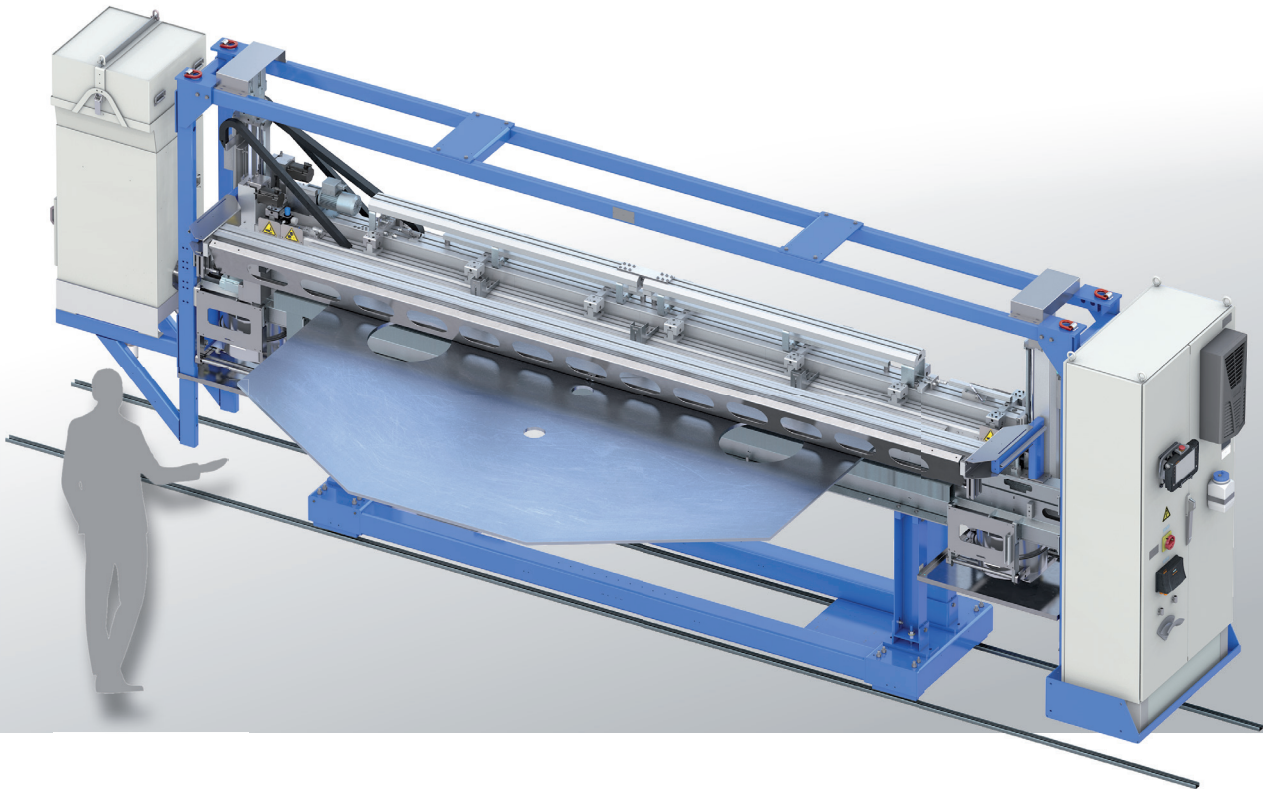




Evomat® EVO 500..

