

For your safety at work, for the future of manufacturing, the assistive device takes this form

The PowerArm shares the payload for a safer workplace.

The new model is now even safer and easier to use.

Status quo of workers in the manufacturing industry

- 64% of workers are 40 years of age or older.
- **Back pain** accounts for more than half of work-related injuries.

* From the Ministry of Internal Affairs and Communications "2017 Annual Report on the Labour Force Survey"

* From the Ministry of Health, Labour and Welfare "2017 Survey on the State of Occupational Illness, Etc."



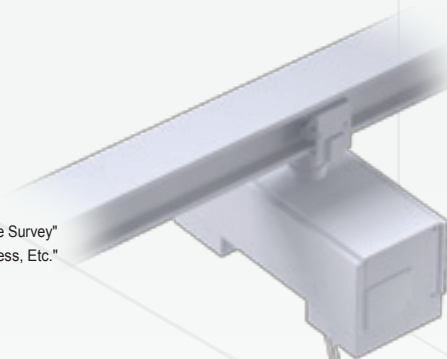
Belt-type assistive devices

- The center of gravity is far from the area of operation (transported item), **making operation difficult. (Starts and stops are a strain)**



Arm-type assistive devices

- Compact storage is difficult, **requiring a large space.**
- Use of the arm is hampered by **interference with the ceiling or walls.**





New pneumatic pressure balancer enables
assistance from the downward direction

PAW Series
PowerArm

< GOOD DESIGN AWARD 2019 >

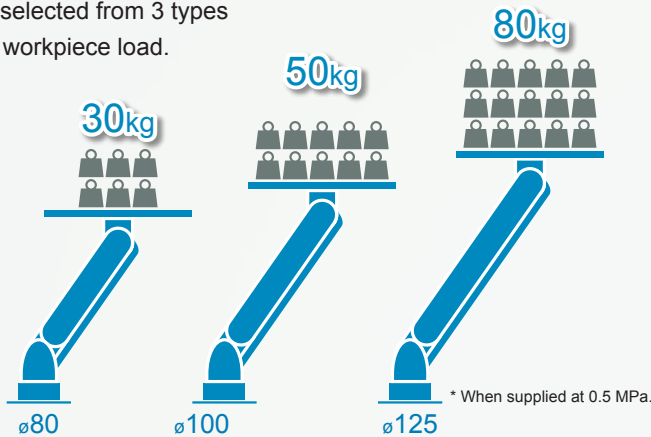
Transform workstyles with assistive devices.



Variation

Arm variations tailored to the specific workpiece

The arm can be selected from 3 types according to the workpiece load.

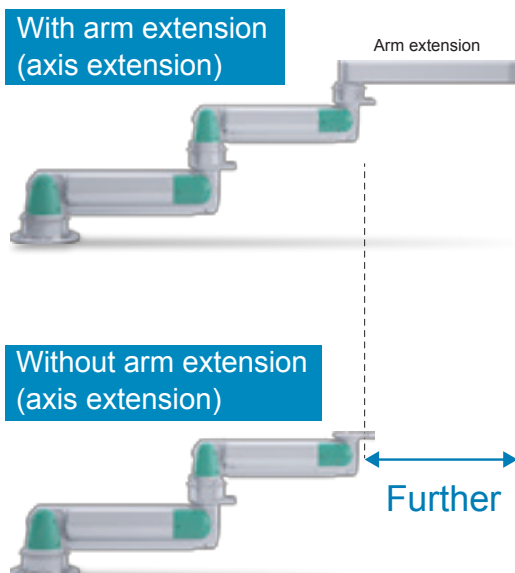


*Refer to the load capacity chart on page 2 for details.

