



# Component

Vibration Platforms

FlexCubes





## Welcome to RNA

As your leading partner for efficient, high-precision, and high-performance feeding technology, we offer a comprehensive range of feeding system components specially designed to optimise your production processes. With nine production sites and an international network of partners, we can serve your needs anywhere in the world. For decades, our name has been synonymous with outstanding performance in terms of technology, quality, and reliability. Our two business units include the development and manufacture of tailor-made feeding systems and their components.

Whether you are looking for customised belt feeders, hopper systems, bowl or linear feeders, vibratory platforms, or controllers – RNA offers the most advanced solutions, tailored to your specific requirements. Our products are regarded as industry standards and stand for longevity, reliability, and efficiency across a wide range of industries – from automotive and medical technology to electronics manufacturing, to name but a few. Thanks to our extensive expertise in feeding technology, all components have been tried and tested under real-world production conditions and are renowned for their exceptional reliability and robustness. New insights are continuously incorporated into the further development of all components, with the aim of continuously enhancing our products.

We offer a complete range of powerful drives and controllers, as well as accessories, whose quality and functionality are widely recognised – including for applications with special performance requirements. What's more, all our drives are digitised and can be digitally tuned using our specially developed **DigitalMotion** simulation software. This allows you to perfectly adjust our drives already

during the design phase of your system, saving valuable time on the shop floor.

Our product portfolio is rounded out by excellent service, immediate delivery, and high availability, as well as specialised designs for the pharmaceutical and food industries and certifications to UL and CE standards. Prior to delivery, all components undergo extensive testing once more to ensure trouble-free operation. With more than 55 years of experience in automation and feeding systems, we are proud to present innovative products backed by a strong commitment to technological excellence and sustainability. Our goal is to support you in boosting productivity and efficiency by offering tailored solutions for your manufacturing requirements.

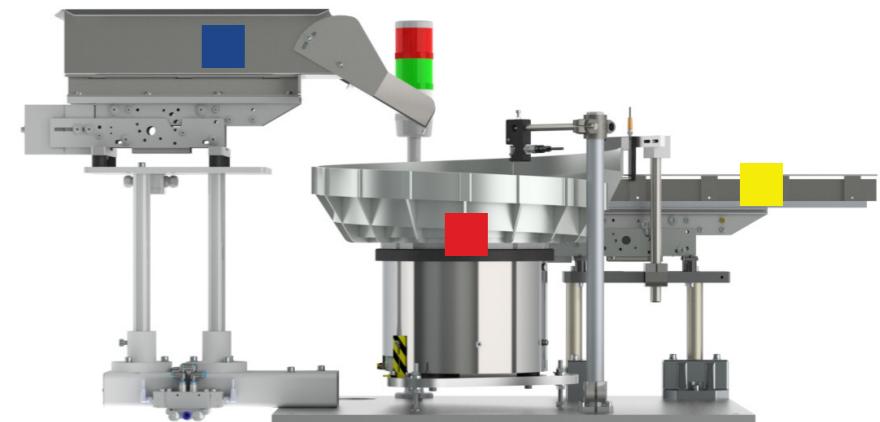
Last but not least, our workforce stands firmly behind all our products. The true measure of their success is customer satisfaction. We know that long-term commercial success can only be achieved through top-quality products and services, where every related task is executed to the highest standard at all times.

In our new catalogue, discover how we can help revolutionise your processes with our high-quality components. Do you have questions or would you like a personal consultation? Our team of experts is here to help. We look forward to accompanying you every step of the way towards your perfect automation solution.

