# **GROZ-BECKERT**

# Weaving Machines for the cleaning processes



# Machines from Groz-Beckert for cleaning weaving machine accessories

In addition to the process steps drawing-in, warp-tying and weaving, Groz-Beckert also offers a comprehensive product range designed for cleaning weaving machine accessories.

Modern drawing-in systems and weaving machines are sensitive to even the most minimal amounts of dirt on the weaving machine accessories. Productivity increases and high-quality weaving results can only be achieved with clean drop wires, healds, and reeds. Automated cleaning systems improve accessory cleaning results and minimize the amount of manual work involved.

The respective cleaning systems from Groz-Beckert ensure optimum cleaning for drop wires, healds, and reeds. Cleaning these accessories ensures that production can continue without interruptions.







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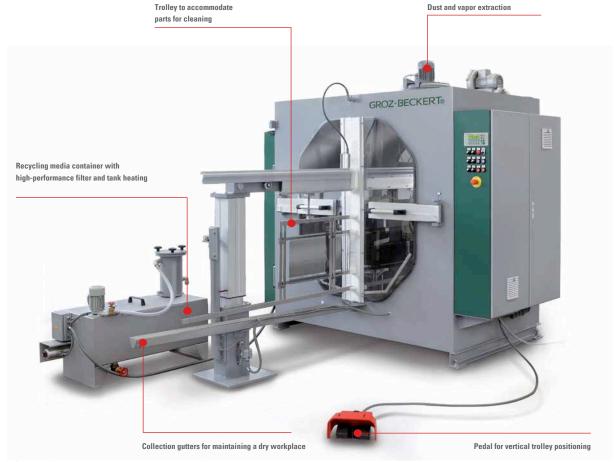
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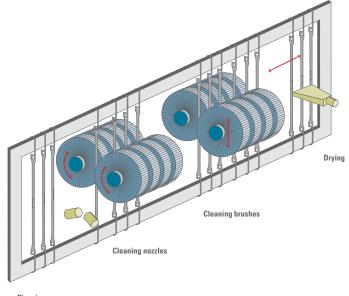
# ${\tt Groz-Beckert\ Cleaning\ System-An\ Overview}$

The universal cleaning machine "Cleaning System" from Groz-Beckert has optimized technology for the mechanical and chemical cleaning and subsequent drying of drop wire, healds, and reeds.



More information is available in the "Cleaning System" data sheet





**Cleaning process** 

## Cleaning



Cleaning reeds



Cleaning healds



Cleaning drop wires

#### Fields of application

The Groz-Beckert Cleaning System offers both dry and wet cleaning - as well as a combination of both methods. The Groz-Beckert Cleaning System is particularly suited for cleaning the following components:

- Flat and tunnel reeds with tin or plastic channel
- J, C and O-shaped healds
- All customary types of open and closed drop wires

Dimensions	Healds	Reeds	Drop wires
Length (mm)	≤ 450	-	≤ 450
Thickness (mm)	≥ 0.1	-	Optional
Width (mm)	-	≤ 5,000	Optional
Height (mm)	-	≤ 150	-
Dent width (mm)	-	≤ 12	-
Dent thickness (mm)	-	≤ 0.1	-
Density (dents/10 cm)	-	≤ 350	-

Minimum cleaning and drying time requirements <sup>1</sup>		
Healds	up to 25,000 pcs. per hour	
Drop wires	up to 40,000 pcs. per hour	
Reeds	up to 10 pcs. per hour	
Maximum cleaning length <sup>2</sup>	3,800 mm	
Maximum cleaning height	450 mm	
Maximum span height	1,100 mm	

<sup>&</sup>lt;sup>1</sup> Depending on degree of soiling and component properties

 $<sup>^{\</sup>rm 2}$  Greater lengths are simply cleaned by repositioning the frame / reeds in the machine truck.

### Groz-Beckert Cleaning System – processes, programs and benefits





#### **Innovative cleaning process**

Specially-shaped cleaning brushes with directional multi-dimensional movements are an intergral part of the Groz-Beckert Cleaning System. They ensure careful and controlled contact with components, particularly in areas which are difficult to access. Used in combination with a special cleaning agent, the brush movement ensures that the dirty parts arranged in rows are separated and individually cleaned.

#### **Coordinated cleaning programs**

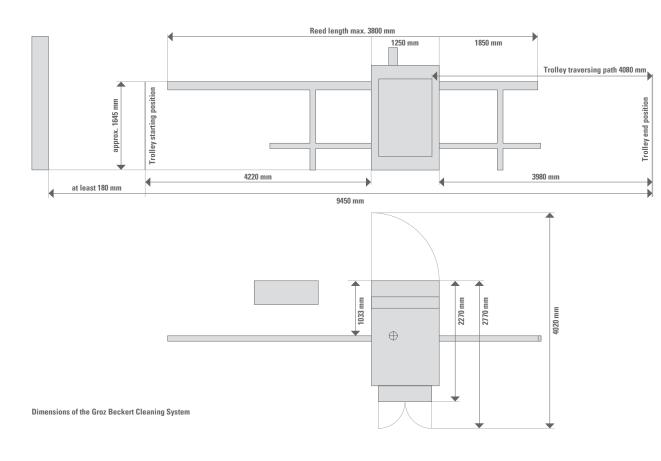
The Cleaning System offers different fully automatic cleaning programs — coordinated to the individual application and the degree of soiling. The subsequent drying process is intergrated and continues to work reliably even while the cleaning brushes are rotating. This prevents the cleaned items from sticking, and ensures that they will enjoy a long service life.

