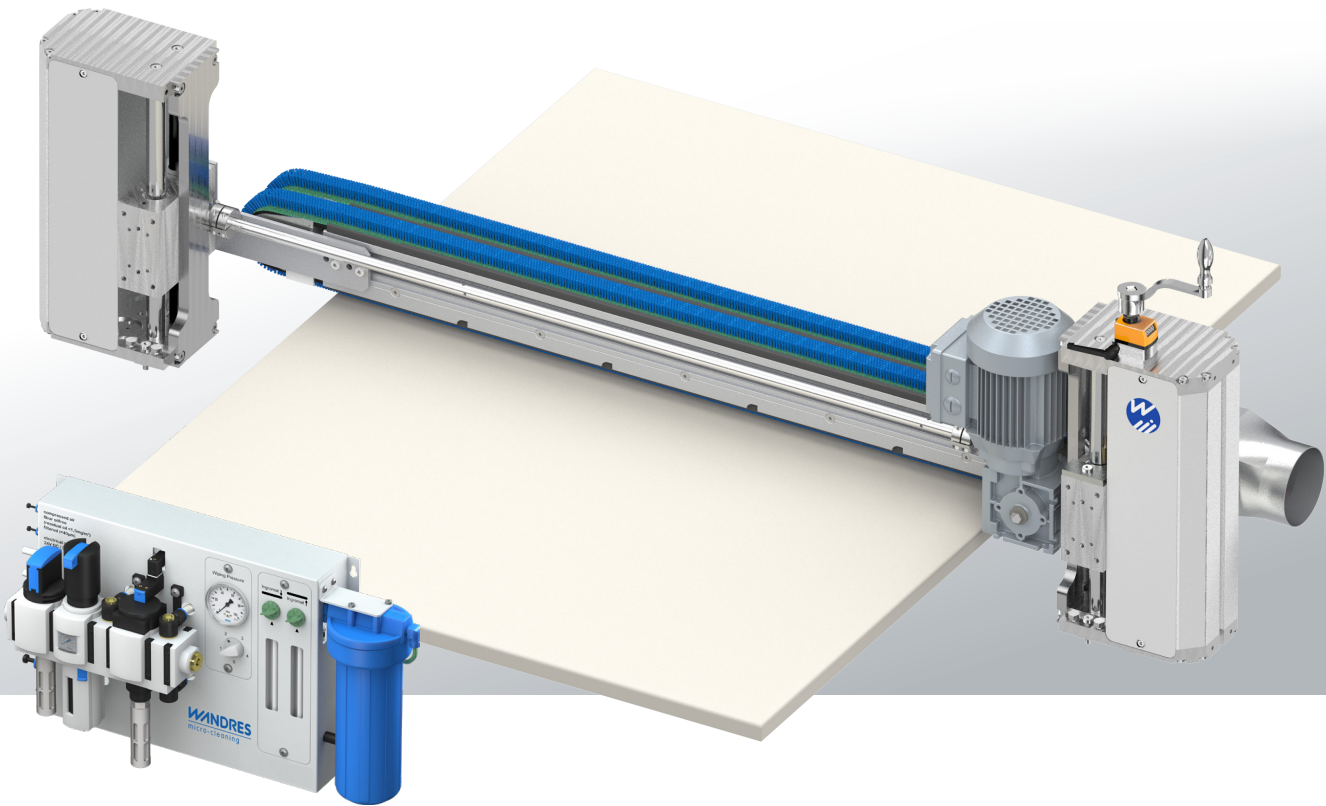


## Combi Sword Brush Una XL 111..

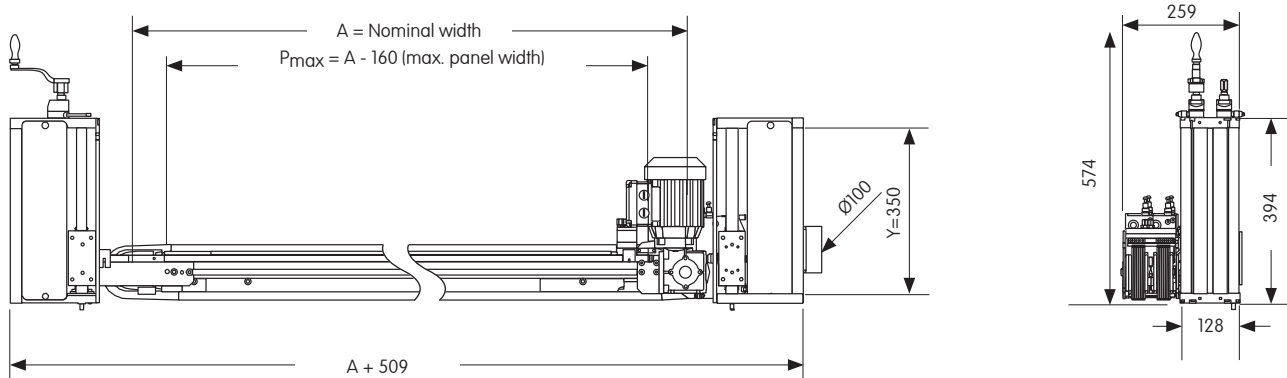


### Brief description

The Combi Sword Brush Una XL 111.. is ideal to clean heavily contaminated boards and panels at high production speeds e.g. floor laminate panels. One Power Sword Brush (type BIX 102) with two linear brushes wipes transversally across the surface. The machine uses the Ingromat® system and is equipped with micro-moistened brush filaments that remove even large amounts of electrically charged, abrasive laminate dust. An integrated pressure buffer provides for a consistent wiping pressure onto the material surface and premium cleaning results.

### Technical details

- 1 x Sword Brush BIX 102/1M/A with reinforced self-cleaning mechanism, pressure buffer, Ingromat® system and an Ingromat® regulator and filter unit IR 100.. (standard), with control and pneumatic cabinet (option)
- Adjustment frame VEG 25 with mechanical height adjustment (standard). An electrical and/or pneumatic height adjustment is available as an option.



Values in mm

### Ordering example

The subject panel has a max. width of

$P_{\max} = 1500 \text{ mm}$ .

Minimum nominal width of Combi Sword Brush:

$A_{\min} = P_{\max} + 160 \text{ mm} = 1660 \text{ mm}$

The most suitable Combi Sword Brush has  
a nominal width of  $A = 1700 \text{ mm}$ .

Order no. 2259-059

describes Combi Sword Brush

Una XL 111/350/1700

### Self-cleaning nozzles

Standard version order no. 4163340

Reinforced version order no. 4158462

We recommend the reinforced version for all  
applications where large quantities of dust occur.

Order no.

