



RNA
We handle it.



COMPONENTS

HOPPERS

- *Vibrating Hoppers*
- *Belt Hoppers*
- *Accessories*



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Welcome to RNA Germany – your market leader in the field of feeding technology!

Rhein-Nadel Automation GmbH is a traditional family-owned enterprise that has its head office in Aachen, Germany. With seven production locations and an international network of partners, we are there for you worldwide. For many decades now, our name has stood for top-class performance regarding technology, quality and reliability.

Our two business segments are the development and manufacture of complete custom-made feeding systems and their corresponding components.

With many years experience in the automation and parts handling industry and nearly 2000 complete feeding systems supplied annually, RNA has earned a reputation for the most robust and reliable equipment on the market. Our commitment to research and development maintains our position at the leading edge of feeding technology. We provide an extensive range of the most efficient drive units, controllers and accessories for either standard or special requirements. All equipment is manufactured to the highest standards of quality upon which we have built our reputation. We offer first class service and standard equipment, immediate delivery from stock. Our product range is manufactured to meet the highest demands of the food and pharmaceutical industries and also includes equipment manufactured to UL and CSA standards. Quality has always been of central importance to RNA, with each employee committed to make their own personal contribution to the achievement of quality standards and customer satisfaction. We know that long term success in business can only be achieved by providing high quality equipment, which fulfils the customer's requirements.



Hoppers from RNA

The catalogue represents our complete range of standard equipment for hoppers, which is available from stock. It includes vibrating hoppers, belt hoppers and additional accessories. Special requirements are available upon request. From a 5 litre vibratory BVL type hopper to a 350 litre "Bunkerband" type inclined hopper we can supply off the shelf with short lead times and competitive prices.

Our experienced staff is available to provide advice and to offer a solution which meets your specific needs.

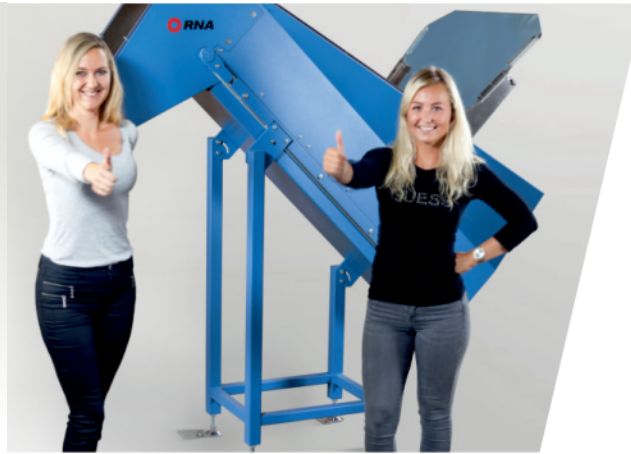
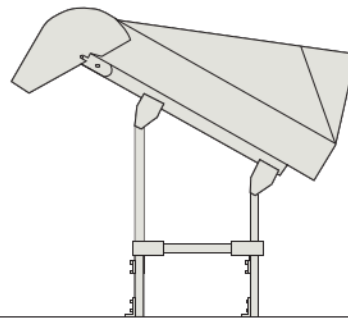


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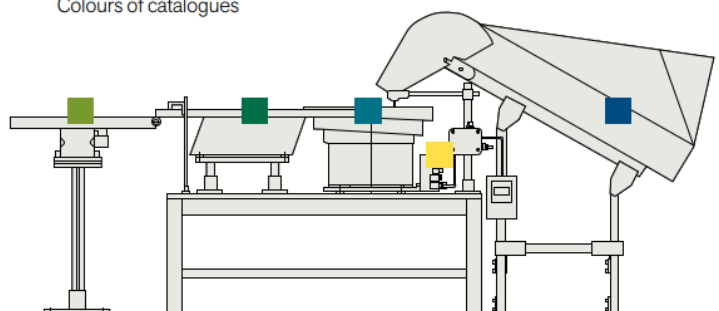


Technical changes reserved. All measurements are stated in mm.

More product catalogues from the RNA range of equipment

Conveyors	
Linear feeders	
Bowl feeders	
Control boxes	
Bulk hoppers	
Step feeders (not shown to the right)	

Colours of catalogues



- Filling weight up to 50 kg
- Filling volume up to 50 l
- Bulk hopper made of VA
- Very good feeding performance (vibration transfer)
- Flexible tuning (as built upon the reliable linear feeders of the SLL series)
- Workpieces are pre-separated as their speed accelerates towards the outlet
- Irrespective of the load, the device works with the same feed performance
- Available from stock

