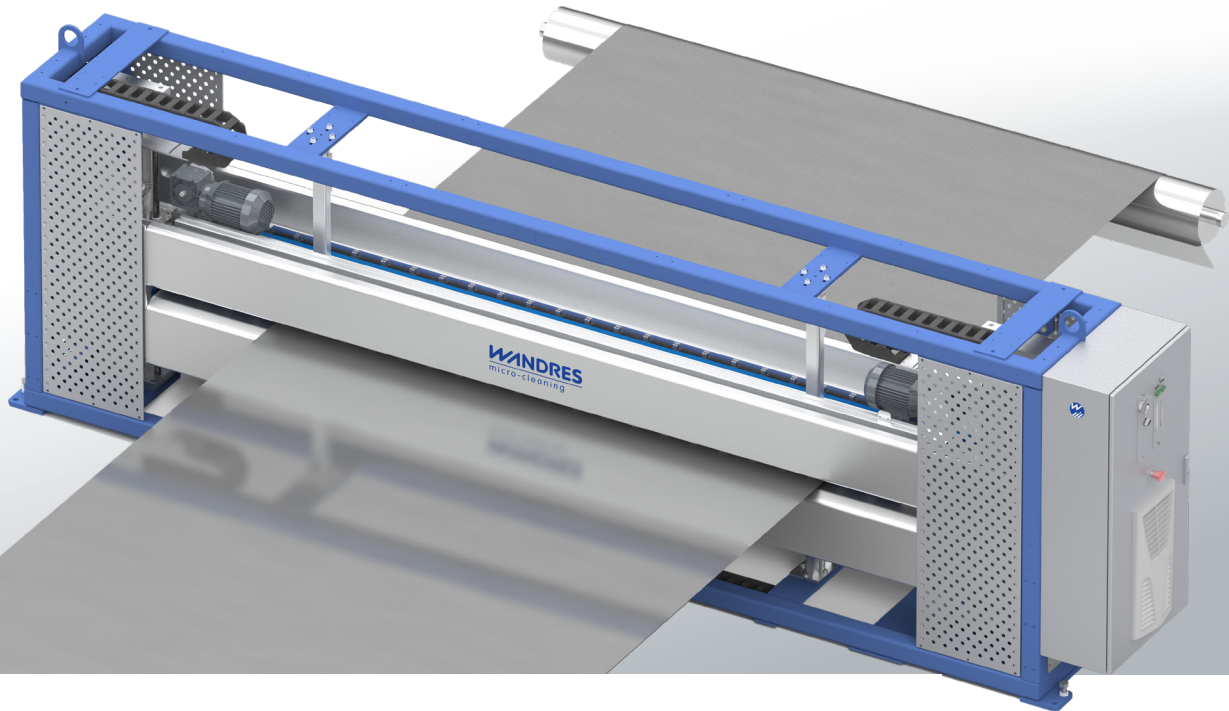


Cevomat® CVO 17..

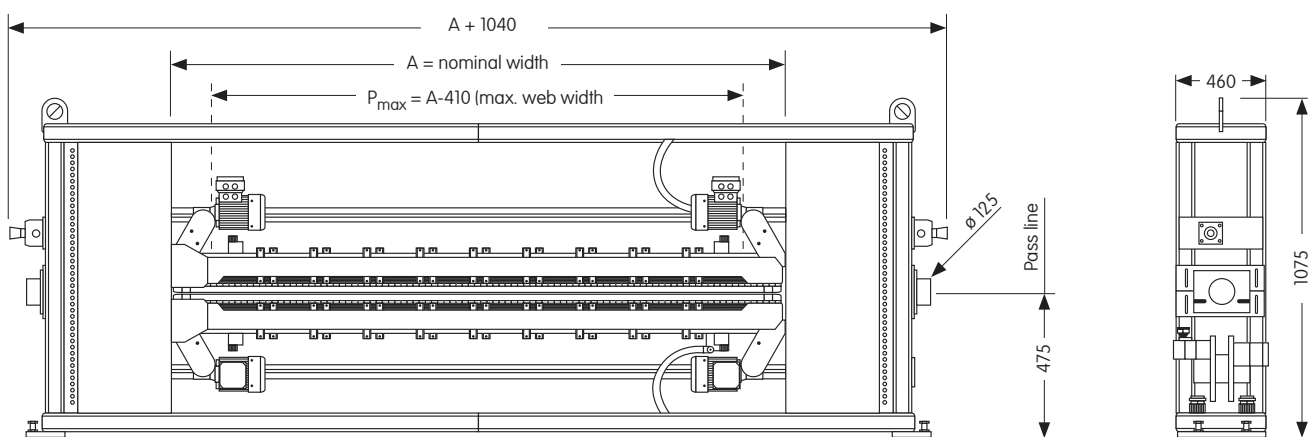


Brief description

The Cevomat CVO 17 machine has been designed for the double-sided cleaning of steel, stainless steel, aluminium and non-ferrous metal coils. Metal coils may be cleaned before rolling, before levelling and before or after galvanising. The Cevomat cleans metal strips with both dry and oil-based lube, switching back and forth as required.

