

ESTABLISHED
1873

Ideen von heute
– für die Welt von
morgen



The OSSBERGER company
More sustainable, cleaner, lighter



The OSSBERGER company

MORE SUSTAINABLE, CLEANER, LIGHTER

Since 1873 Ossberger has been reflecting about the world's development and how to contribute to it. Right from the beginning the company management focused on innovative and environmentally friendly technologies in the field of machine construction. This made Ossberger what it is today: a modern and development-oriented family company. With its three departments hydro power, plastic technology and surface techniques it contributes to a better quality of life worldwide.

OSSBERGER in figures

1873

Company foundation

> 60

Patents worldwide

> 10.000 m²

Production surface

> 12.500

Power units on all continents

> 100

Countries with installed power plants



Coli-Cleaner Inline Cleaning

Principle and advantage, compared with conventional procedures

Revolution in Inline Cleaning

It is our ambition to think things in a new way. In our Surface Technology this has led to a procedure that is both efficient and simple. The OSSBERGER Coli-Cleaner is the solution for line integrated parts cleaning on the market.

Much faster, more efficient, less polluting

YOUR AIM IS TO CLEAN MANY PARTS AT A HIGHER RATE IN ONE PRODUCTION LINE?

We have the procedure. The OSSBERGER Coli-Cleaner is much faster, more efficient and less polluting than the procedures offered by our competitors. All model types only require one meter of space, clean within the production cycle and allow for direct processing of the parts. In addition, the Coli-Cleaner scores with high availability, very short set-up times, low resource consumption and a short payback period.

Direct processing

The Coli-Cleaner focuses on vibration and fluid mechanics in the field of parts cleaning. One can largely do without heat, water or chemical cleaning agents. This leads to a reduced and more efficient use of resources, but also a high tolerance towards a varying pollutant load and consequently a high reproducibility of the final outcome. Getting neither warm nor wet, parts have room temperature and are dry - which allows for direct processing without cooling lines. Cycle times of only a few seconds are standard for the Coli-Cleaner.

100 percent automatable

The Coli-Cleaner technique focuses on the consistent implementation of an idea, tailor-made for pollution and desired cleaning result. Starting from the basic solution, special demands can be fulfilled with minimal effort. The Coli-Cleaner inline cleaning is 100 percent automatable, avoids a complicated or manual transport of parts, goods carriers as well as stock materials and provides exceptional results.

DRY CLEANING

The core process of the Coli-Cleaner.

The parts to be cleaned are put into vibration. The vibration exerts solving forces on the solid and liquid pollution adhering to the pieces. The freed particles are extracted by air suction and can be recycled. Workpieces get cleaned all around, as vibration produces a kind of floating condition without contact areas.

Vibration affects the entire work piece surface, eliminating the influence of cavities difficult to access. The procedure excels in extremely low energy consumption, ensuring a very short payback period. Dry cleaning easily fulfils the requirements of most industrial production processes.

DRY CLEANING^{PLUS}

The Coli-Cleaner combination process.

If higher demands are placed on the purity of parts, dry cleaning is combined with a wet chemical process. Even the thinnest oil film can thus be removed from the work piece, which may then be sent to the next production step free of grease. The Coli-Cleaner process is applied before and after the wet chemical cleaning. Very long bath service lives can thus be achieved, the availability of the unit increased and a constant cleaning quality guaranteed. Thanks to the Coli-Cleaner, there is no need for heat in the subsequent drying process, and the cleaning agent which has been used before can be recycled. The floating condition enables complete rinsing and drying of the work piece. Parts can therefore be wetted with a constant film thickness according to customer requirements.

Development and Innovation

Die Entwicklung im Bereich der Oberflächentechnik konzentriert sich auf neue Anwendungen in der prozesssicheren Benetzung von Teilen. Durch das perfekte Zusammenspiel von Vibrationstechnologie und Strömungsmechanik lassen sich konstante Flüssigkeitsfilme auf das ganze Werkstück aufbringen, die beispielsweise so dünn sind, dass eine nachfolgende, automatische Werkstückvermessung auf wenige Mikrometer genau stattfinden kann.



Machine platform **Line**

Coli-Cleaner S, M, L

Dry cleaning

Reliable cleaning
Residue-free contact surfaces
Without heat and chemicals
Maintenance-free

Integrable into lines

100% inline cleaning
Required space 1.0m within the line
Links production processes
Cleaning within production cycle

Efficient

No waste of media
Low energy consumption
Oil recovery
Short payback time

Plattform Line
Stand 2017-10-10



OSSBERGER

3 Processes, 3 machines, 1 interface

We have the procedure for line-integrated parts cleaning. All platform line units only require one meter of space, are interface-compatible and clean within the production cycle. Thanks to vibration and fluid mechanics one can largely do without heat, water or cleaning agents. Complemented by the use of media for dry cleaning^{PLUS}, the procedure meets with the highest cleaning demands. A direct processing of parts is always possible. Parts have room temperature, are dry all around and are positioned correctly for the transfer.

