

Nederman

IMPROVING YOUR WORKSPACE



**The ultimate way to solve
your oil mist problems**

An investment that makes everybody 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 workpieces in metalworking processes are turned into fine mists by mechanical forces and frictional heat. These mists create potential health hazards for operators and detrimental environments 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?

Primarily, oil mist causes respiratory problems – easily observed as 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 can be hit by unplanned stoppages – caused by contaminated circuitry. Having to handle equipment and workpieces coated in thin films 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 premises causing dangerously slippery floors and work surfaces. Unpleasant odours 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.

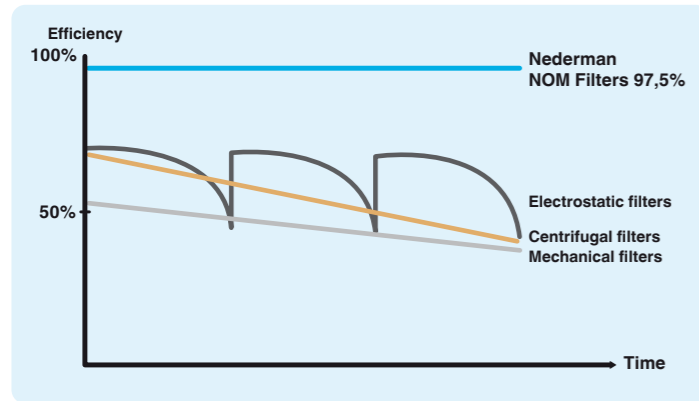
Removing oil mist is essential for workplace safety and cleanliness.

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 numerous industrial applications. The

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.

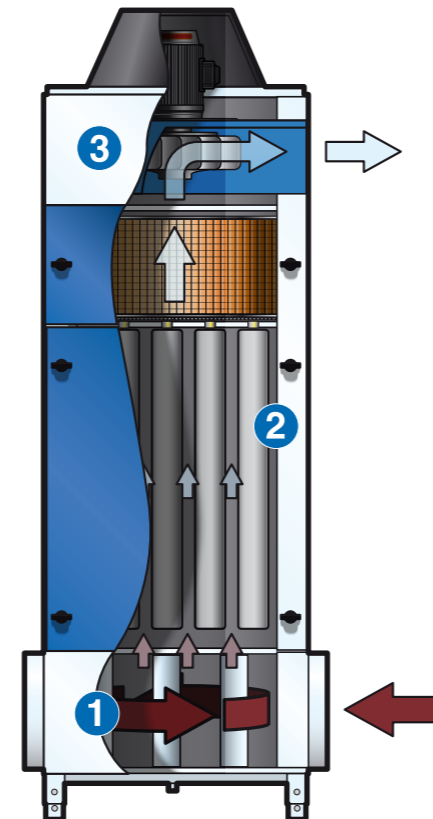
** depending on local regulations*



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. In 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.



For every application



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



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 (10 to 15 bar) coolants. In situations like these, NOM filter units are the ultimate choice for oil mist removal.



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

NOM	4	11	18	28	112
Airflow max m ³ /h	400	1100	1800	2800	10000
230V, 1 phase alt	•	•	•		
400/230V, 3 phase	•	•	•	•	•

HEPA Filter: Standard NOM filter units are delivered without a HEPA filter. This filter can be supplied on request.

Fan: Standard NOM filter units are delivered with an integrated fan. Filter units without fans are available for connection to a central fan system.

For more information: please visit www.nederman.com

Optional equipment

Automatic damper control

The automatically controlled 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 automated damper can be fitted to provide a momentarily 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.

Test for yourself

Not convinced about our technological advances? Then we are prepared to let one of our experts investigate the conditions in your workshop and let you test a NOM Filter for a free trial period of 6 weeks. At the end of this period we will test for the presence of oil mist and recommend suitable filter solutions based on the results.

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, and The Netherlands.

CANADA

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

DENMARK

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

GERMANY

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

NORWAY

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

SWEDEN

Bröderna Edstrand
Fredrikssons Verkstads AB
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

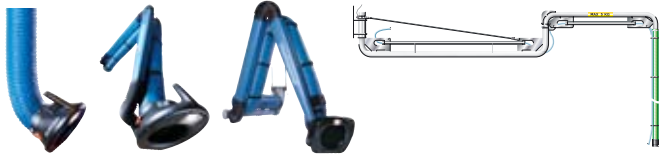


Nederman solutions for optimal working environments

Health and safety issues are fundamental to our company ethos, which is to advise customers and work with them to develop solutions and products to improve the efficiency of 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



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