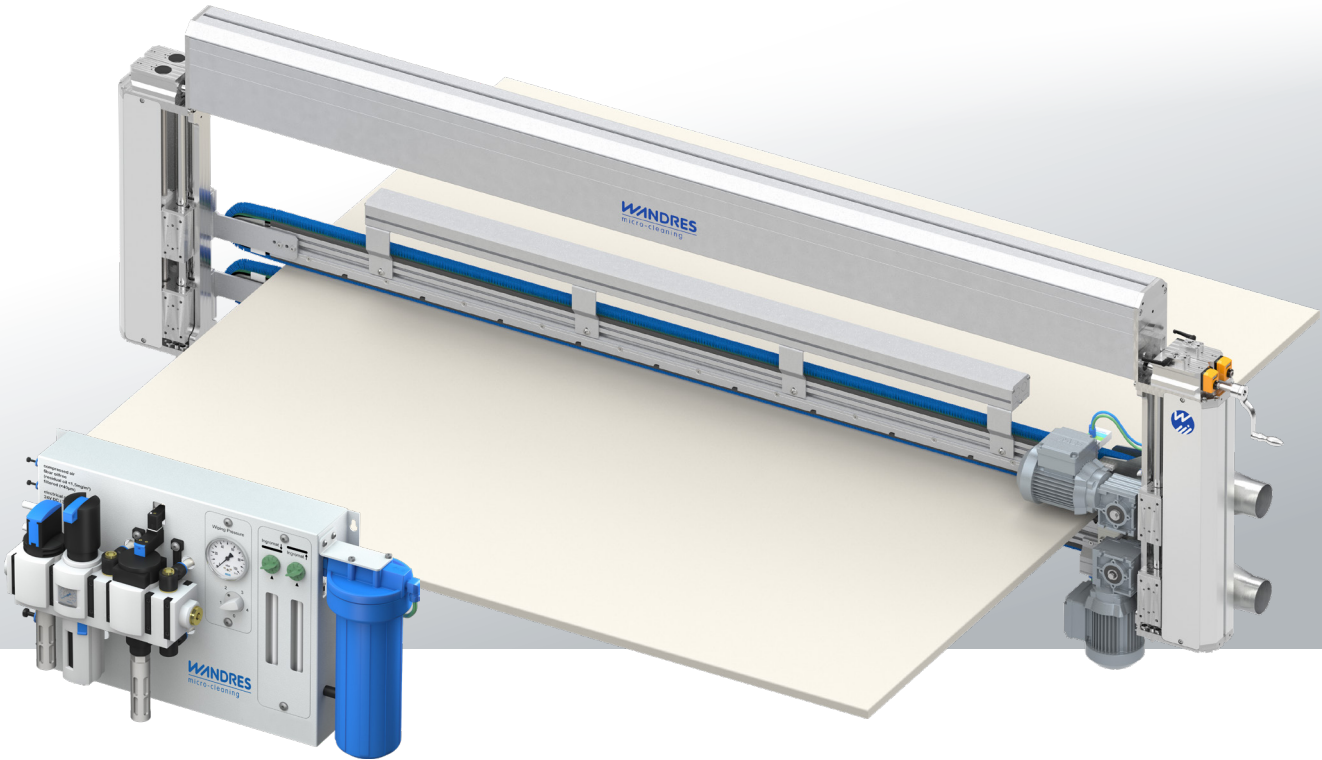




Combi Sword Brush Una H-X 121.. / Una H-X 123..

