

Nederman

IMPROVING YOUR WORKSPACE



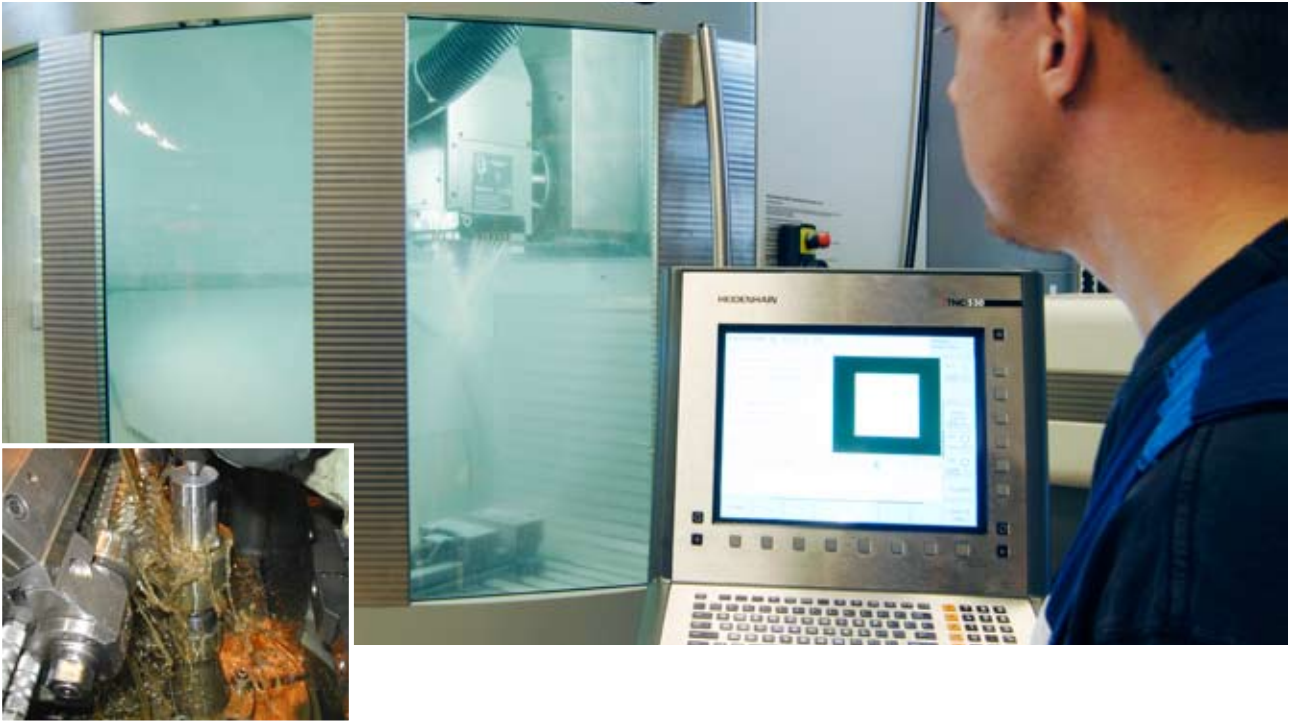
Nederman Machining

Clean Air
Clean workplaces
Clean Coolant
Profitable Recovery



Member of the Nederman Group

Good solutions for you, your employees and the environment



Metal-working using highly productive machinery with high cutting speeds requires large flows of coolant, and also produces a lot of swarf. Metal-working also generates oil mist which is a health risk to employees and a burden on the environment. Microscopic oil drops can affect sensitive electronics that govern machinery, which can result in sudden operational stoppages.

Solving these problems by using effective coolant filtering, swarf management and air filtration systems opens up major opportunities for reduced costs and increased revenues.

The Nederman Machining concept has been developed to provide metal-working companies with products and systems that cover their current and future needs. We are the only company in the world to take an overall grasp of the problem seen in the metal-working industry. Our solutions help to improve the environment and increase profits.

