



# Velum

FAST  
PROTECTION

AIR FILTRATION FOR:

INDUSTRIAL MACHINES  
COOLING SYSTEMS  
ELECTRICAL MOTORS



**NORTHERN**  
MACHINE TOOL SERVICES

Distributor



**Velum:** designed for automation machinery, cooling systems, recycling machines, printers and computers, woodworking machines, PCs, packaging machinery for the food, chemical industry, pharmaceutical and textile industries, refrigeration equipment, robots and CNC machines.



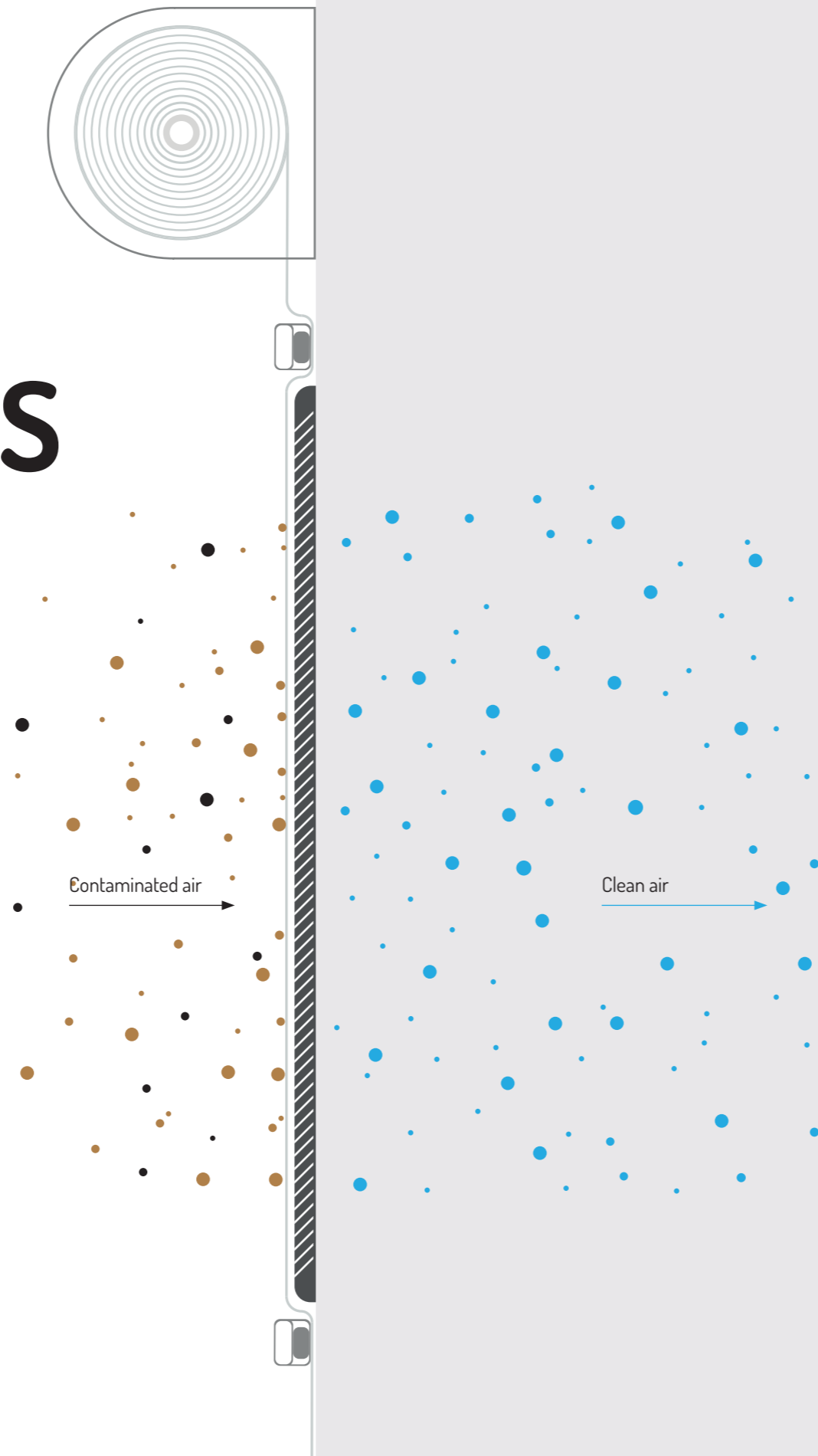
**Velum air:** ideal for compressors, cooling systems and heat exchangers. Velum Air has a thicker fabric but lower porosity than Velum and is designed to ensure better air flow and prevent overheating.



