



## **Flat-bag Filter**

Perfected air purification,  
environmental protection and dust collection

## Clean air to mankind, environment and machine

### One-stop shopping for air-cleaning systems

Nederman masters the entire process, from project specification and solution development to installation and after-sales service.

The company covers the entire business spectrum from know-how and products to solutions and services.

- L Foundry industry**
- L Asphalt industry**
- L Aluminium industry**
- L Steel industry**
- L Power-generating industry**
- L Quarries industry**

### The air –cleaning experts

Choosing the right air-cleaning system to fit each specific application requires taking a variety of factors into consideration. To simplify this process, Nederman offers the services of dedicated experts who can guide each customer to the best solution for their particular needs.

Nederman is fully equipped to address any and air quality issues in your work place and will work closed with you to achieve a safer working environment and more success for your business.

If you are unsure about which industrial air-cleaner-system you require to address your air quality issues, we have a variety of specialists available who offer expert advice and multiple options to address your air quality needs.



*Dust collectors for all foundry areas, moulding plants, sand industry, furnaces, cleaning and blasting rooms.*



*Flue gas purification in the power industry. State of the art filter processes and systems for removal of pollutant gases.*



*Dust collectors for electric arc furnaces in steel plants with accessories such as coolers and spark arrestors.*



*Dust collectors for mineral treatment, e.g. on jaw and rotary crushers, impact crushers, screening machines, conveyor belts, air separators, silo aspirators and loading stations.*



*We construct stationary and mobile dust collectors for the asphalt industry according to the requirements of the asphalt mixing plant.*



*Flue gas cleaning systems for the primary aluminium and secondary aluminium industry.*

## Filter materials in all qualities – for all demands – for all requirements

### Depending on:

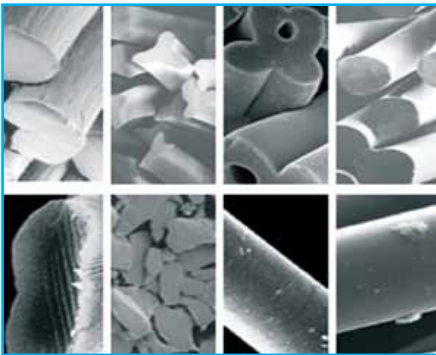
- └ temperature
- └ moisture content
- └ flue gas composition
- └ dust type

### our filter materials differ according to:

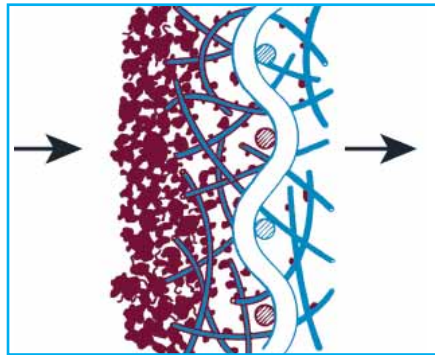
- └ temperature resistance
- └ acid and alkali resistance
- └ hydrolysis resistance
- └ air permeability
- └ fibre fineness
- └ expansion behaviour

### With special design versions lead to improvements in

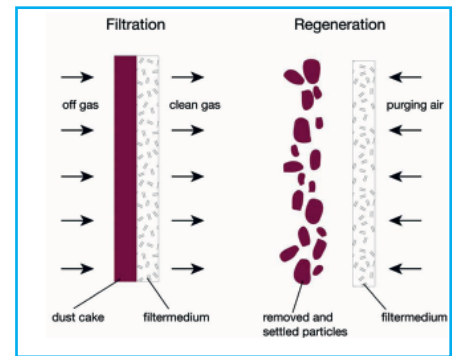
- └ residual dust content
- └ chemical resistance
- └ dust flaking behaviour
- └ electrical conductivity
- └ dust and oil repulsion
- └ flame resistance
- └ spark resistance



Materials: PP 0,8-7,0 dtex; PES 0,8 - 7,0 dtex;  
PTFE 0,7 – 6,0 dtex; AR 1,1 – 3,5 dtex;  
PPS 1,0 – 3,5 dtex; PI 0,8 – 3,5 dtex;  
PPS 1,0 – 3,5 dtex; PAN 0,8 – 2,8 dtex