Coolant recycling

- Improved productivity and product quality through rational coolant handling and constant filtration reduces stoppages for changes
- Reusing coolants = improved profitability

Swarf and coolant management

- Better price for refined swarf metals
- Less need for storage space, handling and storage of voluminous turnings
- Recycling of coolants that are filtered and returned to production

Oil mist extraction/filtration

- Less sick leave due to less oil mist
- Less risk of affecting electronics
- Cleaner premises – less cleaning



Cut costs for coolants - ensure productivity

Clean coolants ensure highly-effective machining with fine tolerances, while dirty coolant wears spindles, pumps and tools. Coolants polluted by leaked oil, are broken down by bacteria, lose their original properties and start smelling. There are high costs involved in changing coolant, operational stoppages, removal and disposal.

Effective coolant filtration systems

Nederman's solution for the constant filtration of coolants in full flow is the "Presto" program. The coolant is cleared of sediment, particles and leaked oil. "Perpetuum" is another solution for coolant filtration for many machines working in groups. Investing in a coolant filtration system pays off very quickly.

Profitable swarf handling

Many companies produce more turnings than products from their incoming material. CNC lathes usually produce around 40-60 per cent of turnings, which also contain large amounts of coolant. Consequently there is a lot to be gained from effective waste management. Clean turnings have a higher scrap value. Centrifugation of the turnings can help to extract, filter and

return more than 90 per cent of the coolant back into production. By pressing the turnings into solid briquettes, companies can achieve further financial benefits through improved smelting and simpler waste management.

Clean air in the workshop and a safe working environment

Oil mist can directly affect machine operators' health and disrupt production. It also settles everywhere in the premises and causes floors and work surfaces to be dangerously slippery. A Nederman oil mist filter reduces the risk of work-related injuries, and results in fewer operational stoppages with a reduction in maintenance and cleaning requirements.