**Velum motor:** the perfect solution for the protection of electric motors. With its patented system and reusable holder in polypropylene, this filter can be applied to any kind of electric motor.

# VELUM PROTECTS YOUR INVESTMENTS

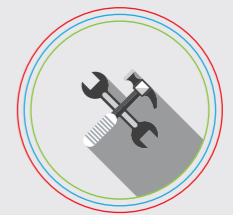
Velum protective filters have been designed by Nitty-Gritty in order to protect electronic equipment for industrial manufacturing facilities, compressors and electric motors from oily mist and dust. These substances block fresh air from going into the machine and cause the malfunction of the internal components.



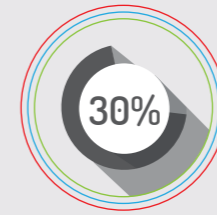
## Add value to your machines



1 velum roll:  
2 years  
of total protection



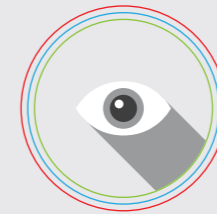
no  
downtime



30% savings  
on maintenance  
costs



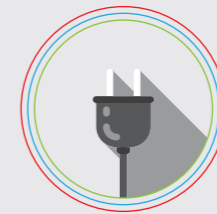
protect  
your business  
with only 20 cents  
per day



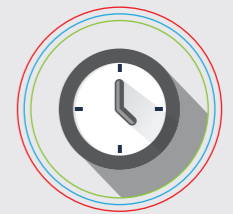
visual control  
allows you  
to change  
the filter regularly



it prevents  
the spread of  
harmful particles

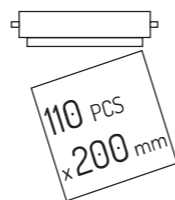


no switch  
gear opening



5-second  
replacement

# FAST PROTECTION FOR INDUSTRIAL MACHINES



**Velum** protective filter has been designed and realised to protect electric and electronic machines in industrial production plants from dust and oily mist. For their well-functioning and best productivity, all automations, robots and numerical control machines need constant maintenance operations and a regular filter replacement. Urgent deadlines that do not allow downtime, the lack of specialised manpower or even simple omissions may prevent companies from replacing filters regularly.

**Velum** protective filter is applied externally, directly to the entrance grid of ventilation and cooling systems of the production unit: once applied, Velum gathers and holds dust and oily mist in its patented-knitted fabric and ensures, while protecting the inner filter, the normal passage of fresh and clean air in the machine.

The **Velum** replacement check is purely visual: when the Velum protective filter is covered by polluting agents, you need to replace it. The replacement takes place in 5 seconds and you do not need any specialised manpower, thus avoiding downtimes and cutting down maintenance costs and any missed production costs that may be due to the inner filter replacement.

**Velum** is easy to apply and allows to efficiently plan the protection of any industrial machine: you just need to write down in the appropriate space the date of your last replacement and the name of the operator who has done it, so to avoid omissions, downtimes or breakdowns due to the missed replacement of the inner filter.

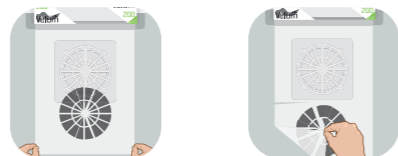
Composition	PLA
Color	White
Thickness	0,14 mm 0,0055 in
Roll lenght	22 m 22ft

Air permeability	4800 l/m2s
Flame retardant	AT type M1
Magnets	2-4

## installation



## replacement

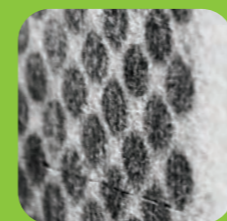


## video



## Sizes

600 mm	23,6 in
500 mm	19,7 in
400 mm	15,7 in
300 mm	11,8 in
200 mm	7,8 in



Used  
Velum



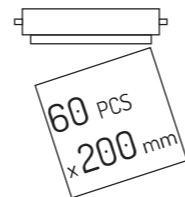
Applied Velum

To ensure the best production efficiency for your machines, replace Velum once a week. A Velum roll consists of 110 sheets: with only 20 cents per day, you can protect your machine for more than 2 years.



Applied Velum

# FAST PROTECTION FOR COOLING SYSTEMS



**Velum Air** has a thicker fabric but lower porosity and is designed to ensure better air flow and prevent overheating. It is ideal for compressors, cooling systems and heat exchangers. Velum Air catches dust and dirt in his knitted fabric and ensures the normal input of fresh air inside the machine.

Control for its replacement is visual: when the protective filter **Velum Air** is completely covered by dirt, it must be replaced.