Coli-Cleaner S	Coli-Cleaner M	Coli-Cleaner L
		
Overview		
Dry cleaning Single-stage process Dry	Dry cleaning ^{PLUS} Two-stage process: Wet and dry cleaning	Dry cleaning ^{PLUS} Three-stage process: Pre-/wet/dry cleaning
Size, power, weight		
Width 1.0m Depth 1.2m Height 1.5m Power consumption 4 kW Weight 620 kg	Width 1.0m Depth 1.5m Height 2.4m Power consumption* 6 – 12 kW Weight 1,350 kg	Width 1.0m Depth 2.0m Height 2.4m Power consumption* 8 – 18 kW Weight 1,700 kg
Cleaning process		
Vibration 50 – 250 Hz Cleaning medium Air flow (depression)	Vibration 50 – 250 Hz Cleaning media Oily or aqueous cleaner** Air flow (depression)	Vibration 50 – 250 Hz Cleaning media Aqueous cleaner Air flow (depression)
Recycling of oil or polluted media		
●	○	●

○ optional ● serial
 * Depending on operating point
 ** Run with oil as plant variant

Coli-Cleaner S



The parts to be cleaned are put into vibration. The vibration exerts solving forces on the solid and liquid pollution adhering to the pieces. The freed particles are extracted by air suction and can be recycled. Workpieces get cleaned all around, as vibration produces a kind of floating condition without contact areas.

Vibration affects the entire work piece surface, eliminating the influence of cavities difficult to access. The procedure excels in extremely low energy consumption, ensuring a very short payback period. Dry cleaning easily fulfils the requirements of most industrial production processes.

The workpieces to be cleaned are taken up by the Coli-Cleaner at the transfer position and pushed through the cleaning channel one after the other, where they are cleaned under vibration as well as with air and media flow. The cleaned parts have room temperature, are dry and are positioned correctly at the outlet for the follow-up process.

The removed medium is separated from solid particles and recycled. It can be supplied to the upstream process again

Size, weight	Width 1.0m	Depth 1.2m	Height 1.5m	Weight 620 kg
Power consumption	Electrical power 4 kW			Cooling capacity None
Cleaning process	Vibration 50 – 250 Hz			Cleaning media Air flow (depression)
Emission	Sound: < 78 dB(A)			Exhaust air Filter category EU9/F9 Temperature: app. 5 – 15°C above RT
Options	Internationalisation Adaptation to country-specific voltages other than 3/N/PE; AC 400V/230V; 50Hz Concatenation Profinet interface, extended emergency stop circuit and adapted safety concept Energy monitoring Electricity and air consumption measurement			

Coli-Cleaner M



If higher demands are placed on the purity of parts, dry cleaning is combined with a fluid-carrying procedure, so that a 2-stage process is achieved. Even residues with low mass can thus be removed from the work piece, which may then be sent to the next production steps, wetted thinly and free of grease. The Coli-Cleaner process is applied after medium cleaning, there is no need for heat in the subsequent drying process, and the cleaning agent which has been used before can be recycled. The floating condition enables complete rinsing and drying of the work piece. Parts can therefore be wetted with a constant film thickness according to customer requirements.

Depending on the option selected, the plant can be run with aqueous cleaner or oil as medium.

The workpieces to be cleaned are taken up by the Coli-Cleaner at the transfer position and pushed through the cleaning channel one after the other, where they are cleaned under vibration as well as with air and media flow. The cleaned parts have room temperature, are dry and are positioned correctly at the outlet for the follow-up process.

Size, weight	Width 1.0m	Depth 1.5m	Height 2.4m	Weight 1,350 kg
Power consumption	Electric power 6 – 12 kW			Cooling power < 10 kW
Cleaning process	Vibration 50 – 250 Hz			Cleaning media Oily or aqueous cleaner Air flow (depression)
Emission	Sound: < 78 dB(A)			Exhaust air Filter category EU9/F9 Temperature: app. 5 – 15°C above RT
Options	Cleaning medium oil Process techniques equipped for an operation with oily cleaners. Internationalisation Adaptation to country-specific voltages other than 3/N/PE; AC 400V/230V; 50Hz Concatenation Profinet interface, extended emergency stop circuit and adapted safety concept Regulation of tank level Water 1-channel, with cleaning concentrate 2-channel through dosing unit Oil separator Band or coalescence separator, integrated into tank system Energy monitoring Electricity and air consumption measurement			

Coli-Cleaner L



If higher demands are placed on the purity of parts, dry cleaning is combined with a wet chemical process, so that a 3-stage process is achieved. Even the thinnest oil film can thus be removed from the work piece, which may then be sent to the next production step free of grease. The Coli-Cleaner process is applied before and after the wet chemical cleaning. Very long bath service lives can thus be achieved, the availability of the unit increased and a constant cleaning quality guaranteed. Thanks to the Coli-Cleaner, there is no need for heat in the subsequent drying process, and the cleaning agent which has been used before can be recycled. The floating condition enables complete rinsing and drying of the work piece. Parts can therefore be wetted with a constant film thickness according to customer requirements.

The workpieces to be cleaned are taken up by the Coli-Cleaner at the transfer position and pushed through the cleaning channel one after the other, where they are cleaned under vibration as well as with air and media flow. The cleaned parts have room temperature, are dry and are positioned correctly at the outlet for the follow-up process.

Size, weight	Width 1.0m	Depth 2.0m	Height 2.4m	Weight 1,700 kg
Power consumption	Electric power 8 – 18 kW			Cooling power < 10 kW
Cleaning process	Vibration 50 – 250 Hz			Cleaning media Aqueous cleaner Air flow (depression)
Emission	Sound: < 78 dB(A)			Exhaust air Filter category EU9/F9 Temperature: app. 5 – 15°C above RT
Options	Internationalisation Adaptation to country-specific voltages other than 3/N/PE; AC 400V/230V; 50Hz Concatenation Profinet interface, extended emergency stop circuit and adapted safety concept Regulation of tank level Water 1-channel, with cleaning concentrate 2-channel through dosing unit Oil separator Band or coalescence separator, integrated into tank system Energy monitoring Electricity and air consumption measurement			



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