Nederman

The ultimate way to solve your oil mist problems

An investment that makes everyone happy

"It's far easier to concentrate on your job if you're working in clean air. And with effective filters, you don't risk breathing in oil mist every time you open the machine enclosure. Quite simply, better conditions mean you do a better job."

CNC lathe operator

"A well-run workshop is the backbone of our operations. Tough production targets have to be met and we can't afford to be delayed by accidents caused by slippery floors or stoppages due to contaminated electronics."

Production Manager

"The health and safety of our workforce is one of my prime concerns. A clean and comfortable working environment is essential for job satisfaction and an increasingly important factor to be aware of when recruiting new operators and supervisors".

Personnel Manager

"A sound investment is one that pays off. And savings made in all aspects of our business – from cutting illnesses because of health hazards to reducing maintenance and housekeeping tasks – produce results that are clearly visible in our monthly reports."

Financial Manager

By removing oil mist at source it will be prevented from settling on sensitive electronics or other surfaces in the workshop, disrupting production and creating hazards.

What is oil mist?

Nearly all machining operations create oil mist to some extent. Fluids used to cool and lubricate tools and stock in metalworking process are turned into fine mist by mechanical force and frictional heat. The mist creats potential health hazards for operators and detrimental environment for the equipment. Even the finished products can be contaminated.

Nederman oil mist filter solutions eliminate these risks.

How does oil mist affect the workforce?

Oil mist causes respiratory problems – easily observed in coughing, wheezing or shortness of breath. Depending on exposure and frequency it may also cause allergic reactions and skin disorders. These are obviously very undesirable effects and can result in occupational asthma or chronic illnesses. A general feeling of discomfort is often one of the first indications that the environment is unhealthy.

An effective oil mist filter solves these health issues.

Typical production problems

Oil mist almost always results in oily premises, equipment and products. Modern metalworking machinery is often controlled by sensitive electronics and production is lowered by unplanned disruptions – caused by contaminted circuitry. Handling equipment and pieces of products coated in a thin film of oil is not acceptable working practice and definitely not production-friendly.

An efficient oil mist filter promotes economical production.

Impact on the working environment

Besides directly affecting the health of machine operators and disrupting production, oil mist will settle everywhere in the area resulting slippery floors and work surfaces. Unpleasant odors and poor visibility are two more undesirable problems. There is a major risk that housekeeping will never suffice to counter these very basic environmental issues.

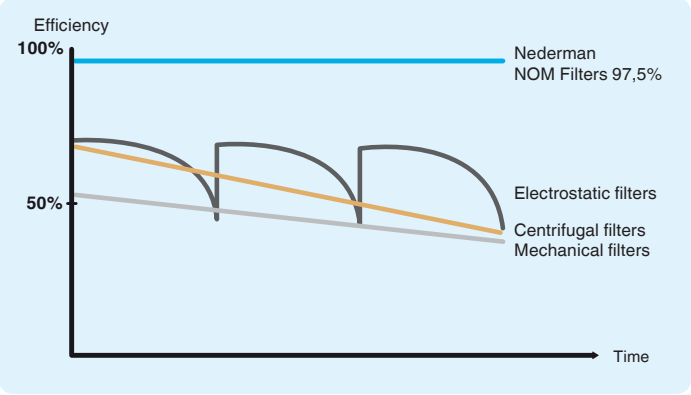
Removing oil mist is essential for workplace safety and cleanliness.

The principle is simple.
The benefits are substantial

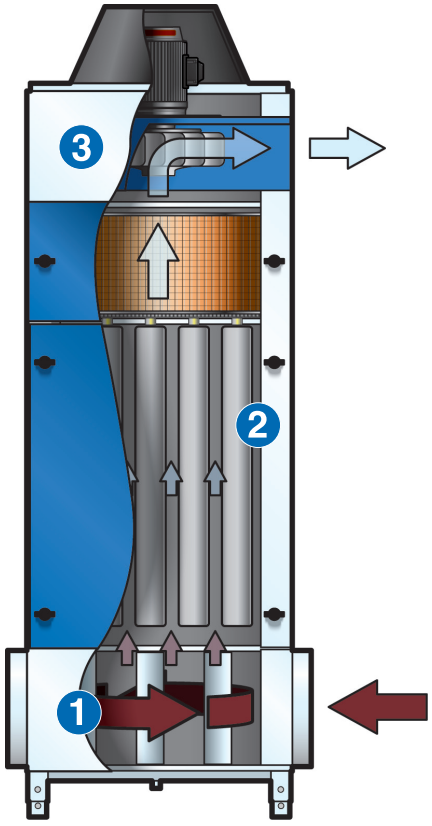
The Nederman NOM series of oil mist filters is the product of extensive research and development work, both in the laboratory and in the field.