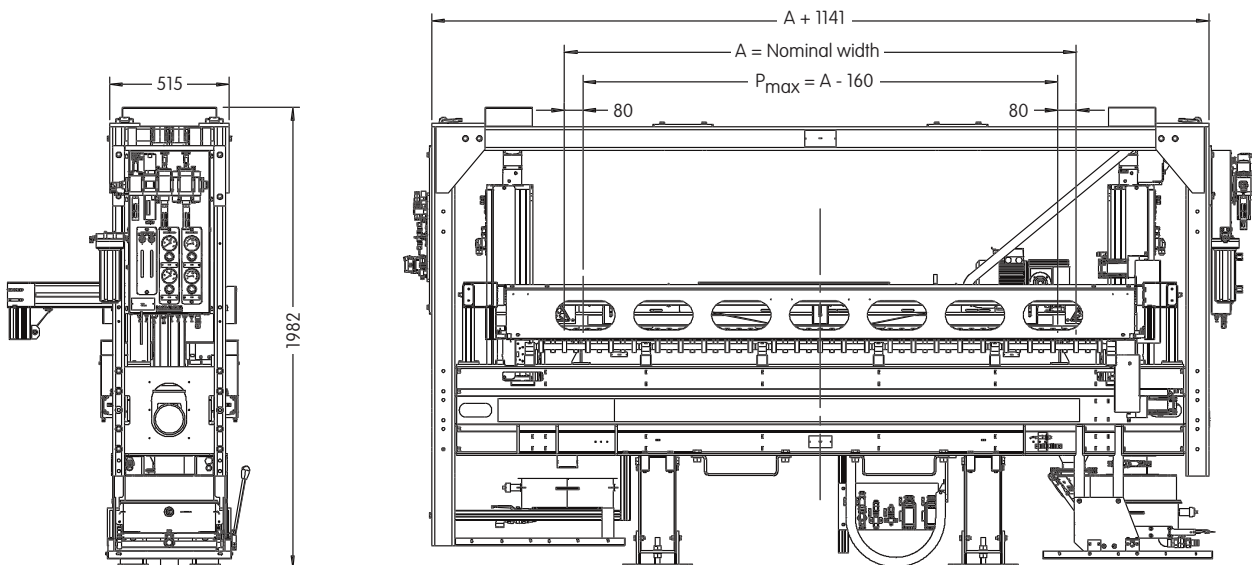


Brief description

The Evomat® EVO 500.. cleans steel and aluminium blanks from above and from below, e.g. before they enter the press line. The integrated self-cleaning mechanism permits an easy alternation between steel and aluminium (oil and dry lube). Linear brush filaments detach particles and surplus lubricants from the surface. Two cyclone separators isolate these debris from the exhaust air via heated channels. The machine has a precise and reliable transport system that can also cope with several blanks positioned one next to the other.

Technical details

- 2 x cleaning module BIP 155/1/A
- self-supporting machine frame
- height adjustment VEG 500 with servo drive
- driven transport and pressure rollers
- pre-separation of dry lubricants
- options: Crash-Protection function operation via Mobile Panel carriage with drive

