

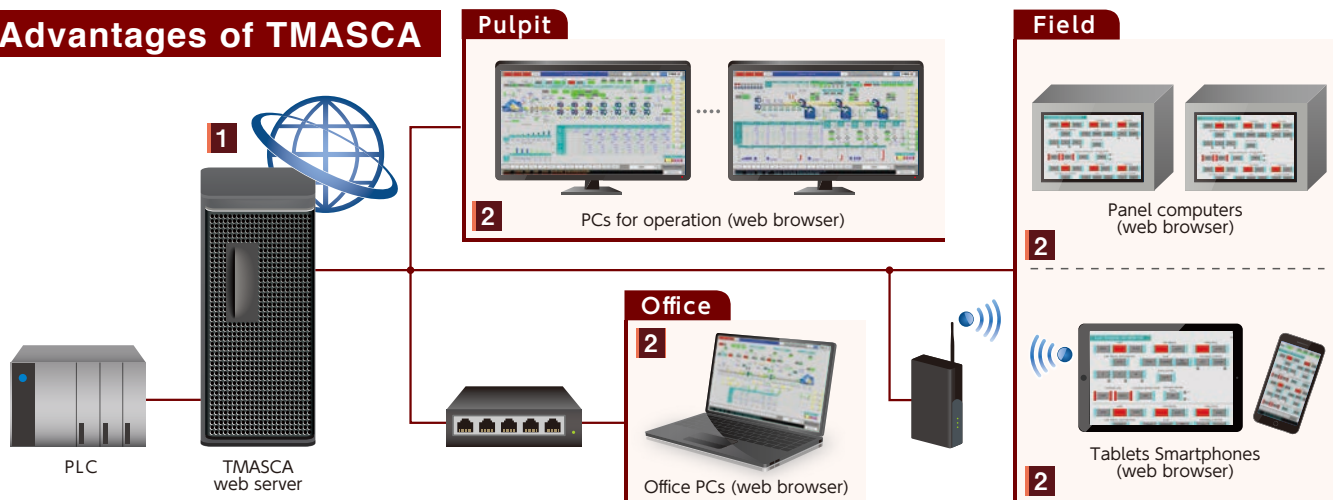
# TMASCA

## TMEIC Advanced SCADA

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TMASCA is web-based high-speed SCADA for steel plants that takes advantage of TMEIC's industrial systems know-hows and web technologies, and will materialize next generation steel plants.

### 4 Advantages of TMASCA



#### 1 Entire Web-based SCADA

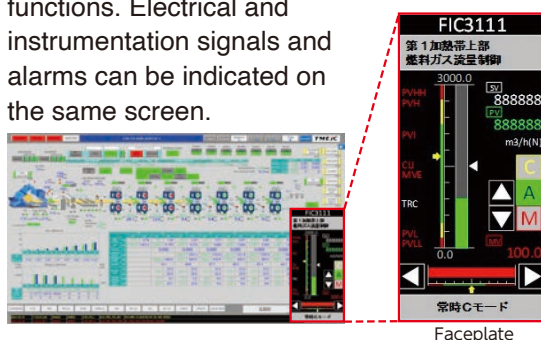
TMASCA screens can be displayed on any terminal supports web browser from anywhere (ex. tablets and smartphones). Wireless connection can be applied as the means of SCADA communication.

#### 2 200ms refresh with 200K tags and 128 clients

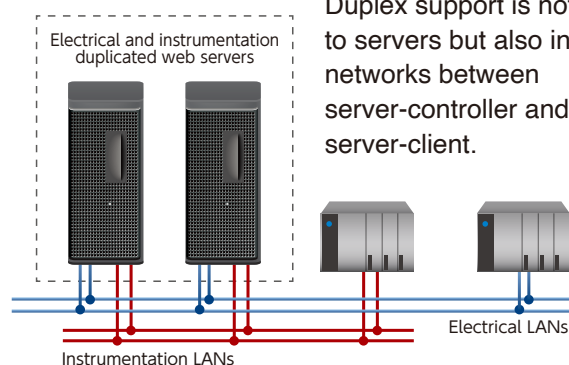
TMASCA single system can cover large hot strip mill plants as a single server supports 128 concurrent client connections. The response is fast as the system supports 500ms input / 200ms display frequency with 200K tags.\*1

#### 3 Integrate Electrical and Instrumentation

Web servers has both electrical and instrumentation functions. Electrical and instrumentation signals and alarms can be indicated on the same screen.



