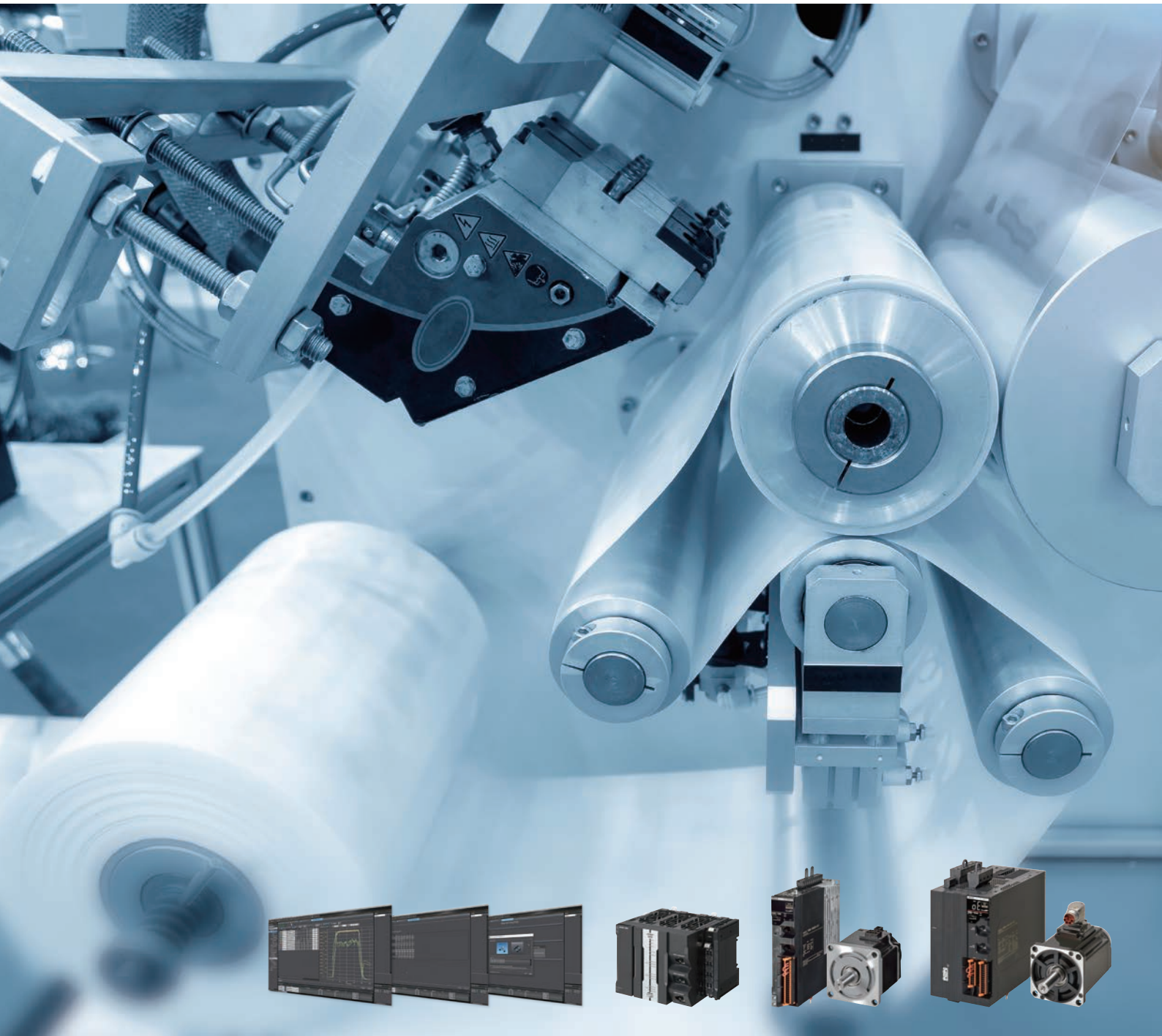


AC Servo System  
1S Series/1S Series with Safety Functionality

**OMRON**

# Optimize tuning for multiple fixed axes and reduce design time



# Quick and easy multi-axis setup and tuning

## Multi-drive setup and monitoring in a single view

Previously, each drive in the machine was configured and monitored with separated configuration windows. Many operations were required to adjust and monitor parameters.

The Drive Setting Table in the Sysmac Studio provides a single view for configuring and monitoring multiple drives.

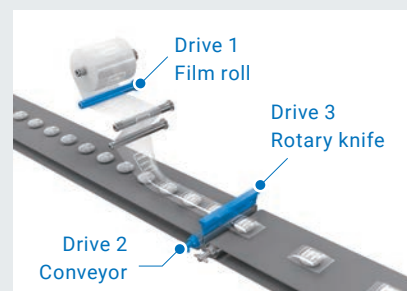
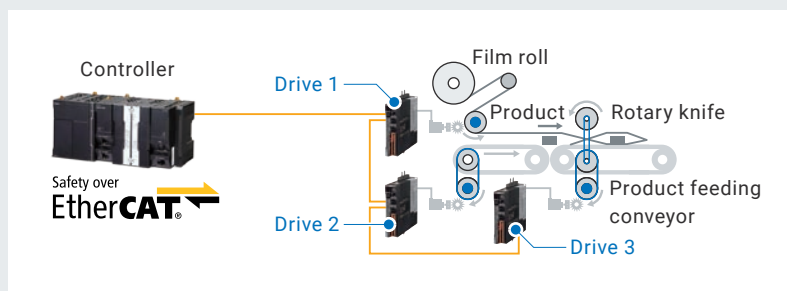
### Application example: Wrapping machine

