●
	CNC	IAC-7025	● ●	● ●	● ● ●	● ● ●				● ●
	Food Factories	IAC-7025	● ● ●	● ● ●	●	● ●	● ●			
	Printing Industry	IAC-7025	●	●				● ● ●	● ●	
	PCB Printing	IAC-7025	●	●	●			● ● ●	● ●	
	Chemical Plants	IAC-7025		●			●	● ● ●	● ●	
	Paper Products Processing	IAC-7025	● ●	●				●		
	Carbon Fiber Products	IAC-7025	● ● ●	● ● ●				●		
Medical Sector	Nursing Homes	BAC-2021	●	●	●	●	● ● ●	●	●	
	Medical Clinics	BAC-2021	●	●	●	●	● ● ●	●	●	●
	Animal Clinics	IAC-7025 BAC-2021	●	●		●	●	● ● ●		
	Biomedical Manufacturing	BAC-2021	●	●			●	●		

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Educational Institutions	Kindergarten	BAC-2021	●	●		●	● ● ●		●	
	Classroom	IAC-7025	●	●		●	● ● ●		●	
	3D Printing Classroom	IAC-7025	●	●		●	●	●	●	●
	Training Workshop	IAC-7025	● ●	● ●	●	●	●	●		●
	Principal's Office Teacher's Office	BAC-2021	●	●		●	●	●	●	
	Art Studio	IAC-7025	●	●	●	●	●	●		
	Makerspace	IAC-7025 PMC-2014	●	●	●	●	●	●		●
	Copy Room	IAC-7025	● ● ●	● ● ●		●		● ●		
Electronics & Technology Industry	Technology Companies	IAC-7025	●	●		●	●	●	●	
	Electronics Industry	BAC-2021		●			●	●	●	
	Offices	BAC-2021					● ● ●			
	Indoor Restaurants	IAC-7025	● ● ●	● ● ●	●		● ● ●			●
Restaurants & Entertainment Venues	Restaurants	IAC-7025	● ● ●	● ● ●	● ● ●	●	● ● ●	● ●	●	● ● ●
	Entertainment Venues KTV	IAC-7025	● ● ●	● ● ●	●	●	● ● ●	● ●	●	● ● ●
	Gyms	IAC-7025	● ● ●	● ● ●	●	●	● ● ●	●	●	
Home Environments Lobby Lounges	HAC-0725		●	●	● ●	●		● ●	● ● ●	

Corporate Social Responsibility Goals

Wish

At COOLBIT, we emphasize the human dimension.

We envision a future where industrial environments, healthcare and nursing centers, educational institutions, public welfare organizations, and professional workplaces are no longer places where people merely “endure” the environment, but where they can breathe freely and strive with confidence in their daily work.

Our Commitment: Together, let us pursue a better and healthier working environment.

[Nation's First] Long-Term & Day Care Nursing Center

Yunlin County Private Filial Piety Community Long-Term Care Institution

Providing residents with proper care and respectful treatment

Praised by Healthcare Staff!

A nurse said:
“Like a clear white cloud
emerging from
within the gray sky.”



Indoor Air Quality Greatly Improved

1. Thoroughly eliminates odor problems in living spaces.
2. Reduces droplet concentration to minimize the risk of cross-infection.

Education & Training Centers



National Sports Training Center

Elite Tennis Training Center

Workforce Development Agency, Ministry of Labor

Education & Training
Vocational Schools
Examination Halls
Practical Training Courses
Classroom Environments

Now

The Nation's First Air Hazard Prevention Machine — Not a Household Appliance!

IAC-7025

Inverter Technology

Patented Product

Industrial Air Cleaner

Air Hazard Prevention Machine
General Purpose

Health Shield Air Hazard Prevention Machine



Features

Effectively reduces dust to the nanometer level, as well as formaldehyde and vehicle exhaust fumes drifting indoors.

Filtration efficiency above 99.9%.

Eco-friendly with minimal consumables, delivering the highest cost-performance value.

Inverter design for energy saving and power efficiency.

Applicable for use in outdoor open sheds.

Product Specifications

Power Supply	Frequency	Power Consumption	CADR	Dimensions
1P / 110V	50/60 HZ	135 W	1100 m ³ /h	500 x 700 x 1700 mm

※ Applicable coverage area may vary depending on the pollution environment. Not suitable for all conditions.

Customer Cases

中央研究院
Academia Sinica

台灣積體電路製造
TSMC

台北101頂級Buffet裝修工程
Taipei 101 Premium Buffet Renovation Project

台中市政府環保局

Taichung City Government Environmental Protection Bureau

Kuozui Motor
TOYOTA製造商_國瑞汽車股份有限公司

AIDC-Aerospace Industrial Development Corporation
漢翔航空工業有限公司

國家運動訓練中心:全國第一家,正式採用
National Sports Training Center: The First in the Nation to Officially Adopt

Harley Davidson 哈雷 桃園旗艦展示中心
Harley Flagship Store
桃園旗艦展示中心

大立光電股份有限公司
Largan Precision Co., Ltd.

