



LEADING IN PRODUCTION EFFICIENCY

EcoMultiCyclone

POWERFUL BATH CLEANING



EcoMultiCyclone – POWERFUL BATH CLEANING

EFFICIENT – COMPACT – ROBUST

The **EcoMultiCyclone** is used for the separation of solid particles from the pre-treatment baths in automotive paint finishing.

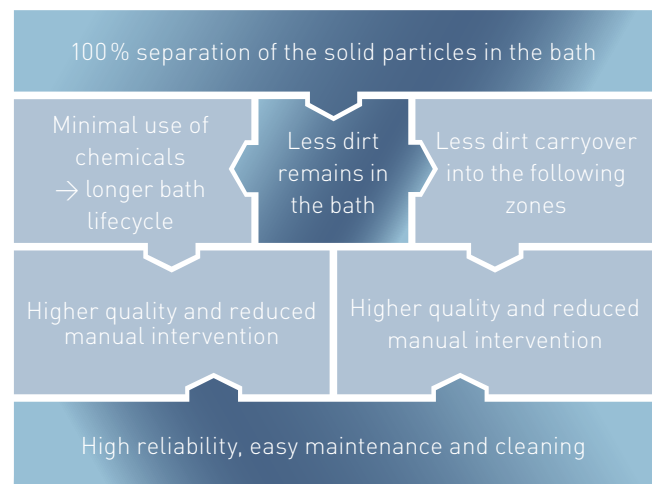
Compared to conventional bag filter systems, the use of the **EcoMultiCyclone** significantly reduces the dirt particles in the entire system peripherals. Its immediate impact is to significantly improve surface quality, reduce manual rework and provide savings in energy consumption and costs.

Nano and Micro

EcoMultiCyclone is available as a nano or micro version, depending on the desired flow rate and deposition rate. One of its greatest strengths are the specially designed unbreakable inserts made from a TPE-plastic composite. They stand for longevity and ease of maintenance.

Optimally combined

The combined use of the **EcoMultiCyclone Micro** and **Nano** results in an excellent bath quality. In the first zones, after the body shell construction, the particles are initially cleaned up to 25 µm. In the last stage, the use of the **EcoMultiCyclone Nano** enables a precision cleaning to below 10 µm. This is particularly suitable for the demanding nano surface coating to achieve an optimal base.



EcoMultiCyclone	Nano	Micro
Flow rate	1.65 m ³ /h	12–15 m ³ /h
Pressure loss	2.3–2.7 bar	0.8–1.2 bar
d 50	8.2 µm	15 µm
90 %	10 µm	30 µm
100 %	20 µm	50 µm

EcoMultiCyclone Micro



Degreasing zone I

EcoMultiCyclone Micro



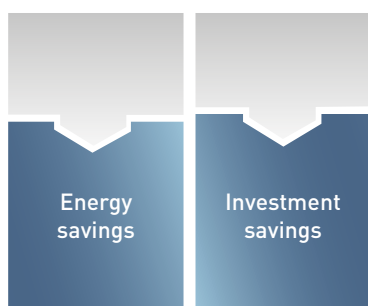
Degreasing zone II

EcoMultiCyclone Nano

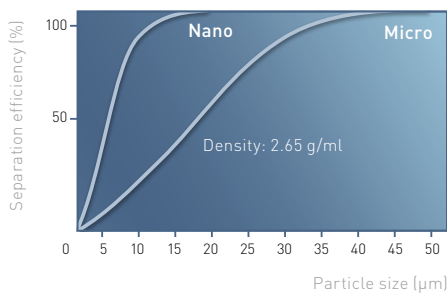


Degreasing zone III

» *Retrofitted system with EcoMultiCyclone Micro*



EcoMultiCyclone Micro compared to a conventional filtering system

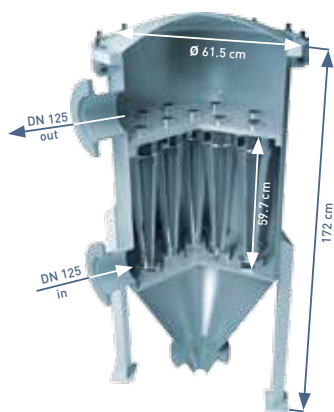


Cost saving

- » Lower operating and maintenance costs
 - Longer bath life cycle
 - Reduced chemical consumption
 - Less wear and tear
- » Less investment
 - Reduced number of components
 - Smaller overall system
- » Less rework