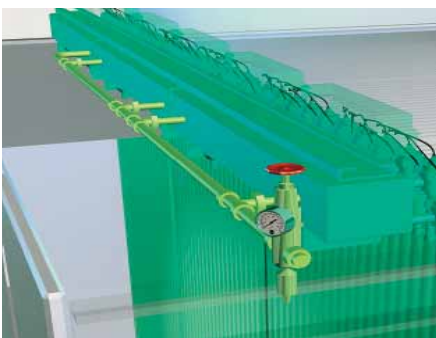


Dust build-up on flat bags = formation of the filter cake increases the filter properties.



Filtration takes place through the filter cake and filter material. The dust is separated by regeneration.

## Flat bag filter with compressed air cleaning (FD/FP)



The filter with compressed air cleaning FD is fitted with stationary blowpipes and injection nozzles. Compressed air is supplied from compressed air containers with electromagnetic cleaning valves located outside the filter chambers.

The FP filter is a combination of both filter cleaning systems. The flat hoses are cleaned by compressed air.

## We provide the complete, ready to operate filter system

### An improvement in the efficiency of dry sorption processes

We are able to provide a vast range of versions to comply with customer-related demands. In doing so, we use system components such as mixer reactors that achieve an optimum separation of pollutants such as HF, HCL and SO<sub>2</sub> through an homogenous mixture of additive and crude gas flow.

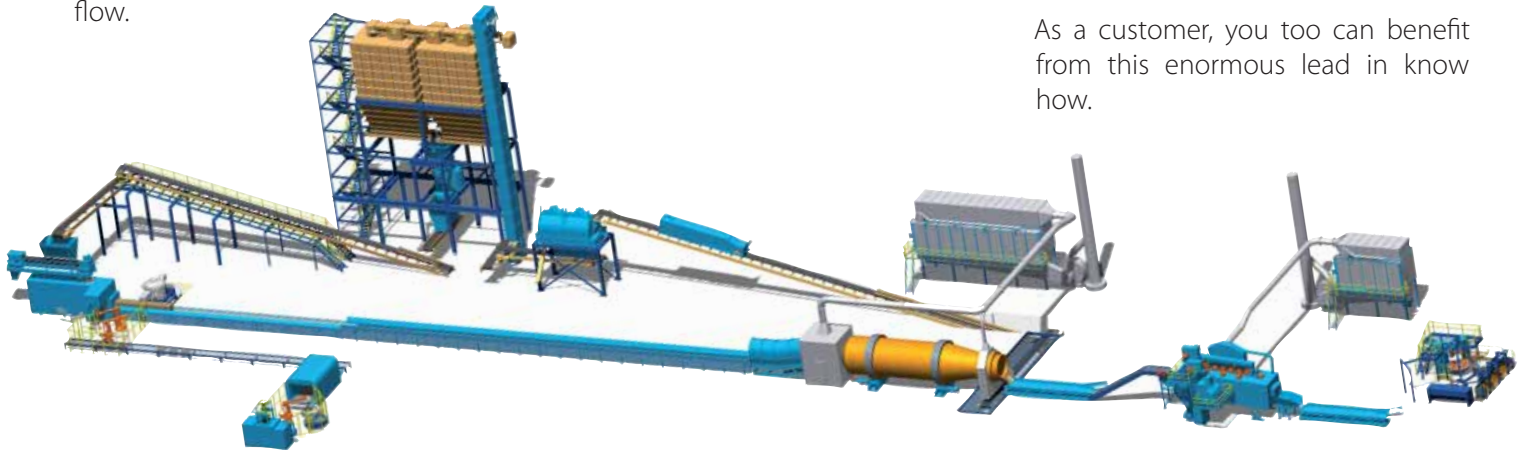
### Reduced additive consumption – less residual products

The recirculation of additives minimises additive consumption and consequently the occurrence of residual products. Here too, our engineers have developed a wide range of processes such as the Rotosorp process with or without moisturised recirculation.

