

Goodtech Open Process Control System

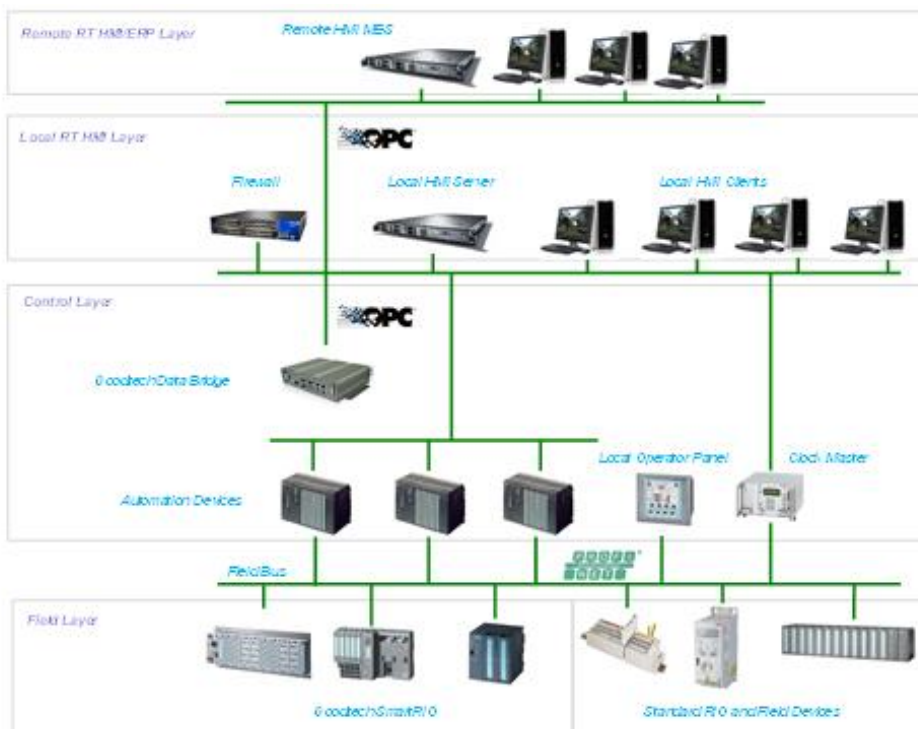
The **Goodtech Open Process Control System** is a modular high performance system based on industry standard hardware and software. The system is based on Simatic standard PLC hardware in the S7 300, S7 400 and S7 1500 range. Any OPC client capable HMI system can be used as HMI system. Of course HMI systems using native Simatic S7 communication can be used as well.

When the system is constructed using the **Goodtech SmartRIO** system, the **Goodtech Data Bridge** and the Goodtech standard PCS version 4.0 and 5.0 components the system is capable of time stamping messages with a resolution of two milliseconds. The actual time stamping is performed by the IO units, avoiding communication delays to influence the time stamp resolution. In such an application a high precision time synchronization source is used for time synchronisation of all units in the system. In this system all data is transferred between the PLC system and the HMI system includes time stamps and quality codes.

Engineering of the system is performed using standard PCS7 engineering tools and the functionality of the system is roughly equivalent with the functionality of the Goodtech PCS7 system.

The **Goodtech Open Process Control System** implements functionality according to NORSOK standards.

The figure below shows the principle for the **Goodtech Open Process Control System** automation system form field layer to real time HMI layer.



Goodtech Open Process Control System

The figure shows the Goodtech Open Process Control System for process station control.

The field layer uses ET200S, ET200M, ET200SP and ET200MP RIO units, the control layer uses Simatic S7 400 (or Simatic S7 300 and Simatic S7 1500) automation devices, and the real time HMI layer can for instance use the Wonderware application server program suite or the Seven Technology IGSS HMI system.

The "SmartRIO" units are intelligent ET200S/M/SP/MP RIO stations.

The Goodtech Data Bridge unit is introduced as a protocol converter interfacing the remote and local HMI.