

# EcoCBelt



Beltwasher



EcoClean

# Perfectly clean. Perfectly easy!

The new belt cleaning system *EcoCBelt*.



Individually adaptable, short delivery times, cost-effective: the *EcoCBelt* cleaning system is distinguished by its concept that provides simple and flexible solutions both during purchasing and later when in use.

## **Individually adaptable**

The cleaning system has a modular structure. Four different standard sizes are available, depending on the size of the work pieces and the required output rate. Additionally, it is also possible to equip the system with three different process levels and fit it with over 30 aggregates or modules.




### **Short delivery times**

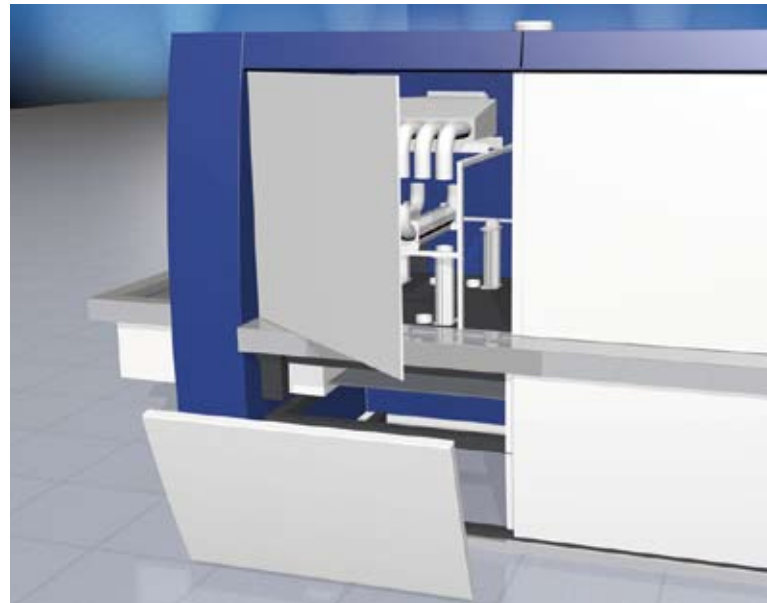
The system structure allows the individual modules of the *EcoCBelt* to be prepared so that the individually assembled system can be ready for shipping ex-works within 8 weeks.

### **Cost-effective**

Optimised batch sizes during purchasing and production allow highly economic prices to be realized.

### **Rapid information**

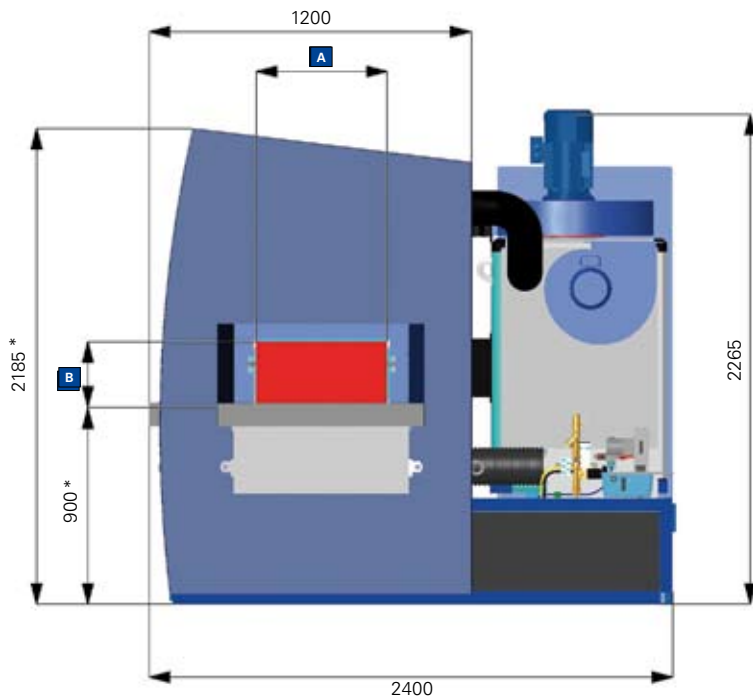
Anyone who is interested can find information about prices and availability of the *EcoCBelt* on our website [www.beltwasher.de](http://www.beltwasher.de) in a matter of minutes. A special configurator helps the user to select the right system and provides immediate information about the price and delivery time for the system. 