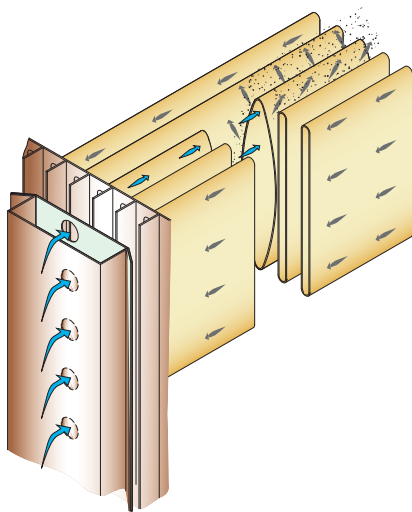
### Optimum fine dust collection through the synergy of cleaning processes and special filter media.

With the filter media tailored to the respective cleaning systems, we are already able today to meet the stringent EU regulations for fine dust (PM10). This has been confirmed by latest research by the University of Karlsruhe.

As a customer, you too can benefit from this enormous lead in know how.



### Offline effect:



Flaking dust from the neighbouring flat hoses is prevented from being sucked-in during the dedusting process.

### Function

Gases with dust content via the filter via the crude gas hood. Flow direction through the filter is from top to bottom (fall-flow principle). The gas enters the pure gas chamber of the filter through the flat bag. During this process, the dust is held back by the filter media and forms a filter cake which is important for filtration. The fully programmable dedusting process is activated after a specific time period and the dust cleaned out of the filter hose. The dust falls into the collecting unit and is carried away via the dust conveyor units.

### Intelligent cleaning air purging

The filter type FS is operated with efficient air purging. The purging air filter located behind the purging air fan provides an air pulse which inflates the flat bag during a cleaning cycle and creates an air flow against the filter direction. The connection between the purging air valve and the purging carriage is achieved by a flexible hose. The purging carriage is driven by a maintenance-free chain drive and fed over a guide rail with expansion compensator. The purging nozzle is positioned by a maintenance-free cycle switch. The bearings of the rollers are also maintenance-free.