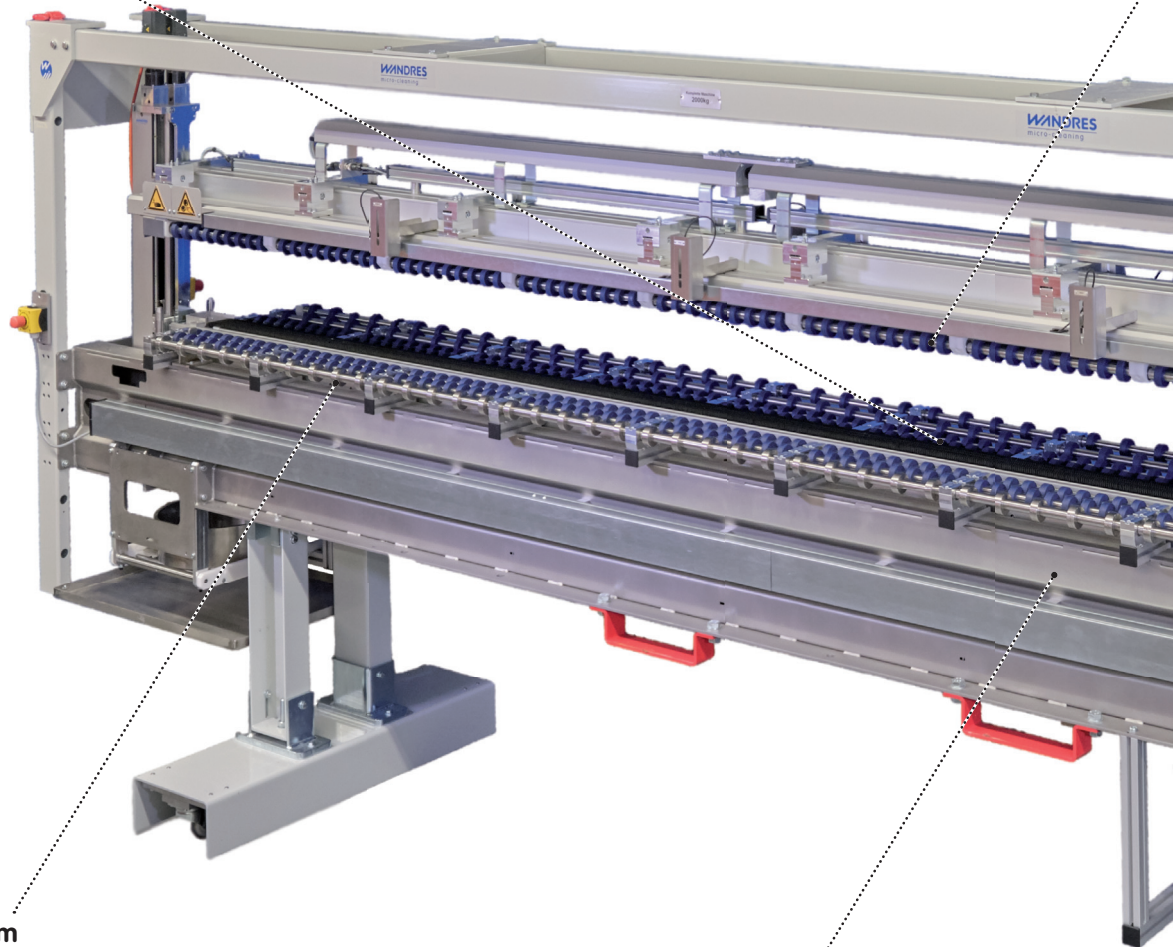
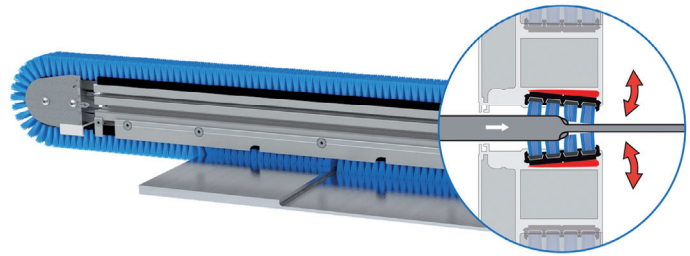


Exemplary illustration. Values in mm.

Evomat® EVO 500..

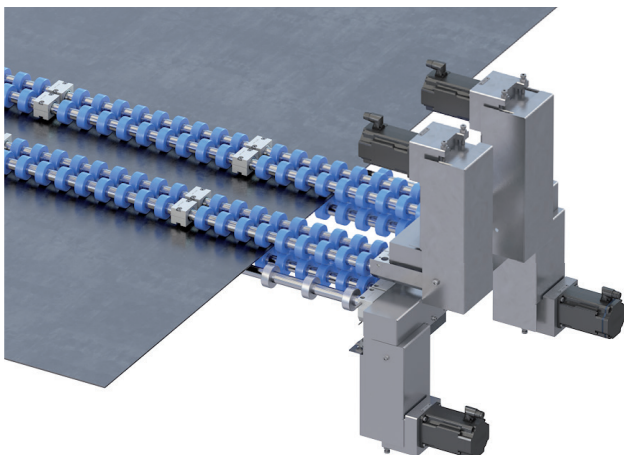
Adaptive linear brush guide

Linear brushes are mounted flexibly on top of a pressure buffer. This feature provides for optimal cleaning results. If there are blanks with different thicknesses or tailored blanks, the cleaning system does not have to be readjusted as the pressure buffer can compensate thickness variations up to +/- 2 mm.