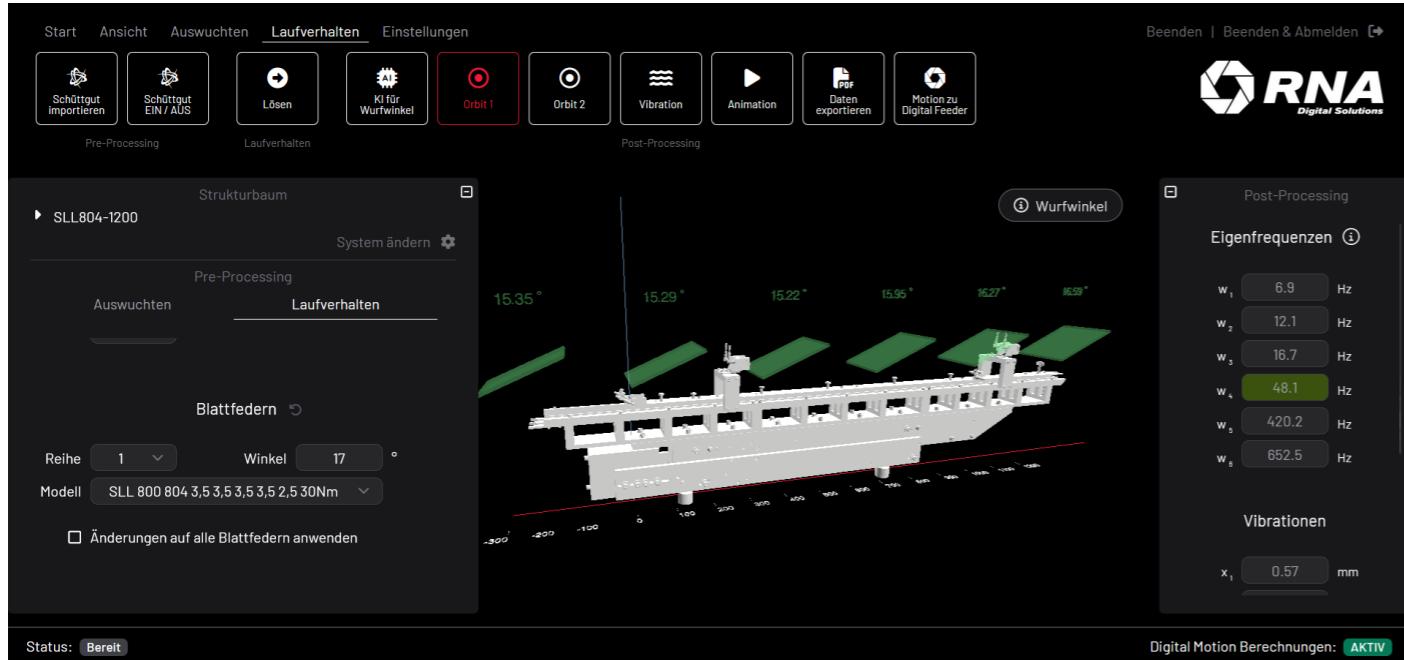
Rhein-Nadel Automation GmbH – we handle it.

## Overview

Component	Colour in catalogue
Vibratory Feeders and Bowl Feeders	Red
Linear Feeders	Yellow
FlexCubes (not shown on right)	Green
Belt Feeders (not shown on right)	Light Green
Hopper Systems	Blue
Step Feeders (not shown on right)	Cyan
Controllers (not shown on right)	Orange



# DigitalMotion – Tuning drives in the Cloud



The browser-based DigitalMotion software enables you to tune the feeding behaviour of RNA components with a few clicks. This saves valuable time during initial commissioning of your drives, creates a reproducible set-up with clear documentation, and forms the basis for optimal operation of your feeding system in the long term.

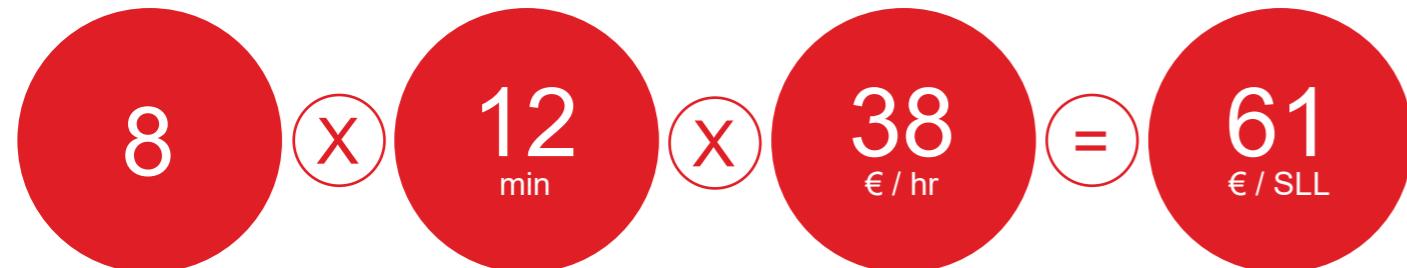
## Simple workflow

DigitalMotion can be seamlessly integrated into your existing processes. All you need is the CAD design data of your feeder rail or bowl. The graphic presentation of the simulation results and integrated interpretation aids make the tuning process child's play. Exporting the results to a \*.pdf file provides you with a documentation that will help you install the drives on your own, or to order pre-configured drives from RNA. This makes DigitalMotion your tool to combat the shortage of skilled personnel in the field of feeding technologies.