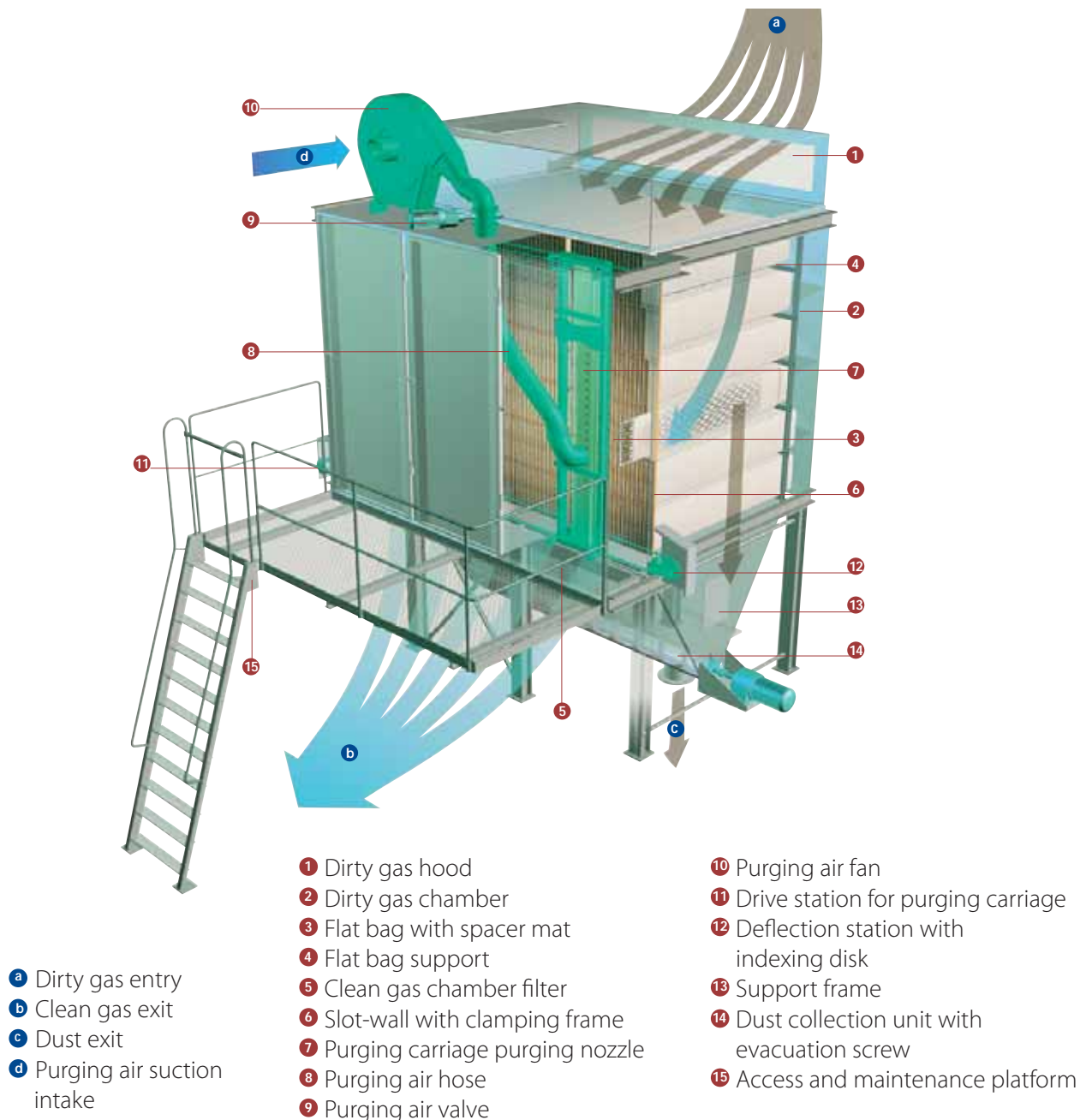


## Is the air that you breathe a subject that is close to your heart?

### Flat bag filter – with a maximum of process and operational safety! The result speaks for itself!

Nederman also has the expertise to design and manufacture high-quality air-filtration products for a wide range of applications across many different industries all over the world. Through constant innovation, Nederman continues to improve the performance and reliability of its products.

### Flat bag filter with air purging (FS)



## Our service fleet is at your disposal: Anywhere, anytime.

Moreover, the company provides customers with a comprehensive range of services and spare parts. Customers benefit from highly individualized service programmes tailored to meet their specific needs. Thus, Nederman is today widely-recognized as the leading air-cleaning specialists in its field.

	Check of:				Exchange of wearing parts	Repairs	Materials included in fixed price
	Filterimpermeability	Filter-mechanism	Ventilator system	Control electronics			
Inspections	✓	✓	✓	✓			
Maintenance	✓	✓	✓	✓	✓		
Full service	✓	✓	✓	✓	✓	✓	Optional

### Competent, comprehensive, individual and fast – our service solutions

From routine inspection to complete system revision, you can choose your own individual service package.

### Measurement engineering competence:

- └ Pressure and differential
- └ Sound
- └ Condition of filter media
- └ Vibrations
- └ Energy conservation & Measurement
- └ Thermo scan

### Call service:

- └ Hotline: +66 (0) 8 3988 1573
- └ Fast, competent, on site – by our widespread network of local
- └ Service personnel
- └ Set hourly rates



