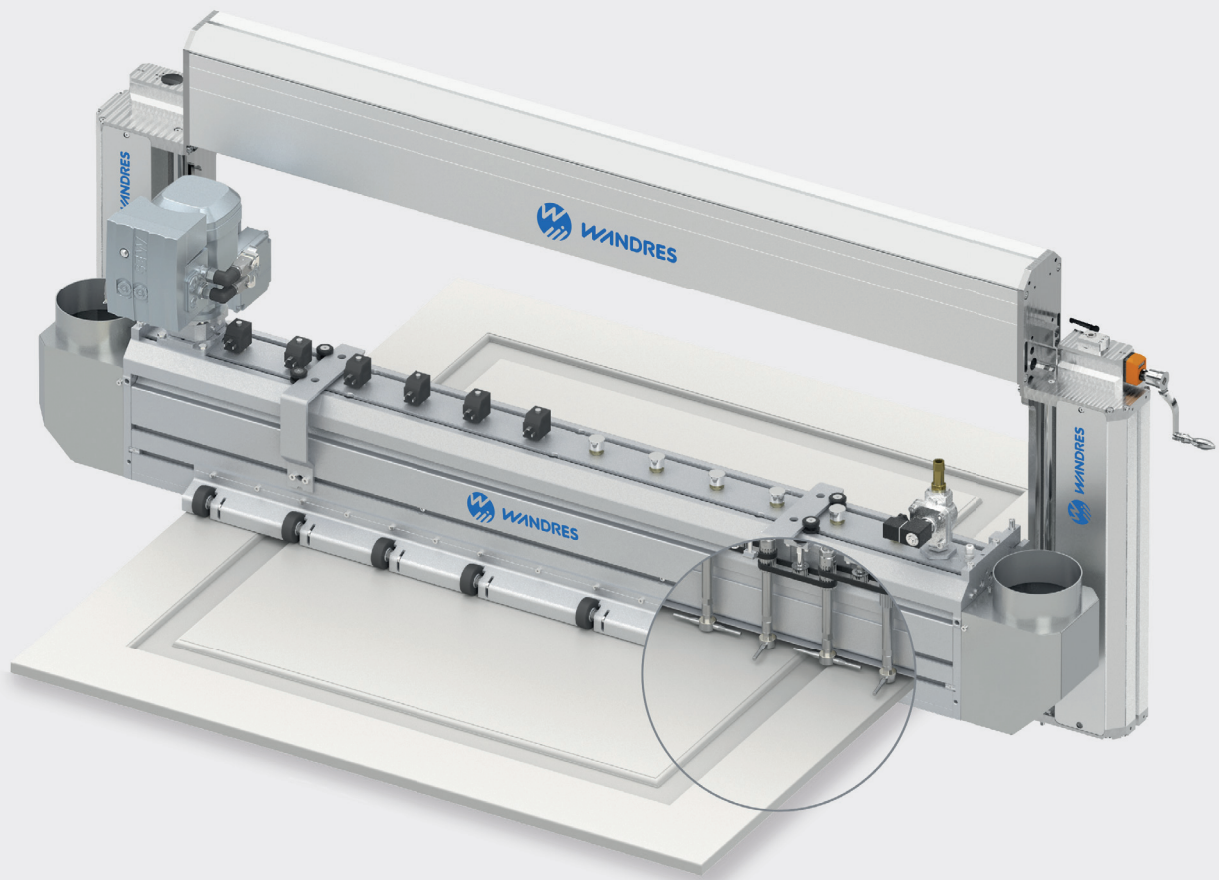


C-Line

Tornado Channel Una H-TKRO 200



Cleaning of sanded or structured surfaces

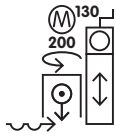


Tornado nozzles

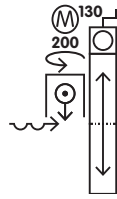


Height adjustment

Technical details and dimensions



Una H-TKRO
200 / 350 / A



Una H-TKRO
200 / 600 / A

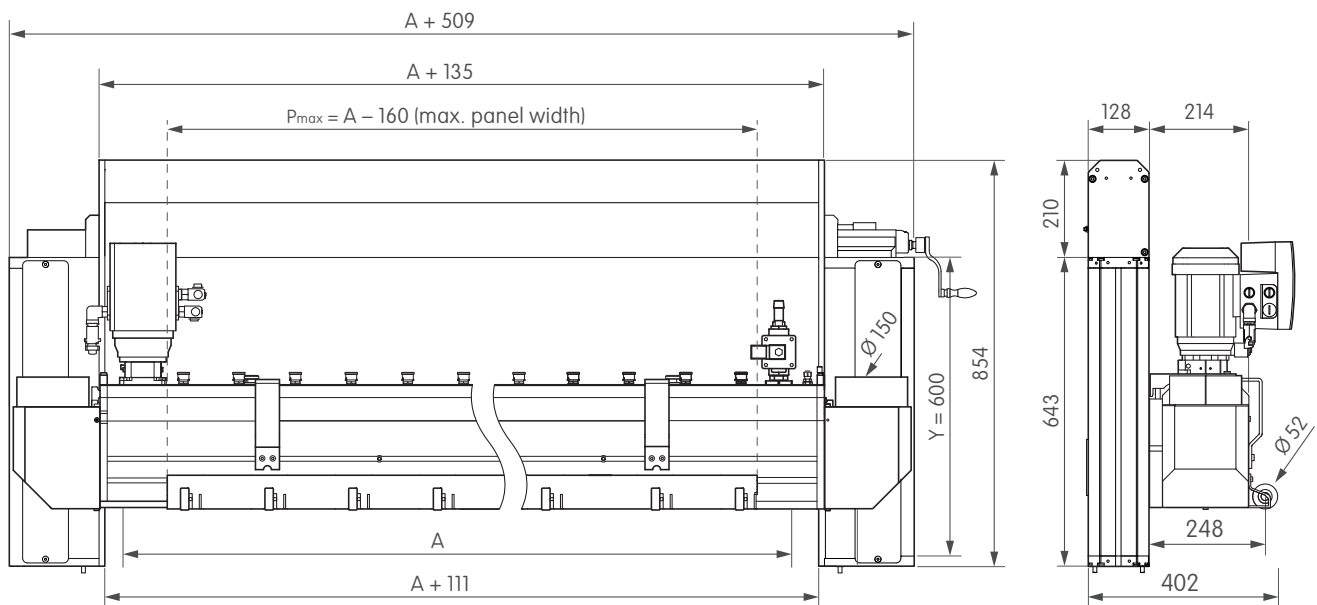
U-shaped channel with angles at the infeed and at the outfeed to guide the air

Electrically driven, rotating compressed **air nozzles** with mechanical or electrical individual valves

1 or 2 suction connections Ø 150 mm facing upwards