View of Drive Setting Table

Description	Units	Film_feeding	Product_feeding	Rotary_knife
Basic Functions - Motor Rotation Direction Selection		1 : A positive direction c	1 : A positive direction c	1 : A positive direction c
Machine - Inertia Ratio	%	250	250	250
Torque Detection - Torque Actual Value	%	59	46	37
Torque Limit - Max Torque	%	300.0	250.0	200.0
External Latch Input 1 - Port Selection		7 : General Input 7 (IN7)	7 : General Input 7 (IN7)	7 : General Input 7 (IN7)
External Latch Input 1 - Signal Status		True	False	False

Drive 1      Drive 2      Drive 3

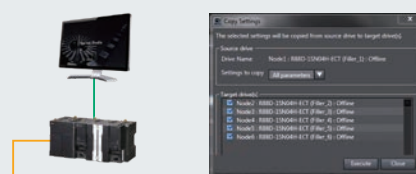
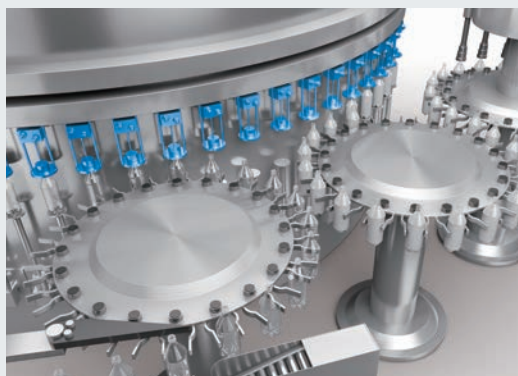
Multi-axis tuning  
on  
one screen



## Easy parameter copy and transfer

For a machine with a large number of axes, the user previously needed to modify parameters manually for each drive, requiring a long time. The Sysmac Studio allows the user to first configure one drive in the machine and then configure all other similar drives in a few seconds just by copying and transferring same parameters.

### Application example: Filling machine



Up to 256 axes

Parameter  
copy and transfer



Set parameters for 1 drive → Copy and transfer

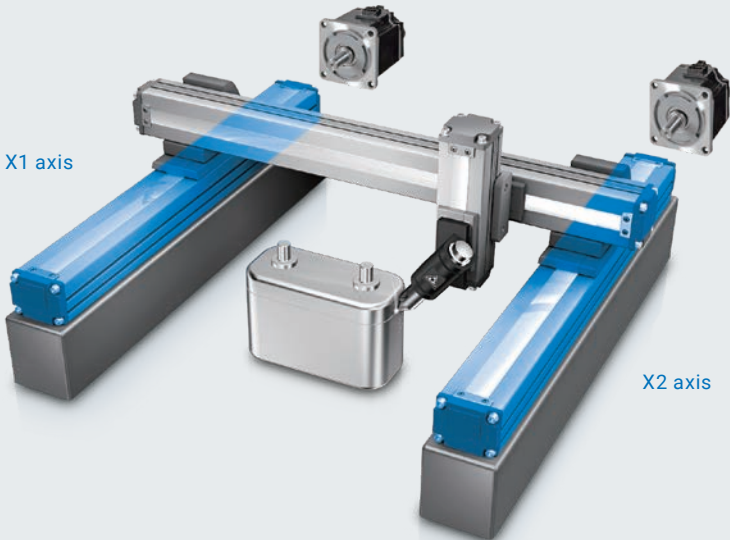
Up to 256 axes  
Quick  
parameter  
copy

Safety over  
EtherCAT

# Multi-axis gain tuning NEW

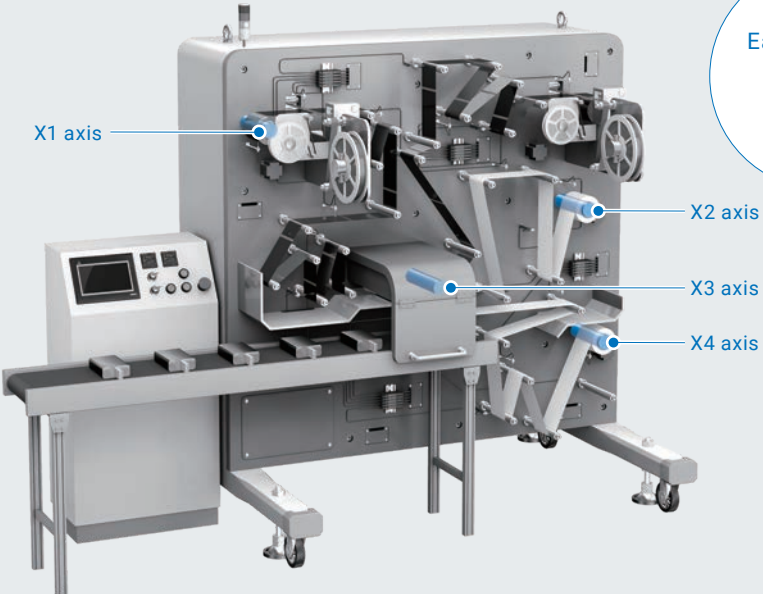
Tuning for a mechanism with mechanically fixed axes is difficult without disassembling the machine because the machine can be damaged. With the multi-axis tuning wizard of the Sysmac Studio, load inertia of the assembled machine can be estimated, facilitating tuning.

Application example: Welding machine with gantry mechanism for rechargeable batteries



Multi-axis tuning

Roll-to-roll winding machine with synchronized motion axes



Easy tuning of up to 4 axes

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- Refer to the *1S Series Catalog* (Cat. No. I821) and the *1S Series with Safety Functionality Catalog* (Cat. No. I838) for details of AC servo systems.
- Before you place an order, please read and understand "Agreement for Using the Product" available on Omron's website.

**Note: Do not use this document to operate the Unit.**

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