Wide

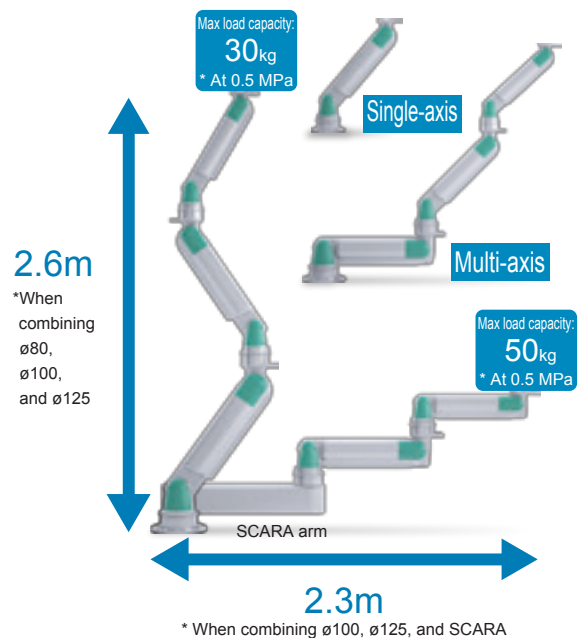
Achieving a wider range of movement

Extension arms (extension axes) can be used for multi-axis specification types to enable an even wider range of motion.



Wide range of motion to suit the application

Freely combine single-axis and multi-axis specifications to suit your applications and worksites.



Safety



■ Holds position when motor power (air, electric power) is down

In addition to a position-locking function (standard equipment) via block valve, a rotation lock can be mounted on the normally closed type (option). Position holding is possible during emergency stops.

Rotation lock (normally closed type)

■ Snag prevention

Fingers, etc., do not fit into the joint gaps.

In addition, the space remaining when the joints are closed keeps fingers from being snagged.



* The European Safety Standards CE marking applies only to the Power Arm body.

Simple

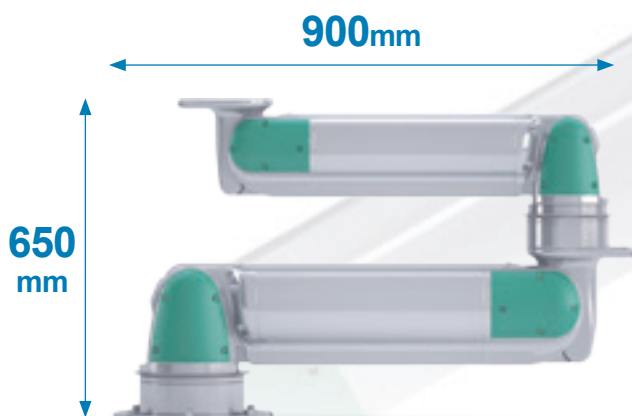
■ Simple assistive mechanism based on pneumatic pressure control

Uses a pneumatic pressure cylinder in part of the body. The simple mechanism can be easily handled.

Compact

■ Compact

Even the multi-axis specification, foldable for storage, is more compact and easier to store than arm or belt types.



