

CA filter cartridge with UniClean

A wide range of different filter materials is available for the Nederman cartridge filter range



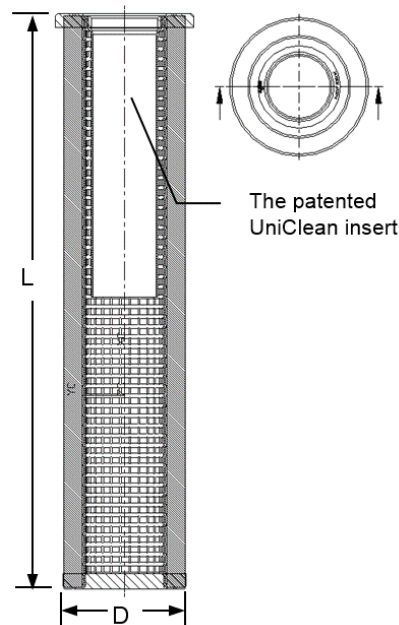
Dust is not just dust

Dust can be heavy or light, fine or coarse, sticky or free flowing, damp or dry or can have an electrostatic charge. It is thus very important to choose the correct cartridge type when engineering a dust control system.

A wide range of different filter materials is available for the Nederman cartridge filter range. These filters can therefore be used to handle most types of dust efficiently to ensure low levels of emissions.

These cartridges, when featuring UniClean (patented) integrated inserts, result in better cleaning from shorter pulses of compressed air.

Shorter compressed air pulses for filter cartridge cleaning enables lower consumption of compressed air and leads to longer cartridge life.



UniClean

The integrated UniClean CA Type filter cartridges give your filter a longer life and lower energy consumption:

- The same cleaning pressure over the full cartridge length
- The maximum dust cake build around the centre, not at the top
- Up to twice the cleaning pulse pressure inside the cartridge
- Fewer cleaning pulses \Rightarrow longer filter life
- Fewer cleaning pulses \Rightarrow lower compressed air consumption

CA	Substrate Type	D	L	Area in m ²	Weight in kg
Type 22	Spunbond Polyester	186	500	2,2	3,5
Type 40	Spunbond Polyester	186	870	4,0	4,0
Type 44	Spunbond Polyester	186	1000	4,4	4,2
Type 66	Spunbond Polyester	186	1390	6,6	4,8
Type 90	Cellulose/Polyester	186	870	9,0	4,0
Type 145	Cellulose/Polyester	186	1390	14,5	4,8

Available filter materials:

Type	Material	BIA Test	Weight (g/m ²)	Air permeability at 200 Pa (m ³ /m ² /h)	Characteristics
CA100	Polyester Standard	L, M	250	490	Smooth
CA140	Polyester Al-coating	L, M	260	540	Antistatic
CA141	Polyester with PTFE-coating	L, M	224	486	Antistatic
CA150	Polyester mit PTFE-Membrane	L, M	256	308	PTFE-membrane
CA175	Cellulose / Polyester flame retardant	L, M	130	640	Flame retardant
CA178	Cellulose / Polyester flame retardant nanofiber layer	L, M	132	538	Flame retardant, nanofiber layer
CA190	Polyester PTFE coating	L, M	250	500	Smooth, non-stick surface oleophobic

Emission dependent on filter load, dust type, quantity of dust, application etc.
 Not all CA-Types are available for all Nederman cartridge filters.
 Always consult the technical specialists at Nederman when choosing filter material.
 Oleophobic: Easy cleaning of greasy dust.
 The cartridges do not contain any chlorinated compounds (PVC).

UniClean in detail

UniClean delivers the same cleaning pressure along the full length of the cartridge during a cleaning pulse (See Fig. 2).

In conventional cartridges the dust cake builds from the top, where cleaning is least effective, giving rise to clogging in this area. This reduces the area for effective filtration. UniClean design overcomes this completely by encouraging the dust cake to build from the middle of the cartridge, with the additional advantage of uniform cleaning pressure.

The cleaning pressure in UniClean cartridges is often more than double that in conventional cartridges, with similar reverse jet cleaning equipment (compare Fig. 1 and 2).

The efficient cleaning results in fewer cleaning pulses being necessary. As a result the filter life is extended and the energy used for cleaning is reduced.

Patents

Patent no.: PCT/EP00/01801
 US patent no.: 6554138
 EU patent no.: 1161293

