

B-Line

Combi Sword Brush Una HZ-BB 121



Cleaning of body skin parts and structural parts before forming



Double-sided cleaning



Pressure buffer



Self-cleaning mechanism



Height adjustment

Optional:



Thermal self-cleaning mechanism



Pre-separation



Crash indicator



Pneumatic quick-adjustment

Perfectly clean blanks before the forming press



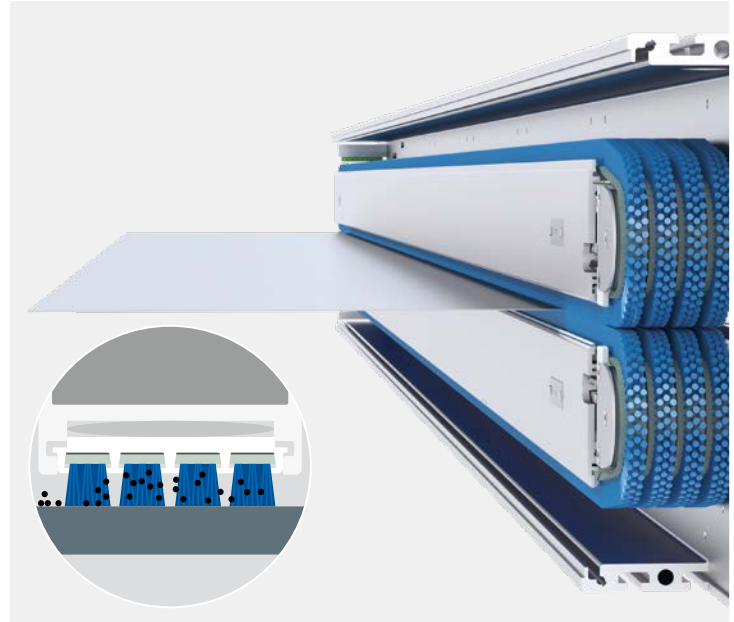
At the infeed of the press, the **Combi Sword Brush Una HZ-BB 121** effectively removes all kinds of particles from the surface of outer skin panels or structural parts. This reliably prevents damages of the forming tools and blanks, reducing rejection rates. The machine can clean both top and bottom sides of oily steel blanks as well as aluminium blanks covered with dry lubes.

Compared with traditional blank washing machines, operating and maintenance costs are very low. The machine produces a high and consistent cleaning performance. Due to its small footprint, the Wandres system can easily be integrated into existing press lines. Furthermore, it can be combined with oilers and transport systems from Wandres' business partners.