Una XL 111/350

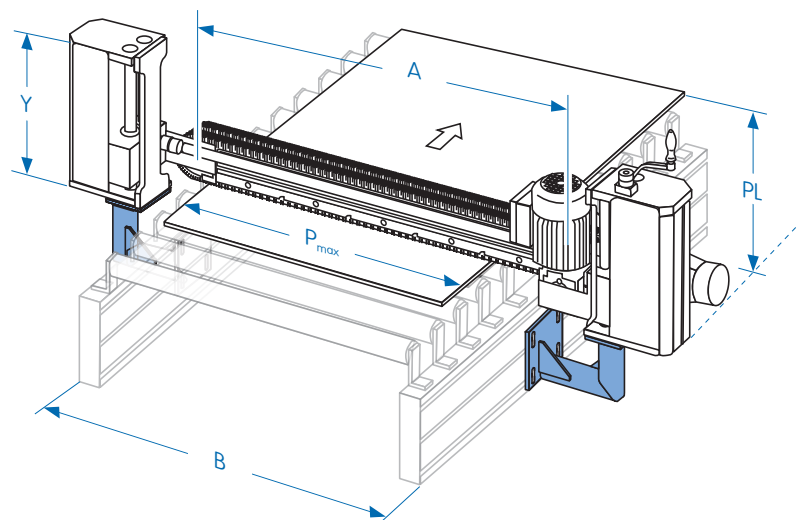


2259-

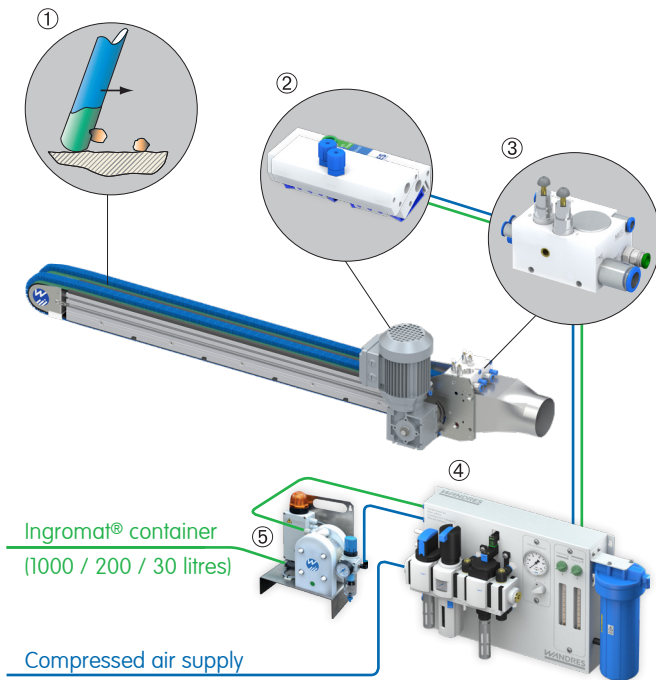
	Nominal width A in mm	Nominal width A in inches	
- 003	400	15.75	
- 004	520	20.47	
- 005	650	25.59	
- 058	700	27.56	
- 006	850	33.46	
- 045	900	35.43	
- 007	1000	39.37	
- 008	1100	43.31	
- 031	1200	47.24	
- 009	1300	51.18	
- 030	1400	55.11	
- 010	1500	59.06	
- 011	1650	64.96	
- 059	1700	66.93	
- 012	1750	68.89	

### Explanation

- A Nominal width of Sword Brush =  
Distance between deviation roller shafts.
- PL Pass line = Distance between screw down  
area and lower panel surface
- $P_{\max}$  Max. panel width =  $A - 160 \text{ mm}$
- Y Nominal measure of adjustment frame
- B Width of roller conveyor =  $A - 300 \text{ mm}$   
(-40/+25 mm)  
(for standard Homag roller conveyor  
with fastening kit 4160483)



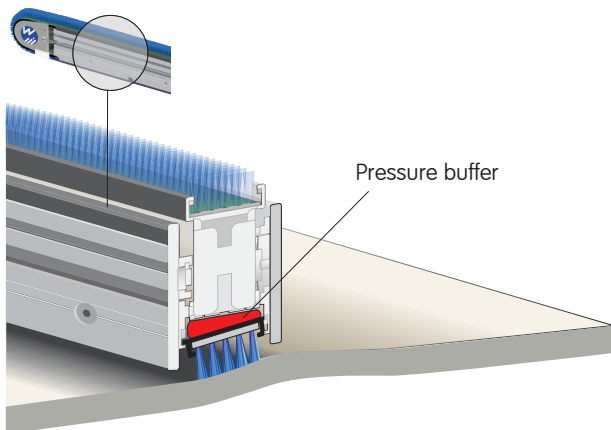
Una XL 111/350/A with  $Y = 350 \text{ mm}$



## Ingromat® system

Ingromat® is an anti-static cleaning agent. The brush filaments are micro-moistened with Ingromat® and effectively remove even the most tiniest dust particles.