Clean workplaces

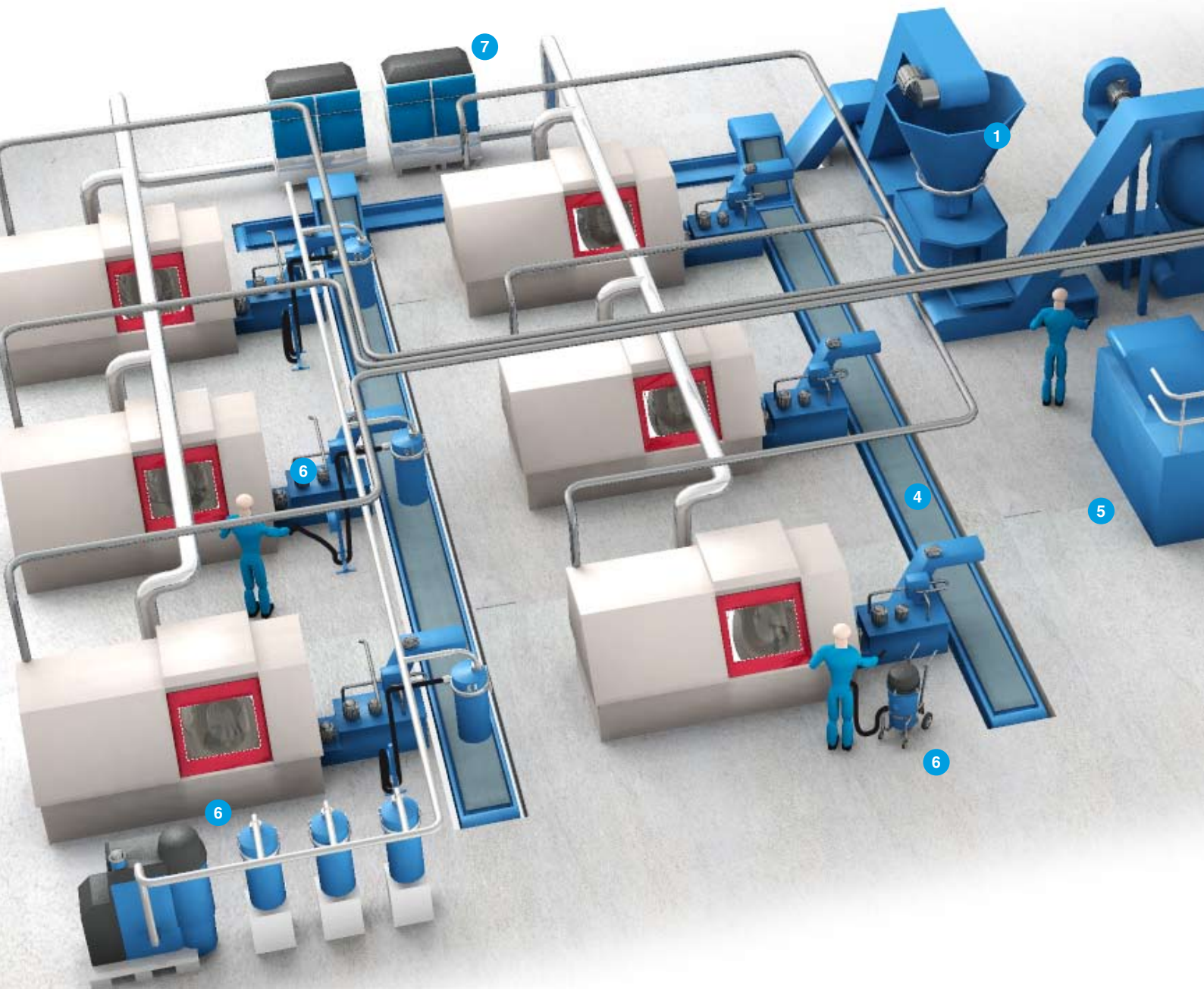
Cleaning a workplace or object with compressed air can damage machinery and people's health and only moves the problem to another place. Nederman's mobile and central vacuum and filtration systems keep objects, machinery and workplaces clean and collect turnings and dust that may have been deposited

Keep premises free from swarf and dangerous oil mist

Nederman solutions include systems for swarf handling and processing, coolant filtration and oil/water separation. The effects are prolonged life of coolant, decreased costs for swarf handling, and higher prices for scrap material. Nederman products and systems also keep machines and premises free from scraps and our NOM Oil mist filters purify the air.

Nederman systems and solutions:

- Swarf handling, transportation/conveying
- Cutting oil and coolant filtration/purification
- Chip processing and briquetting
- Oil mist filtration
- Machine and general cleaning





1

Swarf Handling and Processing

The integrated system crushes the swarf, de-oils the chips and recovers coolant.



2

Swarf Centrifuge

Separates effectively coolant from chips via a high speed centrifuge.



3

Briquetting

Presses chips from machining into cylindrical briquettes and recovers coolant.



4

Conveyors

We have a conveyor for every need: Belt Conveyors, Magnetic Conveyors, Drag Conveyors, and Vacuum Conveying Systems.