The HEPA filtering efficiency that can be achieved is 99.97%, which means that the extracted air could even be recirculated* into the workshop premises without causing any discomfort.

** depending on local regulations*

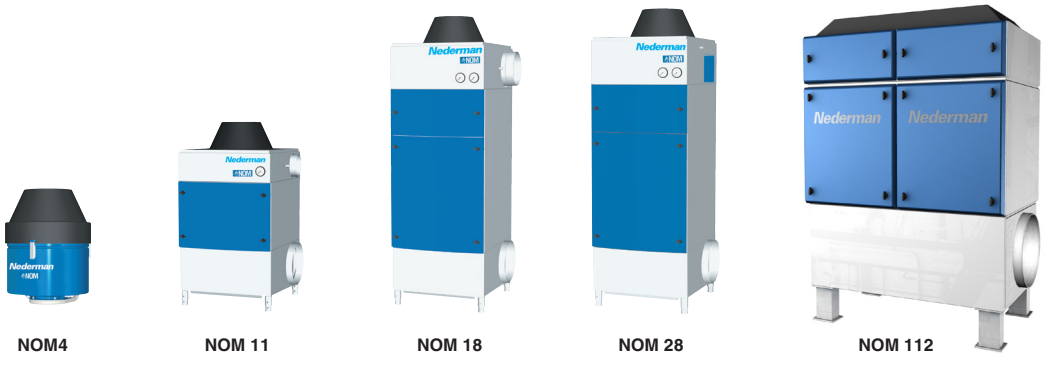


Performance of different oil mist filters without HEPA filter
Particle mass <10 micron



The NOM filter unit cleans the air in up to three stages:

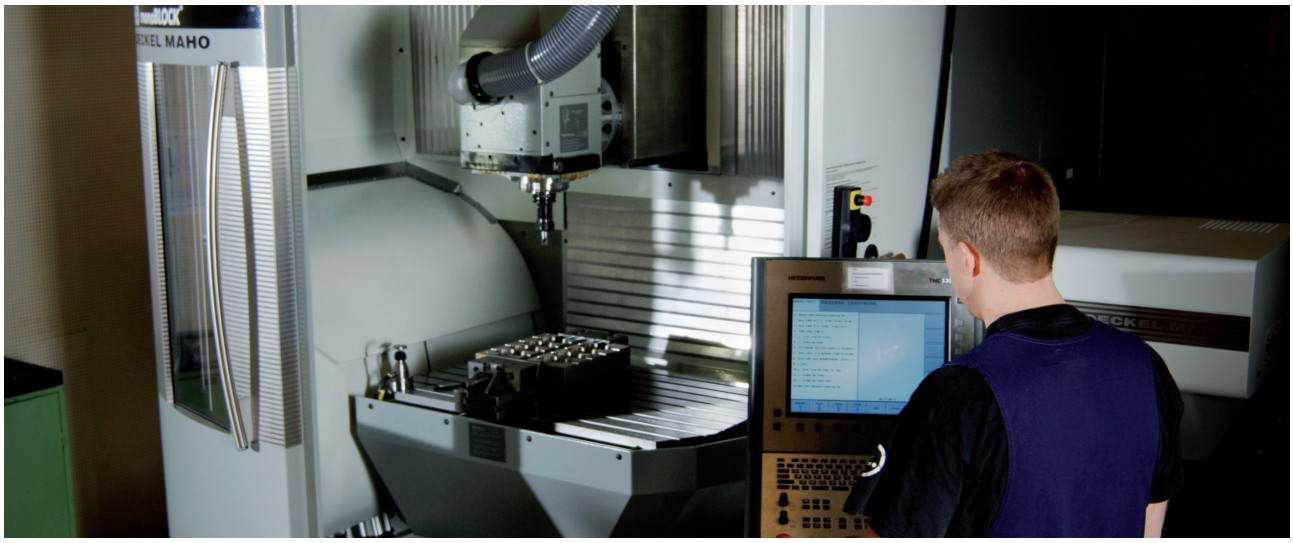
1. In the initial stage, contaminated air is drawn into the filter unit and turbulator plates separate out the relatively large drops of oil.
2. A washable main filter then removes up to 97.5 % (<PM_{10}) of the particle content of the mist.
3. An optional third stage a HEPA filter can remove practically all remaining traces of contamination. The discharged air will contain only 0.03% of its original oil content.



NOM4 NOM 11 NOM 18 NOM 28 NOM 112

Nederman offers a full range of advanced oil mist filters, from the NOM 4 model, which can be mounted directly to metalworking machine tools, to the high-capacity NOM 112, which can serve a series of machines linked to a common ducting system.