台北捐血中心
Taipei Blood Center, TBSF

新日興股份有限公司
SHIN ZU SHING CO., LTD.

豐興鋼鐵股份有限公司
FENG HSIN STEEL CO., LTD.



▲ Taipei 101 Premium Buffet Renovation Project



▼ NTU Circular Innovation Materials Pilot Laboratory



▲ Air Purification for Large School Spaces.

Trusted and Adopted by Leading Institutions

BAC-2021 Inverter Technology Patented Product

Business Air Cleaner

Commercial Model |
Air Hazard Prevention Machine

Health Shield Air Hazard Prevention Machine

Features

- Silent Operation (Low Noise)
- Minimal Power Consumption (Energy Saving)

Applications

- Conference rooms and crowded spaces | Reduces droplet concentration
- Vehicle exhaust and incense smoke | High capture efficiency



Product Specifications

Power Supply	Frequency	Power Consumption	CADR	Dimensions
1P / 110V	50/60 HZ	50 W	750 m ³ /h	410 x 710 x 1480 mm

※ Applicable coverage area may vary depending on the pollution environment. Not suitable for all conditions.

Customer Cases

Empowering Enterprises to Succeed

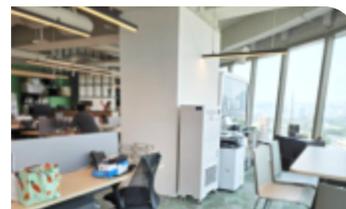
- National Security Bureau: Improved polluted air in underground shooting ranges.
- ASOL Taiwan A* Technology Co., Ltd.**:
Resolved office area air quality alarm issues caused by external pollution sources.
- Mailiao Filial Piety Long-Term Care Center:
The first institution of its kind in the nation to comprehensively improve environmental air quality.



▲ NCHU Department of Veterinary Medicine



▲ Filial Piety Long-Term Care Center



▲ Clean Air Solutions for New Office Spaces



▲ WCC Coffee Roasting World Cup – Taiwan Qualifiers



HAC-7025 Inverter Technology

High efficiency Air Cleaner

High-Efficiency Air Hazard Prevention Machine

Residential High-Efficiency
Air Hazard Prevention Machine



Features

Exclusive filter layer design extends HEPA filter lifespan by more than 10 times, while supporting multiple application modes that can be configured according to environmental needs.

- Consumable-free operation with low resistance, increasing airflow volume.
- Compatible with ducted local dust collection or wide-area purification.
- 5-stage filtration effectively tackles various types of air pollution, ensuring health protection.

Product Specifications

Power Supply	Frequency	Power Consumption	CADR	Dimensions
1P / 110V	50/60 HZ	135 W	600 m ³ /h	560 x 350 x 1310 mm

※ Applicable coverage area may vary depending on the pollution environment. Not suitable for all conditions.

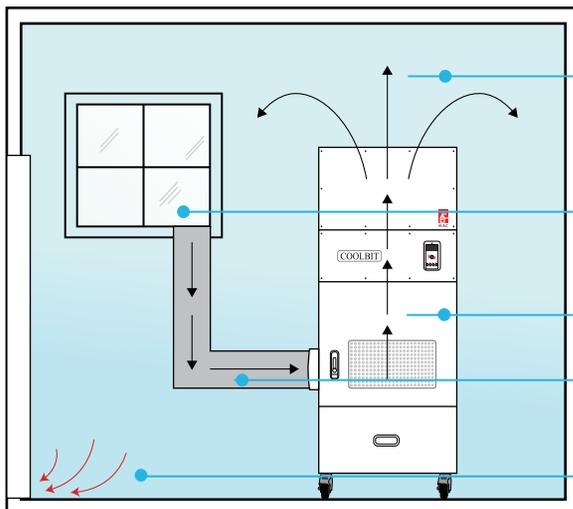
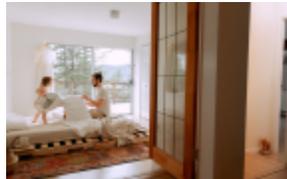


◆ Suitable for Homes / Residential Use



◆ Executive Office

Seed Tennis Academy ▶



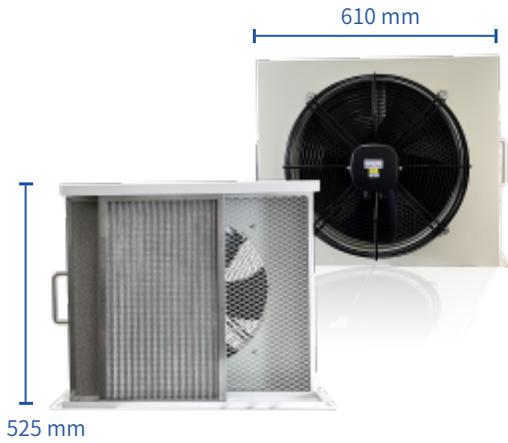
- Continuously supplies purified fresh air to the environment.
- Draws in outdoor fresh air, filters and purifies it, then delivers it indoors.
- Five-stage filtration, adaptable to different environments.
- Configurable duct connections from multiple directions according to site needs.
- Expels carbon dioxide (CO₂) and contaminated air outdoors for effective ventilation.