## High return-on-Investment

The use of DigitalMotion does not only permit direct savings during commissioning of your drives. Correctly setting up the feeding behaviour is actually the basis for optimal long-term operation of feeding systems. In this manner, you benefit twice over: In your own shops and in the production facilities of your customers.

## Example: calculation of the savings for tuning an SLL 800-800:

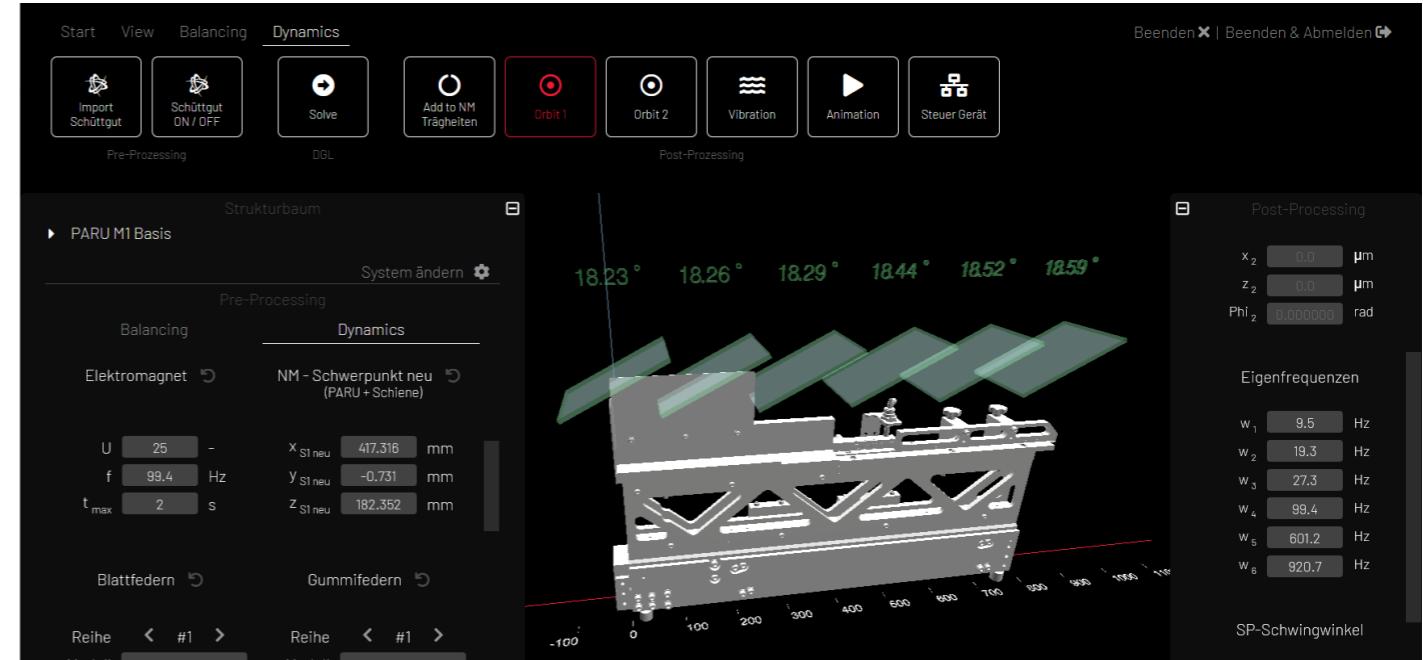


Ø number of parameter variations on an SLL (leaf springs: stiffness, inclination...)