**Velum Air** is easy to apply and provides an efficient way to protect industrial machines of all kinds: simply write down the date of replacement and name of the operator who carried out the replacement.

Composition	RAYON	
Color	White	
Thickness	0,29 mm 0,01141 in	
Roll lenght	12 m	472,441 in

With this system you will avoid omissions, downtime or failures caused by the replacement of internal filters, and the clogging of compressors, cooling systems and heat exchangers.

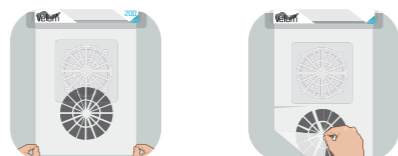
A roll of **Velum Air** is composed of 60 sheets. A few cents a day will protect your investments.

Air permeability	5600 l/m2s
Flame retardant	AT type M1
Magnets	2-4

## installation



## replacement



## video



## Sizes

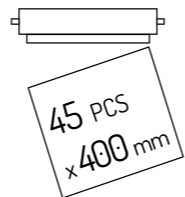
600 mm
23,6 in
500 mm
19,7 in
400 mm
15,7 in
300 mm
11,8 in
200 mm
7,8 in



Applied Velum Air

Changing the filter takes only 5 seconds and does not require skilled labour; this avoids any downtime, maintenance costs and loss of productivity which would occur when replacing internal filters.

# FAST PROTECTION FOR COMPRESSORS



Velum air is available in the **XL version** for large format machines.

Available sizes are:

1500 mm	59,1 in
1200 mm	47,2 in
1000 mm	39,4 in
900 mm	35,4 in
800 mm	31,5 in
700 mm	27,5 in
620 mm	24,4 in

We are also available to assess the needs of individual customers and start customized productions.



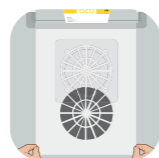
Composition	PES
Color	White
Thickness	0,31 mm 0,0122 in
Roll lenght	18 m 708,661 in

