WHESSOE VAREC

FUELS MANAGER





FuelsManager running on the Microsoft Windows®NT operating system is a versatile Supervisory Control and Data Acquisition System (SCADA) specifically designed for operators of bulk storage facilities, marketing terminals, refineries and pipelines, and allows them to manage their entire facility efficiently. FuelsManager enables users to integrate all major types of tank level and mass measurement instruments - including float, servo, hydrostatic, radar and hybrid tank gauges - into one system. Storage tank parameters, such as level, temperature, mass, pressure, density, rate of flow, gross and net standard volumes, are displayed at the local operator workstation and can be networked with other PC's or host computer systems.

GAUGING

FuelsManager has the ability to integrate, via the RTU 8130 or industry standard PLC's, control functions such as pump and valve control, flow metering and independent alarm systems.

FuelsManager has been designed such that it can interface with existing tank gauging systems as well as new equipment, thus facilitating the "system only" upgrade of refineries and terminals.

Regardless of the client's requirements, FuelsManager has the flexibility to be the Central Data Acquisition system for any tank gauging application.

AT A GLANCE

SCADA functionality

True supervisory control coupled with efficient data acquisition for any tank gauging application.

 Windows based graphical user interface (GUI)

World-wide acceptance and ease of use.

 Standard "tank" type for ease of configuration

Standard configuration templates regardless of tank type.

 Comprehensive alarm/event/ reporting capabilities

Daily alarm/event file logged to printer and hard disc.

Network capability (peer to peer, client/server)

System can expand with customer requirements.

 Client/server design architecture industry

Industry Standard design for SCADA-DCS applications.

Batch sequence language

User-friendly process orientated language designed for engineers to enable plant control.

FUELSMANAGER

FM BATCH

The FMBatch Sequencing System is a FuelsManager specific application designed for the implementation of maths and logic control schemes. FMBatch consists of a "process orientated" script language that allows FuelsManager to automatically monitor and control database points and provide control functions and actions via PLC's.

The language provides the ability to manipulate all FuelsManager database points, as well as internal FMBatch variables, i.e. valves may be opened and closed, pumps may be turned on and off. The states of valves and pumps may be tested. Tank variables and command parameters may be set and tested.

FMBatch is designed to allow engineers to create their own control schemes and incorporate them into FuelsManager.



DATA PROCESSING

FuelsManager provides fast and efficient computation of all relevant parameters including alarm generation that is required for the efficient control of a refinery or terminal.

COMMUNICATIONS

FuelsManager is designed to interface to all of the Whessoe Varec field devices and with the use of the 8130 RTU to third party field devices.

SYSTEM EXPANSION

FuelsManager is readily expandable as system requirements change. Additional systems can be added via standard networking techniques to take full advantage of the Client/Server Architecture, or I/O expansion can be accommodated using industry standard third party devices.



OPERATOR INTERFACE

FuelsManager takes full advantage of the Microsoft Windows Graphical User Interface (GUI). Multiple windows can be opened simultaneously to allow viewing of more than one graphic display at a time, each window displaying real-time data and associated control functions.

DCS/PLC COMMUNICATIONS

FuelsManager has the ability via loadable drivers to enable master/slave communications to the most popular PLC's and DCS systems allowing system integration of all tank associated control functions such as pump and valve control, alarm and shut-down control, automated import/export control, batch management and flow metering.

FUELSMANAGER USER PROGRAM

FuelsManager uses a standard Windows- based GUI interface for user interaction with the system. The FuelsManager User Program exists as a window for access to all FuelsManager functions.

The user is able to define start-up options, define resources, configure database points and alarms, configure or maintain the Communications Manager, and access FuelsManager's subprograms. The Operate, Report and Draw programs are also accessible from the FuelsManager User Program.

8130 RTU

The Model 8130 RTU is designed for applications where a cost-effective control system is needed for remote collection of field data and control of equipment. The RTU is ideally suited for tank farm, pipeline and refinery applications. It is an effective solution in SCADA or stand-alone programmable control unit applications.

The 8130 RTU can interface to many different tank transmitters including third party devices such as SAAB, Enraf and L&J. The 8130 RTU is fully compatible with FuelsManager, thus facilitating centralised data acquisition for sites with multiple gauge types.



OTHER RELATED DOCUMENTS

Whessoe Varec Gauging Corporate Overview: Gauging & Instrumentation Systems Intelligent Remote Terminal Unit: 8130 RTU Applications for the FuelsManager system: App Note: 9000/APP/1/97



TOTAL CAPABILITY

Our total capability is demonstrated through the use of appropriate, field-proven techniques and advanced applications technology and services to maximise your profitability and performance

FUELSMANAGER SYSTEM

TECHNICAL SPECIFICATION

WINDOWS BASED GUI

Multiple Windows available for simultaneous real-time display Change of colour and visibility based on field data changes Graphics creation using standard symbol library Screen dump to printer Ability to add database ID tags during graphics creation Ability to query/list database ID tags during graphics creation Generic pre-defined tank graphic displays

ALARMS

Flashing graphic and text colours based on system of field values Audible alarm supported Animation based on different alarm conditions User notification of alarms regardless of active display Alarm priority capability

ALARM SUMMARY

Unlimited number of alarm pages supported Alarms logged to file for future reference Printout of all alarms – timed or on demand

EVENTS

User selectable log to file of each event change Ability to print event log file Separate alarm/event file stored on a daily basis

REPORTING

Standard or user configured reports Periodic or demand reports Display of reports in real-time via GUI

NETWORKS

Supports peer-to-peer and client server Local Area Networks (LAN) Remote access network capability

SERIAL COMMUNICATIONS R5232/5485

300 baud up to 19,200 baud Multiple serial communications (Up to 32) Master/slave capability to PLC's and 8130 RTU Slave capability to DCS/MIS Systems

DATABASE

FMBatch sequencing system API standard tank calculations Standard "tank" structure definition for ease of configuration

CATALOGUE ORDER CODES

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					3	L&J (requires 8130 RTU)								
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FUELSMANAGER PC SPECIFICATION (Operator Station)

MINIMUM	PREFERRED
486/66 DX Intel Processor	Intel Pentium Processor
16 MB Ram	32 MB Ram
300 MB hard Disc	500 MB hard Disc
15" SVGA Monitor	17" SVGA Monitor
1MB SVGA Graphics Adaptor	2 MB SVGA Graphics Adaptor
System Mouse	Internal CD-Rom
	System Mouse

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