AOC-6016 (IAC-6016)

Patented Product

Air Oil Collector

Oil Mist Remover
Airflow Filter Unit



Features

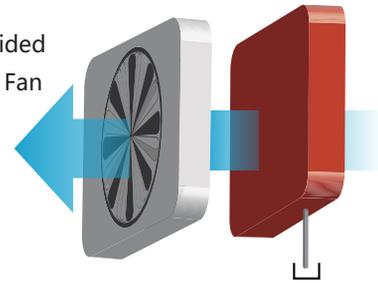
- ✓ The Only Oil Mist Remover for Large-Space Purification
- ✓ Simple / Durable / Maintenance-Free / Effective
- ✓ Flexible installation options based on site requirements: ceiling-mounted, window-hung, or floor-standing.

Product Specifications

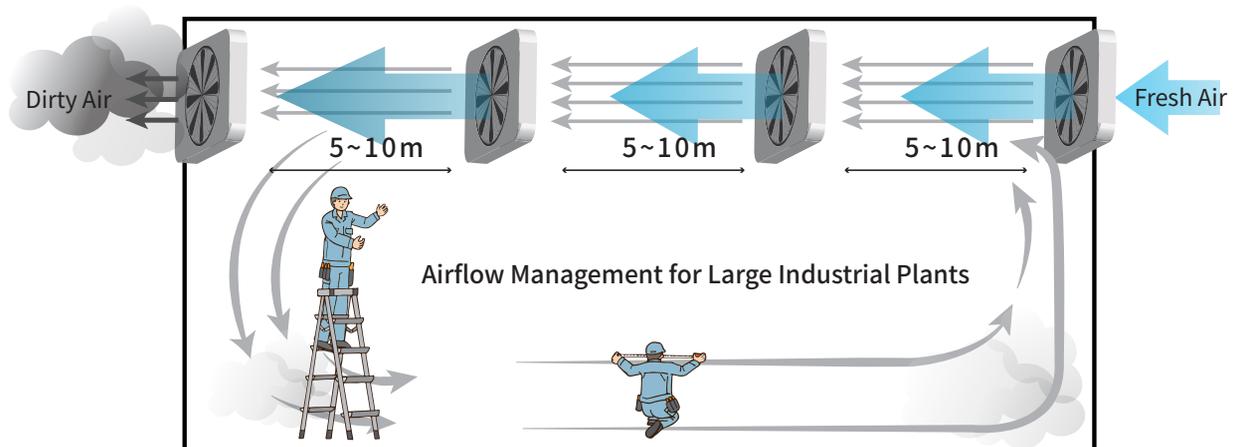
Power Supply	Frequency	Power Consumption	CADR	Dimensions
3P / 220V	50/60 HZ	250 W	4800 m ³ /h	610 x 245 x 525 mm



Airflow-Guided
Circulation Fan



3D Negative-Dimension Metal Filter
Oil mist removal efficiency up to 90%



PMC-2014 (COC-2014)

Particulate Matter Collector

Particle Dust Collector

Suitable for laser engraving machine dust collection and filtration



Features

- ✓ Wide applicability
- ✓ Compact size, easy to place, space-saving
- ✓ Reduces smoke and odor pollution
- ✓ The first-choice model

Product Specifications

Power Supply	Frequency	Power Consumption	CADR	Dimensions
1P / 220V 3P / 380V	50/60 HZ	250 W	4800 m ³ /h	610 x 245 x 525 mm

※ Optional Accessories: Post-Stage Filter Box \ Caster Wheels

BW-2000

Patented Product

Heavy-Duty Industrial Dust Collector



Features

- ✓ Low clogging, powerful suction
- ✓ Ultimate application of cyclone separation technology
- ✓ Delivers up to 100 times the effectiveness of bag-type dust collectors

Product Specifications

Power Supply	Frequency	Power Consumption	CADR	Dimensions
3P 220V/380V	50/60 HZ	1500 W	1980 m ³ /h	800 x 610 x 1760 mm

Note:

The replacement schedule recommended by our company is for reference only, as air quality may vary across different environments. Please assess the pollution level of each user's environment individually and replace consumables accordingly.



Save Energy. Save Water.

Put People First.



COOLBIT

AIR CLEANING SOLUTION

[CONDECT] COOLBIT



Headquarters (HQ):
Taiwan, Taichung



Building 2



Building 3



Mainland China Branch
(Jiangsu)



WEB



LINE

COOLING

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