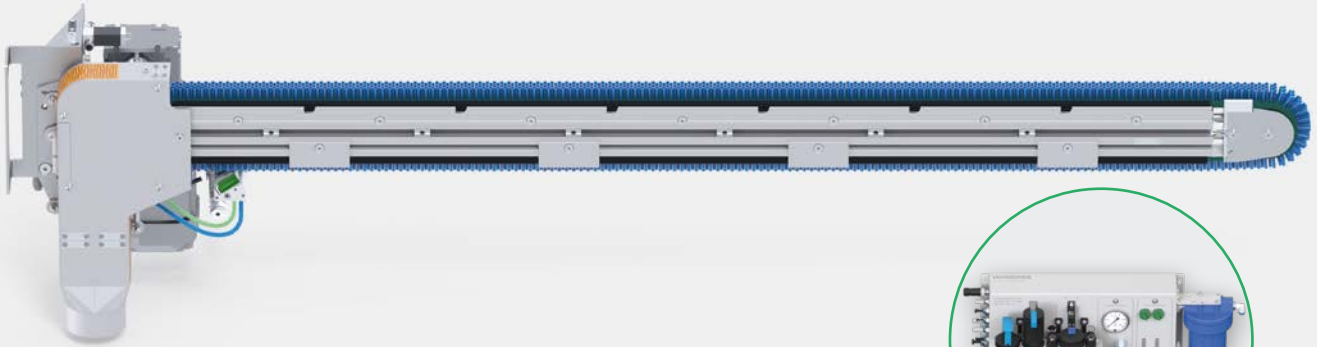


B-Line

Sword Brush BIX-U 51 TR



Including: Ingromat® system

For the effective cleaning of conveyor belts
after cutting or before forming of blanks



Cleaning from below



Pressure buffer



Thermal self-cleaning mechanism

Optional:



Pre-separation

The **Sword Brush BIX-U 51 TR** cleans the lower surface of conveyor belts such as vacuum belts or magnetic conveyors. A thorough cleaning of conveyor belts prevents particles from being dragged along the line and ensures that transported blanks remain free of residues. The compact design and its integration from below allow for an easy integration into the line,

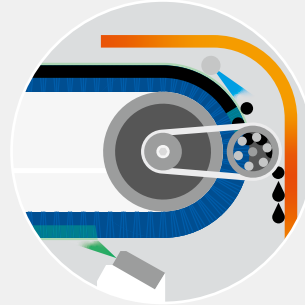
e.g. after cutting or before the forming of blanks. A self-cleaning unit permanently cleans the brush filaments providing for stable 24/7 operations. During the self-cleaning process, wax-like lubricant agglomerations are made flowable and may be separated from the suction flow within an optional cyclone separator.



Stable continuous operation

Thermal self-cleaning

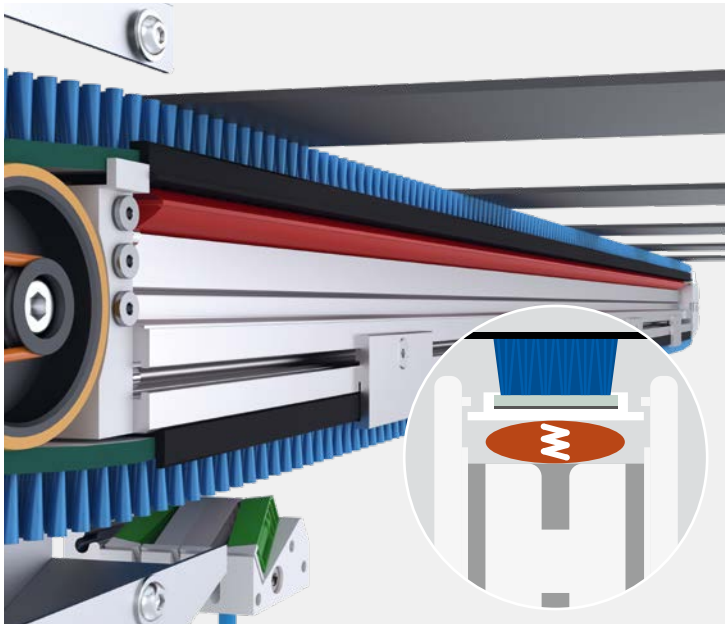
A **rotating rack** and **compressed air nozzles** continuously clean the brush filaments. A thin film of the cleaning agent Ingromat® is applied onto the filament tips to minimise the adherence of oil and dry lubes. **Thermal elements** heat the suction area which makes wax-like dry lubes flowable and prevents agglomerations.



Consistent wiping power

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 power and particles are always removed effectively from the surface.