Ø duration per adaptation

Hourly rate in shop

Cost savings per drive using simulation



## Digitized drives from RNA

Due to the positive feedback from our customers, we are constantly updating DigitalMotion with additional RNA components. At present, following products are already incorporated in this software:

- SLL series (SLL 175, SLL 400, SLL 800, SLL 804)
- PARU Mini
- SRC-N series (160, 200, 250, 400)



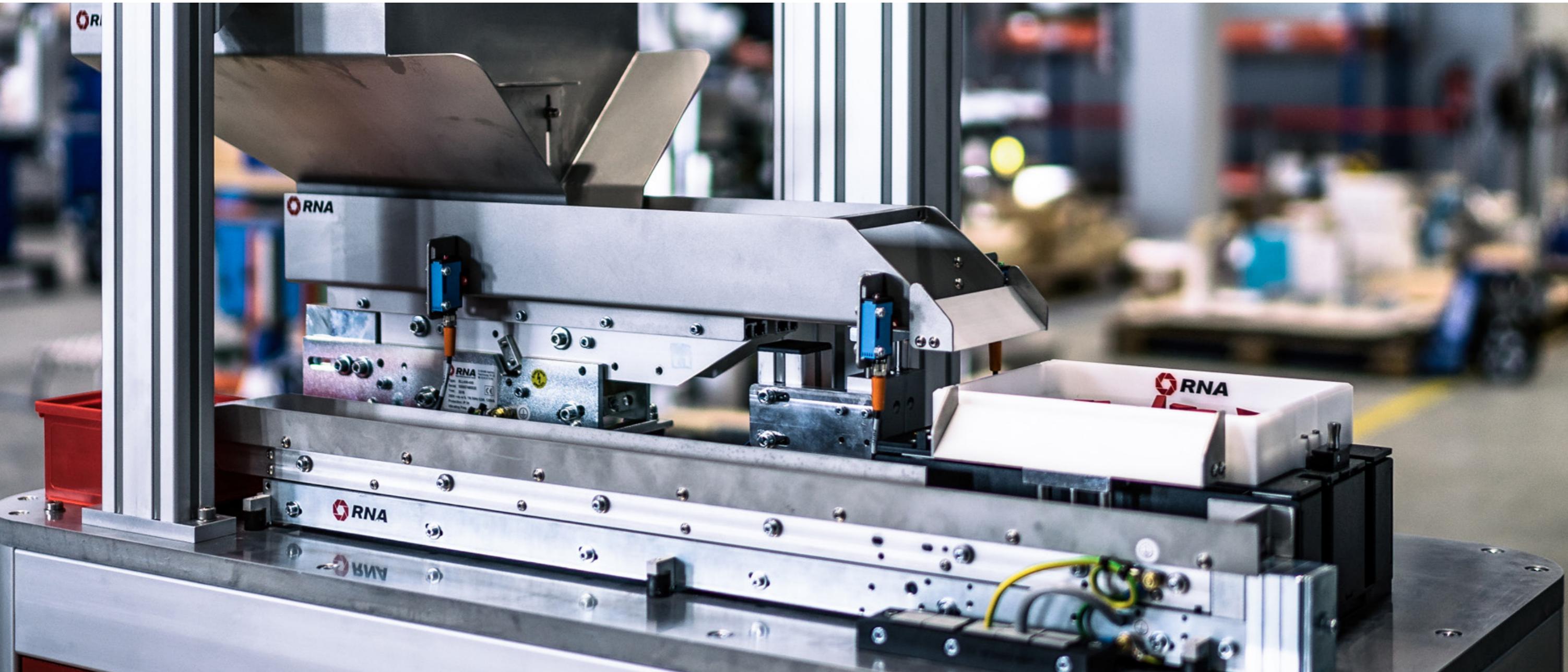
## Numerous access options

DigitalMotion offers various access solutions tailored to your specific needs. Our Credit System is an excellent option for all customers requiring digital validations occasionally only. Under our monthly subscription scheme you will have full access to the simulation feature, with an unlimited number of calculations. Be sure to contact your RNA representative for additional information, personalized solutions or a non-binding test phase.

# FlexCubes

FlexCube is the ideal feeding system when high flexibility in production is required. FlexCube vibratory platforms are usually operated together with an image processing system and a robot for the feeding of parts having different geometries. Thanks to our patented 3-axis system, even sensitive parts can be fed safely and reliably.

The parts are evenly distributed on the surface of the feeder. If required, they can also be aligned in all directions using textured baseplates and smart vibratory motions. Whole families of parts can be singulated and supplied by such a feeding system, making it usable for future tasks too.



