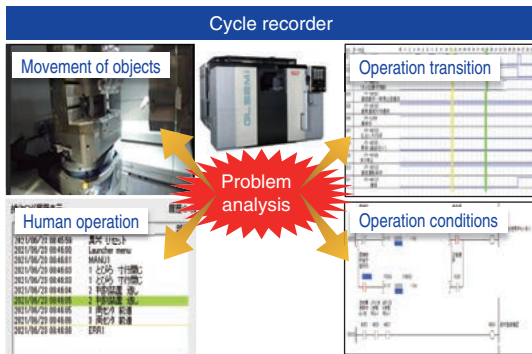


Cycle Recorder Function



We have developed a cycle recorder function that supports event analysis of equipment operation by recording four types of state information: movement of objects (video), human operation, operation transition (signal state), and operation conditions (ladder circuit) for the equipment.

In recovery after an equipment problem and investigation of its causes, a combination of TOYOPUC®-Nano 10GX and TOYOPUC®-Nano-AAA-ExHigh with this function can contribute to quick identification of the true cause of equipment problems and to shorter MTR (mean time to repair) and improved operational availability for equipment.

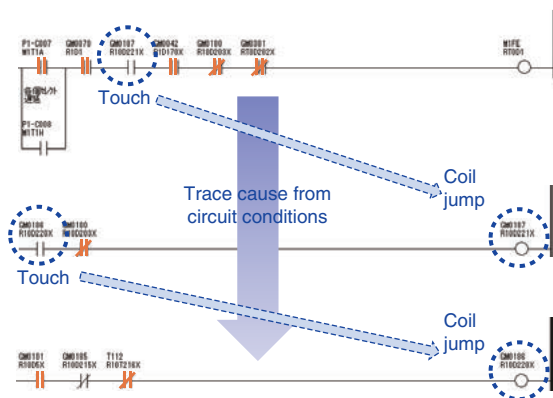
Development Background

In equipment troubleshooting, it is common to obtain information and make comprehensive judgments while checking the equipment and devices inside the facility and on the operating panel. However, it is rare that information such as human operation procedures and signal states when the problem occurred remain, which prevents the gathering of the necessary information, making it impossible to immediately implement essential corrective measures for the problem.

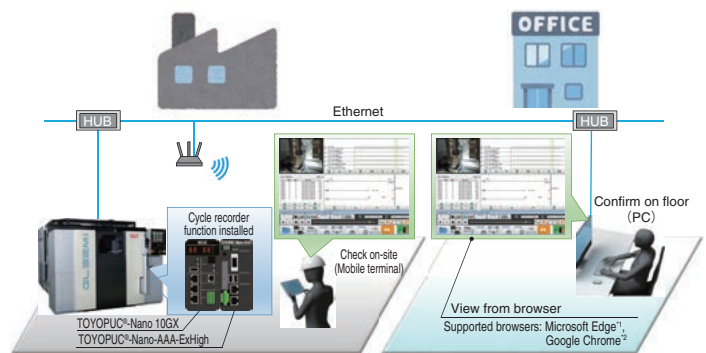
To resolve these issues in maintenance work, we have developed a cycle recorder function that can record information on people, objects, and controls, and analyze events.

Main Features

- ① Investigates the true cause by using records, not by relying on memory
The system prioritizes the restart of equipment after an equipment problem occurs, and records not only the control signal status but also video images and human operations even after the equipment returns to normal, enabling event analysis.
- ② Visualization function for efficient event analysis
The circuit trace function* enables intuitive and easy event analysis.
*A function that allows you to track down the cause of an anomaly by simply touching the conditions of a ladder circuit.
- ③ Can be checked anytime, anywhere
The recorded data can be checked remotely to provide support in case a problem occurs.



Circuit trace function



Can be checked anytime, anywhere

*1 Microsoft Edge is a registered trademark of Microsoft Corporation.

*2 Google Chrome is a registered trademark of Google LLC.

(Control Engineering Dept., Machine Tools & Manufacturing Systems Business Unit)