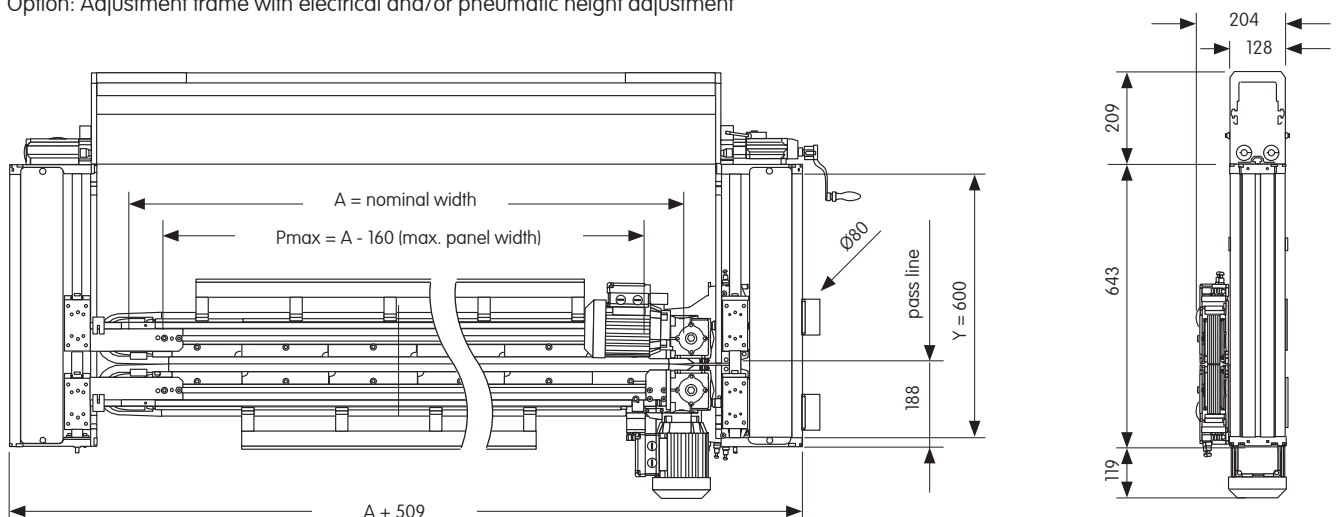


Brief description

The Combi Sword Brush Una H-X 121.. / Una H-X 123.. is ideal to clean furniture panels, wooden boards, plastic and flat glass sheets from above and from below. These surfaces need to be cleaned before lacquering, converting, stacking or before camera inspection. Two Sword Brushes, type BIX 51, wipe transversally across the material surfaces. The micro-moistened brush filaments (Ingromat® system) remove even the most minute particles from the subject surface. The integrated pressure buffer provides for a constant wiping pressure and a premium cleaning result. The adjustment frame VEG 130.. allows for a vertical adjustment of the Sword Brushes e.g. to adapt them to the material's thickness or to remove them from the material surface for maintenance purposes.

Technical details

- 2 x Sword Brush BIX 51/1M/A with pressure buffer and Ingromat® system including an Ingromat® regulator and filter unit IR 100.. (standard) resp. control cabinet for pneumatic and electrical functions (option)
- Adjustment frame VEG 130/600 with mechanical height adjustment
Option: Adjustment frame with electrical and/or pneumatic height adjustment



Una H-X 121.. Values in mm

Order code

Ordering example

The subject panel has a max. width of $P_{max} = 3000$ mm.

Min. nominal width of Combi Sword Brush is

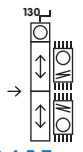

$$A_{min} = P_{max} + 160 \text{ mm} = 3160 \text{ mm.}$$

The most suitable Combi Sword Brush has a nominal width of $A = 3200$ mm.

Order code 2457-018

describes Combi Sword Brush

Una H-X 121/600/3200

UNA H-X 121..		UNA H-X 123..			
				Nominal width A in mm	Nominal width A in inches
2457-		2458-			
-056	-056	2300	90.55		
-015	-015	2500	98.43		
-050	-050	2700	106.29		
-016	-016	2750	108.26		
-060	-060	2800	110.23		
-036	-036	2900	114.17		
-017	-017	3000	118.11		
-037	-037	3100	122.05		
-018	-018	3200	125.98		
-039	-039	3400	133.85		
-019	-019	3500	137.79		
-020	-020	3750	147.64		
-021	-021	4000	157.48		
-022	-022	4300	169.29		
-023	-023	4500	177.17		