# FlexCube 50, 80, 240, 380, 530



## Infos

- **Compatible with all parts geometries**
- **Minimum change-over times**
- **Extremely gentle part handling**
- **Free movement of the parts**
- **Prevents transmission of vibrations**
- **Systematic part orientation**
- **Easy configuration**

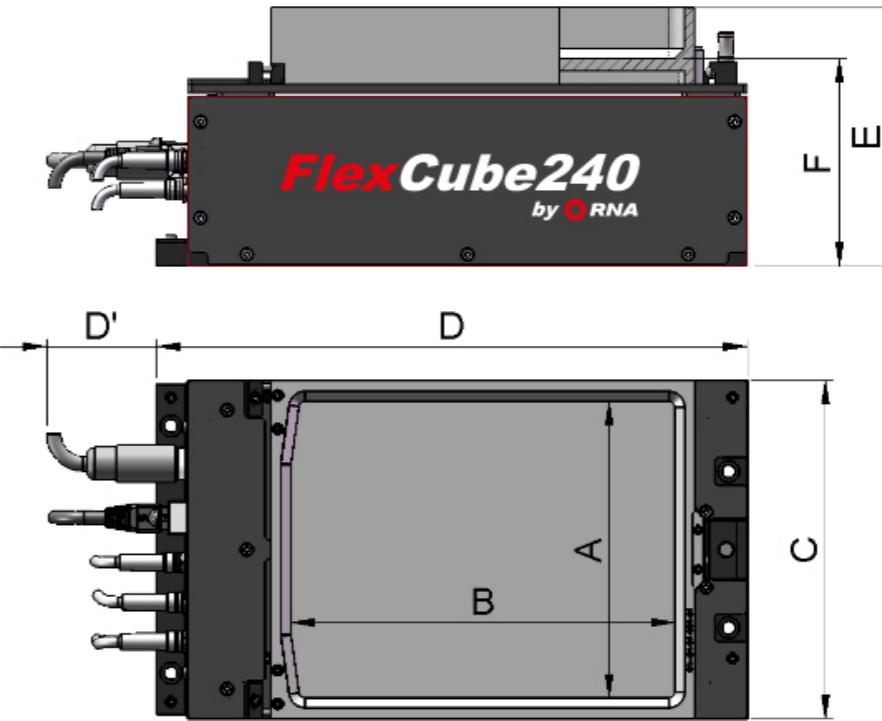
## Description

RNA's components for vibratory platforms provide you with a complete range of products to compose your flexible feeding systems. From specially designed hoppers to quick dumps and plastic plates tailored to your specific requirements, RNA offers the optimum solution to your needs.

Our intelligent vibratory systems offer possibilities for controlled part movements in all directions, as well as for precise metering and exact attitude detection and presentation of parts. The hoppers of our BVL-P series have been developed to promote uniform parts feeding. Combined with sensors and a shutoff gate, they also prevent overfilling of the vibratory platform. The quick dump system enables you to run all parts out of the platform in a swift and efficient manner. Ejected parts are returned via an SLL 175-800 linear feeder which is also a recent addition to our product line-up.

At your request, RNA can also offer a complete line-up of modular components for the most diverse tasks.

Typical application: FlexCube 240 for plastic parts



Be informed that we offer a comprehensive range of accessories for FlexCubes. As the accessories are highly specific to the tasks at hand and the parts to be handled, we are here to put them together for your application,

Type	FlexCube 50	FlexCube 80	FlexCube 240	FlexCube 380	FlexCube 530
Typical part dimensions (mm)	< 0.1 - 5	3 - 15	5 - 40	15 - 60	30 - 150
Available vibratory plate surface area (mm)	A = 34 B = 45	A = 52 B = 65	A = 150 B = 195	A = 254 B = 325	A = 371 B = 427
Overall dimensions (mm) (mounting surface area)	C = 46 D = 293	C = 65 D = 320	C = 171 D = 499	C = 257 D = 600	C = 372 D = 600
Total height (mm)	E = 140	E = 140	E = 132	E = 307	E = 320
Pick-up height (mm)	F = 110	F = 111	F = 105	F = 245	F = 360
Power supply	24V/6A	24V/6A	24V/8A	24V/20A	24V/20A

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