For every application



NOM filters can be used in a process wherever oil mist is generated. Nederman has extensive experience in solving air contamination problems created by coolants and our wide range of solutions cover all types of workshop machinery, from conventional machines to the latest highspeed CNC equipment. We offer highly efficient filter solutions for numerous operations, including grinding, turning, machining, drilling etc.

The ultimate choice for modern machining

High-speed machining is a growing trend and the equipment used creates even finer oil mists. Thanks to our latest developments in filter technology, contamination problems can be effectively dealt with, for instance in modern CNC lathes. These machines operate at speeds of 20,000 rpm or more and use high-pressure (145 to 220 psi/10 to 15 bar) coolants. In situations like these, NOM filter units are the ultimate choice for oil mist removal.

NOM	4	11	18	28	112
Airflow max cu ft/h:	235	650	1100	1650	6000
m^3/h:	400	1100	1800	2800	10000

Other models available: please visit www.nederman.com

A complete solution in a kit

- All models are available with or without Hepa filter
- All models are also available with or without integrated fan

Optional equipment

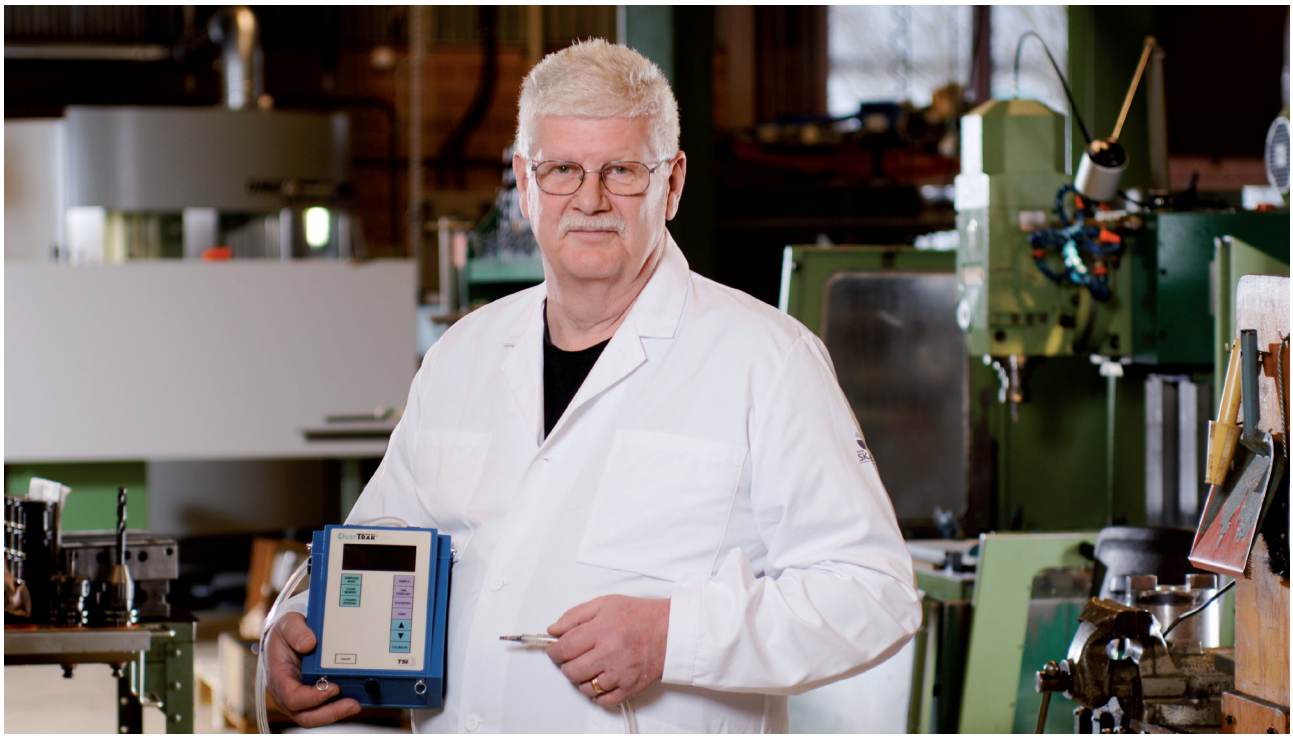
Automatic damper control

The automatic damper operates on signals from the coolant control system. This enables extra evacuation of oil mist just before the workpiece is ready for removal, creating a clean enclosure for the operator to work in.

Other options:

- Manual starter
- Silencer
- Water and oil trap
- Pressure gauge
- Mounting devices (wall brackets, stands)

We know how to keep things clean and simple



Nederman has more than 60 years experience of capturing, removing and filtering contaminated air generated in engineering workshops, research laboratories and material handling processes. When it comes to dealing with oil mist, our R&D department's latest achievements in filter technology mean that we can offer you the cleanest and most cost-effective solutions on the market.

