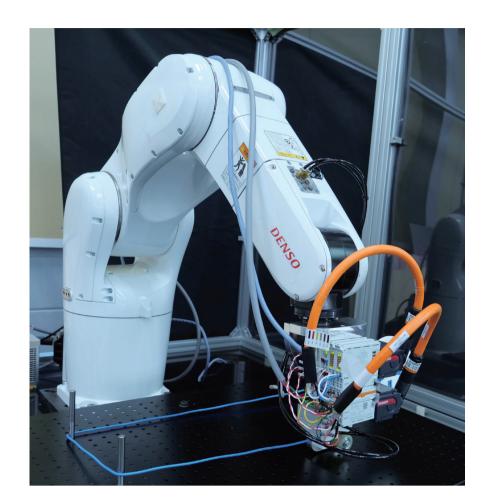
# **B-02 TwinCAT Automation of cable routing operations using electronic cams**

 By utilizing the "TwinCAT3 NC Camming" electronic camming function, the robot motion and cable feeding are synchronized in real time. Automation of cable routing work that used to rely on manual labor.

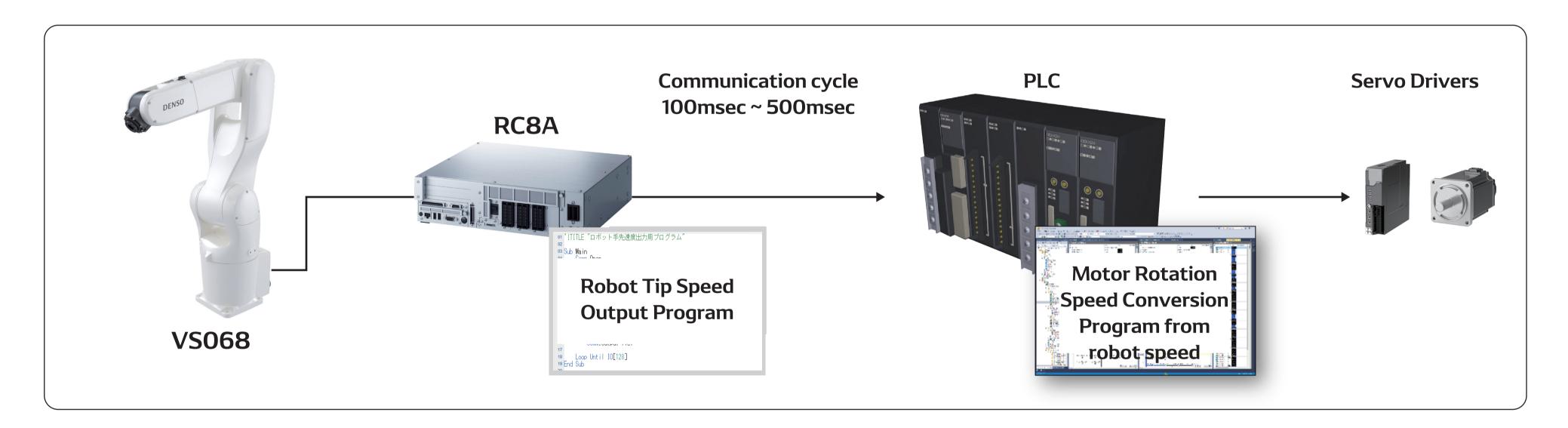


### Robot control is achieved by utilizing electronic cams

#### Conventional

When synchronizing the robot and the feeder by communicating with the robot, the robot controller side must implement a program to output the robot tip speed and the PLC side must implement a program to convert the robot speed to the motor rotation speed, and the development environment and languages are also different, resulting in a large number of man-hours. In addition, communication delays between the robot and the feeder were likely to occur, making the feed operation unstable.

# system configuration



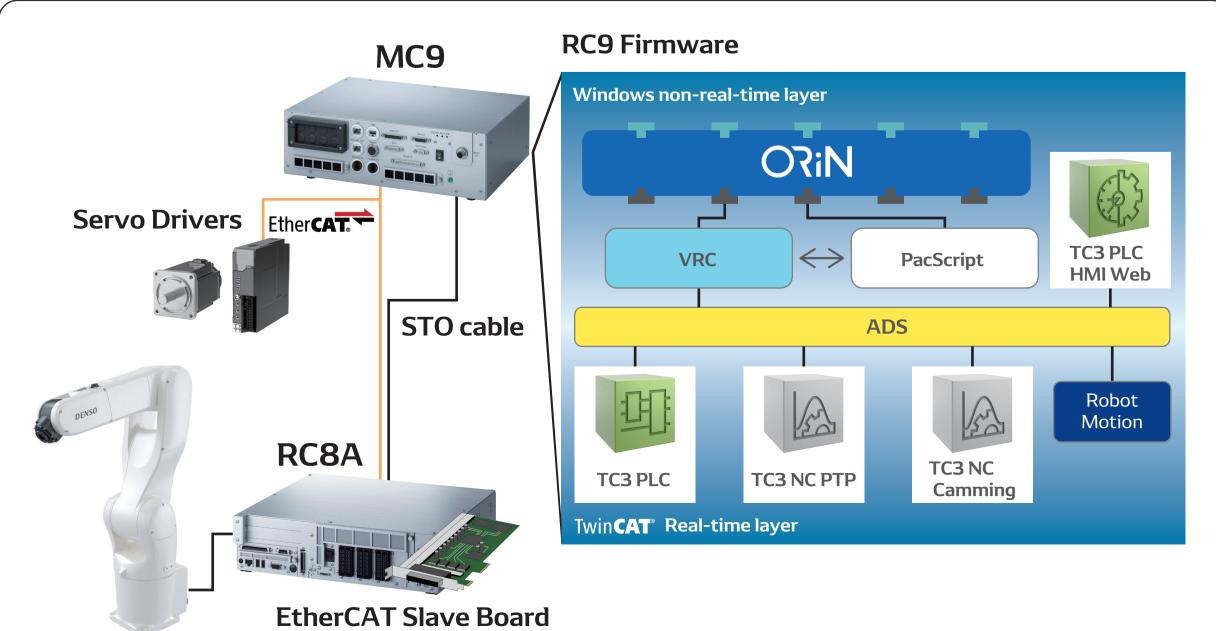
#### Control utilizing electronic cams

(1) Robot motion and cable feed motion can be implemented in an integrated development environment.

(2) Seamless connection and no communication delays enable real-time synchronized control of the robot and feeder.

(3) Realization of stable cable feeding by electronic cam function

# system configuration



#### Image of operation when using electronic cam