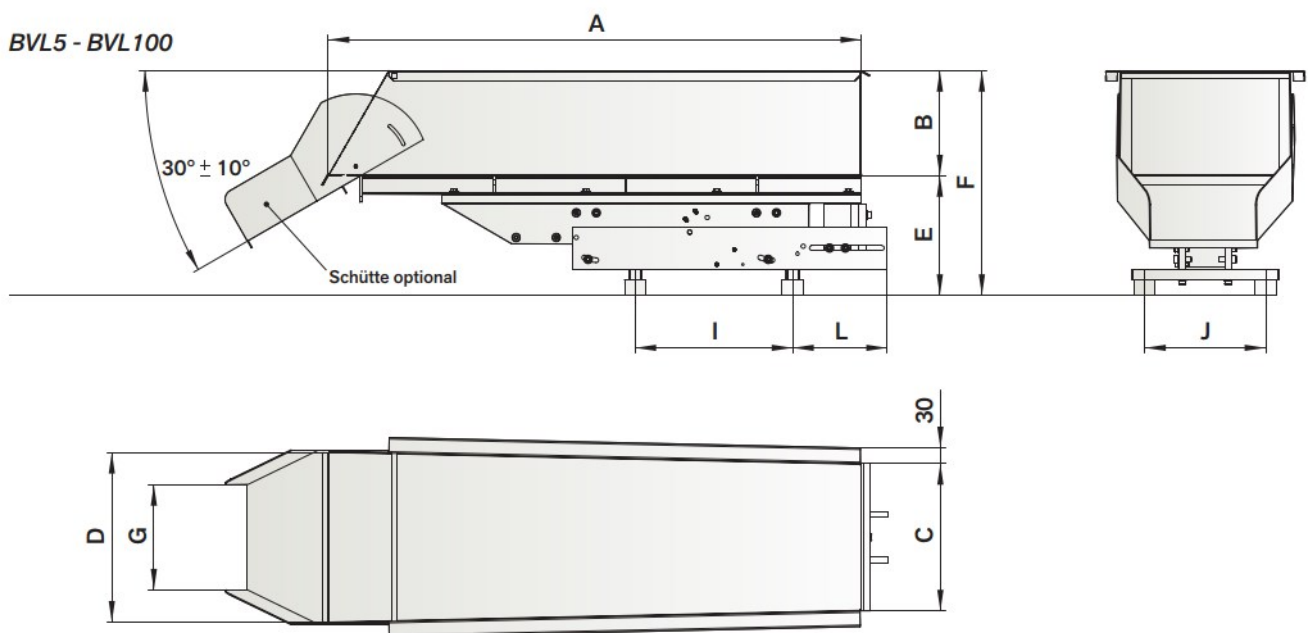
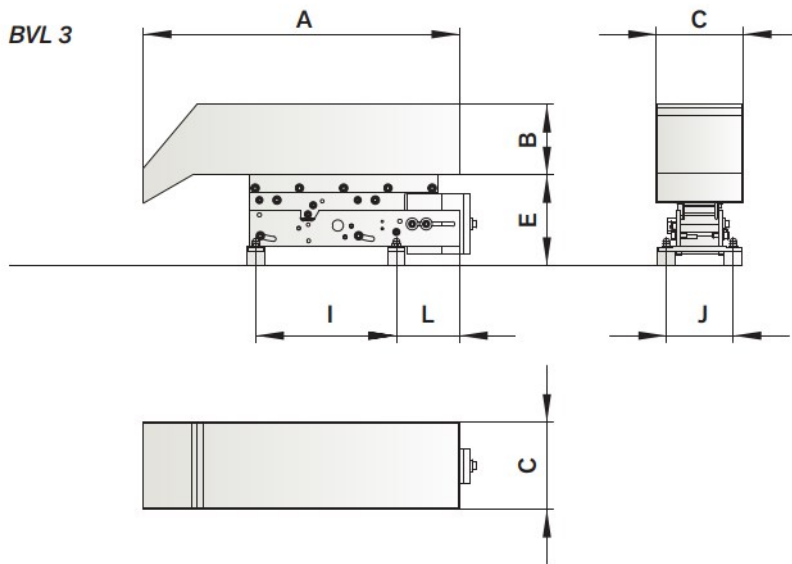


All hoppers (BVL3 - BVL5 - BVL15 - BVL50 - BVL70 - BVL100) are available in 3 to 100 litres.