Air permeability	5200 l/m2s
Flame retardant	NO
Magnets	16-28

installation



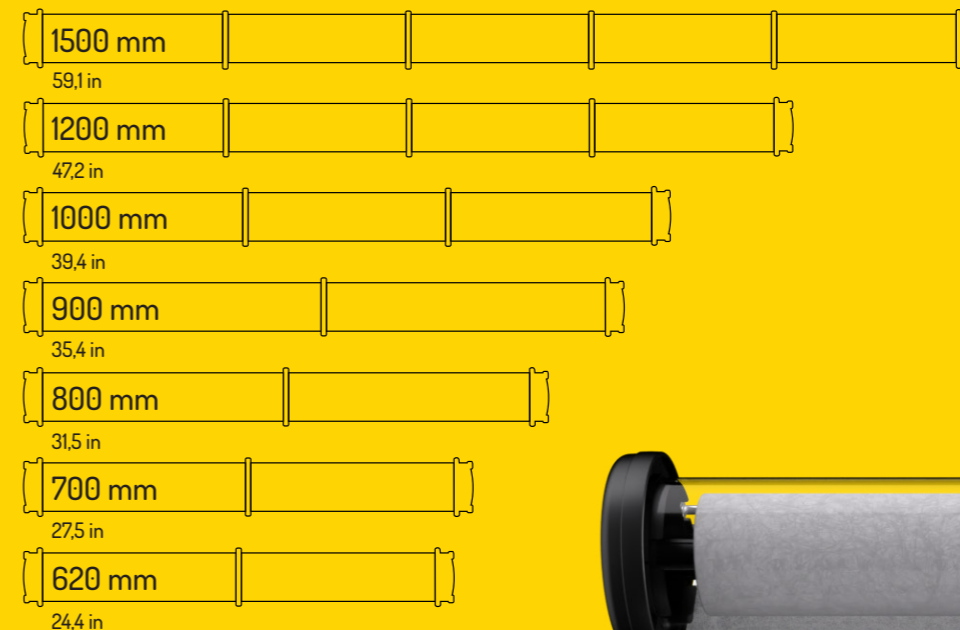
replacement



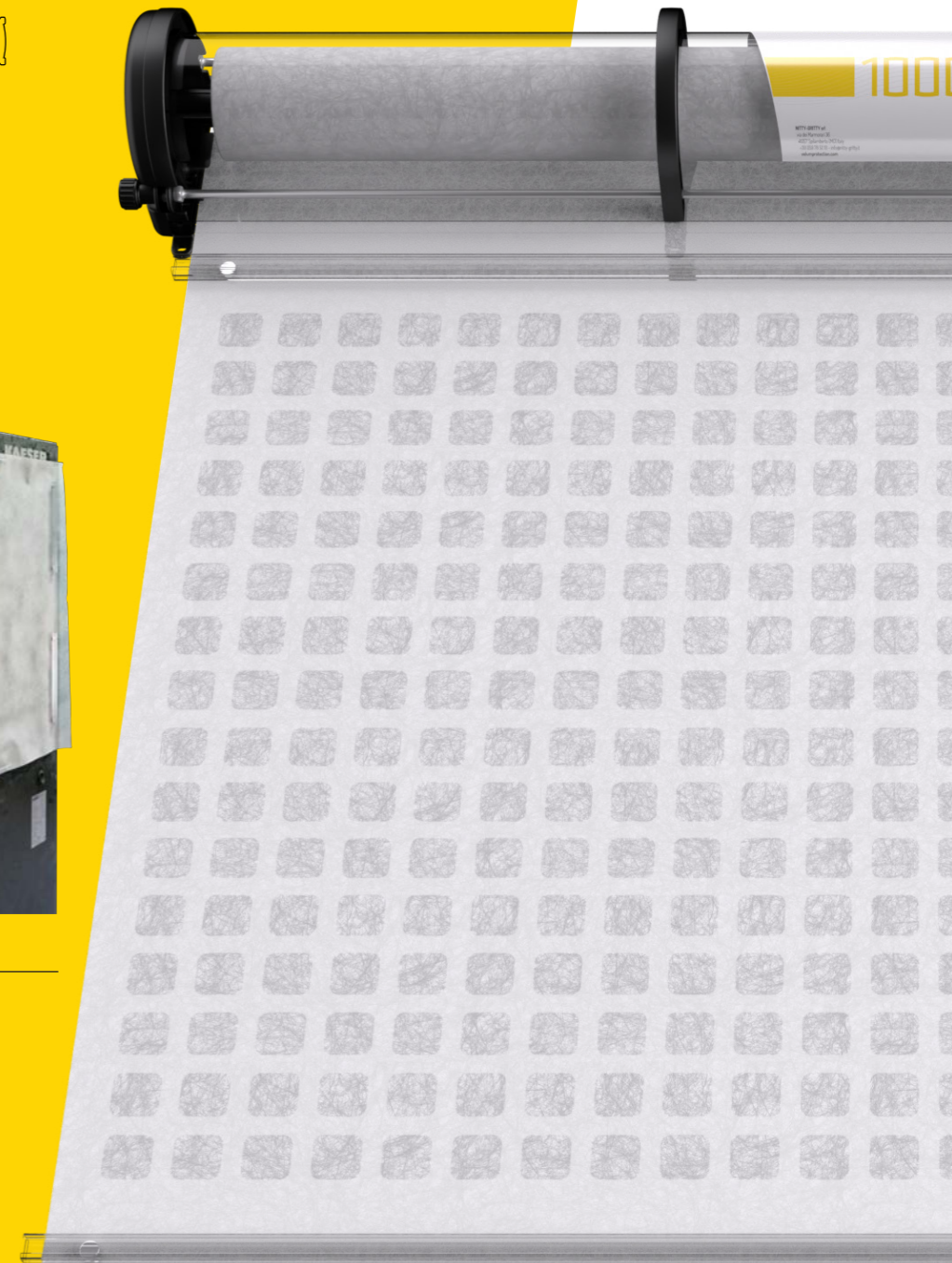
video



## XL Sizes



Applied Velum Air XL



# NEW VELUM SMART



**Velum Smart is Velum's great innovation!**  
It's an automated scrolling system that brings Velum's installation and maintenance process to the next level.

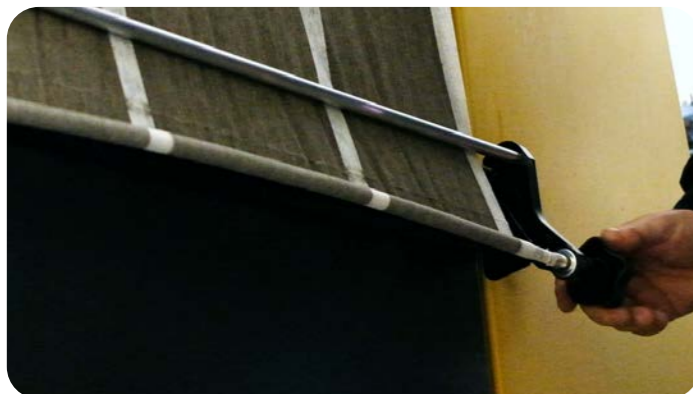
With the filter automatic scrolling,  
the operator just needs to remove the used filter  
and load a new roll **once a year** when finished,  
instead of every week.