Flexible

■ Customers can easily incorporate arms

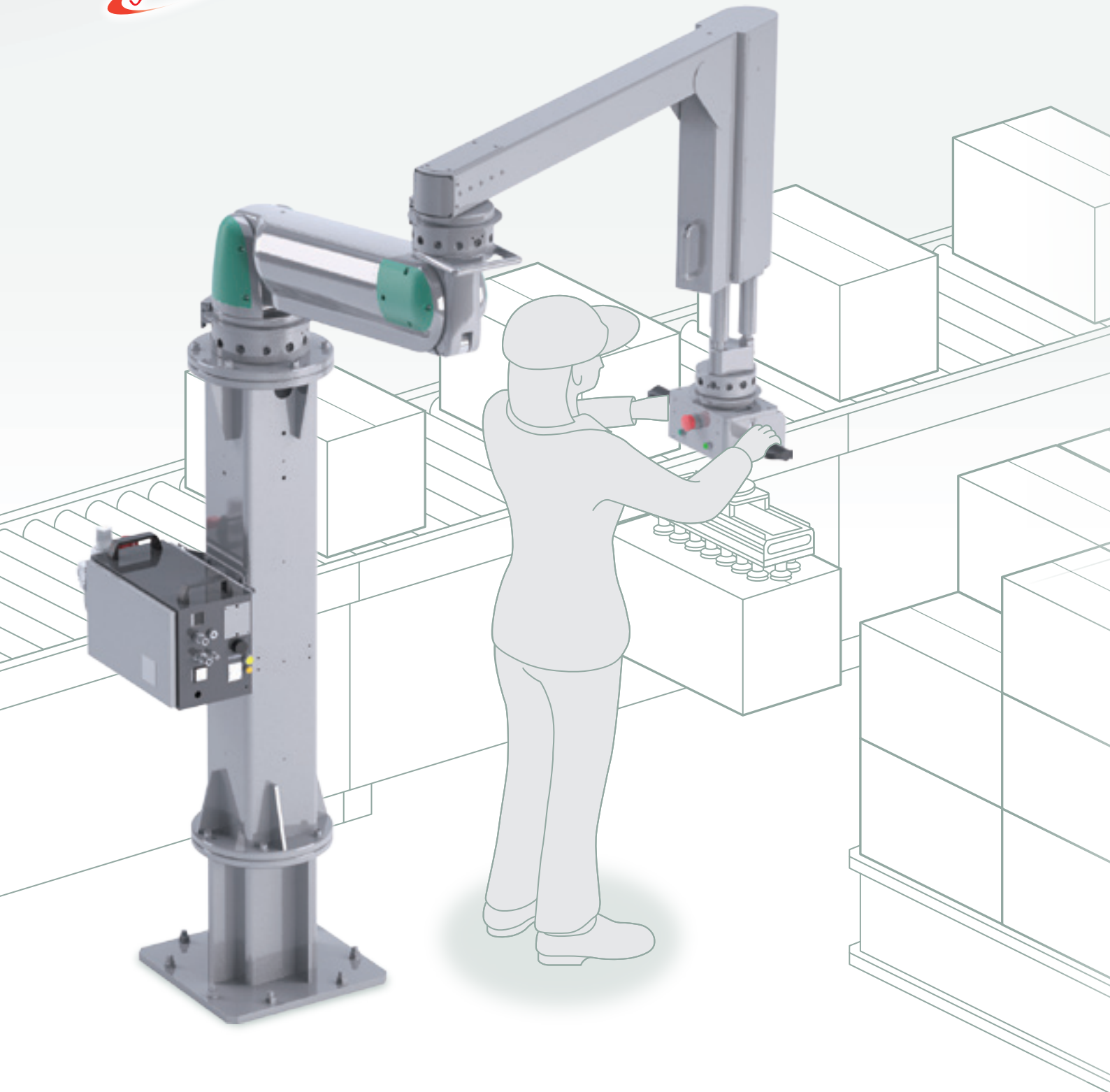
With the simple structure, arm combinations can be flexibly changed by the customer.



Human Assist

Palletizing specifications

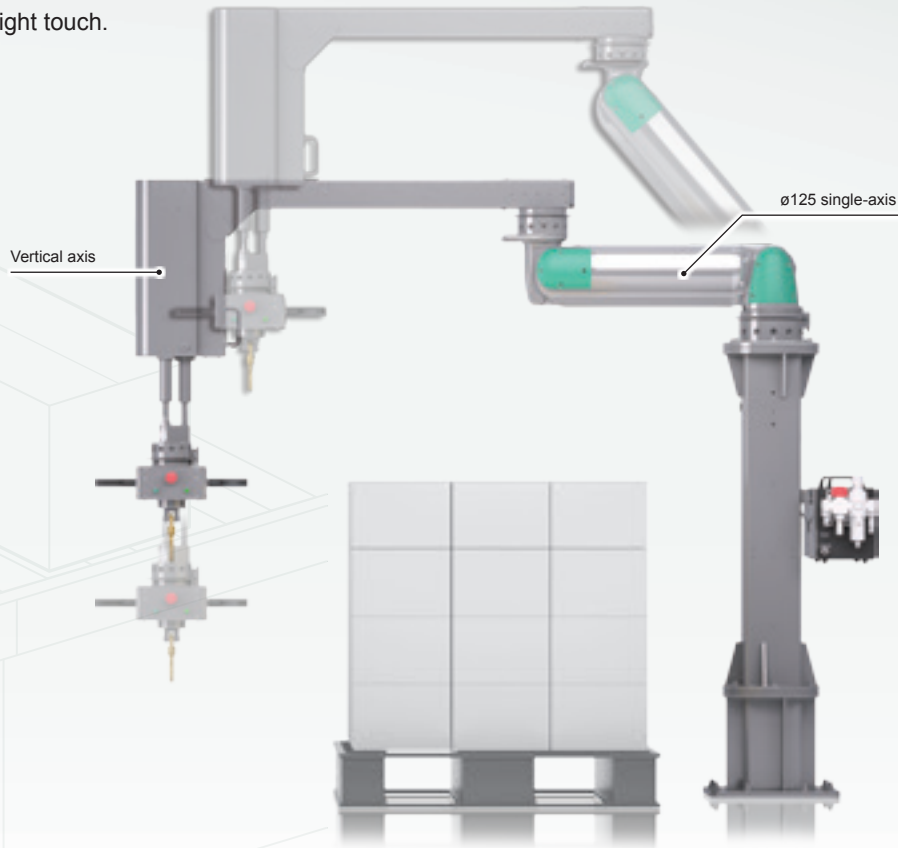
**to allow stacking and unloading tasks to
be performed in limited spaces**