Type	BVL 3	BVL 5	BVL 15	BVL25	BVL50	BVL70	BVL100
Capacity (l)	3,5	7	15	25	50	70	100
Filling weight (kg)	15	15	20	25	50	50	50
Drive unit	SLL 400-400	SLL 400-400	SLL 400-600	SLL 400-800	SLL 804-800	SLL 804-1000	SL 804-1000
Voltage	200V / 50Hz	200V / 50Hz	200V / 50Hz	200V / 50Hz	200V / 50Hz	200V / 50Hz	200V / 50Hz
Rating in amps	0,55 (A)	0,55 (A)	0,55 (A)	0,55 (A)	0,55 (A)	0,55 (A)	0,55 (A)
Vibration frequency	100 Hz	100 Hz	100 Hz	100 Hz	100 Hz	100 Hz	100 Hz
Protection type	IP54	IP54	IP54	IP54	IP54	IP54	IP54
Length of connection cable (mm)	1.800	1.800	1.800	1.800	1.800	1.800	1.800
A (mm)	450	515	685	885	1.015	1.150	1.220
B (mm)	100	110	150	150	200	255	280
C (mm)	124	170	220	220	280	340	390
D (mm)	124	197	256	256	329	329	430
E (mm)	129	160	163	163	228	230	230
F (mm)	229	275	315	315	430	485	510
G (mm)		100	125	125	200	200	200
I (mm)	200	200	300	450	300	450	450
J (mm)	95	170	220	220	230	230	230
L (mm)	90	90	90	90	180	180	180

Achievements	Standard	Special Design	Accessories
Technical changes reserved.	<ul style="list-style-type: none"> • Hopper tray with integrated outlet chute made of V2A (1.4301) • Inside and outside glass bead blasted • Factory setting on the specified filling weight • With mounted widening on the linear conveyor 	<ul style="list-style-type: none"> • 316 stainless steel • Hopper covered with polyurethane • Voltage (230V/50-60Hz; 110V/50-60Hz) • Linear Feeder in CSA/UL approved 	<ul style="list-style-type: none"> • Control boxes • Level controller • Stands

Standard voltage 200V/50Hz; Also available in special voltage 110V and frequency 50Hz or 60Hz.

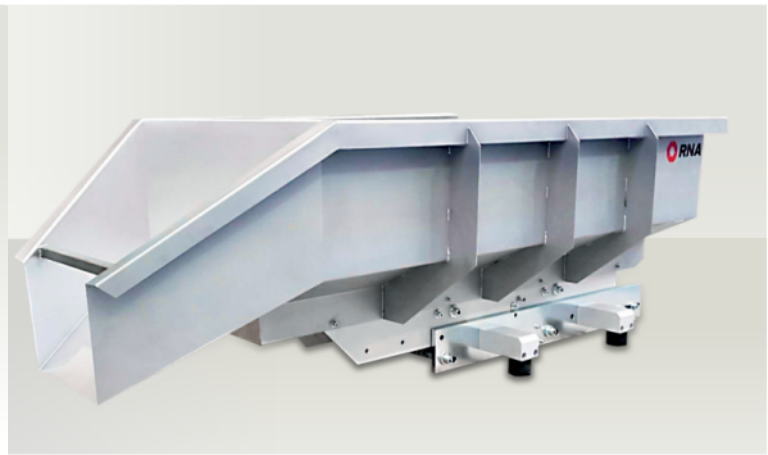


BV

The vibrating hoppers BV150 - BV200 are based at the renown series linear feeder type SLL and SLF.

Filling weight up to 200 kg. The BV hoppers can not only be used for high feeding rates and high filling volume but also for feedings from bigger and/or heavier components.

- Filling volume up to 200 l
- Characteristics like the BVL model
- More robust design and made for higher filling weights



