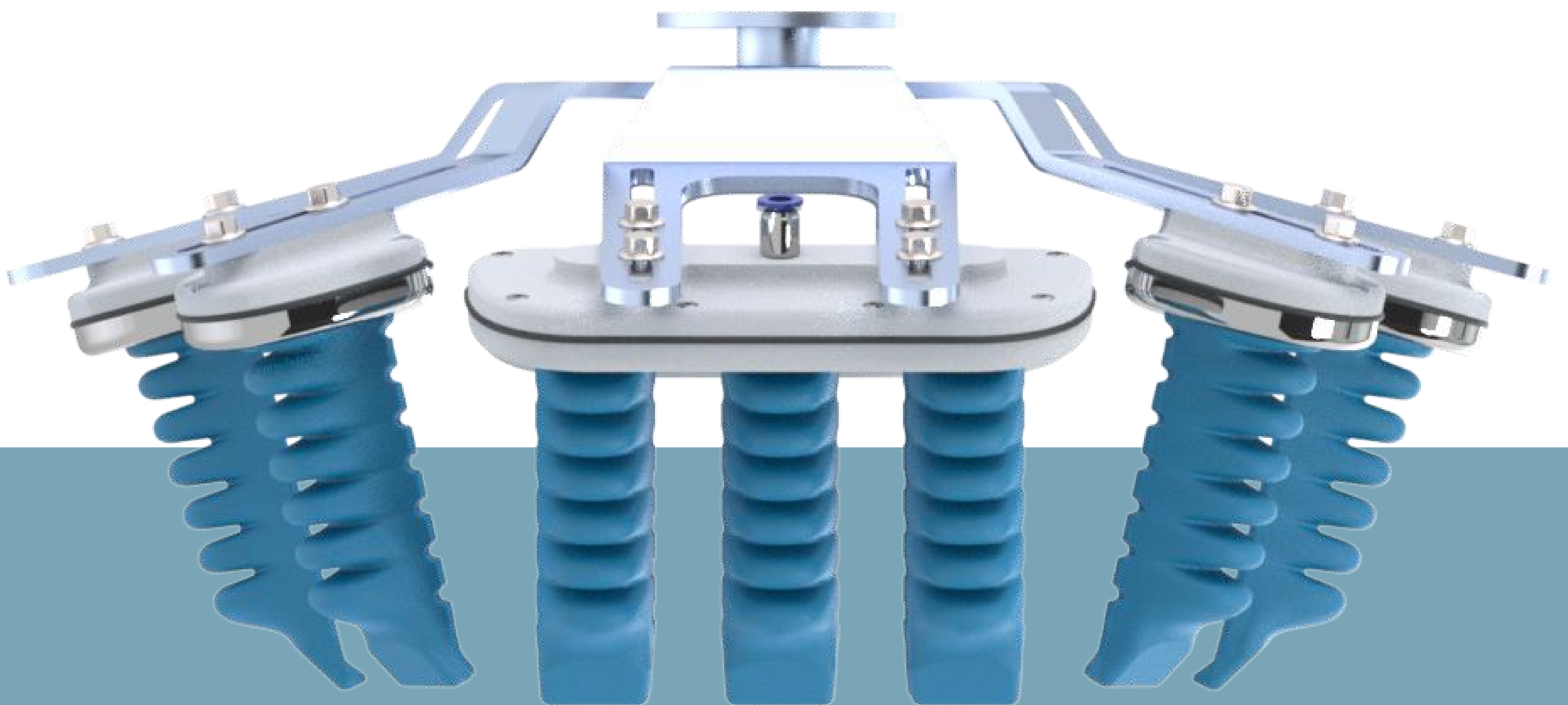


BagGripper



Gentle in grip.
Powerful
in performance.

A customized gripping solution for nets and bags – developed with partners and end customers to meet the demands of modern food production.

Engineered to meet customer needs.

The Challenge

Nets and bags are anything but rigid — their contents can shift during handling, changing the shape and even the center of gravity of the entire package. Traditional grippers quickly reach their limits:



Lack of adaptability to constantly changing shapes and weights



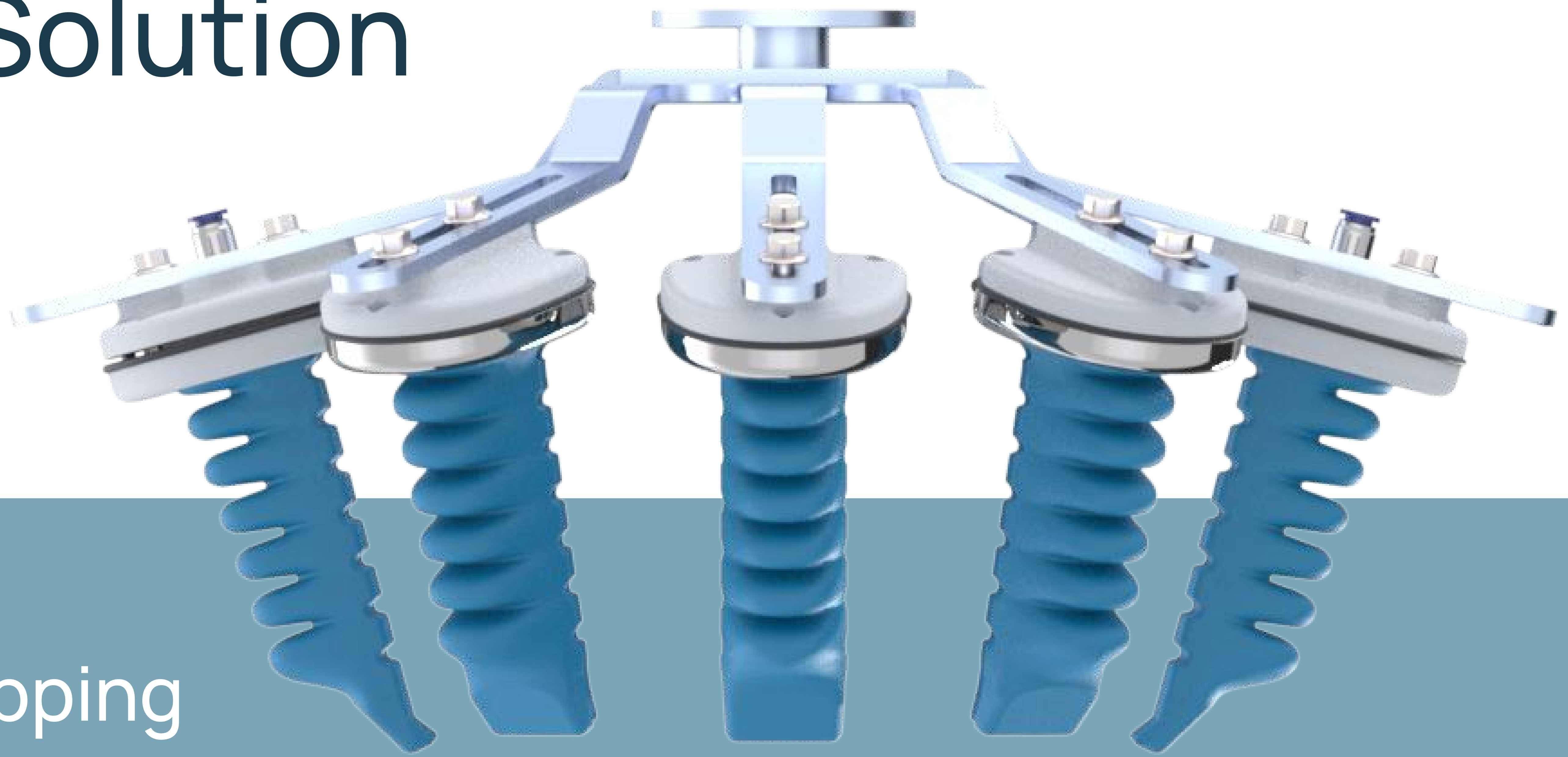
Product damage due to uncontrolled pressure or slipping