### ***EcoCBelt* – Benefits at a glance**

- Compact construction, ready for connection and small installation surface
- Problem-free integration into a production line and/or a production machine (decentralized or island solution)
- Diverse expansion options thanks to modular structure
- Expansion of the cleaning process without affecting the cycle time
- Full utilisation of the existing outputs thanks to continuous operation
- Reproducible cleaning results
- Multi-level washing/rinsing process with hot-air drying
- Parts in contact with the media are made of stainless steel or other rustproof material
- High level of system availability due to low and simple maintenance requirements (large servicing doors, fast-action couplings)
- Chain return path is below the spray tunnel

# Facts and Figures

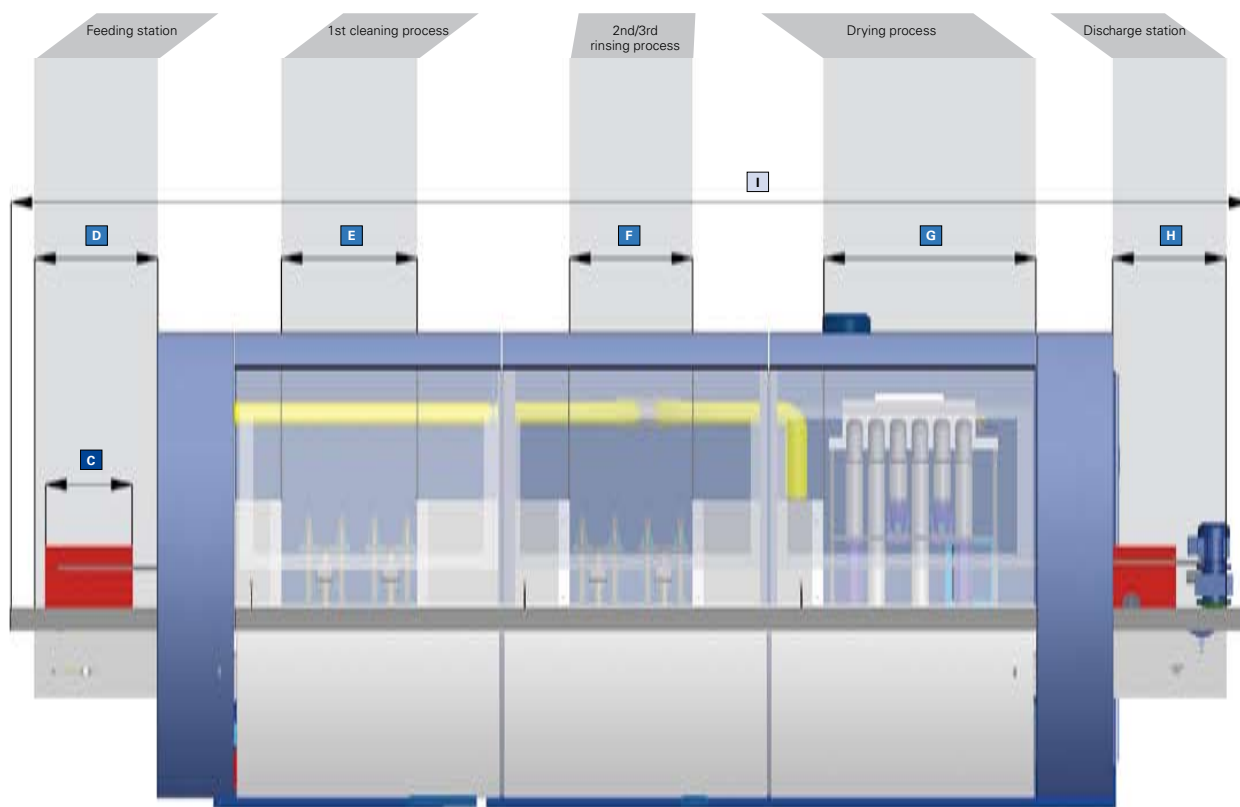


\* The load/unload height can be continuously adapted within a range of 850 – 950 mm resulting in a respective modification of the system dimensions.

## Technology and Procedure

- The standard version is available in four different construction sizes that are adapted to the workpiece size
- Modular system structure:  
Clean – Rinse – Dry
- Cleaning process can be individually adapted to the level of soiling of the workpieces
- Manual or automatic feeding interlinked to an existing transport system
- Continuous or cyclic transportation of parts, alternatively with belt or chain conveyors
- Adjustable belt speed
- Closed system housing with large maintenance openings for easy access
- Siemens control system for individual programming of the procedure processes
- Error diagnosis via plain text display on the operating panel
- Parts in contact with the media are made of stainless steel or other rustproof material