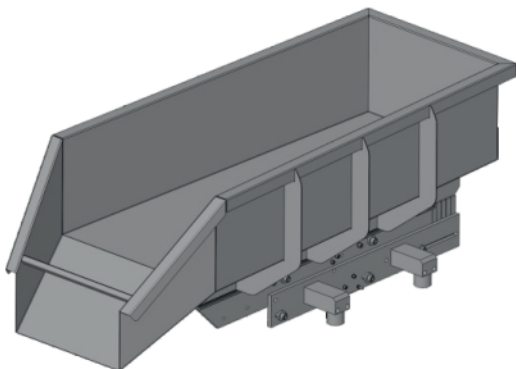
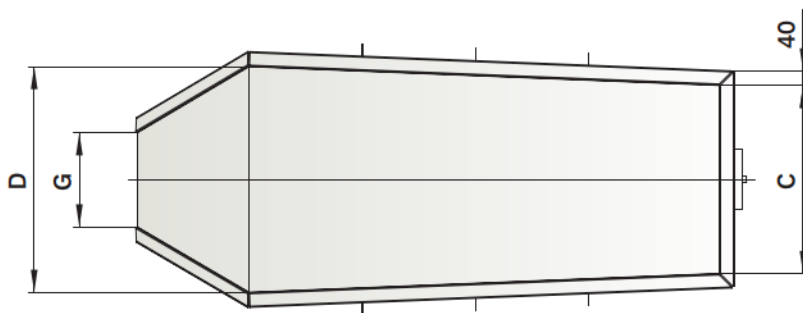
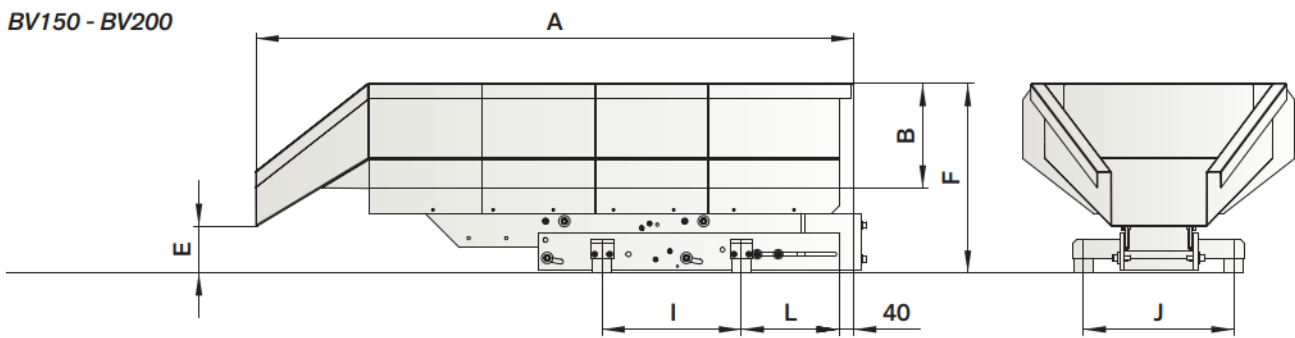
Type	BV150	BV200
Capacity (l)	150	200
Filling weight (kg)	200*	200*
Drive unit	SLF1000	SLF1000
Voltage	200V / 50Hz	200V / 50Hz
Rating in amps	2,5 (A)	2,5 (A)
Vibration frequency	50 Hz	50 Hz
Protection type	IP54	IP54
Length of connection cable (mm)	1.800	1.800
A (mm)	1.590	1.590
B (mm)	250	345
C (mm)	500	500
D (mm)	680	680
E (mm)	120	120
F (mm)	570	668
G (mm)	400	400
I (mm)	370	370
J (mm)	400	400
L (mm)	260	260

*The maximum full weight is dependent on application and components

Achievements	Standard	Special Design	Accessories
Technical changes reserved.	<ul style="list-style-type: none"> • Hopper tray with integrated outlet chute made of V2A (1.4301) • Inside and outside glass bead blasted • Factory setting on the specified filling weight • With mounted widening on the linear conveyor 	<ul style="list-style-type: none"> • 316 stainless steel • Hopper covered with polyurethane • Voltage (230V/50-60Hz; 110V/50-60Hz) • Linear Feeder in CSA/UL approved 	<ul style="list-style-type: none"> • Control boxes • Level controller • Stands

Standard voltage 200V/50Hz; Also available in special voltage 110V and frequency 50Hz or 60Hz.

BV150 - BV200



BU-W

In conjunction with a feeding system, the belt hoppers BU-W series store and deliver component parts on-demand. The basis of the BU-W series is the proven RNA standard conveyor FP120.

- Filling volume from 5 to 200 L
- Tank and Chute in stainless steel outside brushed
- Belt FDA-convenient
- Adjustable raised face in stainless steel
- Curtain lock
- 3-phase motor



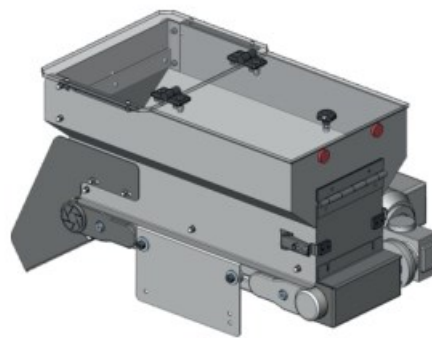
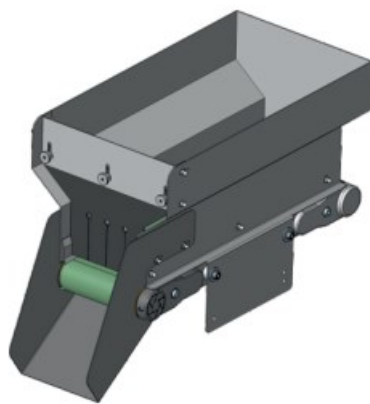
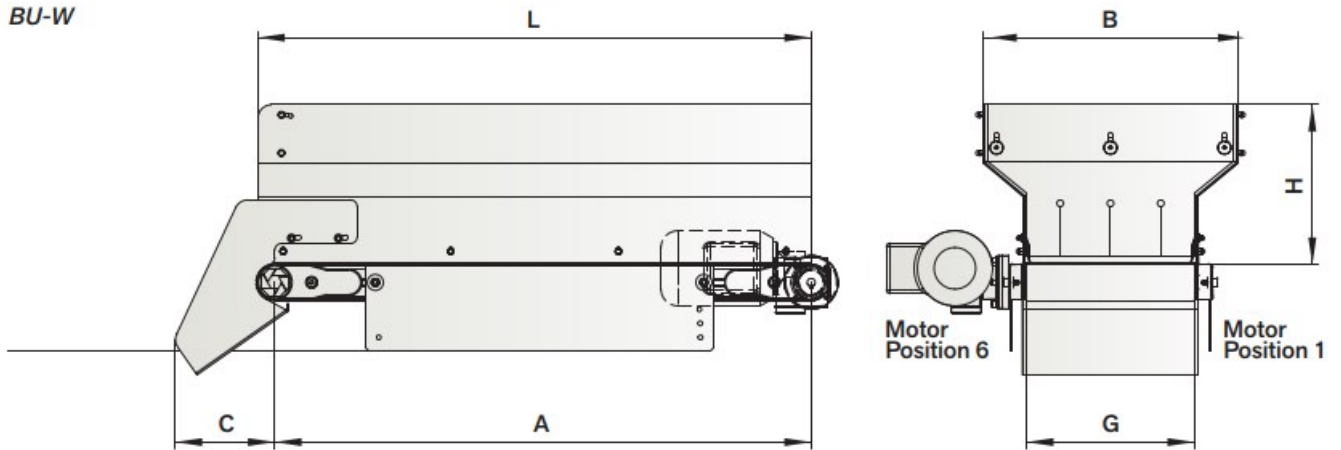
Horizontal Belt Hopper