Unreliable performance at high speeds

The challenge: develop a gripper that can adapt dynamically to non-rigid objects — while combining speed, precision, and gentle handling.

The Solution



SoftGripping

BagGripper with GorillaFingers

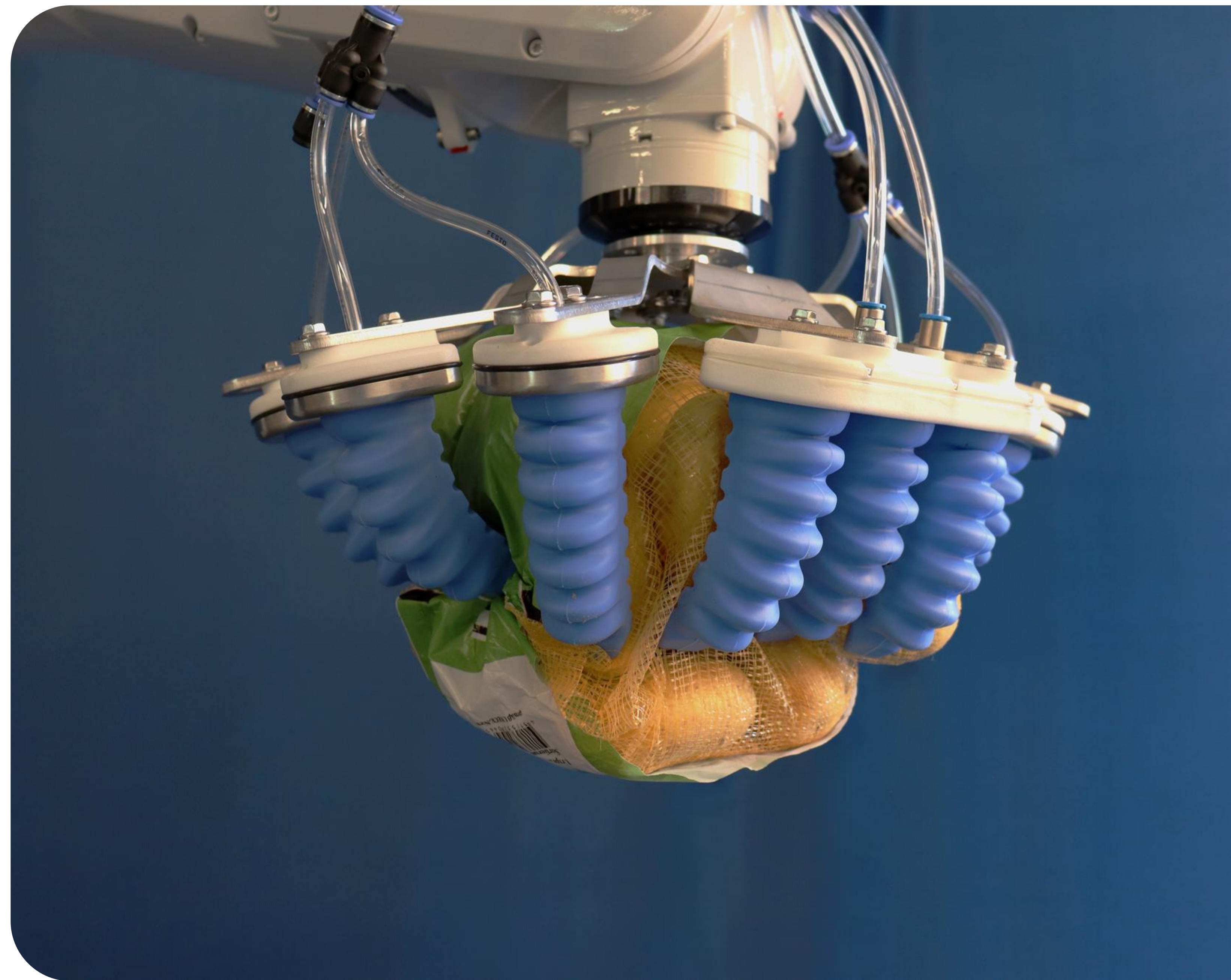
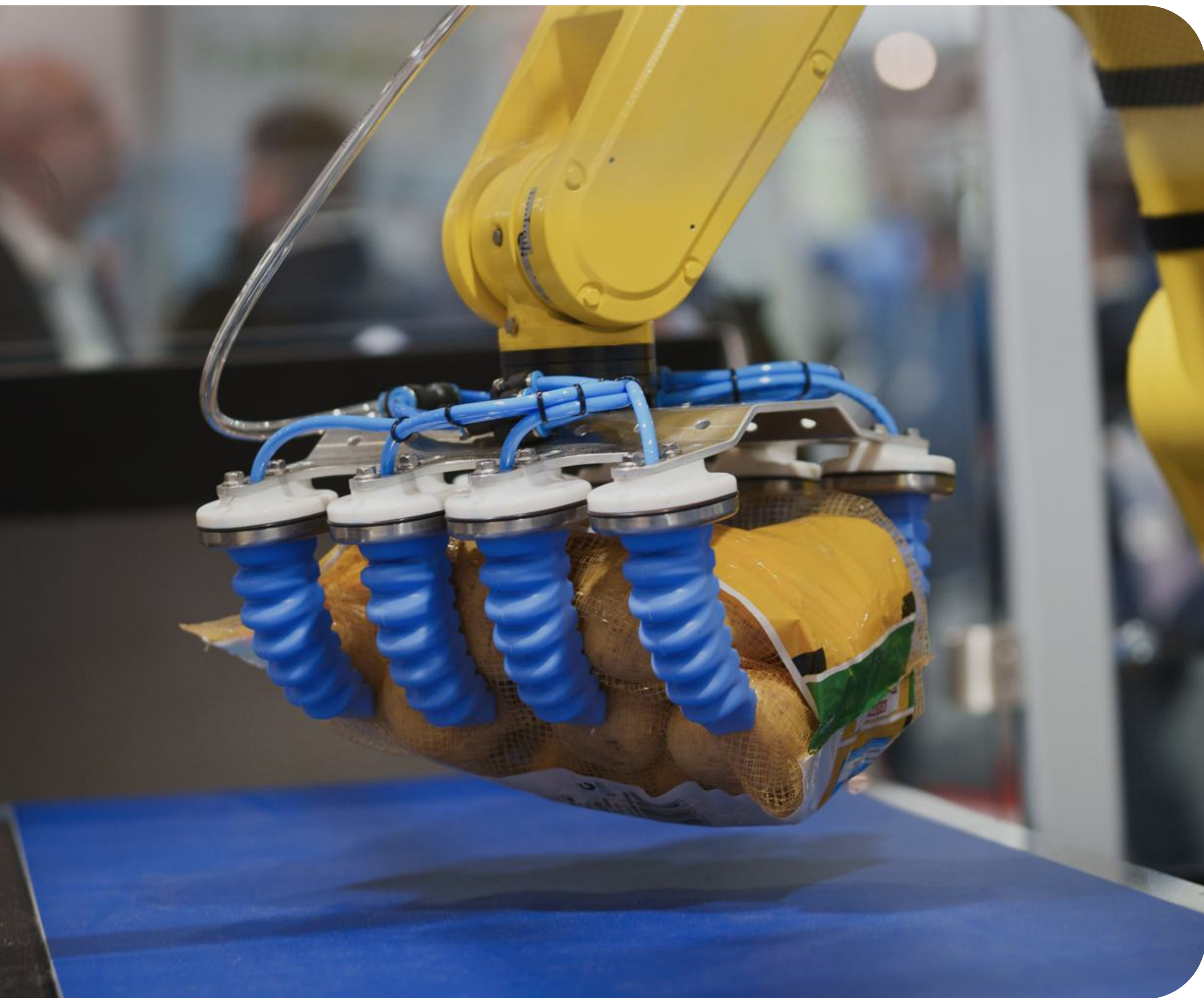
Gentle. Flexible. Hygienic.