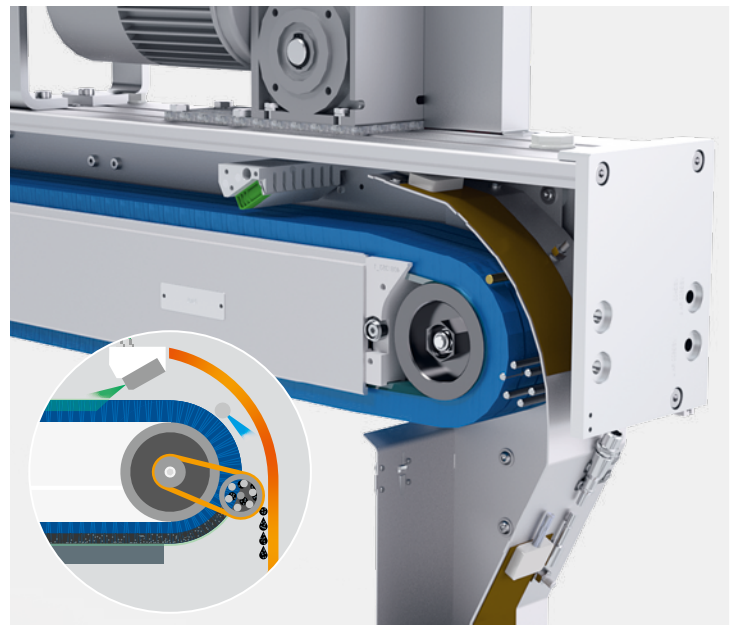
High cleaning performance Sword Brush®

Sword Brushes wipe crosswise across the blank surfaces on both sides and effectively remove particles and dust with their circulating linear brushes. Wandres' sister company, Wandres Brush-Hitec GmbH, with its plant in the Black Forest in Germany produces and delivers the high-end linear brushes. They have proven their effectiveness in 24/7 operations in numerous production lines and have a long industrial life.



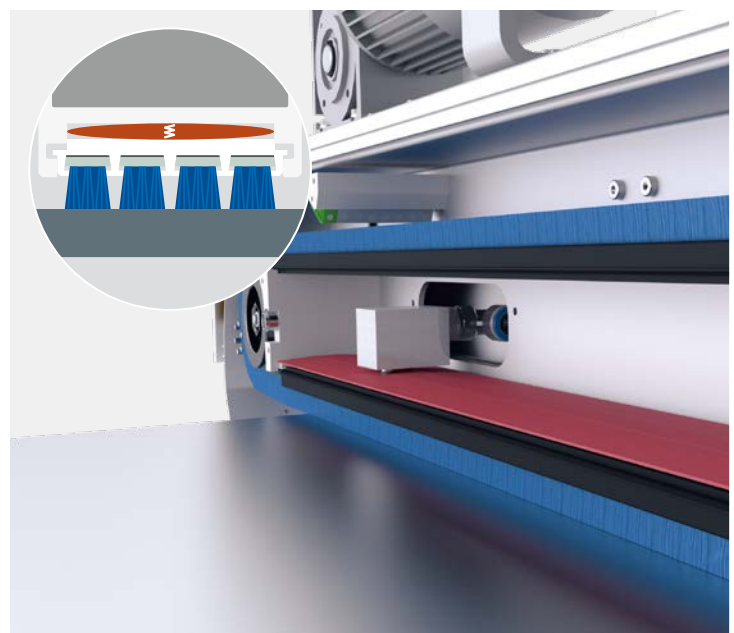
Stable continuous operation Self-cleaning mechanism

Compressed air nozzles and a roto-rack permanently clean the brush filaments. Cleaning results thus become reproducible. The cleaning agent Ingromat® facilitates regeneration of the linear brushes during the washing periods. A **thermal self-cleaning mechanism** is available as an option. Here, the entire suction channel and the deviation area of the linear brushes are heated to liquefy dry lubes. The dry lubes may be separated from the exhaust air in the optional cyclone filters if requested.



Consistent wiping pressure Pressure buffer

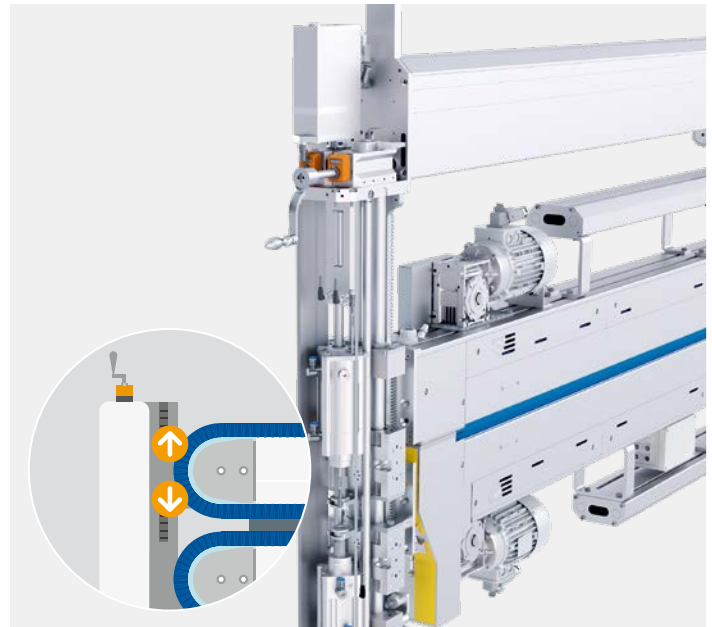
The linear brush's product contact area is mounted flexibly on a pressure buffer. This ensures a constant wiping pressure of the brush onto the subject blanks even if thicknesses vary. When cleaning tailored blanks with different sheet thicknesses, optimum cleaning results are achieved over the entire surface with a minimum pressure of the brushes.