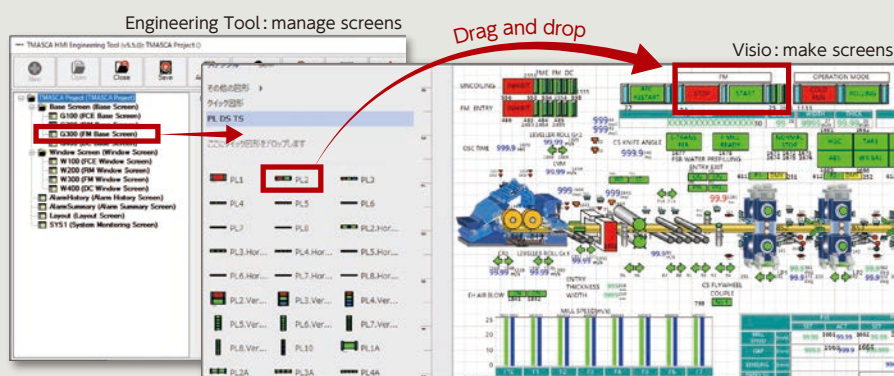
#### 4 Duplex web servers and networks



Duplex support is not limited to servers but also includes networks between server-controller and server-client.

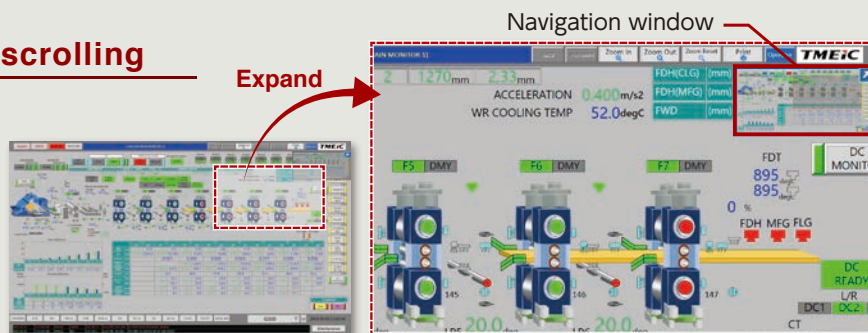
### Engineering Tool

TMASCA screens can be designed on Visio with standard parts prepared for steel plants, for example, buttons and lamps. Screen can be designed by dragging and dropping standard parts without actual coding.



## Zooming in / out and scrolling

TMASCA screen can be zoomed in / out intuitively. Zoomed position can be checked and scrolled on the navigation window.



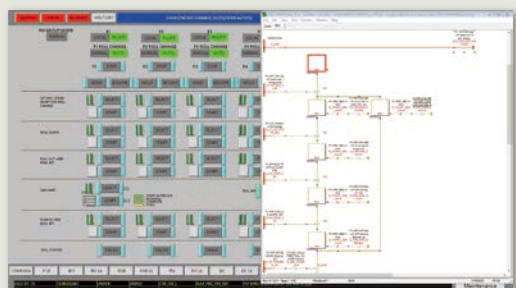
## Trend Graph (collaborate with ODG\*)

ODG trend graphs can be displayed on TMASCA screens.

※TMEIC Online Data Gathering system (TMODG)

## Interlock diagnostics(collaborate with nV-Tool)

Interlock conditions with failed ones selectively chosen by backtracking the program automatically can be monitored on TMASCA screens in ladder diagram or list format. From there first fault conditions can be selected as well.



## Program monitor(collaborate with nV-Tool)

Controller programs with real-time conditions can be monitored on TMASCA screen.

Items	Specification
The number of monitors	Maximum 128 monitors
Support networks	Ethernet, TC-net 1G, TC-net 100
Display software	Web browser
The number of screens	Maximum 3,000 screens
The number of items	Maximum 200,000 items
Indication response time	Maximum 200ms*1
Operation response time	Maximum 500ms*1
Screen change time	Maximum 1s*1
The number of display real-time alarms	10,000 alarms
The number of display historical events	50,000 events per day
Historical events retention period	3 years (50,000 events per day)

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\*1: Depend on computer performance and environment.  
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• All specifications in this document are subject to change without notice.

\* Issued in March 2023

### PRECAUTIONS

Read the entire "Instruction Manual" carefully for important information about safety, installation, operation, and maintenance.