Developed in close collaboration with customers, the BagGripper with GorillaFingers is a modular, pneumatic gripping system engineered specifically for the toughest challenges in food, packaging, and logistics automation: handling non-rigid bagged and netted goods.

Its adaptive, food-grade silicone fingers wrap around the product like a strong yet gentle hand — guiding and securing the contents without damage. From netted produce to frozen food bags and irregularly shaped packages, the gripper maintains a secure hold even when shapes, sizes, and weights vary. With advanced pneumatic control and durable stainless-steel construction, it delivers precise, gentle, and adaptable performance across a wide range of products.

Built for food safety.
Designed for performance.

One Gripper. Many Applications.



A flexible, soft-touch gripper designed to handle a wide variety of objects, from large products to packaged goods, ensuring gentle and precise handling.

Netted products
(potatoes, apples,
onions)

Bagged products
(corn, potato, carrot)

Frozen food bags
(berries, vegetables,
fries)

Heavy goods
up to 5 kg

Key Advantages

1

Fast and Reliable Performance:

Up to 56 picks per minute
for maximum speed – recommended:
20 picks/min for precise handling
of products up to 5 kg.

2

Durable Design:

Stainless steel construction
and FDA-compliant silicone fingers
ensure longevity and safety in food
applications.

3

Adaptability:

The pneumatic system adjusts flexibly
to various pressure ranges, enabling
the handling of a wide variety
of objects.