		Construction size			
		T1	T2	T3	T4
Nominal belt speed (adjustable from 0.2 to 1.5 m/min)	[m/min]	0.4	0.5	0.75	1
Drive output	[KW]	0.4			
Bath capacity / module	[l]	500		1,000	
Pump output / module	[m³/h]	15		30	
Pump pressure	[bar]	2.2			
Motor output / module	[KW]	2.2		3	
<b>Cleaning / Rinsing process</b>					
Bath temperature	[°C]	45			
Heating output / 1st module	[KW]	24		36	
Heating output / 2nd module	[KW]	18		36	
<b>Drying process</b>					
Volume flow	[m³/h]	3,000		6,000	
Pressure	[Pa]	4,000			
Fan output	[KW]	6		12	
Drying temperature	[°C]	50			
Heating output	[KW]	12		24	
Total connected load	[KW]	45/65/85		75/114/153	
Voltage		3 x 400 V/50 Hz			
Maximum throughput	[kg/h]	3,000	4,500	6,000	9,000



Workpiece dimensions			Dimension			
			T1	T2	T3	T4
A =	width	[mm]	600	600	600	600
B =	height	[mm]	200	300	450	450
C =	length	[mm]	300	400	500	600
Max. workpiece weight:		[kg]	45			
Machine dimensions						
D =	Feeding station	[mm]	450	450	650	650
E =	1st cleaning process	[mm]	450	550	1.000	1.050
F =	2nd/3rd rinsing process	[mm]	450	550	1.000	1.050
G =	Drying process	[mm]	800	1.000	1.550	2.000
H =	Discharge station	[mm]	450	450	650	650
1st Cleaning module + drying module						
I =	Overall machine length	[mm]	3.730	4.130	5.630	6.530
1st Cleaning module + 2nd cleaning module + drying module						
I =	Overall machine length	[mm]	4.780	5.380	7.430	8.780
1st Cleaning module + 2nd cleaning module + 3rd cleaning module + drying module						
I =	Overall machine length	[mm]	5.830	6.630	8.910	11.030