Specialized

Focused on stacking and unloading tasks

A vertical axis is now equipped with this product to ensure easier use in the palletizing process while maintaining PowerArm signature features; a space-saving, compact design, and a light touch.



Wide

A wide moving range

The combination of the ø125 single-axis and vertical axis provides a wider moving range.

Compact

Space saving storage

This product can be stored folded.



Storage condition

Variation

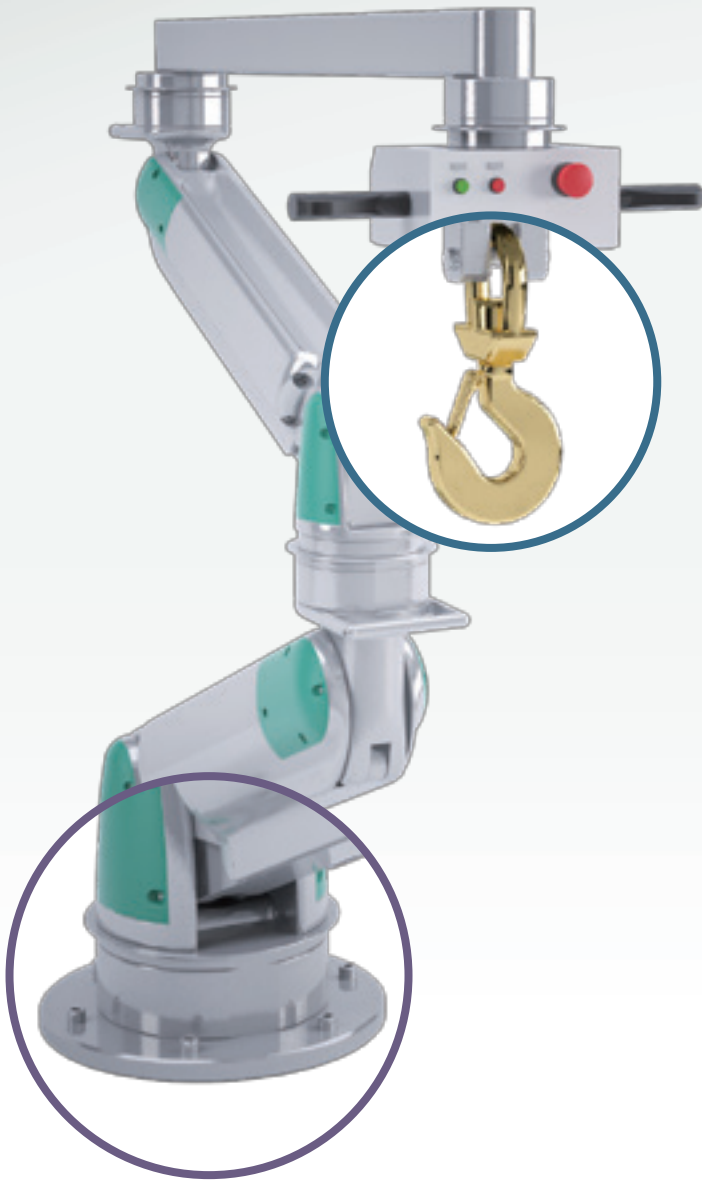
Simple combinations are possible

The vertical axis and SCARA arm can be combined and used if the product does not often make vertical strokes.