Type	BU-W5	BU-W15	BU-W25	BU-W50	BU-W100	BU-W200
Capacity (l)	5	15	25	50	100	200
Filling weight (kg)	15	50	70	80	100	100
Belt speed (m/min)	1 or 2					
Voltage (V)	230/400 or 230					
Current consumption (A)	0.37 or 0.64					
Engine power (W)	90					
Motor position	Standard engine position 6 (right in running direction) alternative engine position 1 (left in running direction)					
L (mm)	475	475	525	825	1.025	1.025
A (mm)	450	450	500	800	1.000	1.000
G (mm)	120	120	150	250	300	300
B (mm)	125	250	280	380	430	430
H (mm)	105	205	240	240	290	510
C (mm)	140	140	140	140	140	140

Achievements	Standard	Special Design	Accessories
Technical changes reserved.	<ul style="list-style-type: none"> • Hopper tray and outlet chute made of V2A (1.4301) brushed inside and outside • With side sealing strips made of V2A adjustable sluice curtain • Belt FDA-convenient 	<ul style="list-style-type: none"> • Hopper tray with fast emptying flap • Hopper belt adapted to the part geometry 	<ul style="list-style-type: none"> • Foldable lids made of Makrolon/PET-G • Level-monitoring • Floor stand



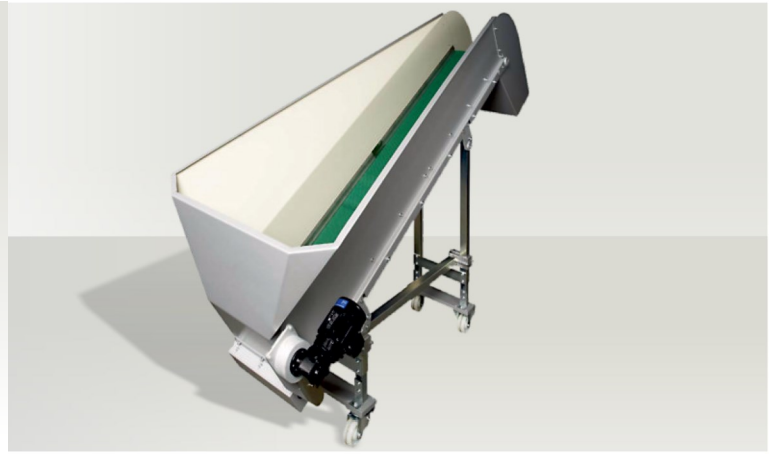
BU-W



BU-S

The BU-S hopper belts serve to store light, bulky component parts and, in interaction with a vibratory bowl feeder.

The hopper belt of the BU-S type are based on the RNA standard conveyor FP120 or FK120. The BU-S hoppers are available with a filling volume of 65 to 350 litres. Depending on the space required, the user can choose the hopper belts in difference sizes.