Precise transport system

Integrated transport and pressure rollers transport the blanks through the Evomat® EVO 500 without any lateral shifts. Transport speed of the blanks is infinitely adjustable.



Self-supporting machine frame

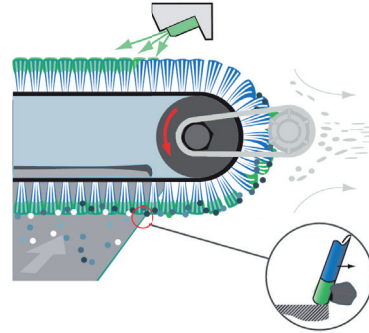
Robust steel frame to endure harsh conditions within a press line.

Pneumatic pressure roller shafts

Pressure of pressure rollers onto the surface may be adjusted precisely. Several blanks that arrive next to each other may be transported and cleaned without lateral shifts.

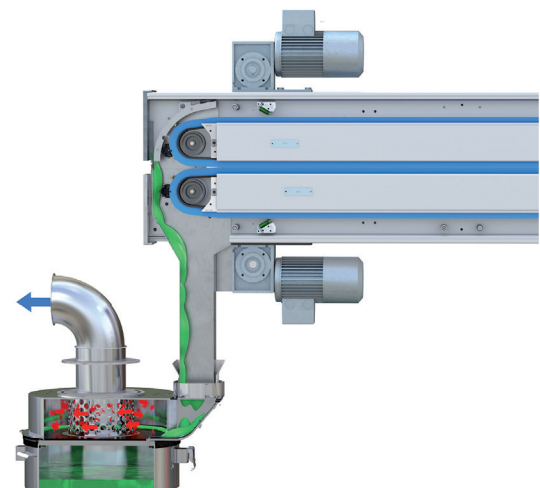
Brush cleaning with the Ingromat® system

There are 4 linear brushes within the upper and the lower cleaning module that wipe transversally across the blanks. Brush filaments are micro-moistened with the Ingromat® anti-static cleaning agent and remove any contaminations effectively. Lubricants will stay on the blanks, the brushes just homogenizes them.



Continuous self-cleaning process

At the self-cleaning unit, rotating racks and compressed air nozzles permanently clean the linear brushes both mechanically and pneumatically. The mixture of particles and lubricants is separated from the brush filaments and sucked into heated channels.



Pre-separation of dry lubricants

Within a cyclone aerosols containing lubricants are separated from the exhaust air and conducted to an accessible collecting tray.

Technical details

Evomat® EVO 500..

Basic data

nominal width A	2200 - 5000 mm
electrical supply	115-230 / 400-480 V AC, 50/60 Hz, 3P + PE
control voltage	24 V DC
Bus system	Profinet, Profibus
compressed air supply	1 x 3/4", 6 bar (category 5 according to DIN ISO 8573-1)

Dimensions of subject blanks

max. blank width P_{max}	nominal width A - 160 mm
min. blank length C_{min} (in transport direction)	250 mm

Conveyor system

max. transport speed	200 m/min (frequency controlled)
bridgeable gap	500 - 820 mm (gaps > 820 mm bridgeable with additional roller conveyor)

Pneumatic details

compressed air quality	filtered (particel size < 40 µm), oil free (residual oil < 1.5 mg/m ³ at 24° C)
compressed air consumption	640 l/min

Fluidics

Ingromat®-hose connection	1 x Ø 8 mm
Ingromat®-consumption	0.4 - 0.8 l/h
Ingromat®-supply	external Ingromat®-pump (optionally with liquid level monitoring)
liquid level monitoring for Ingromat®-container	option

Suction

oil spray and emulsion separator	OEL-DS(A) 1-0,18 with subsequent filter
suction capacity	1000 m ³ /h
total pressure	1600 Pa

Acoustic emission

max. sound pressure level	85 dB(A)
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Linear brushes

type	Linear brush Twin (4 x per cleaning module)
filament material	Polyamide (black)
filament length	19 mm
filament-Ø	0.2 mm

Technical data are subject to change

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