Higher quality

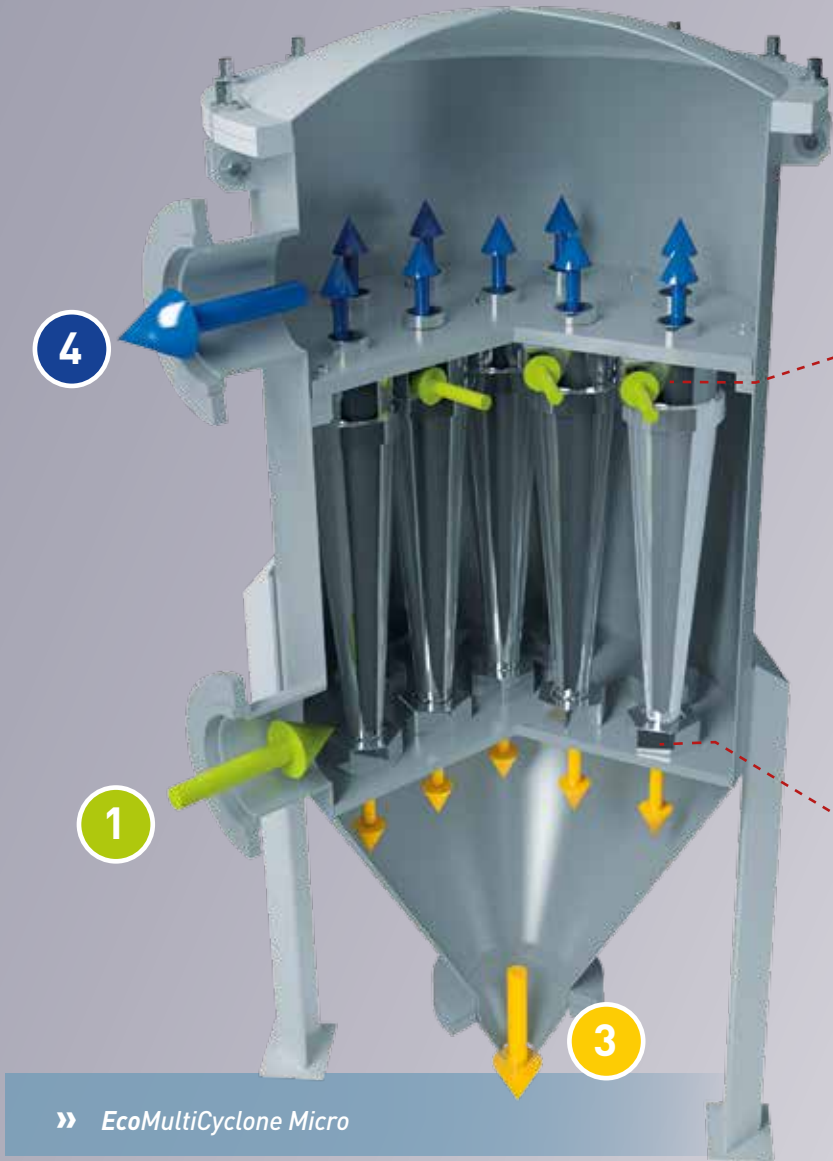
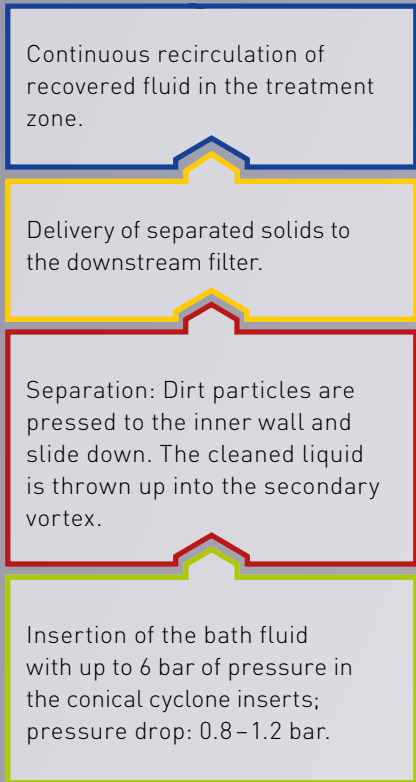
- » Highest level of separation
 - Nano: 90% at 10 µm, 100% at 20 µm
 - Micro: 90% at 30 µm, 100% at 50 µm
- » Optimally sized passages for inlets and outlets