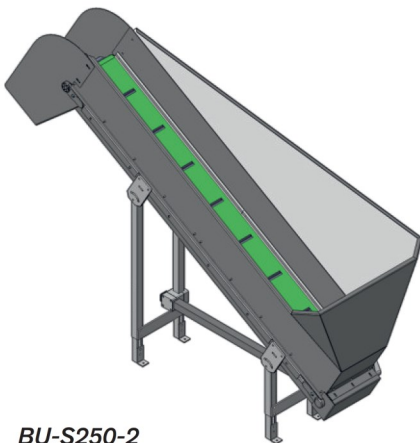
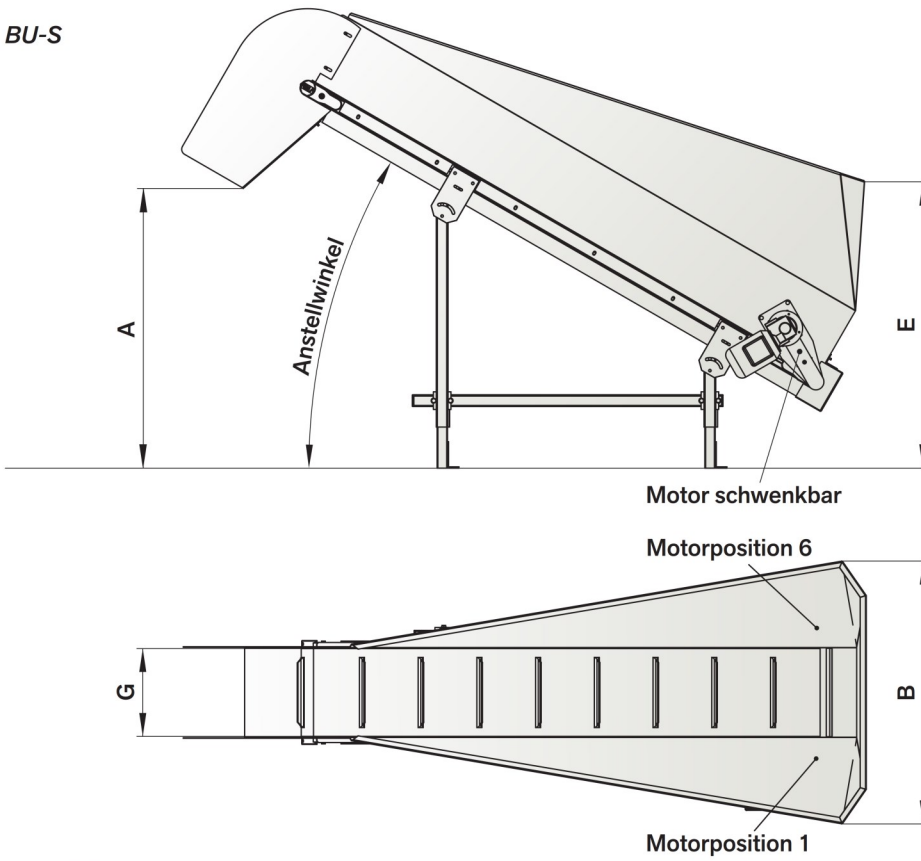
E Min. filling height at 30° in mm

Type	BU-S65/1	BU-S100/1,5	BU-S150/1,5	BU-S250/1,5	BU-S200/2	BU-S250/2	BU-S350/2
Filling volume at 30° in litres	65	100	150	250	200	250	350
Max. filling weight in kg	75	75	75	75	75	75	75
B Hopper width in mm	600	600	780	880	800	900	1.000
E Min. filling height at 30° in mm	780	750	850	950	850	950	1.050
A Discharge height at 30° in mm	525	680	680	680	915	915	915
E Min. filling height at 40° in mm	700	650	750	850	750	700	950
A Discharge height at 40° in mm	640	880	880	880	1180	1180	1180
Distance between centres in mm	1.000	1.500	1.500	1.500	2.000	2.000	2.000
G Belt width in mm	250	300	300	400	300	300	400
Belt type with setting angle > 30°	AR belt or cleat belt with T20, L30 or L35 type cleats (number depends on applications)						
Belt speed m/min	1 or 2 (Standard)						
Motor	3-phase or AC motors						
Motorposition	Beginning of belt pos. 1 or 6						

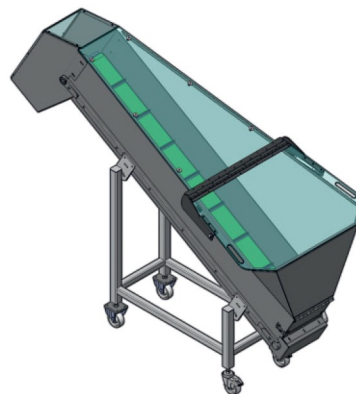
Achievements	Standard	Special Design	Accessories
Technical changes reserved.	<ul style="list-style-type: none"> . Anodized aluminium profile . Hopper tray, outlet chute and UVV covers - V2A (1.4301) brushed inside and outside or <ul style="list-style-type: none"> . Hopper tray, outlet chute and UVV covers - steel painted (RAL7035) . Hopper belt adapted to the part geometry 	<ul style="list-style-type: none"> . Hopper tray with fast emptying flap . Hopper belt adapted to the part geometry . Direct drive . Heavy duty drive station . Drive and pulleys - V2A (1.4301) . Lashes are chemically nickelplated . Belt speed > 2m/min 	<ul style="list-style-type: none"> . Foldable lids made of Makrolon/PET-G . Coatings for hopper tray . Control units . Level-monitoring . Floor stand (optional)



BU-S



BU-S250-2



New quality standard vertical conveyors in the feeding technology of RNA

The new STF series from RNA is a high quality standard and bespoke vertical conveyor, available in various sizes and belt widths.