Thickness adjustment

Height adjustment

The Sword Brushes are mounted on an adjustment frame to allow the cleaning module to be adjusted to the relevant blank thickness. As an option, an electrical actuator in conjunction with a higher-level control system enables fully automatic blank thickness adjustment. The electrical height adjustment may be combined with a **pneumatic quick adjustment**. With the latter, pneumatic cylinders remove the cleaning unit rapidly from the subject surface e. g. in crash situations.

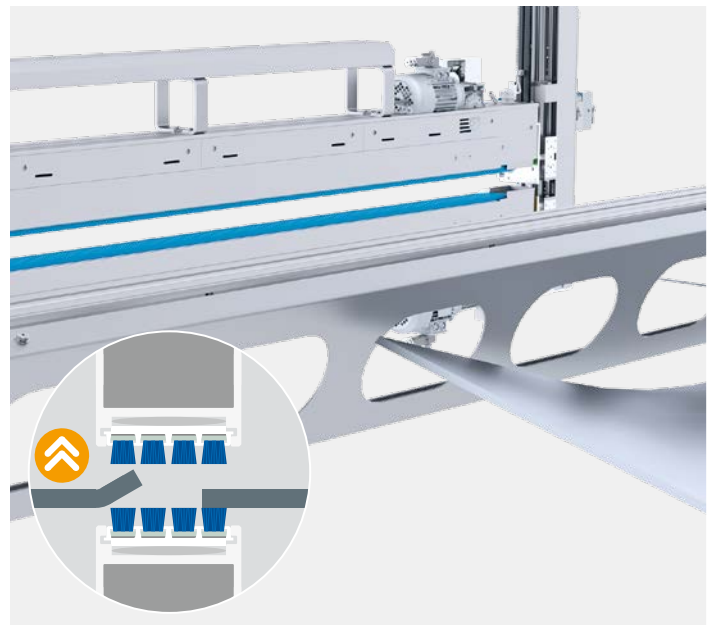


Optional

Prevent collisions

Crash indicator

If there is a risk of collision, for example due to protruding edges of damaged blanks, the Crash indicator will be triggered. A pneumatic quick adjustment rapidly moves the upper cleaning module upwards into a safe position.