4

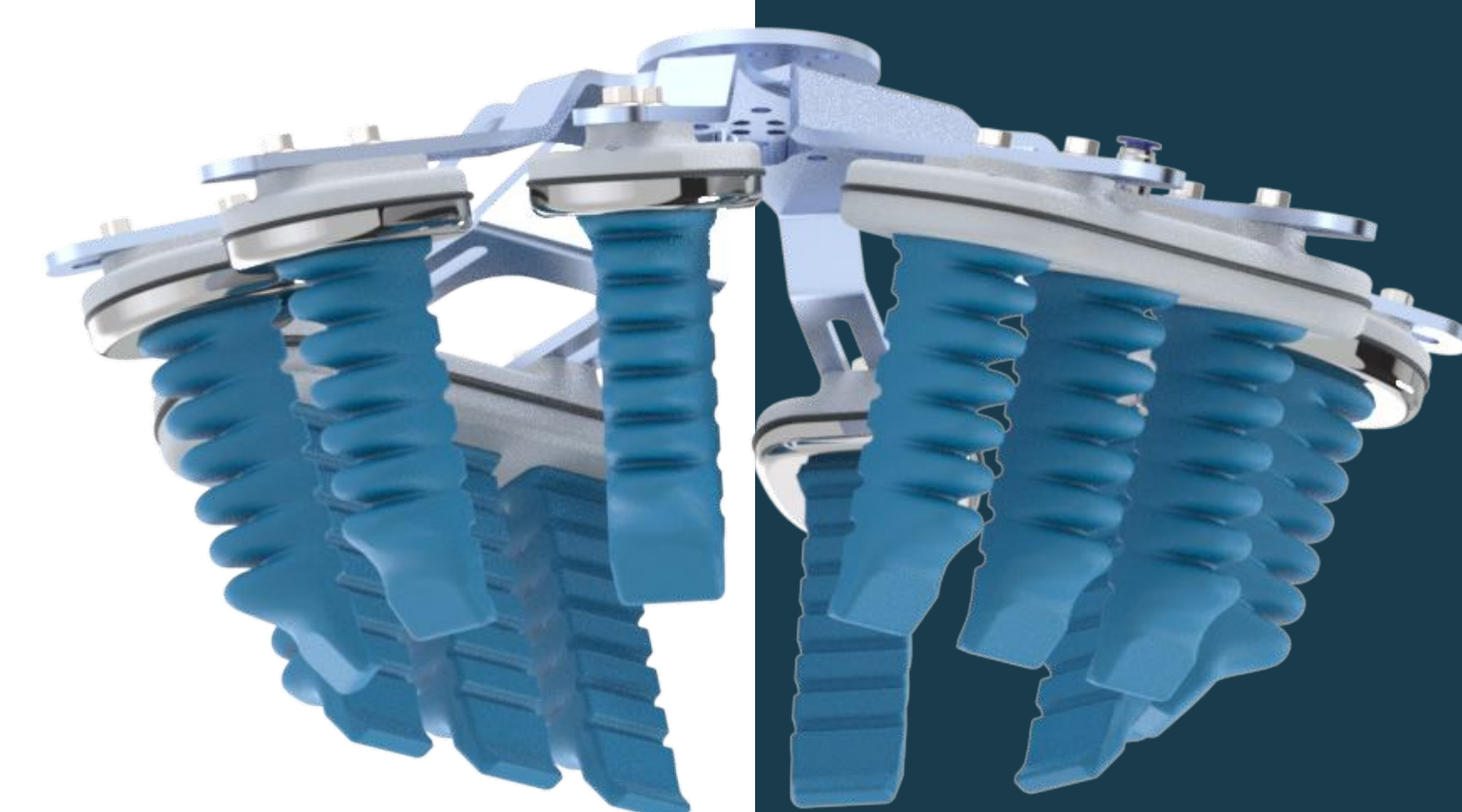
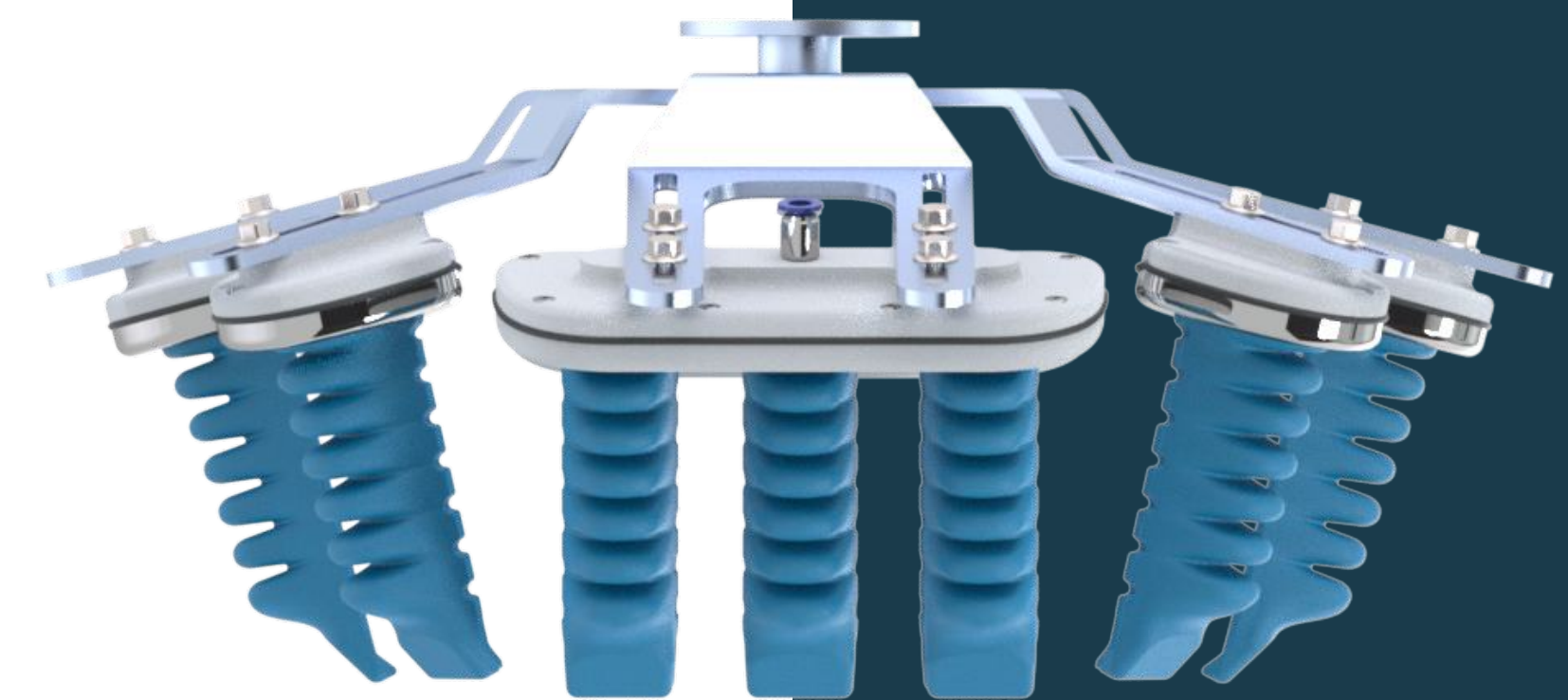