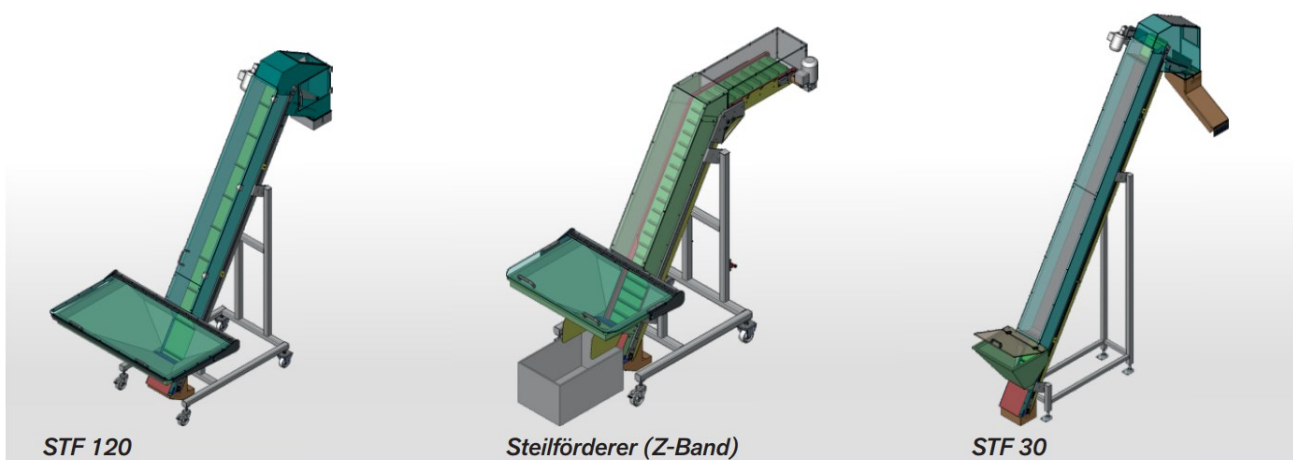
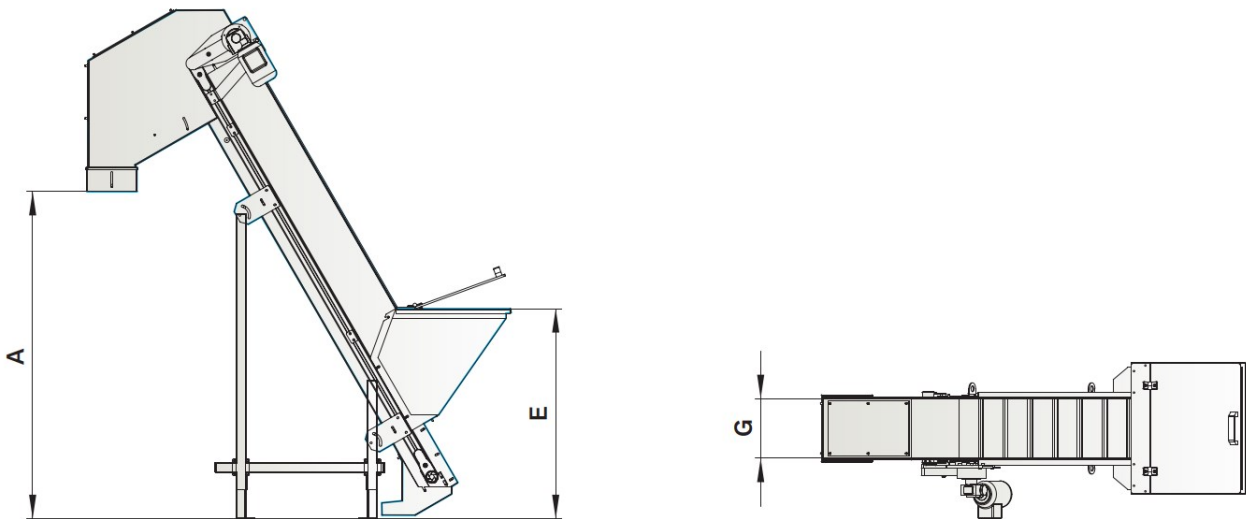


Special features:

