



New strip brush machine principle brush against brush 2 stations can be used as a washing or abrasive brushing machine



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Technical Description

Wesero 2 station washing and brushing machine

Band parameters:

Strip material width	:	min. 20 mm; max 355 mm
Thickness	:	0,5 – 10 mm
Line Speed	:	0 - 200 m/min

Technical equipment:

The machine frame consists of a welded steel construction and carries the following assemblies:

2 brush stations (2x top, 2x bottom), with drive and cantilevered bearing for precise processing.

The bearing guarantees smooth-running and maintenance-free use, as well as a problem-free, fastest possible brush change

1 pc. Traversing of the entire machine for even wear of the brushes.(option for switchable and variably adjustable in speed).

The entire machine traverses from left to right across the entire brush face to assure even brush wear.

4 driven brushes are positioned via a servo gearbox for an even contact pressure in a stable, precise sliding guide construction.

The wet part of the machine is made of stainless steel and equipped with stainless steel spray tubes for brush cooling and cleaning.

1 pc. electrical operation, command messages and gauges in swiveling control panel. Electrical control in separate cabinet. (alternatively, separate control panel on the system).

Technic

Technical Specifications:

Brush diameter	:	450 mm max.
Brush cutting speed	:	V-constant adjustable up to max 20m/sec this will increase brush rpm as the brush diameter decreases due to wear
Brush Speed	:	0 - 1520 rpm, adjustable.
Feed Rate	:	0 – 200 m/min
Brush Shaft bearing	:	Hydrodynamic via oil unit pump and pressure switch.
Brush Adjustment	:	Automatically via Servo gear motor.
Water Supply	:	By customer, approx. 6 ³ /h (filtered water).

Connection data:

Brush Station	:	15 k/W drive DS-FOC. per brush
Traversing drive	:	approx. 0.12 kW
Brush adjustment	:	0,12 kW per brush

Electric

Brush machine control is via PLC, Siemens S7 series, including operating panel.

This process controller is the input of specific material programs with data sets or specifications for strip feed (m/min), brushing performance or brush contact pressure (% motor power) for both the wire brushes and other brushes and their optimum cutting speed (m/sec).

The latter also serves to regulate the brush rpm to compensate the brush wear.

Machine View



Servo-motorized bust delivery with a pretensioned ball roller spindle and low-play slide rail guide on both sides (here equipped with hydrodynamic shaft bearing).



Side view of delivery unit



Installation situation adjustment



Rear view of the complete adjustment units



Switch cabinet



Example of HMI

SIEMENS SIMATIC HMI

10:12:45 AM
11/29/2023

Manual Mode

Control is ON

4 Below	3 Above	2 Below	1 Above
Release	Release	Release	Release
Press	Press	Press	Press
Power [%]	Power [%]	Power [%]	Power [%]
Set Point	Set Point	Set Point	Set Point
0.0	0.0	0.0	0.0
Actual	Actual	Actual	Actual
0.0	0.0	0.0	0.0
circumferential speed	circumferential speed	circumferential speed	circumferential speed
setpoint m/s	setpoint m/s	setpoint m/s	setpoint m/s
0.0	0.0	0.0	0.0
setpoint rpm	setpoint rpm	setpoint rpm	setpoint rpm
1092	819	1092	1094
Actual rpm	Actual rpm	Actual rpm	Actual rpm
-2	-4	0	-3
Brush motor	Brush motor	Brush motor	Brush motor
Off	Off	Off	Off
Reverse	Reverse	Reverse	Reverse
2.2254 inch	2.2213 inch 2.2213 inch	2.2314 inch	2.1523 inch 2.1523 inch

Travesier Cycle is running

Material thickness brushing machine 0.0000

Mode OFF

Overview brush module

Menu PID

recipes

service to brush

ERROR ACK

Sales conditions

Price	on request
Delivery time	1-2 weeks
Transport	by WESERO
Installation	by WESERO, technician, approx. 2 weeks
Documents	including complete documentation
Software	complete implementation, programming and configurations
Warranty	12 months / 3 shift operation, excluding wear parts