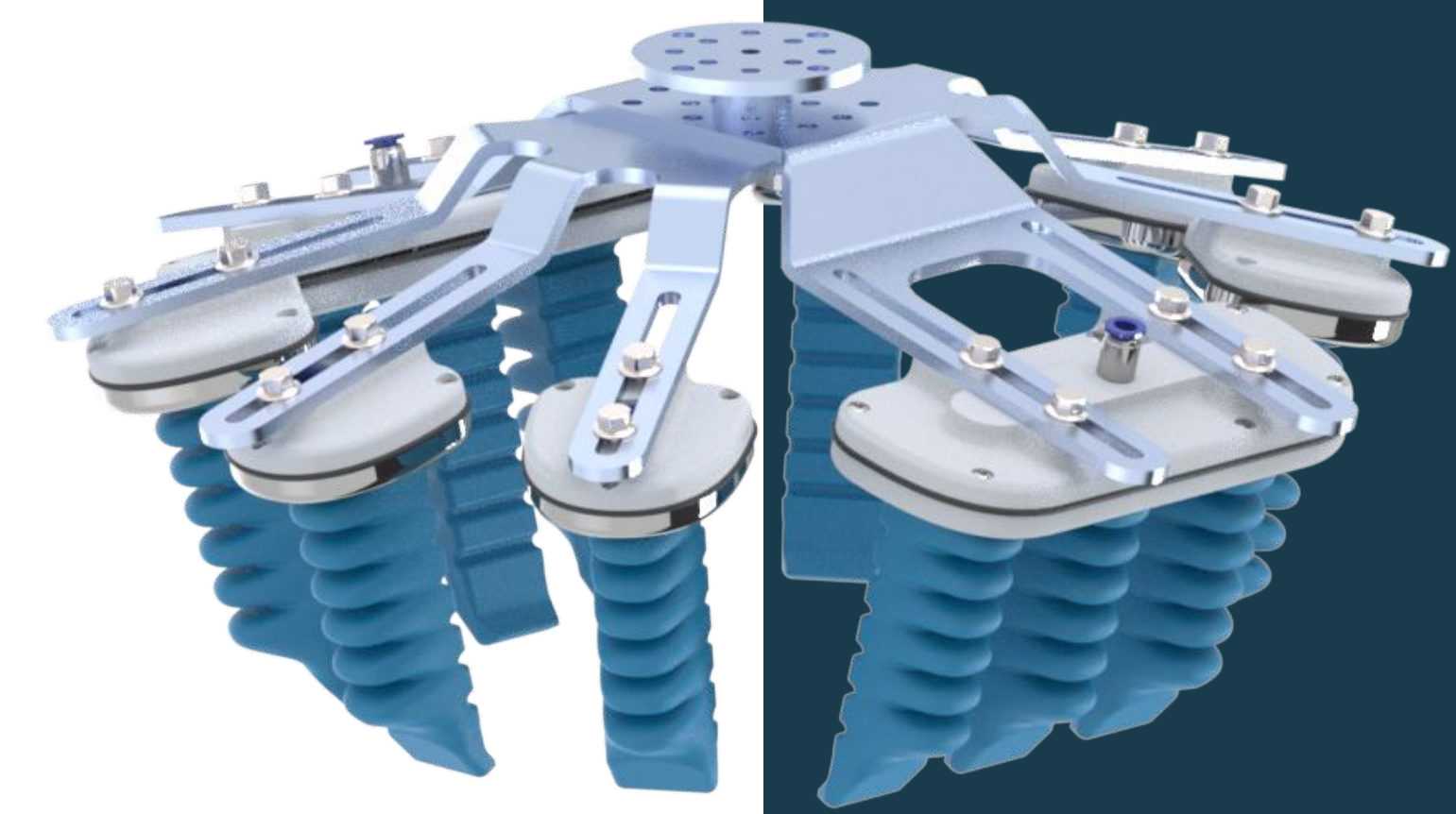
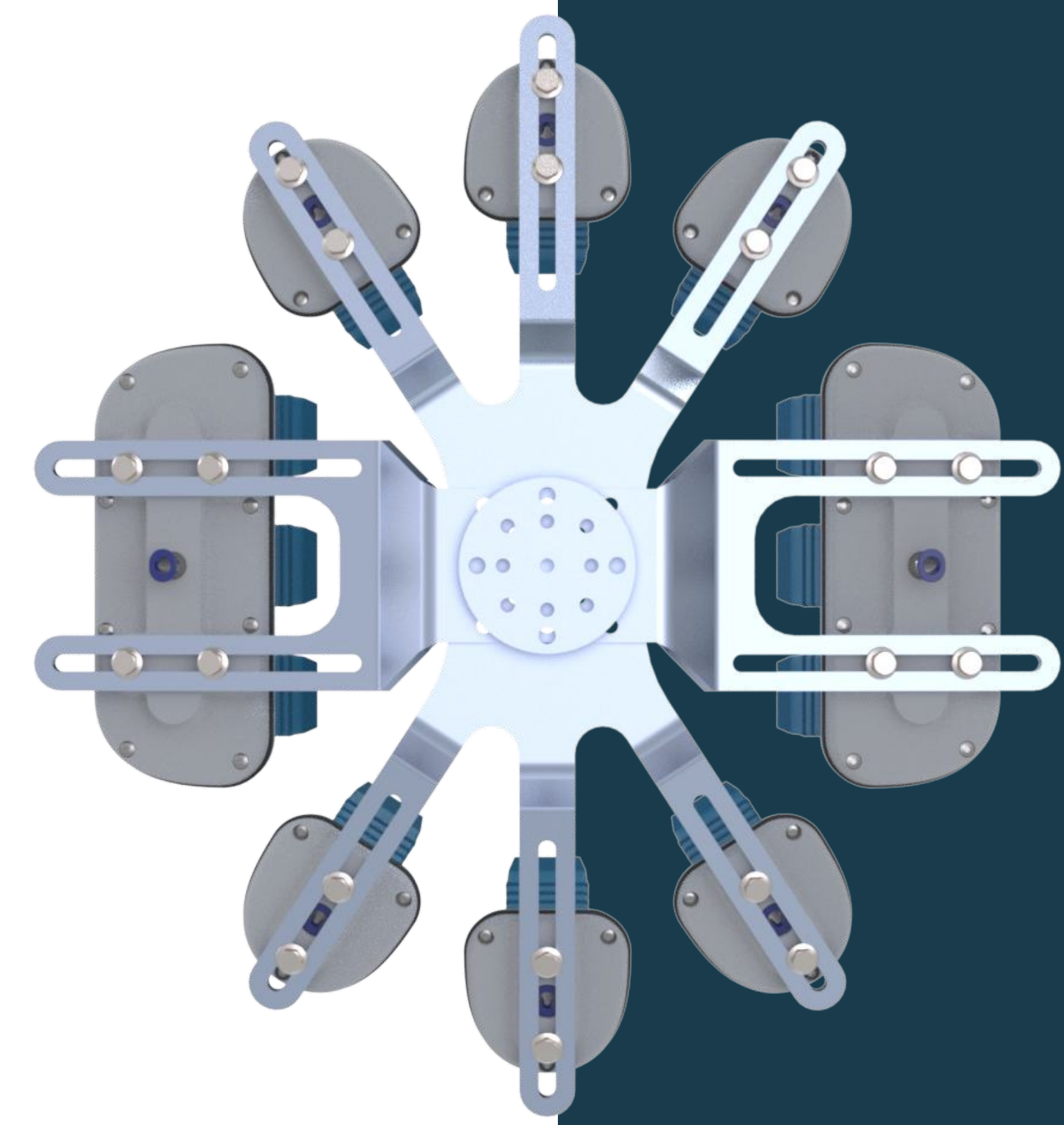
Precise and Secure Gripping:

The oval finger arrangement and 15° tilt
enable controlled, pinpoint handling.
Thanks to the high adaptability
of the SoftGripper, even non-rigid
or slipping objects can be gripped
securely – ideal for demanding food
industry applications.

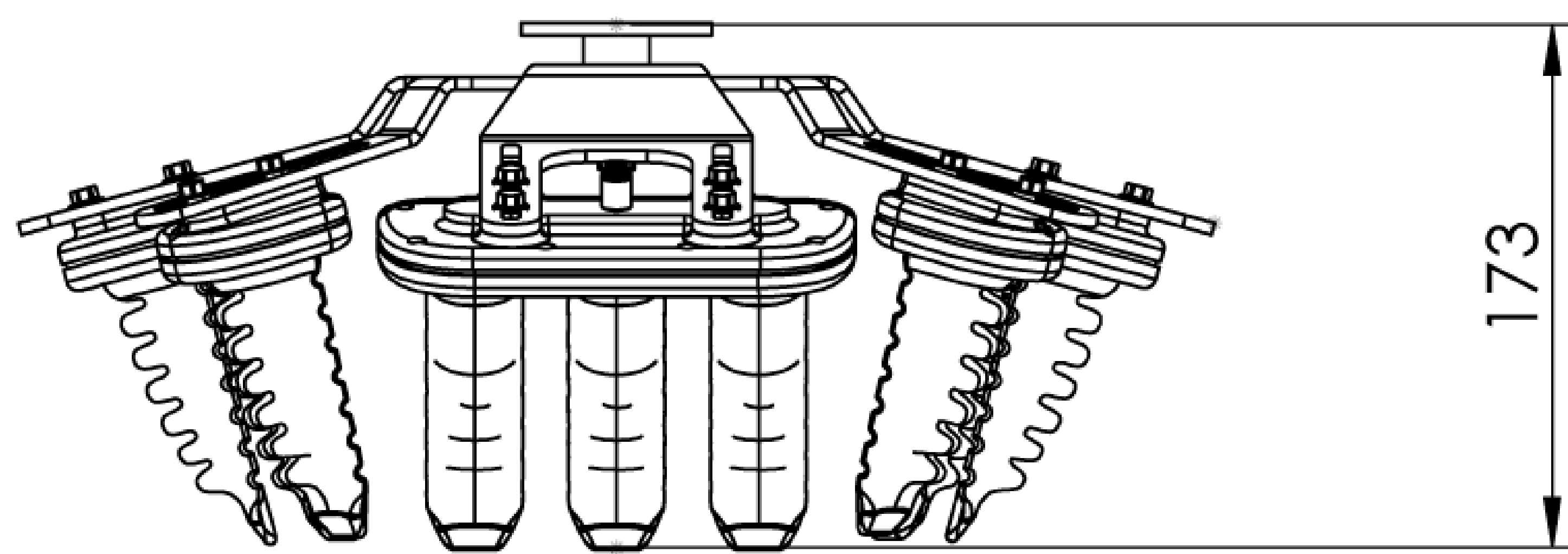
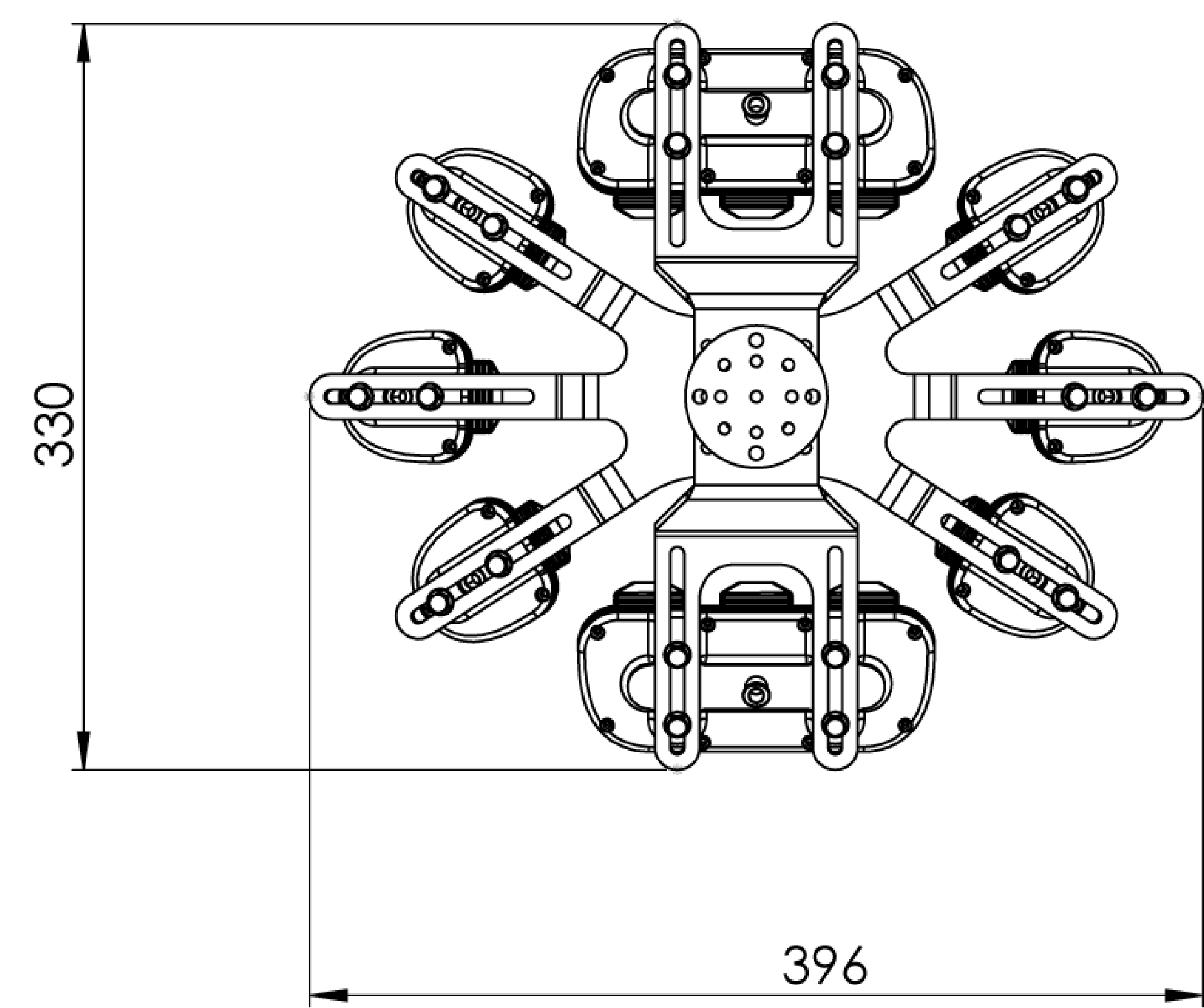
5

