

# Case Studies

## Die Cast Product Deburring Process

Keeps moving . . .  
chips and dust resistant



**Issue** Breakdowns occur frequently for a span of one month in harsh dusty environments

**Result** **4** With the introduction of the HP Series  
times longer product life in dust generating processes

\*Compared to existing products

- ✔ More than 1 year longer service life compared to existing products, providing peace of mind
- ✔ Reduced stock of spare parts and the significant reduction in ordering processes

## High-Frequency Film Cutting Process

Eliminates effort in exchanging  
and arranging, maintenance  
work hours reduced



**Issue** Existing hands (grippers) for film holding malfunctions in **1 to 2 months**

**Result** With the introduction of the HP Series  
Zero breakdowns/problems for more than one year,  
**the number of replacements** dramatically decreased

- ✔ Dramatically reduces equipment failures in processes prone to breakdowns every one to two months
- ✔ Highly rigid, stable operation even if a long finger is attached to the hand
- ✔ Compatible mounting with existing products, enabling smooth replacement without changing the equipment

## Automotive Parts Plant Production Line

Reduces unnecessary compressor  
operation, suppresses CO<sub>2</sub> emissions



**Issue** Operates while **ignoring air leaks** from cylinders

**Result** With the introduction of the HP Series  
**Improves energy efficiency** by suppressing air leaks

- ✔ Improving wasteful compressor operation with a structure that does not cause air leakage for long periods
- ✔ Lowers replacement rates and waste generation, reduces carbon emissions to 1/4

## Automotive Parts Plant Production Line

Reduces production downtime,  
enables prompt recovery



**Issue** Since many grippers are used,  
**recovery cost** during malfunction is **high**

**Result** With the introduction of the HP Series  
**Reduces equipment recovery work hours**  
due to high mounting accuracy

- ✔ Compatible mounting with existing products, enabling smooth replacement
- ✔ High reproducibility eliminates the need for re-teaching the robot
- ✔ Uses predictive maintenance functions to ensure safe operation of equipment

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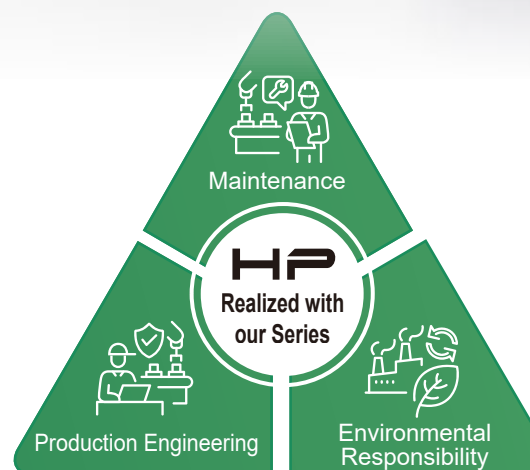
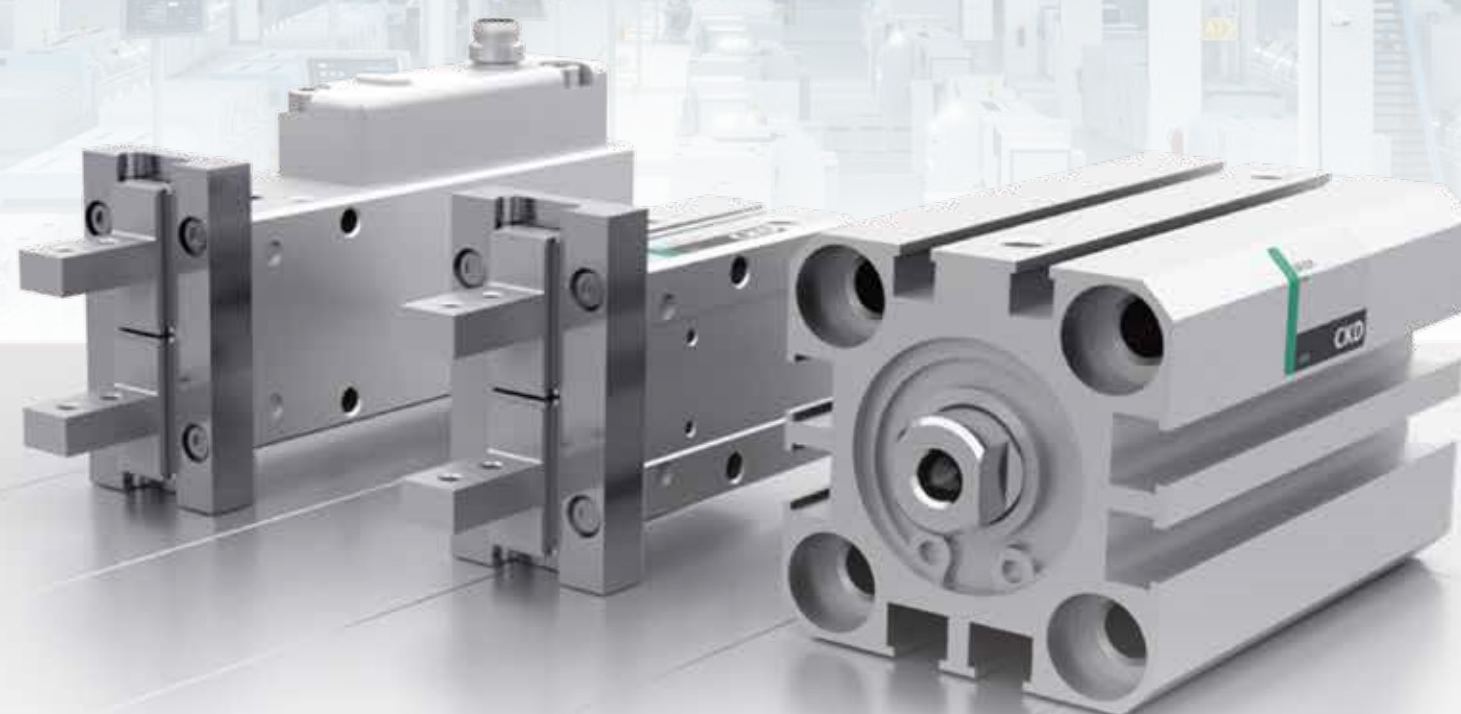
# CKD