- ① Micro-moistened brush filament with Ingromat® (shown in green)
- ② Ingromat® sprayer SQL 102..
- ③ 2 x Distributor block VTB 100..
- ④ Ingromat® regulator and filter unit IR 100.. Ingromat® filter, dosage and display of inner pressure of pressure buffer
- ⑤ Option: Ingromat® central supply pump, e.g. IS 102



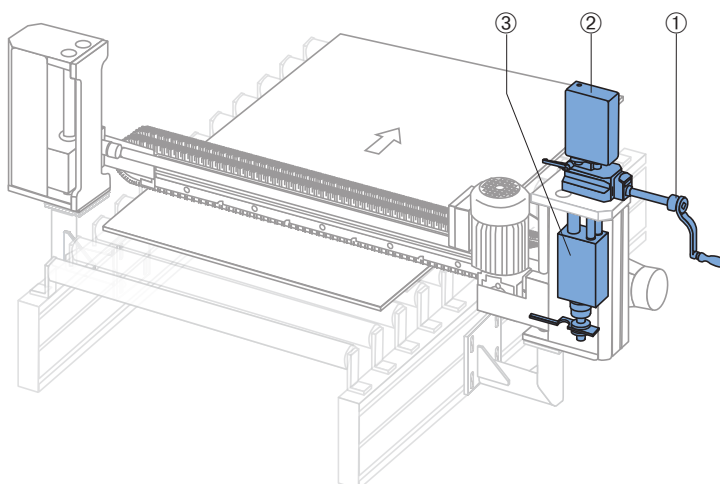
## Pressure buffer

The linear brush is mounted on a pressure buffer that provides flexibility and compensates irregularities and thickness variations of up to  $\pm 2$  mm. Thus brush filaments are not excessively bent, they will remain in a vertical position. This provides for a consistent wiping pressure and a premium cleaning quality.

## Height adjustment

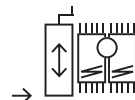
To adjust a cleaning module to the subject panel's thickness, the Sword Brush is mounted at an adjustment frame.

- ① Manual height adjustment (HVM): Normally, adjustment takes place manually via a crank.
  - ② Electrical height adjustment (HVE): An electrical actuator (available as an option) provides for a connection to the overall control which automatizes thickness adjustment completely.
  - ③ Pneumatic height adjustment (HVP): Additionally, the cleaning module may be rapidly removed from the surface with the help of a pneumatic cylinder (e.g. for crash situations). Different types with various strokes are available.
- Both the mechanical and the electrical height adjustment may be combined with the pneumatic quick adjustment.



## Technical details

### Una XL 111/350/A



#### Electrical details

Brush drive motor	1 x 0,25 kW SEW motor, IP 54, UL compatible 50 Hz; $\Delta$ 220 - 240 V; 1.14 A; $\Upsilon$ 380 - 415 V; 0.66 A 60 Hz; $\Delta$ 240 - 266 V; 1.03 A; $\Upsilon$ 415 - 480 V; 0.6 A
Main valve	2/2 control valve: 1 x 24 V DC; 1.5 W
Electrical height adjustment (HVE)	24 V DC; 160 W (AG04); 150 W (AG02); control via PLC
Pneumatic quick adjustment (HVP)	5/3 directional valve: 2 x 24 V DC; 1.08 W

#### Pneumatic details

Compressed air quality	filtered (particle size < 40µm), oil free (residual oil < 1.5 mg/m³ at 24° C)
Compressed air connection	1 x 1/2" female thread; 6 bar
Compressed air consumption	470 l/min (with standard self-cleaning nozzles) 570 l/min (with reinforced self-cleaning nozzles)

#### Fluidics

Ingromat® hose connections	1 x Ø 8 mm
Ingromat® consumption	0.6 - 1.5 l/h

#### Suction

Suction connection	1 x Ø 100 mm; 1 x 14 m³/min
Operating parameters	min. -500 Pa vacuum; min. 28 m/s (measured at suction connection)

#### Acoustic emission

approx. 79 dB (A)  
depending on surface features  
and geometry of the subject material

#### Linear brush

Linear brush type	Quadro R6
Filament material	Polyamide 6.12
Filament length	17 mm
Filament diameter	0.127 mm

#### Transport speed

Max. transport speed	100 m/min
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#### Dimensions of subject panel

Min. panel length	$L_{min} = 300$ mm
Min. panel width	$P_{min} = 60$ mm (upon request)
Max. panel width	$P_{max} = A - 160$ mm

Technical information is subject to changes

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