# Our customer references



**SNF, Thailand**  
*Foundry Industry*



**KKF, Thailand**  
*Foundry Industry*



**AT, Indonesia**  
*Foundry Industry*



**Magotteaux, Thailand**  
*Foundry Industry*



**Aisin Takaoka, Thailand**  
*Foundry Industry*



**Alva, Thailand**  
*Aluminium Industry*



**Siam Fiber Cement, Thailand**  
*Cement/Lime Industry*



**Surint Omya, Thailand**  
*Cement/Lime Industry*



**Harpen Berlin, Germany**  
*Energy Recycling Industry*



**Bua Yai Bio Power Plant, Thailand**  
*Biomass/Agriculture Industry*

ABC, Busan, South Korea / ABP, Dortmund, Germany / Aisin Takaoka (ATFB), Thailand / Alcoa, Kerkrade, Netherland / Alstom, North Ryde NSW 1670, Australia / ALVA, Thailand / AMAG, Ranshofen, Austria / ANGUS Chemie, Ibbenbüren, Germany / Asian Isuzu Casting Center, Indonesia / AT, Indonesia / ATS, Eschborn, Germany / Bakrie Tosanjaya, Indonesia / BAM, Hofolding Germany / Bartz-Werke, Dillingen, Germany / Baumgarten, Bielefeld, Germany / BBS ANLAGENBAU AG, Teterow, Germany / BBT Thermotechnik, Lollar, Germany / Benninghoven, Mülheim, Germany / BMTI, Treibach, Austria / Brochier, Berlin-Neukölln, Germany / BSW, Kehl, Germany / Bua Yai Power Plant, Thailand / CAP C.E.L, Thailand / CASTECH, Ramos, Mexico /

## Extract of our reference list

CMI, Hong Kong, China / CLAAS GUSS, Gütersloh, Germany / COGNIS Ltd, Cork, Ireland / Corus Aluminium, Voerde, Germany / DaimlerChrysler AG, Stuttgart, Germany / De Globe, Weert, Netherland / Dennert Poraver, Postbauer-Heng, Germany / DISA, Schaffhausen, Schweiz / Dorfner, Hirschau, Germany / Düker, Karlstadt/Main, Germany / Eisengiesserei CHL Torgelow GmbH, Torgelow, Germany / EKO Stahl, Eisenhüttenstadt, Germany / EKV FREN KAPANA, Kartal-Istanbul, Turkey / ES Automobilguss, Schönheide, Germany / Euro-Equip S.A., Bilbao, Spain / Facultatieve Technologies, JN Den Haag, Netherlands / Filbo, Bohinjka Bistrica, Slovenia / FMW Förderanlagen, A-Kirchstetten, Germany / Fonderie Industriali Mondovi, Italy / GAST Guangzhou Aluminium Smelting, Guangzhou, China / GEMCO, EB Son, Netherland / Hallberg, Brabach, Germany / Georg Fischer, Singen, Germany / Gienanth, Eisenberg, Germany / Girlock (SA) (PTY) LTD, Isando, South Africa / GP Papenburg AG, Teltow, Germany / Grohe Water Technology AG, Lahr, Germany / Harpen, Berlin, Germany / HARZ-METALL, Goslar, Germany / HAW Hamburger Aluminiumwerk, Hamburg, Germany / Hertwich, Braunau, Austria / HICOM, Malaysia / HWS Heinrich Wagner Sinto, Bad Laasphe, Germany / Hydro, Voerde (Neuss), Germany / I.M.F. Srl, Luino, Italy / Institut für Verfahrenstechnik, Stuttgart, Germany / INTERMET NEUNKIRCHEN, Neunkirchen, Germany / Isar Asphaltmischwerke, Aschheim, Germany / Ischebeck, Ennepetal, Germany / JÖST, Dülmen-Buldern, Germany / JOT Companies, SF-Karkkila, Finland / KAB-Takuma, Berlin, Germany / Kilsaran Concrete Ltd., IR-Drogheda, Hafnarfjörður, Iceland / Kleinknecht, Kupferzell, Germany / Kulthorn Kirby Foundry (KKF), Thailand / Künkel-Wagner, Alfeld, Germany / Küttner, Essen, Germany / Lahme, Ennepetal, Germany / LG Electronics Qinhuangdao, Hebei, China / Linde AG, Weilbach, Germany / LOI Thermprozess, Essen, Germany / Magotteaux, Thailand / MAN Roland Druckmaschinen AG, Offenbach, Germany / Mannesmann, Rexroth-Lohr, Germany / Maris, Singapore / Matsushita Refrigeration Industries, Singapore / MDY L.L.C, Beachwood, USA / Metallwerke Bender, Krefeld, Germany / Metz Anlagentechnik, Berlin, Germany / Modgal Ltd., Rosh Pina, Israel / N.V. Ferromatrix, Marke, Belgium / Nijmeegsche Ijzergieterij, Netherland / Nikkei Siam, Thailand / Nussbaum AG, Olten-Trimbach, Switzerland / OAO Mosblprommontazh, Moskau, Russia / Oetinger, Weißenhorn, Germany / Omya, Gummern, Austria / Oschatz, Essen, Germany / Pine Pacific, Thailand / Pirelli Deutschland AG, Höchst - Odenw., Germany / Plamen International, Pozega, Croatia / POLST Sp. z o.o., Walbrzych, Poland / Portcast - Fundicao Nodular S.A, Maiy, Portugal / Porzellanfabrik Frauenthal, Frauental, Austria / Qinhuangdao Castec, Qinhuangdao Economic, China / Quarzwerke, Frechen, Germany / Remag Alloys B.V., Groningen, Netherland / REMONDIS, Lünen, Germany / Rusal, Samarskaja oblast, Russia / SCA - Hygiene Products, Mannheim, Germany / SHW, Wasseraifingen-Tuttlingen, Germany / Siam Fiber Cement, Thailand / SMS Meer, Mönchengladbach, Germany / Surint Omya, Thailand / Swietelsky, Gunskirchen, Austria / Teksid S.p.A., Crescentino, Italy / The Siam Nawaloha Foundry (SNF), Thailand / Thermcon Ovens B.V., Geldermalsen, Netherland / Trakya Döküm SAN, Mecidiyeköy-Istanbul, Turkey / UAB, Karmelava, Lithuania / Umicore, Olen, Belgium / Union Minière, Hoboken, Belgium / Verzinkerij Weert B.V., Weert, Netherland / Von Roll Casting, Emmenbrücke, Switzerland / Von Roll, Delemont, Switzerland / Wehrle-Werk, Emmendingen, Germany / Weslin Hungary, Oroszlany, Hungary / Winter, Stadtallendorf, Germany / Yangshong Jiangso, China / Yetzikat Hamifratz LTD., Haifa, Israel / Zehnder, Lahr, Germany / Zincoat B.V., Veenoord, Netherland / ZML Industries S.p.A., Maniago, Italy.



