

Collaborative Robot System
Achieving Increased Productivity
and Space Savings

FD-VC8/Compact Controller

# **Challenges in Robot Implementation**



- High Implementation Cost
  - ► Multiple robots and controllers required
- Collaborative Robot : Slow Operation

► Maximum speed limited to 1,000 mm/sec for safety

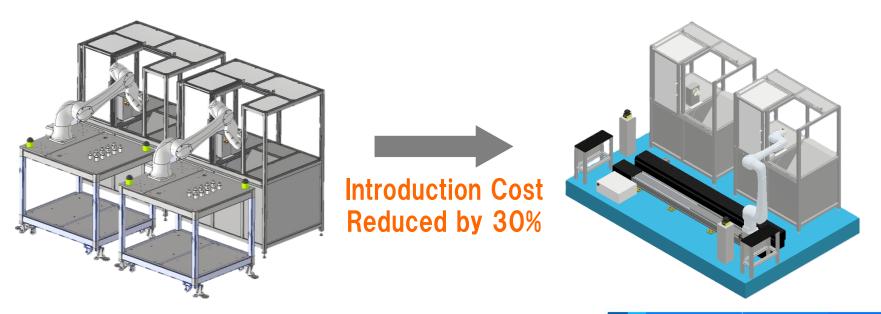
Daihen's new cobot system solves these issues

# Reduced implementation costs



## Expand the work area by combining with a slider

- ► Automate multiple processes with a single robot
- ► Sliders can also be operated with a single new compact controller



# Improved productivity and space-saving design



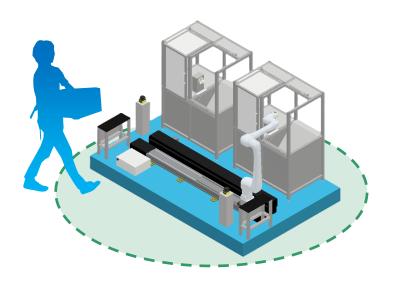
When people are nearby...

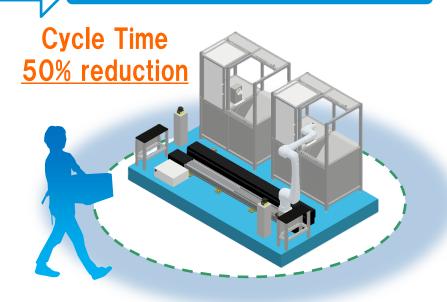
**Collaborative Mode** 

When no one is nearby...

**Auto Switch** 

High-Speed Mode





Maximum Speed: 1,000 mm/sec

Maximum Speed: 2,000 mm/sec

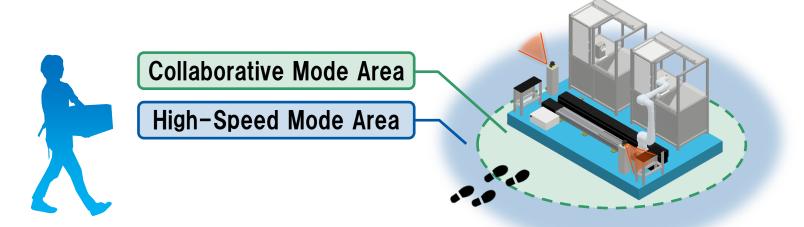
### **Demonstration: Loading and Unloading to Machining Equipment**



#### Automating loading/unloading operations at two locations with a single cobot

Workpiece replenishment and retrieval performed by humans Automation without safety fencing saves space

High-speed/collaborative mode switching balances safety and productivity



# New collaborative robot and compact controller



#### **Collaborative Robot FD-VC8**

- 8kg payload
- Longest reach class exceeding 1.5m
- Control buttons standard on robot tip

#### FD-VC8

#### **Compact Controller**

- Achieves industry-leading compact size (75% reduction in volume compared to our previous model)
- One controller can control up to two external axes
- **Easy teaching in combination with tablet TP** New compact controller
- Visualize power consumption with the power monitor function



Daihen's new cobot system to enhance factory productivity and save space.

