

Service General Specification

Scheduled Maintenance Service

SGS 43S99X04-01E

Release 1.0



The First Aid Cross symbolizes not only our curative services but also our preventive maintenance measures. The arrow symbolizes our speed and precision.

Overview

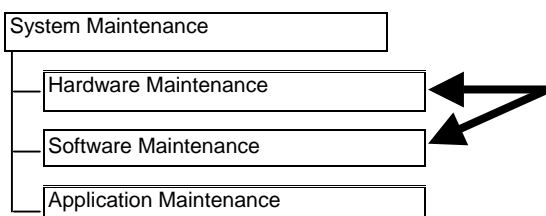
Scheduled maintenance is a Yokogawa VigilantCare™ service that is designed to increase system availability by performing recommended periodic preventative and comprehensive maintenance service. This service is provided during normal business hours but can be performed at other times if required.

Scheduled maintenance helps prevent and resolve hardware problems that may already exist or will appear due to normal use. It is utilized as a tool in conjunction with comprehensive and remote maintenance services.

Fully trained, skilled service specialists utilizing approved test equipment perform checks of the system components, examine any existing issues and report the results of the work performed. When done regularly, these periodic maintenance efforts can reveal potential problems before they occur and limit potential for an unscheduled shutdown.

Positioning

The Response Center provides for telephone or network based diagnostic maintenance of the system hardware and software.



Applicable Systems

The Remote Maintenance Service is applicable to the Yokogawa CENTUM CS 3000 Integrated Production Control System (DCS), Prosafe-RS Safety Integrated System (SIS), and the Stardom Network Based Control System (NCS). They include the following models

Micro-XL
CENTUM-XL
CENTUM CS
CENTUM CS1000
CENTUM CS3000
PROSAFE-RS
STARDOM

Functional Overview

The frequency of scheduled maintenance depends upon the contract service level. Gold service customers are allotted one (1) On-Line scheduled maintenance service per year while Platinum service customers will have two (2) scheduled On-Line visits per year.

A scheduled On-Line operating inspection is performed to maintain the system in a reliable condition. Inspections are performed to detect and prevent incipient failure (s), to recognize faults within the system, to note anticipated wear and to recommend corrective actions to prevent anticipated incidences from occurring. All manufacturer's suggested procedures and inspections are included. Yokogawa will provide written documentation of equipment performance and maintenance procedures that are performed.

- **Components**

The Schedule maintenance service provides for the confirmation and/or cleaning of the following system components as listed in the system inventory of service contract:

- Operator Stations
- Engineering Stations
- System Printers
- Communications Gateways
- Bus Converters
- Field Control Stations
- I/O Nodes, Nests and Modules

- **Contents**

A checklist of items for each hardware component is utilized by the service specialist to confirm operation of the equipment and to perform required cleaning. The following functions on the system are performed:

- Check with Operators/Engineers for previously items of concern.
- Confirm operating condition, review site logs, discuss system usage with operators, and visually examine equipment
- Visually inspect the operating environment of the equipment
- Clean exterior of main units and specific components
- Replacing dirty filters.
- Check performance of power sources.
- Check all connections (cables, boards, wiring, etc.)
- Run diagnostics
- Report any issues and summarize work performed

- **OFF-LINE (shutdown) Inspection**

Occasionally, an on-line inspection can be coordinated with the process turnaround schedule. In this case on Off-Line inspection can be scheduled. Contents of an Off-Line inspection include:

- Consult with system owner/operator for the purpose of reviewing operation or problems, which may exist.
- Examine site logs and visually inspect the system.
- Perform in-depth cleaning (inside and out) on all system equipment and components.
- Check integrity of AC power sources voltage.
- Check and adjust DC and logic level voltage on all power supplies.
- Provide full system backup prior to running diagnostics.
- Perform full system diagnostic.
- Exercise major functions of system including hard disk drive access, floppy disk drive operation, keyboard access and data highway access. Run printer self-diagnostics, etc.
- Provide Customer with a detailed, written report of the work performed.

Ordering Instructions

Scheduled service is purchased on an annual basis. Please contact your local Service Sales Representative for more information.

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