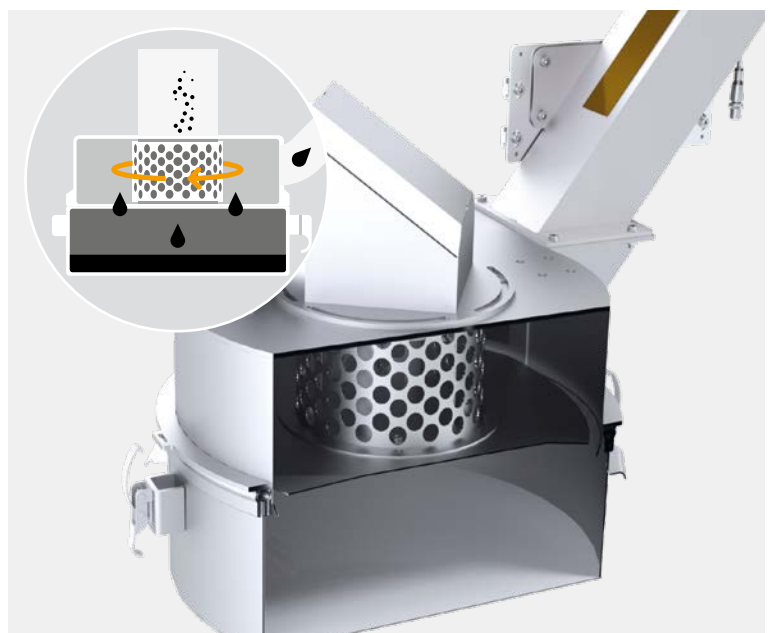


Option

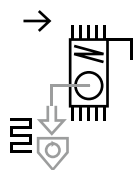
Pre-separation

Cyclone filter

Optionally, the lubricant aerosols may be separated from the suction debris within a cyclone filter in order to disburden the exhaust air filter. The mixture of particles and lubricants will be conducted to a collecting container that is easily accessible and needs to be emptied at regular intervals.



Technical details and dimensions



BIX-U 51 TR

1 x **Sword Brush BIX-U 51**

with pressure buffer to provide for a consistent wiping pressure of the linear brush

1 x **Ingromat®-System**

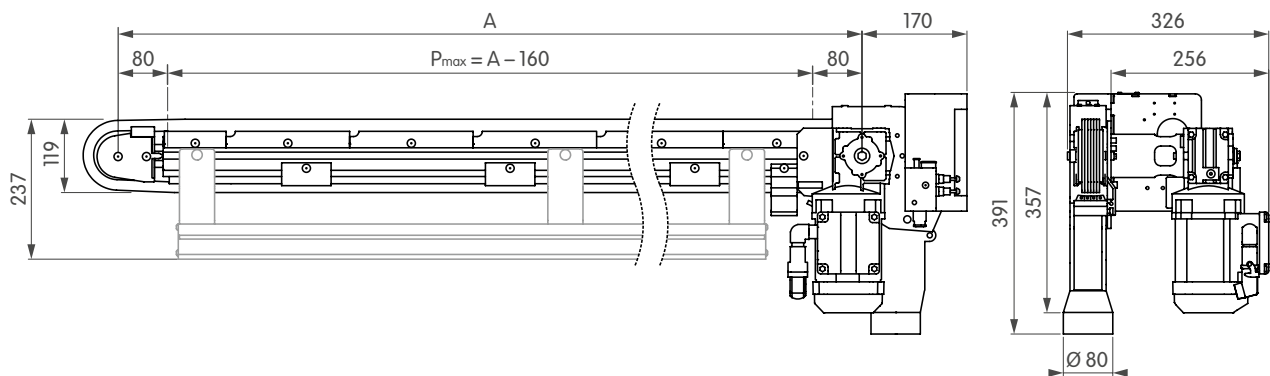
for the micro-moistening of the brush filaments including an Ingromat® regulator and filter unit IR 100

1 x **Thermal self-cleaning mechanism TR**

with thermal elements at the suction area

1 x **Cyclone filter (option)**

for the pre-separation of aerosols



A Nominal width of Sword Brush = Distance between deviation roller shafts
Profile reinforcement from A = 2300 mm
P_{max} Max. cleaning width = A - 160 mm

A in mm

A in inches (rounded)

400	520	650	700	850	900	1000	1100	1200	1300	1400	1500
16	20	26	28	33	35	39	43	47	51	55	59
1650	1700	1750	1900	2000	2100	2200	2300	2500	2700	2750	2800
65	67	69	75	79	83	87	91	98	106	108	110
2900	3000	3100	3200	3400	3500	3750	4000	4300	4500		
114	118	122	126	134	138	148	157	169	177		

Technical data

Electrical details

Sword Brush drive motor	0.25 kW SEW motor, IP 54, compatible UL + CSA 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
Heating elements	7 x 75 W; 24 V DC
Main valve (at IR unit)	2/2 control valve; 1 x 24 V DC each; 1.5 W

Pneumatic details

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 ($C_o \leq 1 \text{ mg/m}^3$)
Compressed air connection	1 x 1/2" female thread; 6 bar
Total compressed air consumption	230 l/min (at 1.013 bar and 20°C)

Suction

Suction connection Sword Brush	Ø 80 mm
Required suction capacity Sword Brush	540 m ³ /h
Operating parameters	min. –500 Pa vacuum; min. 28 m/s (at suction connection)

Acoustic emission

Sound pressure level	ca. 74 dB (A) – depending on surface structure of subject material
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Linear brush

Linear brush type	Quadro R6
Filament material	Polyamid 6.12
Filament length	17 mm
Filament Ø	0.127 mm

Transport speed

Max. transport speed	200 m/min
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Cleaning width

Max. cleaning width	$P_{\max} = A - 160 \text{ mm}$
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Technical data are subject to change