1 x **incoming compressed air regulator** for compressed air supply including filter, pressure regulator and on-off valve

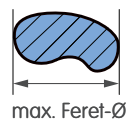
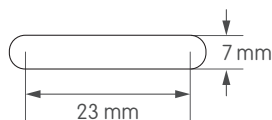
1 x adjustment frame **VEG 130** with short column
(Y = 350 mm) or long column (Y = 650 mm)



A Nominal width

Y Nominal measure of adjustment frame

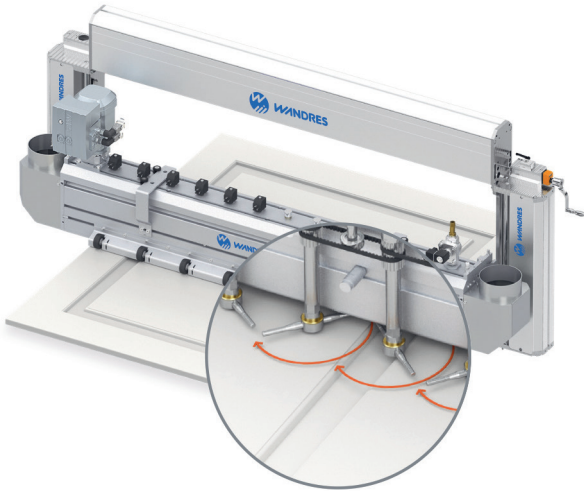
Oblong slots
at lower side



Suitable for particles
with max. Feret Ø 7 mm

Complete cleaning

Tornado nozzles

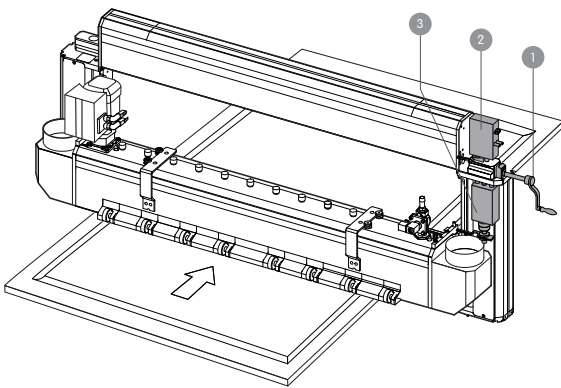


The rotating Tornado nozzles are synchronised electrically and driven via timing belts. They rotate at a constant high speed.