EcoMultiCyclone Micro dimensions

Compact and flexible design

- » Low installation heights
- » Optimized passage through modified feed pipe
- » Variable number of inserts
- » Greater efficiency and flexibility



» *EcoMultiCyclone Micro*

Optimized processes

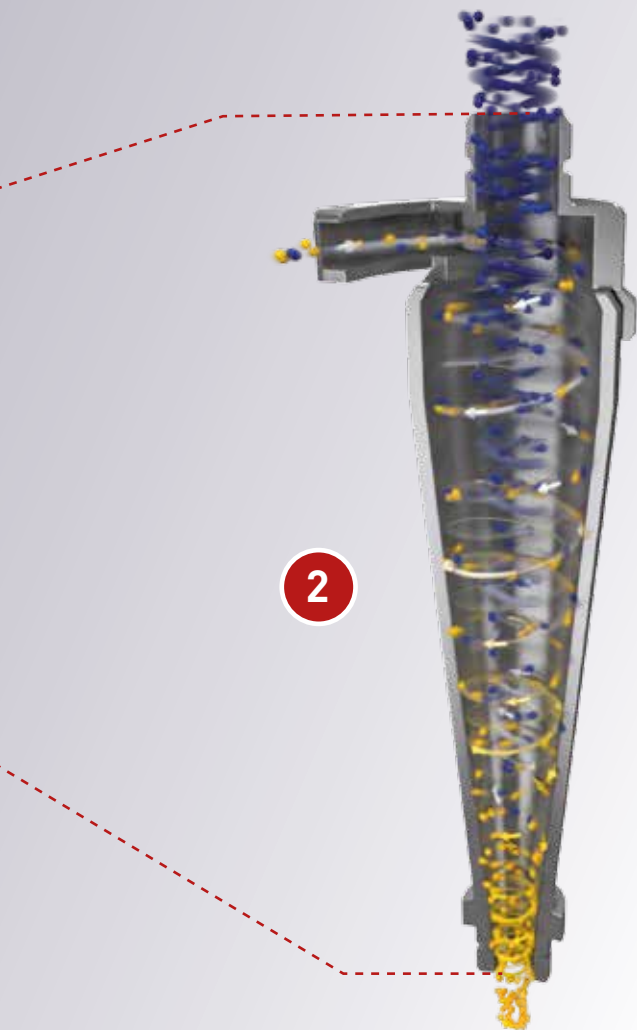
The **EcoMultiCyclone** is placed in the recovery step of the treatment zone. In a continuous process, the bath fluid is pumped through the inlet in the housing and the conical cyclone inserts. Here, due to centrifugal force, the actual process of separation of the solid particles and fluid takes place. Welding slag and grinding particles are collected in the lower part of the housing and discharged at intervals of time to a downstream band filter. The recovered liquid is fed continuously back into the pre-treatment zone.

Unbreakable inserts

The cyclone elements are extremely durable. They are made from a special TPE-plastic material developed by Dürr with special properties:

- » High breaking strength
- » High abrasion resistance
- » High temperature and shape stability





High filtration efficiency with minimal need for space



Easy maintenance

The **EcoMultiCyclone** is easy to maintain and service. The upper plate is removable and allows the dismantling of the individual inserts at a low heights.

All openings in the system have optimal passage sizes. Thus, the filter is less prone to blockages and needs to be cleaned less frequently.

Easy to retrofit

The **EcoMultiCyclone** can be easily integrated into existing pretreatment installations.

Dürr is represented by service centers around the world and offers fast, quality-oriented retrofitting of your equipment.



LEADING IN PRODUCTION EFFICIENCY

Dürr – Leading in Production Efficiency

Five divisions, one goal: maximum production efficiency for our customers

- » **Paint and Final Assembly Systems:** paint shops and final assembly systems for the automotive industry
- » **Application Technology:** robot technologies for the automatic application of paint as well as sealants and adhesives
- » **Clean Technology Systems:** exhaust-air purification systems and energy-efficiency technology
- » **Measuring and Process Systems:** balancing systems as well as assembly, testing and filling technology
- » **Woodworking Machinery and Systems:** machinery and systems for the woodworking industry