Toshiba Infrastructure Systems & Solutions Corporation

# Distributed Control System TOSDIC VS

## Features

◆ Controller with built-in computer functions
The integration of controller functions and computer functions into a single unit, makes it possible to accumulate and analyze critical operational data, enabling timely improvements in productivity. Therefore, it is ideal for edge computing applications that utilize data collected from operational sites in IT solutions.

◆ HMI with remote engineering environment
The HMI (Human Machine Interface) adopts a web technology, allowing the plant operation status to be monitored from the office or home. The use of a tablet device enables on-site plant operations, enhancing the efficiency of maintenance work.

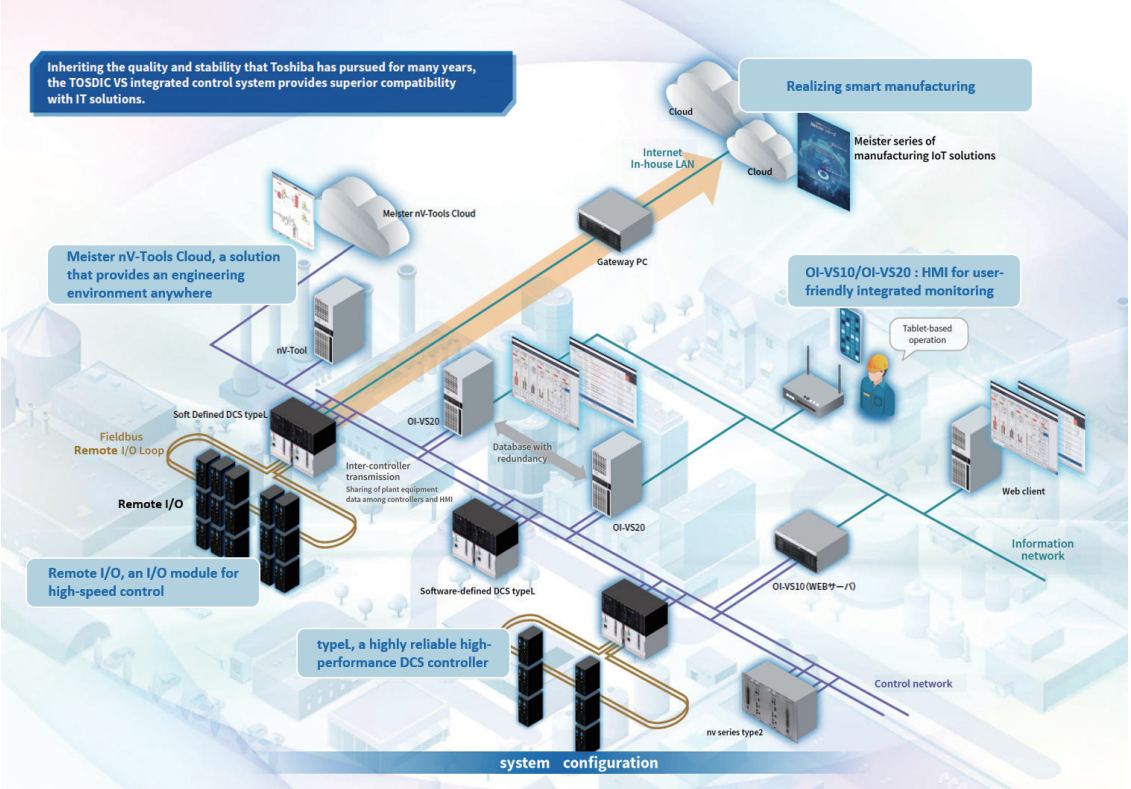
◆ Engineering tools support online development, operation and maintenance via the cloud
Development, operations, and maintenance can be conducted from anywhere, not just on-site, with the engineering environment hosted in the cloud. Additionally, it supports the nV-Tool, an engineering tool that has been used with Toshiba's conventional industrial controllers, while allowing the continued use of existing applications without modification.

◆ High reliability essential for control systems
The controller's core modules incorporate multi-layered monitoring of the active and standby systems, for critical redundancy functions in control systems, thereby improving the overall reliability of the system and reducing the risk of system downtime. The remote I/O modules support online replacement, enabling the system to remain operational during maintenance, while minimizing downtime.

◆ Reuse of existing assets
Partial system updates are possible by reusing existing system I/O modules, connecting to networks and repurposing application programs.

## Overview or Principle






The Distributed Control System TOSDIC VS, consists of HMI (OI-VS10/OI-VS20), DCS controllers (type L), high-speed remote I/O and engineering tools. It is applicable for a wide range of general industrial systems, including petrochemical and paper manufacturing industries. In today's industrial systems, improving control efficiency and engineering efficiency is essential. To achieve this, TOSDIC VS incorporates computer functions into the controllers, enabling real-time data accumulation and analysis. Additionally, the HMI provides web-based monitoring screens and the engineering tools offer a cloud-based engineering environment, allowing the monitoring and engineering of activities regardless of location. This enables a more efficient system operation.

## Energy-Saving Effects & Special Notes

- Compared to conventional products, the tag capacity is doubled, while maintaining the same energy consumption. This allows for the consolidation of controllers in the system, leading to reduced energy consumption.
- Since the engineering tools operate on the cloud and the HMI operates on a web-based platform, engineering and system monitoring can be performed more efficiently without limitations on location or time.
- With the DCS controller incorporating computer functions, the system configuration, which previously required both a controller and an industrial computer, can now be achieved with a single controller. This optimizes the on-site system, reducing energy consumption by half. Additionally, the implementation space is reduced by one-third.

## Implementation Results or Plans

**Domestic** Scheduled for implementation in general industrial systems.

**Overseas** Scheduled for implementation in general industrial systems.

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