Explanation

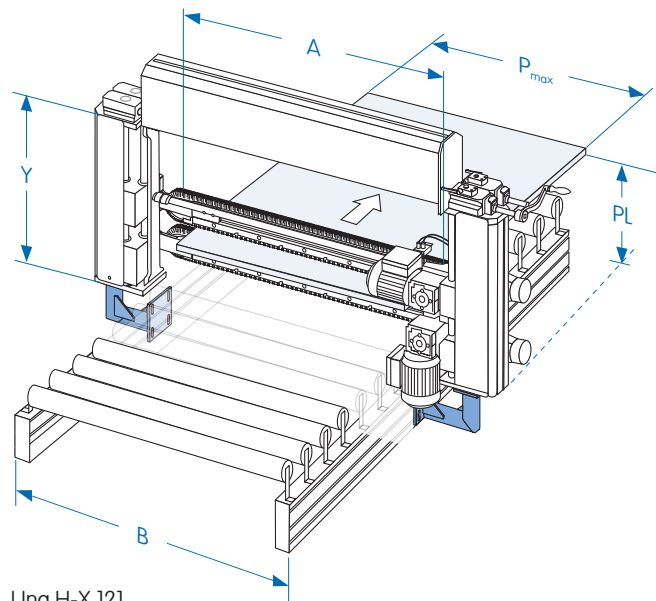
A nominal width of Sword Brush = distance between axes of deviation rollers

B width of roller conveyor $\approx A - 300$ mm (-40/+25 mm) (with mounting kit 4160483 for Homag roller conveyor)

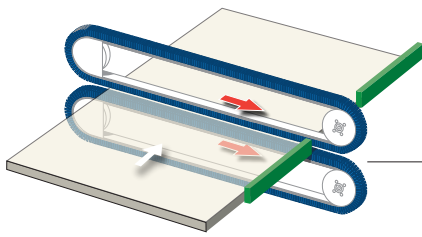
PL pass line = distance between screw down area and lower surface of panel = 188 mm (standard, other possible)

P_{max} max. panel width = $A - 160$ mm

Y Nominal measure of adjustment frame



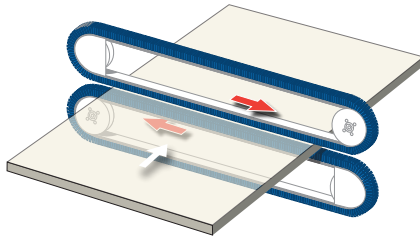
Una H-X 121..



Wiping direction

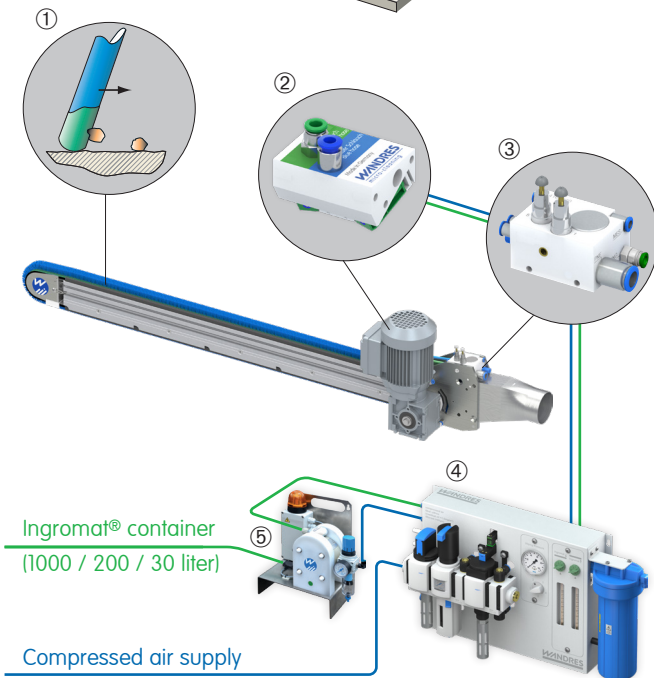
Una H-X 121..