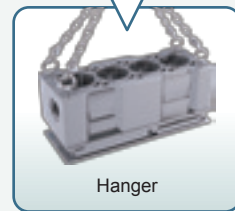


Compatible as an assistive system

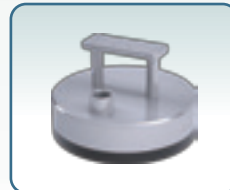
In addition to the assistive components as single units, we address requests including attachments, controllers, and movable type dollies. Contact CKD for details.



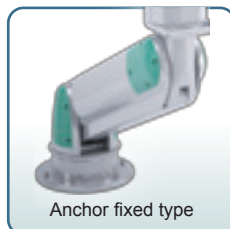
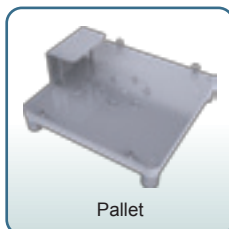
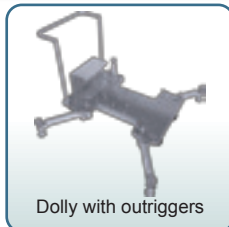
Hook



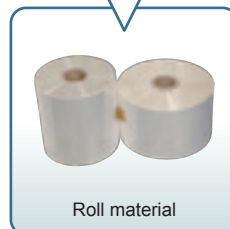
Vacuum



Dolly / anchor



Clamp



Controller design and manufacture

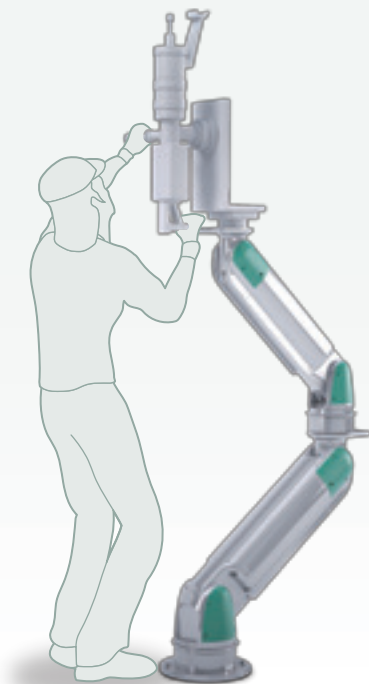
We propose ideal air circuits for various assistance mechanisms. Easy transport is possible with the ideal control method for your transported items.



Example of controller interior.
Let us go over your needs with you.

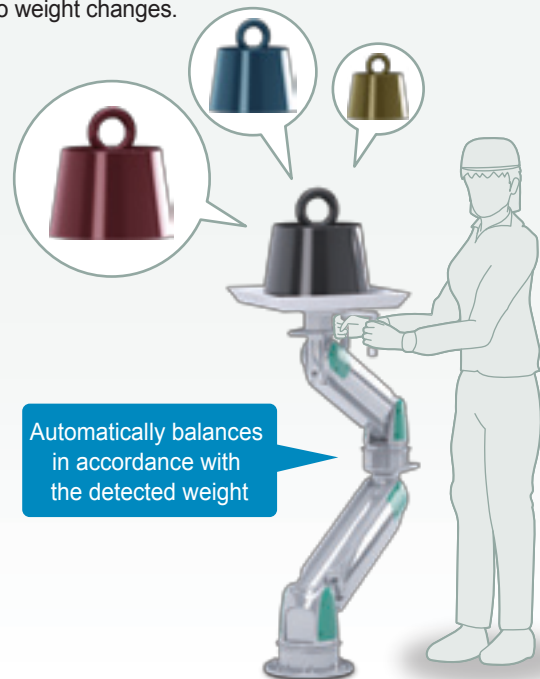
Operating pressure fixing control system

Suitable for assisting with the weight of jigs and tools.
Control that maintains balance at a constant weight.



Automatic operating pressure regulating control system

Suitable for transport of various types of workpieces of differing weights.
Control which detects the transported item weight at the tip, and automatically adjusts the operating pressure in response to weight changes.



Demonstrations

We perform demonstrations so that you can experience the actual PowerArm devices.
We offer demonstrations at various locations. Contact CKD for details.

Compatible with FP Series for secure food manufacturing processes *



This logo represents CKD's stance to provide you with safe components for supporting your food manufacturing processes.

* Contact CKD for details.

Introduction to PowerArm online

We have prepared a PowerArm introductory site.

* Depending on your smartphone environment, it may not be displayed correctly.

