C-Line Combi Sword Brush Una U 121



Sword Brushes with micro filaments and suction channel provide flawless surfaces of panels and boards



Micro filaments

Self-cleaning mechanism

Pressure buffer

Adjustment frame Trans-Vac-Unit TKL 46

The **Combi Sword Brush Una U 121** cleans furniture parts and panels from above and below across the product surface. A Trans-Vac-Unit TKL 46 located at the infeed of the machine absorbs large amounts of dust and particles thus disburdening the task of the subsequent Sword Brush. The Sword Brushes use their micro filaments to clean the panels from both sides. Due to the integrated pressure buffer, the brush filaments move across the surface in a vertical position. This enhances particle removal. The self-cleaning mechanism allows for reproducible results and consistent high-performance cleaning results. The machine is thus ideal to provide flawless surfaces in mass productions during 24/7 operations.



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In-depth cleaning Micro filaments

The linear brush belt is equipped with a great number of very fine brush filaments. The micro filaments only have a diameter of 80 μ m and thus will effectively remove particles and dust even in a dry state. At the deviation, the linear brushes are permanently cleaned. This allows the machine to be used in industrial continuous operations.



Air-assisted pre-cleaning Trans-Vac-Unit TKL 46

The Trans-Vac-Unit TKL 46 is mounted at the infeed of the upper Sword Brush. It does not touch the surface and absorbs large amounts of particles. An air-assisted pre-cleaning process brings major advantages especially if very large amounts of dust and particles occur.





Consistent wiping pressure Pressure buffer

The linear brush is mounted flexibly on a pressure buffer. The pressure buffer compensates for any material unevenness or thickness variations. Brush filaments will remain in a vertical position. This allows for a consistent wiping pressure and particles are always effectively removed from the surfaces.

Technical details and dimensions



Una U 121

1 x **Trans-Vac-Unit TKL 46** absorption of large amounts of particles without touching the surface

2 x **Sword Brush BRX 12** with micro filaments and pressure buffer, without Ingromat system

4 x **pressure roller** with Ø 52 mm, aligned to the right, 2 units are mounted at the infeed and at the outfeed

1 x **adjustment frame VEG 25** for manual height adjustment



 $\begin{array}{ll} {\sf A} & {\sf Nominal width of Sword Brush = distance between shafts of deviation rollers} \\ {\sf P}_{max} & {\sf max. panel width = A - 160 \ mm} \end{array}$

A in mm	400	520	650	700	850	900	1000	1100	1200	1300	1400	1500
N Number of suction connections Trans-Vac-Unit TKL 46	1	1	1	2	2	2	2	2	2	2	3	3
A in mm	1650	1700	1750	1900	2000	2100	2200					
N Number of suction connections Trans-Vac-Unit TKL 46	3	3	3	3	4	4	4					

Technical data

Electrical details

Sword Brush drive motor	2 x 0.25 kW SEW motor, IP 54, compatible UL + CSA							
	50 Hz; △ 220–240 V; 1.14 A; Ƴ 380–415 V; 0.66 A							
	60 Hz; △ 240–266 V; 1.03 A; Ƴ 415–480 V; 0.6 A							
Pneumatic details								
Compressed air quality	filtered (particle size < 40µm),							
	oil tree (residual oil < 1.5 mg/m³ at 24°C)							
Compressed air connection	2 x Ø 12 mm push-in fitting; 6 bar							
Total compressed air consumption	240 l/min (at 1.013 bar and 20°C)							
Suction								
Suction connection Sword Brushes	2 x Ø 80 mm							
Suction capacity Sword Brushes	2 x 9 m³/min							
Suction connection TKL 46	N x Ø 60 mm (number N see table on page 3)							
Suction capacity TKL 46	N x 5 m³/min (number N see table on page 3)							
Operating parameter	min. –500 Pa vacuum; min. 28 m/s (at suction connection)							
Linear brush								
Type of linear brush	Quadro R6							
Filament material	Polyamide 6.12							
Filament length	12 mm							
Filament-Ø	0.08 mm							
Transport speed								
Max. transport speed	100 m/min							
Dimensions of subject panel								
Min. panel length	L _{min} = 240 mm							
Min. panel width	$P_{min} = 60 \text{ mm}$							
Max. panel width	$P_{max} = A - 160 \text{ mm}$							
	Technical data are subject to change							