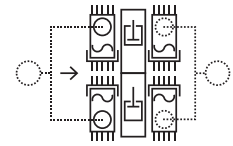
Technical details

- 4 x Sword Brushes CVO 51..with flexible pressure buffer and Ingromat® system. Optional heating / cyclone to separate hot melts.
- 2 x horizontal collective suction connections
- 1 x adjustment frame VEG 40 with pneumatic quick adjustment HVP.
If the latter is used as a crash protection, it may be equipped with a laser light barrier.
- 1 x robust protective frame. If integration gap is 400 mm or larger, there are guide plates at the infeed.
- 1 x control and pneumatic cabinet
- Ideal situation: Machine with base frame or driven carriage



CVO 17/460/A

Values in mm



Order no.

CVO 17/460/A	CVO 17/400/A	CVO 17/300/A	Nominal width A		
050 -	051 -	052 -	in mm	in inches	
- 009	- 009	- 009	1400	55.11	
- 010	- 010	- 010	1500	59.06	
- 011	- 011	- 011	1650	64.96	
- 012	- 012	- 012	1750	68.90	
- 013	- 013	- 013	2000	78.74	
- 014	- 014	- 014	2200	86.61	
- 015	- 015	- 015	2500	98.43	
- 016	- 016	- 016	2750	108.27	
- 017	- 017	- 017	3000	118.11	
- 018	- 018	- 018	3200	125.98	
- 019	- 019	- 019	3500	137.80	
- 020	- 020	- 020	3750	147.64	
- 021	- 021	- 021	4000	157.48	

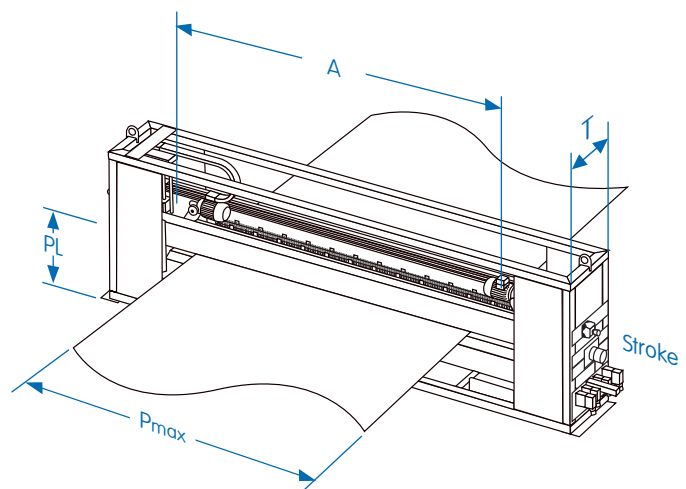
Ordering example

The subject metal web has a max. width of $P_{\max} = 2200$ mm.
 $A_{\min} = P_{\max} + 410 = 2610$ mm
 Nominal width of the Cevomat should therefore be $A = 2750$ mm.

Order no. 050-016 describes CVO 17/460/2750

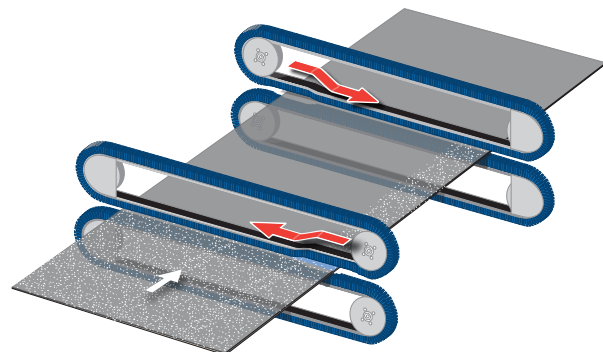
Explanation

- A** Nominal width = centre distance between deviation rollers of linear brushes.
- P_{\max}** maximum width of subject web
 $P_{\max} = A - 410$ mm
- PL** Pass line = working height
 Distance between screw down area and lower web surface
 = 475 mm (standard),
 other dimensions on request
- T** Depth in transport direction
 = 460 mm with CVO 17/460/A
 = 400 mm with CVO 17/400/A
 = 300 mm with CVO 17/300/A

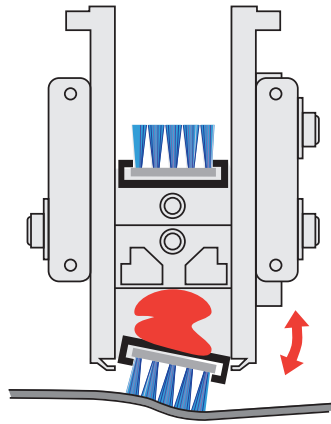
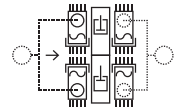


Lifting of brushes

Sword Brushes at the infeed and the outfeed of the machine wipe in opposite directions. Thus wiping forces cancel each other. To protect the brush filaments, brushes are lifted somewhat at the material's edges. They start touching the surface only after having passed these edges. The above-mentioned wiping configuration ensures that the entire product surface is cleaned nonetheless.