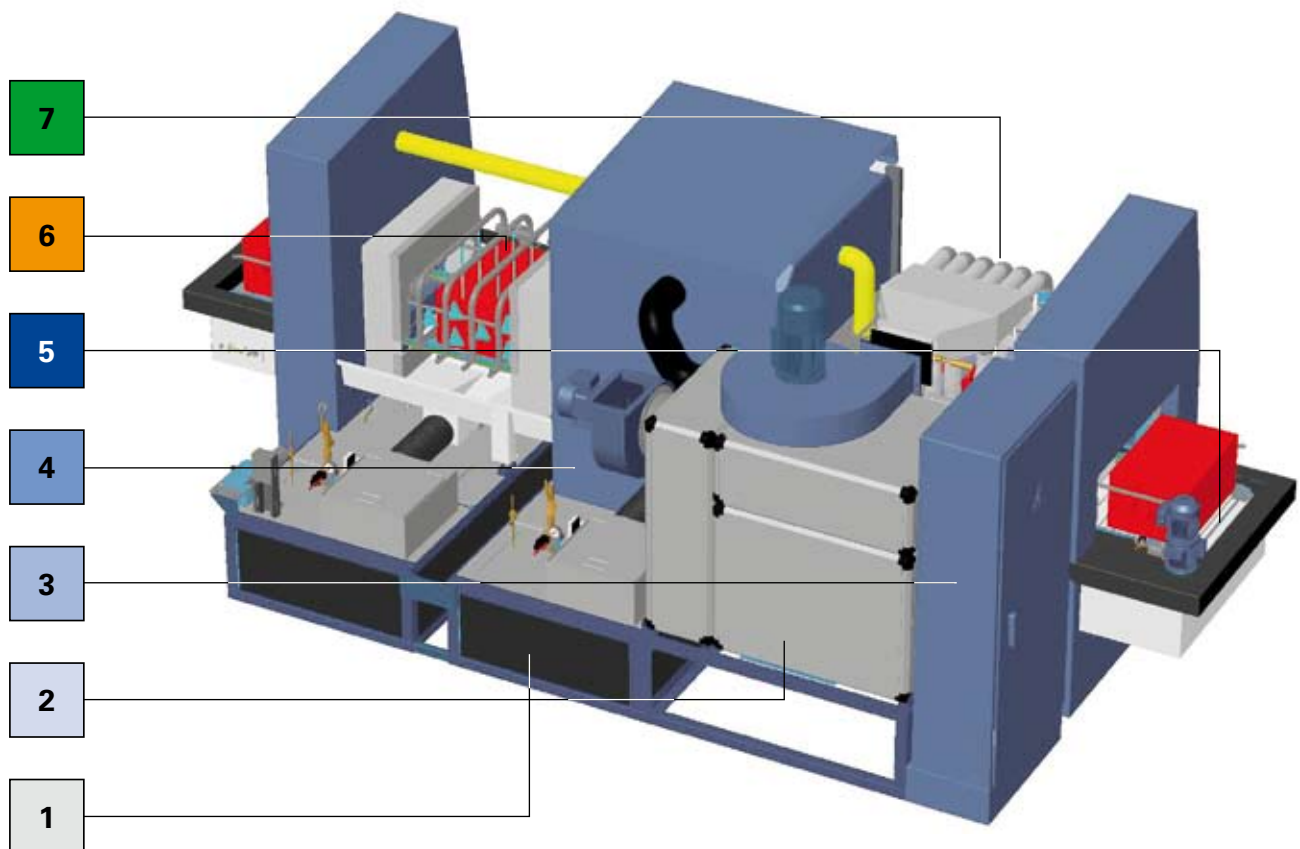
# Standard and Optional

The *EcoCBelt* can be designed individually to meet your respective cleaning requirements. The standard versions can be equipped with a variety of options.

The adjacent table contains a list of all variants that can be used to achieve an optimum cleaning result.

Individual adjustments that go beyond these variants are possible; however they need to be planned and calculated in detail.

In this case, please contact our sales team.



	Basic installation	Options
<b>Basic installation</b>	• Cleaning module	
		• 2nd additional rinse process
		• 3rd additional rinse process
	• Drying module	
		• Floor drip tray
		• Leak warning probe
	• Horizontal pump	• Vertical pump
	• Extended system housing	
	• Weekly timer	
<b>1 Tank</b>	• Tank level controls	
	• Fresh water supply	• Fresh water supply via cascade
	• Pressure gage	
	• Cleaning door	
	• Heating element with temperature control	• Heating element in special design
	• Draining valve	• Fix piped draining pump
	• Basket filter	
	• Band oil skimmer	• Separate oil skimmer
	• Boil dry safety protection	
		• External fine filtration, different models
		• Chemical dosing unit
	• Aquaclean connections (water treatment)	
	• Supply via centralized system	
	• High temperature package 70 °C (per tank)	
<b>2 Air unit</b>	• Extraction system	• Extraction system with strainer
	• Inlet air filter	
	• Blow off fan	
	• Heating element	• Heating element in special design
	• Cross current heat exchanger	
<b>3 Electronic control</b>	• Siemens PLC S7-300	
	• Siemens OP 77B	• Siemens OP 370
<b>4 Spray tunnel</b>	• Maintenance doors with Euchner locks	
		• Tunnel insulated
	• Rubber curtains between the zones	• Sheet walls with workpiece specific cut-outs
	• Dürr finishing (RAL 7035 and 5002)	• Stainless steel, customized painting
<b>5 Conveyor</b>	• Roller chain with wire hoops	• Special roller chain conveyor
		• Multi track conveyor
		• Step-by-step conveyor
		• Customized load/unload
		• Part seats
	• Geared motor from SEW	
<b>6 Cleaning Module</b>	• Stainless steel spray manifold	
	• Plastic nozzles	• Nozzles in special design
<b>7 Drying Module</b>	• Adjustable ventilation measurement	• Ventilation measurement in special design
		• Automatic cleaning of the drying chamber
		• High temperature package 80 °C

# EcoCBelt – the Machine Configurator

How it works

## Logging on

1

Visit our website [www.beltwasher.de](http://www.beltwasher.de), log on with your e-mail address and select "Configure".

## Enter sizes

2

You will be asked to enter the dimensions of your workpiece, its weight and the required output rate. The configurator needs this data to establish the best possible basic system for you.

## Select process

3

In the next step, you will need to select one of three possible processes regardless of the level of soiling of the components: "Clean – Dry", "Clean – Rinse – Dry" or "Clean – Rinse – Rinse – Dry".

## Receiving information

4

The system provides you with an overview of your EcoCBelt configuration. You will also receive information about the price and delivery time of the planned system.

## Selecting options

5

The EcoCBelt also allows you to retrofit or exchange individual aggregates. In total there are more than 30 options; the respective detailed information about these options is available on the website.

## Ordering

6

Your required machine is now configured. The system will generate an overview of the configured EcoCBelt. You can contact us per e-mail and immediately start the ordering process or request further assistance. In each case, you will receive written conformation of the services and delivery time before the sales contract is finalized.



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