Compressed air exits the Tornado nozzles with at several times the speed of sound. This air jet removes particles and dust from flat and structured surfaces. The contaminating debris are propelled towards the suction systems. Cleaning areas of the nozzles overlap, so that the complete surface is cleaned in an extremely efficient manner.

Adjustment to panel thickness

Height adjustment



An adjustment frame provides for a simple adjustment of the Tornado Channel to the panel's thickness.

① **Manual height adjustment (HVM)** via crank

② **Electrical height adjustment (HVE)** with actuator for the automatic thickness adjustment via overall control.

③ **Pneumatic height adjustment (HVP)** with pneumatic cylinder. It removes the cleaning modules rapidly from the material surface e.g. in crash situations. Both the mechanical and the electrical height adjustment may be combined with the pneumatic quick adjustment.

Easy integration

Set of mounting brackets

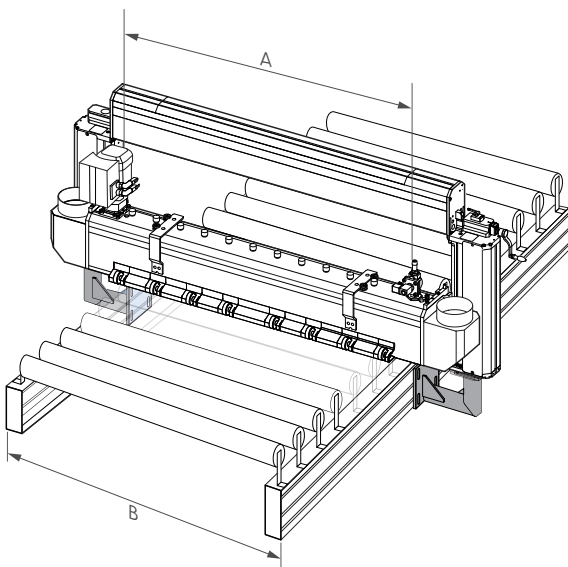
The Combi Tornado Channel may be integrated easily into existing roller conveyors.

The cleaning system is attached to the roller conveyor via mounting brackets (part no. 4160483) that can be supplied as an option.

Nominal width of the Tornado Channel A depends on the roller conveyor width B:

$$B = A - 300 (-40/+25) \text{ mm}$$

If you have a roller conveyor width of 1200 mm, you should choose a Tornado Channel with nominal width 1500 mm, i.e. a machine type Una H-TKRO 200/600/1500.



Nominal width

A in mm	400	520	650	700	850	900	1000	1100	1200	1300	1400	1500	1650	1700
N° of Tornado Nozzles	3	4	5	5	6	7	8	9	9	10	11	12	13	14

A in mm	1750	1900	2000	2100	2200	2300	2500	2700	2750	2800	2900	3000	3200	3400
N° of Tornado Nozzles	14	15	16	17	18	19	21	22	23	23	24	25	27	28

Technical data

Drive Tornado nozzles	1 x 0.75 kW SEW MOVIMOT Motor, IP 54, UL-compatible
Compressed air connection	1 x 3/4" internal thread; 6 bar
Compressed air consumption	n x 94 l/min; n = number of Tornado Nozzles (see above)
Compressed air quality	Purity classes compressed air ISO 8573-1:2010 [6:4:3] (at 20 °C 1 bar) filtered ($C_p \leq 5 \text{ mg/m}^3$), dry (pressure dew point $\leq 3 \text{ °C}$), oil-free ($C_o \leq 1 \text{ mg/m}^3$)
Suction	A < 1200 mm: 1 x Ø 150 mm; 1 x 1.800 m³/h A ≥ 1200 mm: 2 x Ø 150 mm; 2 x 1.800 m³/h A ≥ 2300 mm: 3 x Ø 150 mm; 3 x 1.800 m³/h
Transport speed	max. 30 m/min, otherwise residual particles are possible
Minimum panel dimensions	$L_{\min} = 300 \text{ mm}$; $P_{\min} = 75 \text{ mm}$
Maximum panel width	$P_{\max} = A - 160 \text{ mm}$
Distance to surface	TCD = 4 mm

Exemplary values, the exact values can be found in the specifications.