#### Your benefits

- Economy: Reduced susceptibility to faults during warp drawing-in due to machine cleaned accessories, long service life of drop wires, healds, and reeds, productivity increases in the weaving machine
- Quality: Reduced yarn damage, fewer warp end breakages, optimized weave quality
- Efficiency: Ultra-simple operation using minimal personnel, a short processing time, and a high level of efficiency
- Handling: One system for all drop wires, healds, and reeds incorporating compact central controls and an automatic sequence following insertion and removal with simple manual loading.

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# Cleaning



#### **Specifications**

Dimensions/Weight	
Cleaning length	≤ 3.800 mm
Cleaning height	≤ 450 mm
Span height healds/drop wires	≤ 450 mm
Span height reeds	≤ 150 mm
Weight	3.080 kg
Floor loading capacity	appr. 7.000 N/m <sup>2</sup>
Speed	
Feed rate cleaning / drying	1,85 m/min
Feed rate setting work	3,70 m/min
Connections/Electronics/Water/Co	ompressed air
Feed-in	3 x 400 V, ± 10%*
Max. back-up fuse	50 A
Connection cross-section	5 x 10 mm <sup>2</sup>
Frequency	50/60 Hz
Control voltage	24 V, DC / 230 V, AC
Rated current	20 kW
Infeed pipe	36 A*
	Any infeed pipe for filling height 50 cm
Compressed air connection	max. 8 bar
Miscellaneous	
Noise emission (measured value)	72,6 dB (A)
Cleaning agent	Tex 77

adjustable feed-in according to customer specification

#### Groz-Beckert ReedCleaner

The ReedCleaner from Groz-Beckert is suitable for cleaning reeds within the weaving machine. Steam and specially developed cleaning agents permit effective cleaning with maximum care of the reed. The ReedCleaner can be used both for flat and air reeds.







• Economy, efficiency and quality: Reduced machine stand times through effective cleaning, maximum weaving output due to reduced air consumption in air-jet weaving machines, higher product quality

the "ReedCleaner" data sheet

• Handling: Flexibility due to low weight and 230 V connection, no need to remove the reed from the machine, no reed length limitation, protection of the reed during cleaning



#### **Fields of application**

The mobile, easy-to-use system for cleaning flat and air reeds is used directly at the weaving machine with the warp drawn in. This does away with the need for removing the reed from the machine.



The Groz-Beckert ReedCleaner replaces the manual cleaning of reeds by a meticulously engineered machine process. This takes the strain from operating personnel, allowing them to concentrate on what they do best. This benefits the efficiency of the whole weaving process.



By combining steam and effective cleaning agents – in conjunction with a special cleaning nozzle – the Groz-Beckert ReedCleaner lifts the cleaning of reeds to a whole new level.





# Cleaning

#### **Specifications**

Cleaning output	
Reed/cleaning length	≤ 6.000 mm
Steam output	6 kg/h
Operating pressure	6–8 bar
Steam quantity	0-8 bar (adjustable)
Steam temperature	max. 185°C
Water consumption	appr. 0.1 I for 5 minutes cleaning
Cleaning time per reed	appr. 10 min

Dimensions/Weight	
Length	appr. 825 mm
Width	appr. 500 mm
Height	appr. 1.000 mm
Reed length	2.000 mm-6.000 mm
Reed channel	7 mm-12 mm
Reed height	80 mm-140 mm
Weight	appr. 35 kg

Electrical output	
Heating output	3.000 W
Rated voltage	230 V
Frequency	50/60 Hz
Rated output	3,0 kW
Miscellaneous	
Noise emission	< 80 dB (A)





### Groz-Beckert drop wire cleaner

With the Groz-Beckert drop wire cleaner, drop wires are cleaned in vibrating work chambers. The special mixture of the used granulate media ensures a thorough but gentle drop wire cleaning process.

#### Fields of application

The Groz-Beckert drop wire cleaner is ideally suited for cleaning all kinds of drop wires with light to medium soiling.

# Your benefits

- Quality: Thorough cleaning of drop wires after use in the weaving mill
- Efficiency: Optimization of automatic drawing-in in the weaving preparation department
- Handling: Simple, handy, and uncomplicated

# Space-saving and effective mechanical cleaning

The cleaning process of the Groz-Beckert drop wire cleaner enhances the efficiency of weaving factories. Given its compact design, the system requires only minimal space. The only requirements are a power connection and a special granulate.







More information is available in the "Drop wire cleaner" data sheet

#### **Specifications**

Dimensions/Weight	
Length	407 mm
Width	518 mm
Height	335 mm
Weight	52 kg
Electrical output	
Rated voltage	230/400 V
Frequency	50/60 Hz
Connected load	0,3 kW
Phases	3
Cleaning output/agents	
Cleaning output drop wires	max. 6,000 pcs./h (dependent on degree of soiling and gage)
Cleaning agent	Cleaning granulate type GM 16; blasting sand type VERA 24; cleaning fluid 2-propanol

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