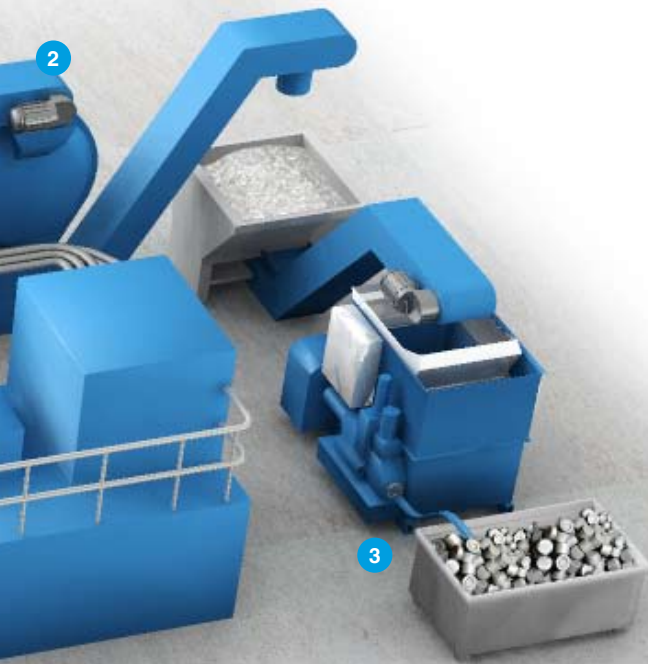
5

Coolant Filtration Systems

Our coolant cleaning solutions cover most operational requirements. This includes the **Presto System** that delivers coolant to two or more machine tools of the same type.



The **Perpetum System** connects to several machines, continuously removing bacteria. This system reduces the number of necessary coolant changes by more than 90%.



2

3



6

Integrated Vacuum Systems for swarf handling and cleaning

The high vacuum suction system can be used for automatic and manual swarf handling and machine cleaning. Chips are removed directly from the machines avoiding unnecessary stops. Premises and machines can also be manually cleaned, improving productivity and preventing accidents.



7

NOM - Oil mist filters

The NOM filters are designed for use in conjunction with machining work where emulsions are used as the coolant/lubricant. They can also be used in the metal pressings.

Our range includes filters for single CNC machines to central systems connected to many machines.

A partner you can rely on



Nederman has extensive experience of how to create the optimum working environment. Our specialists and sales representatives know what is necessary for creating an efficient and profitable facility. They are backed by competent teams and central resources assisting in all phases of a project, from planning and design to installation and commissioning.

Bridging the complete product chain

At Nederman we have complete control of our products. We develop, design, and manufacture all our products ourselves. This means you are always ensured safe and reliable products, and you will always have access to personnel who know our products and systems. Therefore we are able to take full responsibility in making your workshop safe and environmentally friendly for many years.

Nederman offers complete solutions



- *Proprietary products based on effective technology*
- *Comprehensive product range*
- *Extensive experience of creating the optimum working environment*
- *Worldwide representation*



We help metal working companies all over the world

Swarf and coolant can be hidden treasures for every company working in metal. We have helped many companies to uncover these treasures by designing solutions that recover and prolong the life of coolant, and decrease the handling costs of swarf while increasing its value.

We also have an extensive experience in solving air contamination problems created by coolants. Our solutions cover all types of workshop machinery, from conventional machines to the latest high-speed CNC equipment. We offer highly efficient filter solutions for numerous operations, including grinding, turning, machining, drilling and hobbing.

Let us help you turn your problems into profit and improved working conditions.

Sectors:

*Automotive
Aircraft
Railway
Bearings production
Precision Parts Manufacturers
Turning and Grinding shops
General engineering
Rolling mills
Metals manufacturers
Metal recycling companies*

Applications:

*Turning
Cutting, milling
Grinding
Polishing
Rolling/Stamping
Wire drawing
Surface treatments*

Bringing superior conditions to the workplace and the environment

For more than 60 years Nederman has developed, manufactured and marketed products and system solutions to reduce the strain on the environment and improve working conditions in numerous industries.

In addition to the Machining market segment, our products and systems have been groundbreaking in industries such as Metal fabrication, Automotive, Composite manufacturing, Food, Paper, Chemical and Pharmaceutical and many others.

Today companies all over the world are using equipment from Nederman.



Nederman

www.nederman.com

Nederman Sales companies in: Australia, Austria, Belgium, Brazil, Canada, China, Czech Rep. Denmark, France, Germany, Hungary, India, Ireland, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, United Kingdom, USA
Nederman Agents in: Bulgaria, Cyprus, Egypt, Estonia, Finland, Greece, Holland, Hong Kong, 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