User-Friendly Control:

Easy integration with the SoftGripping
control box simplifies operation
and system setup.



BagGripper Art.Nr.: SG.AG.F12.BG01



General technical data

Total weight	2,72 kg
Finger count	12
SoftActuator	GorillaFinger
Arrangement	Oval
Inclination	-15°
Pneumatic tube	ø 10 mm
Actuation	Pneumatic
Material Base	Stainless Steel
Material Finger	Silicon FDA
Mounting	ISO 9409-1-31,5/40/50

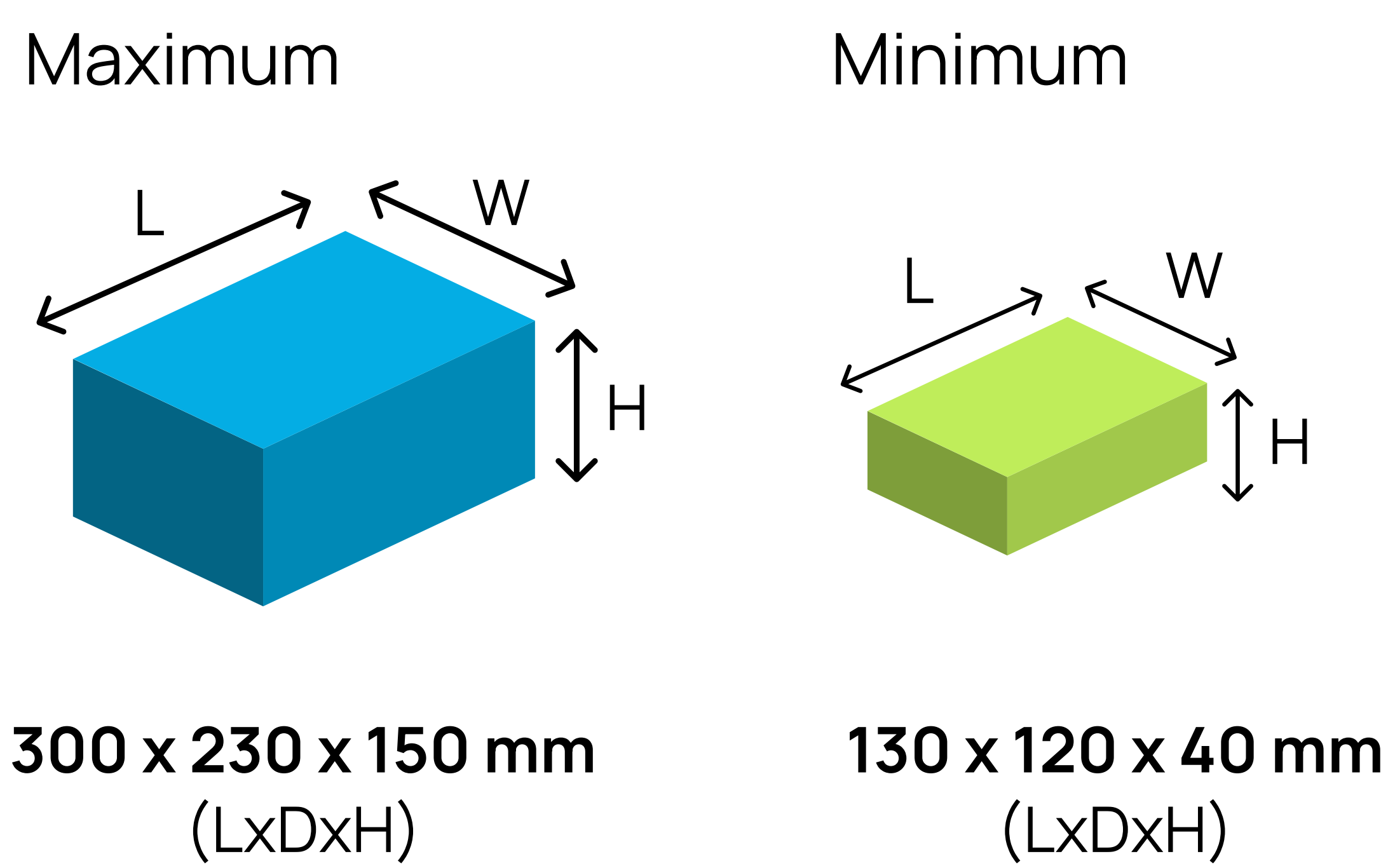
Gripping parameters

Maximum holding force (Fz)*	138 N
Opening time	225 ms
Closing time	320 ms
Full cycle time	424 ms
Maximum Pick Rate ¹	Up To 56 Picks/Min
Suggested Pick Rate ²	20 Picks/Min
Working Range	up to 5 kg

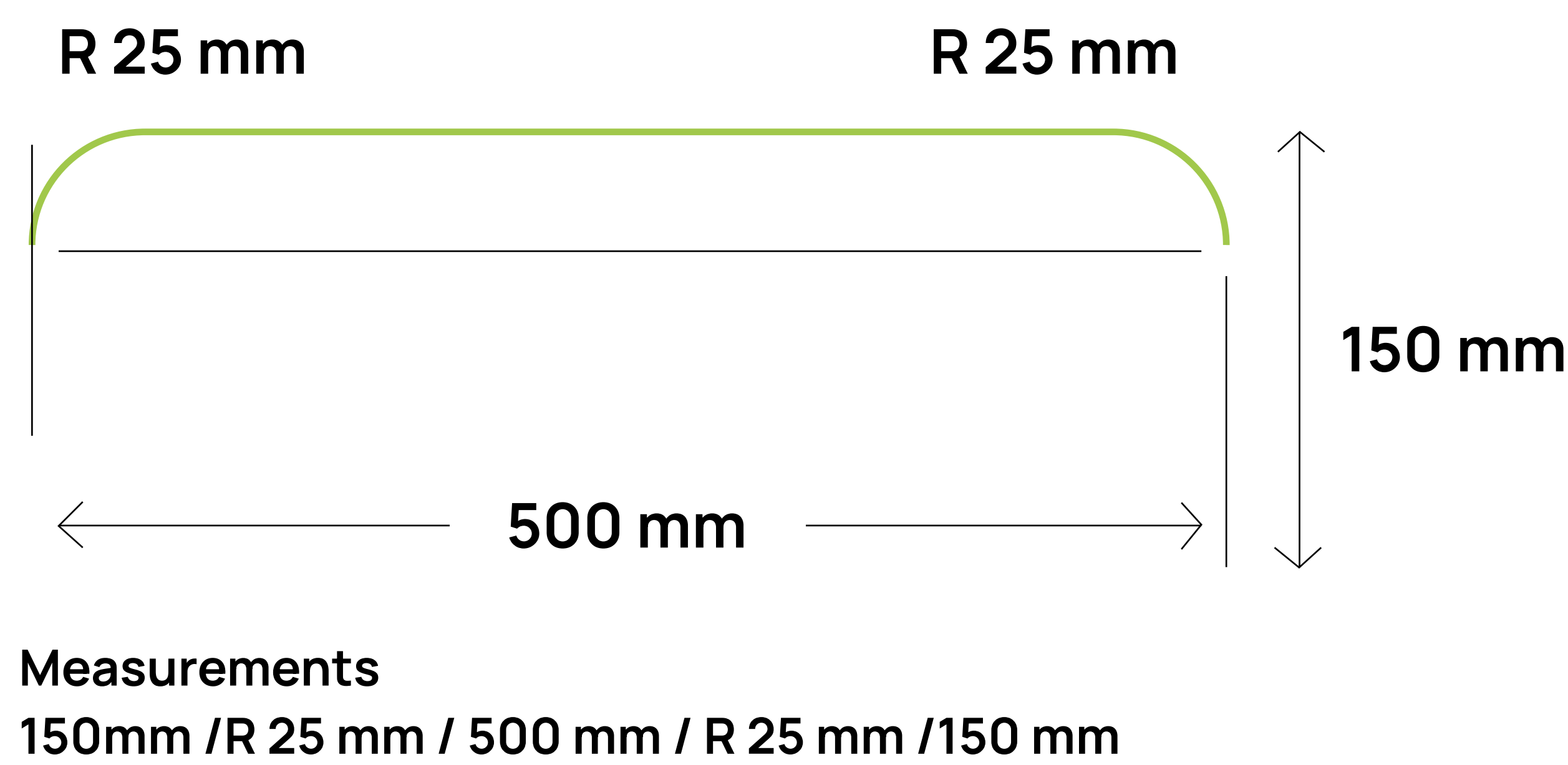
¹ The maximum pick rate is based on the standard scenario (R25/305/R25mm) and average speeds from Delta, SCARA, and 6-axis robot arms: Omron Quadro ix4-800H, KUKA KR 12 R650 Z200, Mitsubishi RV-12CRL-D-S15, and ABB IRB 1300-12/1.4. Actual values depend on the application and robot.

² Data applies to the Pick & Place Scenario with a 2,5kg potato bag and the Kuka KR-10 R1440-2 HO.

Object Dimensions



Standard scenario & robot



Operating conditions

Pressure range	-0.3 ... 1.2 Bar
Ambient temperature	-25 °C ... +80 °C
Pneumatic Controlbox	VP VacuControl



Let's engineer the perfect gripper – together.

We support OEMs, integrators, and food producers with:

Custom gripper
development

CAD modeling
and feasibility
testing

Fast adaptation
for product trials



Distributor in USA
Essential Robot Products
USA, Centerville, OH
45459

+1 574 2717895

info@robot-pros.com

<https://www.robot-pros.com>

Distributor in USA
Essential Robot Products
USA, Centerville, OH 45459

+1 574 2717895

info@robot-pros.com

<https://www.robot-pros.com>

Buy BagGripper
in [USA](#) 



Our grippers
in action
on [YouTube](#) 