## FACTS ABOUT NEDERMAN

The Nederman Group is one of the world's leading suppliers of products and solutions within the environmental technology sector, focusing on industrial air filtration and recycling.

Nederman products and solutions contribute to reducing environmental impacts from industrial production and to creating safe and clean working environments whilst boosting production efficiency.

The group's offering covers everything from the design stage through to installation, commissioning and servicing. Nederman has subsidiaries in 29 countries and agents and distributors in over 30 countries.

Nederman is ISO 9001 and 14001 certified. The group develops and produces in its own manufacturing and assembly units in Europe, North America and Asia.

In 2010 Nederman acquired Dantherm Filtration, thereby forming the world's leading group within industrial air filtration.

***Nederman***  
**www.nederman.com**

**Nederman S.E.A. Co., Ltd.**

66/1 Moo 11 Bangkruay-Sainoi Road, T. Bangbuathong, A. Bangbuathong, Nonthaburi 11110, Thailand.

Phone: +66 2715 1300      Fax: +66 2715 1301      Email: [info.th@nederman.com](mailto:info.th@nederman.com)

**Vietnam Representative Office in Ho Chi Minh City:** Phone: +84 835 265 541      Fax: +84 835 265 541      Email: [info.vn@nederman.com](mailto:info.vn@nederman.com)

**Nederman (Malaysia) Sdn. Bhd. (892768-T):** Phone: +603 8940 1192      Fax: +603 8940 1196      Email: [info.my@nederman.com](mailto:info.my@nederman.com)

**Indonesia Representative Office:** Phone: +62 815 1499 7996      Fax: +62 815 1499 7996      Email: [info.id@nederman.com](mailto:info.id@nederman.com)

**Nederman Sales companies in:** Australia, Austria, Belgium, Brazil, Canada, China, Czech Rep. Denmark, France, Germany, Hungary, India, Ireland, Malaysia, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Slovak Republic, Spain, Sweden, Thailand, Turkey, United Kingdom, USA, 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