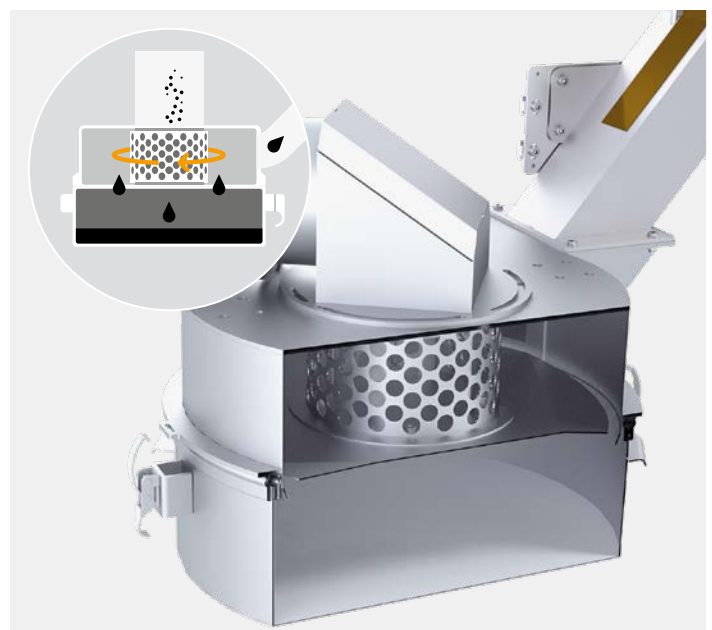


Optional

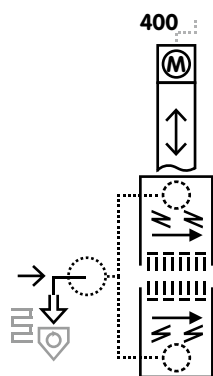
Pre-separation

Cyclone filter

To protect the suction filter, greasy aerosols are separated from the air flow within the cyclone separator that propels them to a collecting container that is easily accessible. This significantly prolongs industrial life of the filters within the suction installation.



Technical details and dimensions



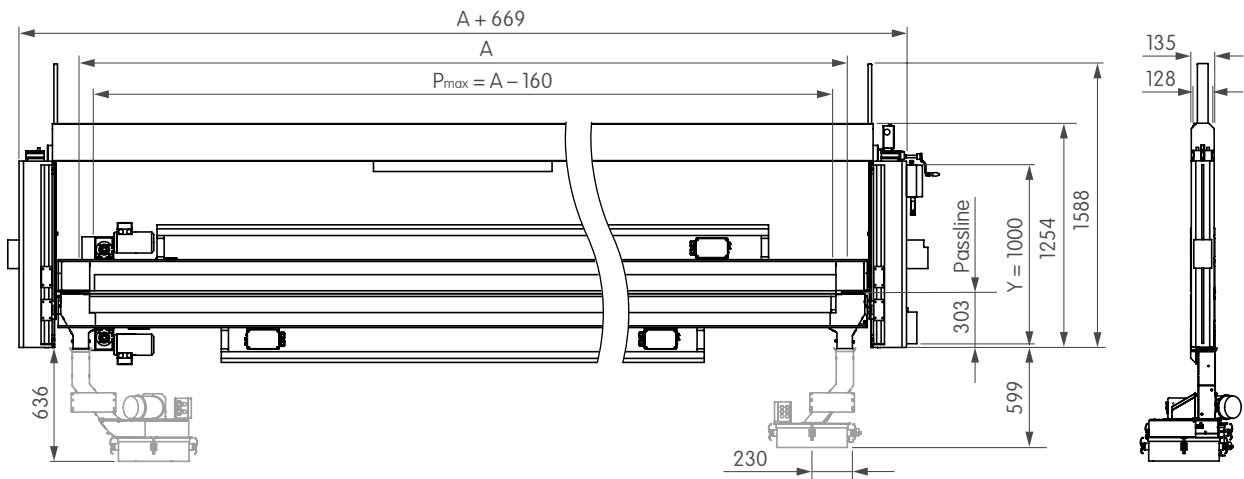
8 x **Twin brushes** with pressure buffer

Ingromat® system for the micro-moistening of brush filaments, incl. Ingromat® regulator and filter unit IR 100

1 x **Adjustment frame** (height adjustment), pneumatic quick adjustment HVP as an option

Pre-separating consisting of: Cyclone filter, collecting container, heatable suction area (option)

1 x **Crash indicator PWB 500** (Option)



A Nominal width of Sword Brush = Centre distance between deviation rollers
P_{max} max. blank width = A – 160 mm

A in mm
A in inches (rounded)

1300	1500	1650	1750	2000	2200	2500	2750
51	59	65	69	79	87	99	108

3000	3200	3500	3750	4000	4300	4500	4750
118	126	138	148	158	169	177	187



Wandres GmbH · Im Gewerbepark 8 · 79252 Stegen · Germany
www.wandres.com