- . A hopper system eliminates jamming of the parts between the conveyor belt and cover or hopper wall.
- . The adjustable baffle plate in the spout prevents parts from getting under the back belt cover.
- . The open design of the lower deflection station prevents parts jamming.
- . The new series is optimized with regards to the filling height, the variable discharge height and noise reducing measures

Type	STF30-120	STF60-120	STF60-250	STF120-250
Filling volume in litres	30	60	60	120
Max. filling weight in kg	50	50	75	75
E Min. filling height in mm	ca. 800	ca. 900	ca. 900	ca. 900
A Min. filling height in mm	1.200 – 1.700	1.200 – 1.700	1.200 – 1.700	1.200 – 1.700
G Belt width in mm	120	120	250	250
Type of belt	Type T20 and K10			
Motor	3-phase or AC motors			
Motorposition	End of belt (tractive)			

Achievements	Standard	Special Design	Accessories
Technical changes reserved.	<ul style="list-style-type: none"> . Anodized aluminium profile . Hopper tray, outlet chute and UVV covers - V2A (1.4301) brushed inside and outside or <ul style="list-style-type: none"> . Hopper tray, outlet chute and UVV covers - steel painted (RAL7035) . Hopper belt adapted to the part geometry 	<ul style="list-style-type: none"> . Hopper tray with fast emptying flap . Hopper belt adapted to the part geometry . Direct drive . Heavy duty drive station . Drive and pulleys - V2A (1.4301) . Lashes are chemically nickelplated . Belt speed > 2m/min 	<ul style="list-style-type: none"> . Foldable lids made of Makrolon/PET-G . Coatings for hopper tray . Control units . Level-monitoring . Floor stand (optional)

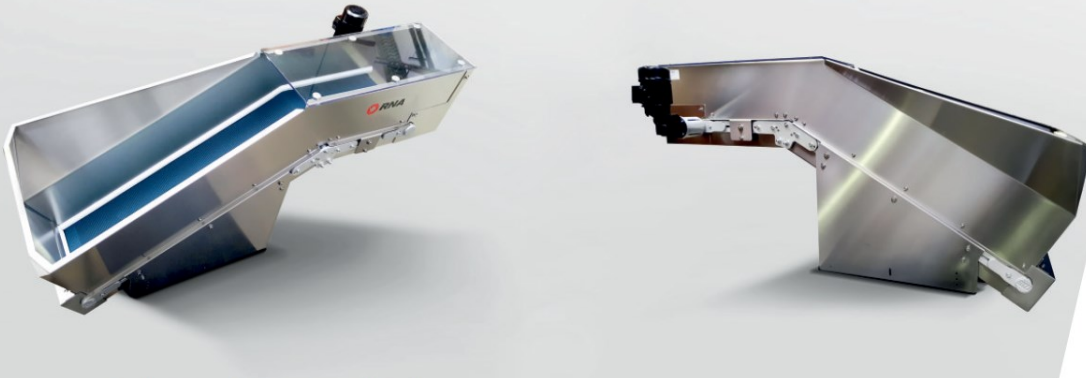


STF 120

Steilförderer (Z-Band)

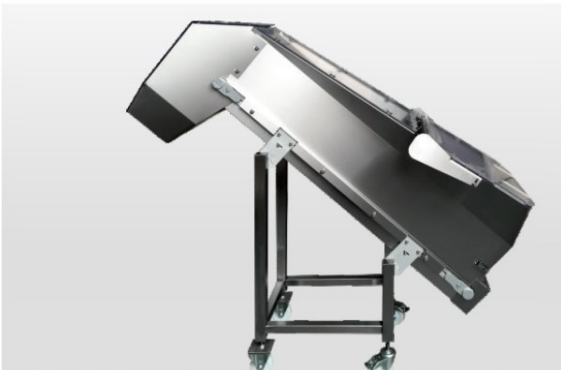
STF 30

Special Hoppers

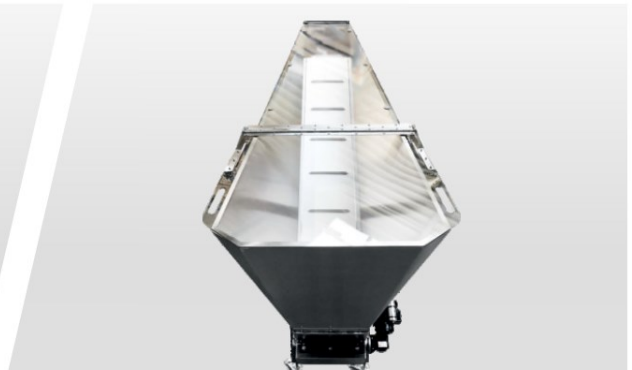


Belt hopper based on a z-belt

Hopper Applications - Customized design



Belt hopper BU-S 200 for pharmaceutical applications



Vibrating hopper with a quick emptying flap



Vibrating hopper for heavy loading





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