**Velum Smart: make the most of your time!**

Velum Smart is available either in a **manual version**  
and a remotely controlled via **Android and iOS APP**  
**completely automated version.**



Applied Velum Smart



Applied Velum Smart Manual



Velum Smart Manual



Applied Velum Smart

video



FAST

PROTECTION

FOR ELECTRICAL

MOTORS

**Velum Motor** is the perfect solution for the protection of electric motors.  
 Thanks to the patented system with reusable polypropylene support, this filter can be easily applied with a magnet and a normal O-Ring (included in the package).

This polyester filter **Velum Motor** can be easily applied on the fan of any kind of electric motor, and has many advantages:

- it protects precious investments such as machinery and equipment;
- it protects the life of the engine and avoids the spreading of suspended particles;

- it reduces maintenance costs;
- no downtime thanks to easy application and replacement;
- it protects worker's health. Fans in the engines keep the air moving. If the air contains harmful particles, the fan moves contaminated air which is then inhaled by the workers;
- the visual control allows you to change the filter regularly so as to always ensure adequate air flow.

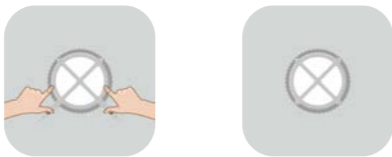
Composition	PES
Color	White
Thickness	10 mm    0,3937 in

Classification	G2
Flame retardant	F1/M1
Magnets	2-4

installation



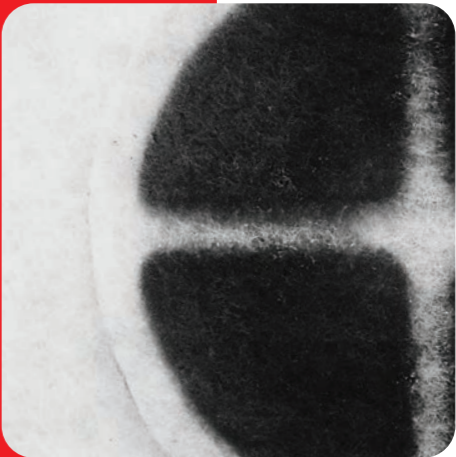
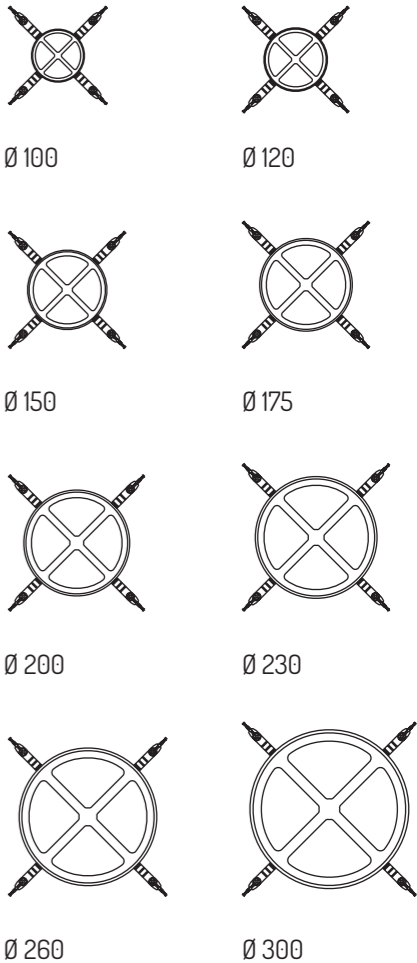
replacement



video



Sizes



Used Velum Motor



Magnetic attachment

# APPLICATIONS

Machine tools	Automation machines	Industrial printers	Recycling machines	Industrial computers	Cooling plants
Machines for wood carving	Packaging machines	Machines for the food industries	Machines for chemical industries	Machines for pharmaceutical industries	Machines for textile industries
Refrigeration machines	Personal computers				



# WHAT THEY SAY ABOUT US

“ Velum has improved the performance of my **motors**.

“**Extremely easily** installed!



“ With this, we do not have to clean our machines and tools every few months.

“Replace the filter in 5 seconds!



“ We are **really reaaallyyyy reaaaaaallyyyyyy** happy with Velum filter and strongly recommend them.



“My machines can **finally breathe**

“ We Velum we do not have to stop to clean the machine.

“ Velum helps to keep my tools clean.





# **NORTHERN**

## **MACHINE TOOL SERVICES**

**Proud distributors of**