Wiping direction 1
linear brushes wipe in the same direction towards the guide rail.



Una H-X 123..

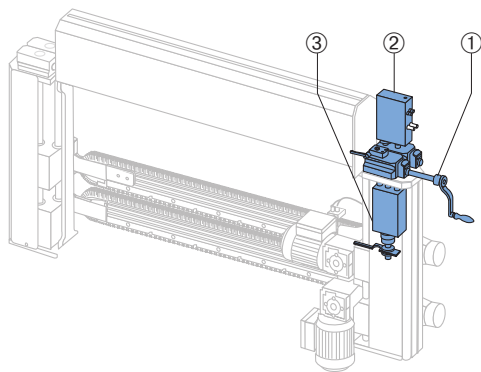
Wiping direction 3
linear brushes wipe in opposite directions
Wiping forces cancel each other.



Ingromat®system

Ingromat® is an antistatic cleaning agent. The brush filaments are micro-moistened with Ingromat® thus providing an effective removal of even very fine dust particles

- ① Individual brush filament micro-moistened with Ingromat® (shown in green)
- ② Ingromat®-sprayer SQL 51..
- ③ 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.



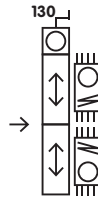
Height adjustment

To adjust a Sword Brush cleaning module to the thickness of the panel, these modules are mounted at an adjustment frame.

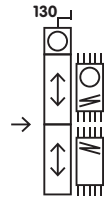
- ① HVM: Normally, adjustment takes place manually via a crank.
- ② HVE: Option: An electrical actuator provides for an automatic thickness adjustment in combination with the overall control of the line.
- ③ HVP: Additionally, the cleaning module may be rapidly removed from the surface with the help of a pneumatic cylinder (e.g. for crash situations). Different versions with different strokes are available. Both the mechanical and the electrical height adjustment may be combined with the pneumatic quick adjustment.

Technical details

Una H-X 121..



Una H-X 123..



Electrical details

Brush drive motor	2 x 0.25 kW SEW motor, IP 54, UL-compatible 50 Hz; Δ 220 - 240 V; 1.14 A; Υ 380 - 415 V; 0.66 A 60 Hz; Δ 240 - 266 V; 1.03 A; Υ 415 - 480 V; 0.6 A
Main valve	2/2 directional valve: 1 x 24 V DC; 1.5 W
Electrical height adjustment (HVE)	24 V DC; 150 W (AG 02); 35 W (PSE); control via PLC
Pneumatic quick adjustment (HVP)	5/3 directional valve: 24 V DC (2 x for single-sided, 4 x for double-sided); 2.4 W

Pneumatic details

Compressed air quality	filtered (max. particle size < 40 μ m), oil free (residual oil < 1.5 mg/m ³ 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)

Details regarding antistatic liquid

Ingromat® hose connection	1 x \varnothing 8 mm
Ingromat® consumption	2 x 0.2 - 0.8 l/h

Suction requirements

Suction connection	2 x \varnothing 80 mm
Suction capacity	2 x 9 m ³ /min
Operating parameters	min. -500 Pa vacuum; min. 28 m/s (measured at suction connection)

Acoustic emission

Sound pressure level LpA	approx. 77 dB(A) depends on the surface structure and the geometry of the subject material.
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Linear brush

Type of linear brush	Quadro R6
Filament material	Polyamid 6.12
Filament length	17 mm
Filament diameter \varnothing	0.127 mm

Transport speed

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

Min. panel length	L _{min} = 240 mm
Panel width	P _{min} = 60 mm (upon request); P _{max} = A - 160 mm

Technical information is subject to changes.

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