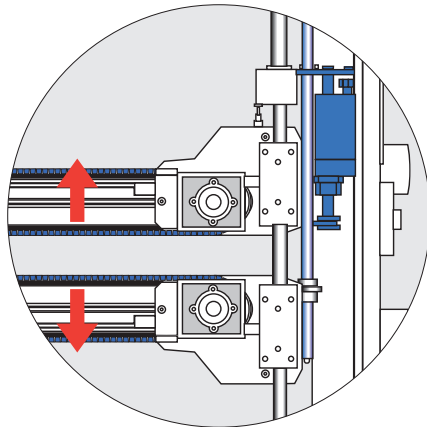


CVO 460..



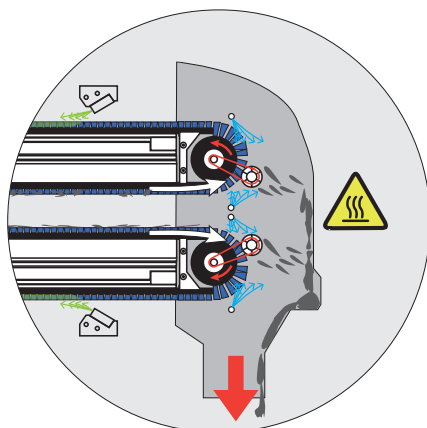
Flexible pressure buffer

The linear brushes are mounted on flexible pressure buffers. These buffers compensate material thickness variations and provide for a consistent wiping pressure even with wavy webs. Furthermore, the linear brushes are guided in a parallel way. This type of guide keeps the linear brushes in place so that they cannot tilt in transport directions if the webs move at high speed. Brush filaments will always be in a vertical position in relation to the material surface and will thus yield premium cleaning results.



Crash Protection

In crash situations, a pneumatic quick-adjustment rapidly removes the Sword Brushes from the web. Joints and faulty areas at the beginning or at the end of a web may pass the Cevomat without any problems. The pneumatic stroke feature allows a quick exchange of webs. Normally, there is a 100 mm upper and lower stroke. Other strokes are available on request.



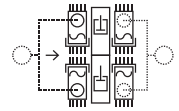
Self-cleaning mechanism

The Sword Brushes have a self-cleaning unit. At this unit, rotating racks and compressed air nozzles permanently clean the linear brushes both mechanically and pneumatically. In certain intervals, the brush filaments are micro-moistened and regenerated with the cleaning agent Ingromat®.

Heating elements for the brush filaments and for the walls of the self-cleaning unit are available as an option. They liquify pasty lubricants (hot melts) making them flowable. The self-cleaning unit will detach the mixture of particles and lubricants from the filaments. It will flow into a cyclone and separated within a collecting tray. Customers may switch between dry lube aluminium webs and oily steel webs. These materials may be cleaned continuously without time-consuming switching operations.

Technical data

CVO 460..



Electrical details

Drive motor Sword Brushes	4 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 Sword Brushes	2/2 directional valve: 1 x 24 V DC; 1.5 W
Electrical height adjustment (HVE)	24 V DC; 160 W; control via PLC
Pneumatic quick adjustment (HVP)	5/3 directional valve: 2 x 24 V DC; 1.08 W

Pneumatic details

Compressed air quality	filtered (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	930 l/min (with standard self-cleaning nozzles) 1130 l/min. (with reinforced self-cleaning nozzles)

Fluidics (option)

Ingromat® hose connection	1 x \varnothing 8 mm
Ingromat® consumption	4 x 0.2 - 0.8 l/h

Suction requirements

Suction	2 x \varnothing 125 mm
Suction capacity	2 x 21 m ³ /min
Operating parameters	min. -500 Pa vacuum; min. 28 m/s (measured at suction connection)

Acoustic emission

approx. 80 dB (A) depends on surface features and the geometry of the subject coil.

Linear brush

Linear brush type	Quadro R6
Filament material	Polyamide 6.12
Filament length	17 mm
Filament- \varnothing	0.127 mm (standard), option: 0.15 mm; 0.2 mm

Technical data are subject to change

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