Pre-sales support

Our customer support department will assess your specific needs, with regard to present machining tools and process cycles, and recommend the most effective set-up. For example, an automatic damper can be installed to provide increased airflow. This means that the enclosure doors can be opened immediately on completing a machining cycle without encountering residual oil mist.

After sales support

Nederman NOM filters are designed for top performance with a minimum of maintenance. To ensure trouble-free operation, we recommend our NOM Filter Service Package that includes scheduled assessment of the condition of the filters, changing them if necessary, inspection of the fan and control units, and advice regarding future operations.

Ask for our performace guarantee

Not convinced about our technological advances? Why not let one of our oil mist experts give you some advice? Together, you can inspect the condition in your workshop and determine the requirements necessary to improve production efficiency and create a cleaner environment. As a special offer, we will also let you test a NOM Oil Mist Filter. Contact us for further details.

NOM solutions around the world

These are just a few of more than 1,000 oil mist solutions installed by Nederman in workshops and plants all over the world. Among others also in: Finland, Holland, Austria, the Czech Republik, France, Spain, Portugal, Italy, Poland, the Netherlands, the U.S.

CANADA
ICD Tesma
Magna Powertrain
Presstran Industries
Babcock & Wilcox
Toyota Tsusho America

DENMARK
Terma A/S, Airborne Syst.Div.
FagerlundsVærktøjs- & Metalvarefabrik A/S

GERMANY
Siemens VDO Automotive AG
KBA König & Bauer AG
Goldbeck Bau GmbH
FINTEC
MPT Präzisionsteile GmbH
AIRCO-KKF Druckluftservice Gmbh
Krüger, Martin Dipl. Ing./Eig.
Julius Zimmer GmbH & Co KG
Spindel- und Lagerungstechnik

IRELAND
Excellent Medical supply
Element Six

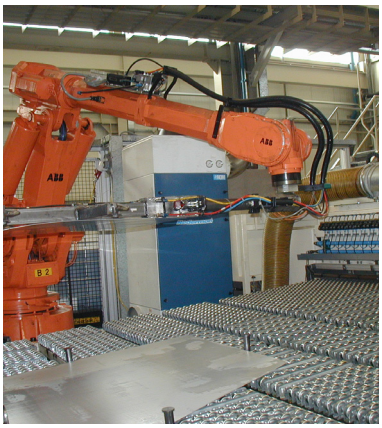
NORWAY
Aarbakke AS
Årdal Maskinering
Kongsberg Automotive
Uvdal Mekaniske Verksted
Forus Industrier AS
Vinghøg Mekaniske

SWEDEN
Bröderna Edstrand
Fredriksons
LEAX AB
Uddeholms Mechanical
Metalock workshop
Volvo Traction

SWITZERLAND
Von Dach Technik AG
Netstal-Maschinen AG
Mowag Motorwagenfabrik AB
Clima & Filtrotechnica SA
Elektro & Solartechn von Flüe
Grolimund Präzisions AG
Axima AG, Rapperswil
Hunziker & Partner AG
Haba Platten service
Centres & Métaux SA
Hunziker & Partner AG

UNITED KINGDOM
Eaton Ltd
Goodrich Power Ltd
Mitsubishi Ltd
RNLI Ltd
Microturbo Ltd
GKN Ltd
F Brinklow Ltd
RPL Ltd
Dunlop Aerospace Ltd

UNITED STATES
Gem City Engineering



Nederman solutions for optimal working environments

Health and safety issues are fundamental to our company philosophy, which is to advise customers and work with them to develop solutions with products to improve the efficiency in their workplaces. With more than 60 years of commitment to improving working environments, Nederman has become the world leader in fume and dust extraction equipment, and also supplies auxiliary equipment such as self-retracting hose and cable reels.

Extraction arms

Exhaust Extraction Systems

Fans

Filters

Central/fixed filter units

Portable and mobile filter units

Cleaning equipment

Hose and Cable Reels

Nederman

www.nederman.com

Nederman Sales companies in: Australia, Austria, Belgium, Brazil, Canada, China, Czech Rep. Denmark, France, Germany, Hungary, India, Indonesia, Ireland, Malaysia, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Slovak Republic, Spain, Sweden, Turkey, United Kingdom, USA, Thailand, Vietnam.
Nederman Agents in: Bulgaria, Cyprus, Egypt, Estonia, Finland, Greece, Holland, Hongkong, Iceland, Iran, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Malaysia, New Zealand, Philippines, Saudi Arabia, Serbia, Singapore, Slovenia, South Africa, Switzerland, Taiwan R.O.C, Thailand, Turkey, United Arab Emirates

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