## HP

HIGH PRODUCTIVITY

# Improves productivity of the entire plant

# Contributes to carbon neutrality



## High-Durability Components HP Series

**HP1/HP2 Series**  
Long Life/Predictive  
Maintenance

**G-HP1 Series**  
Environmental  
Resistance



HP Series  
Official Site Here

**P4-HP1 Series**  
Long Life/For Rechargeable Battery  
Manufacturing Process

**FP1-G-HP1 Series**  
Environmental Resistance/For Food  
Manufacturing Process



Free Sample  
Loan Request Here



# Reasons to Choose HP Series

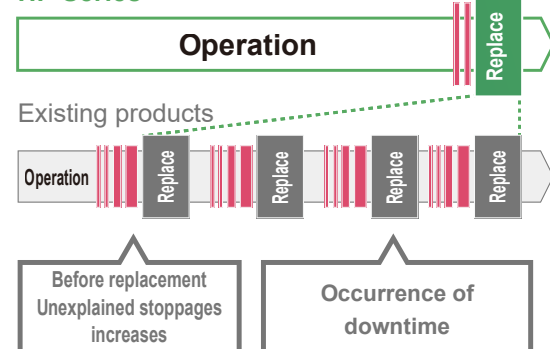


Maintenance

Reduces time and cost related to maintenance, alleviating burdens and resolving labor shortages

Reduce the number of stoppages and replacements  
**Downtime Reduction**

HP Series



When stopped  
Corresponding costs

**Invisible Maintenance cost**

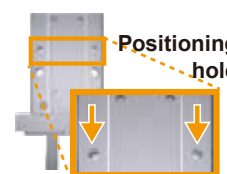
Inspection	Repair/Replace
Replenish inventory	Ledger registration
Disposal processing	Response record
Procurement request	Countermeasure report

**75% or more**  
Maintenance cost reduction

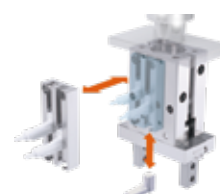
Conventional Maintenance cost

**4** times  
conventional life

Long service life and  
reduced replacement frequency



**Easy positioning**  
during exchange



Reduction of work time  
required for maintenance



Grip and measure  
length immediately,  
Replace before breaking

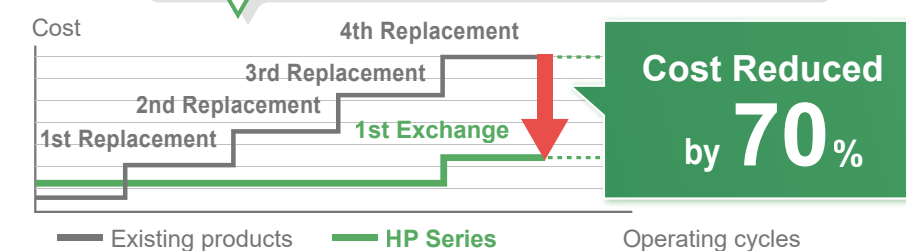
HP2 Series



Production Engineering

Amazing durability and cost performance  
Realizes functions that meet strict design requirements

Long life with superior cost performance

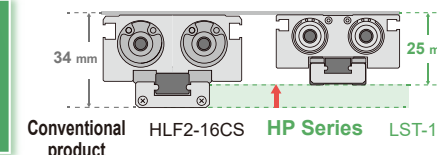


Increased rigidity allows  
for longer fingers



Max. **100** mm  
Overhang

Increased rigidity  
enables space saving



Environmental Responsibility

Reduces CO<sub>2</sub> emissions and  
contributes to factory carbon neutrality

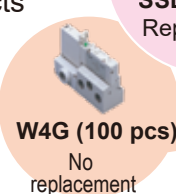
Thoroughly reduce air leaks,  
cutting CO<sub>2</sub> emissions



Conventional products



SSD2 (100 x 2)  
Replacement 1 time



W4G (100 pcs)  
No replacement



Automated line

Conventional products

(operating 20 million cycles)

HP Series

Air leak  
CO<sub>2</sub> Emissions  
**0.45 t-CO<sub>2</sub>**

CO<sub>2</sub> Emissions  
**97% Reduced**  
0.012 t-CO<sub>2</sub>



HP Series

Reduce failures,  
cut CO<sub>2</sub> emissions

With a life span 4 times longer,  
CO<sub>2</sub> emissions are reduced by **75%**  
Waste is also reduced, lowering environmental impact

Operation

Replace  
Disposal

Existing products



During replacements,  
product life cycle CO<sub>2</sub>  
generated is added

Materials	CO <sub>2</sub>
Manufacturing	CO <sub>2</sub>
Transport	CO <sub>2</sub>
Use	CO <sub>2</sub>
Disposal	CO <sub>2</sub>

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