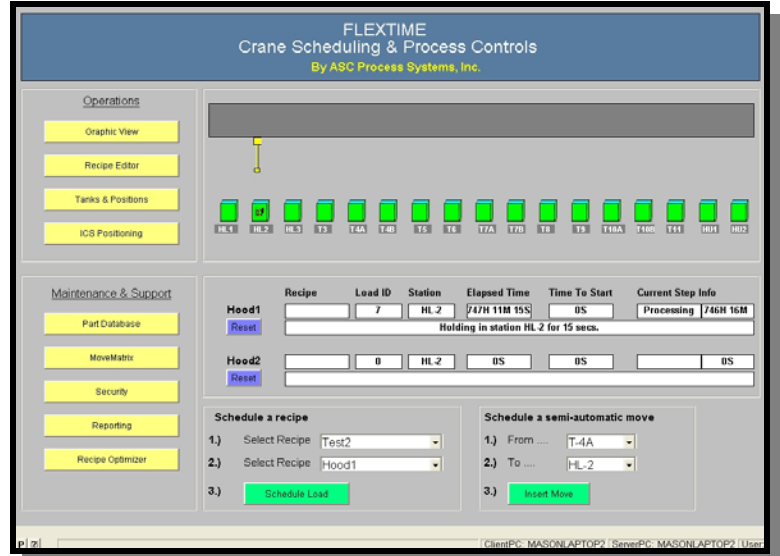


- Software for tank-line process & hoist scheduling/control
- A complete solution for MMI, control, data-acquisition, and reporting
- Dynamic and fixed time-way scheduling capabilities
- Flexible, powerful, and easy to support by end user



INTRODUCTION

FLEXTIME is a comprehensive control, data-acquisition, and scheduling package designed to meet the automation needs of the wet process industries.

The package is a robust platform capable of controlling your entire tank line, including hoists, shuttles, tanks, rectifiers, fans, blowers, and pumps.

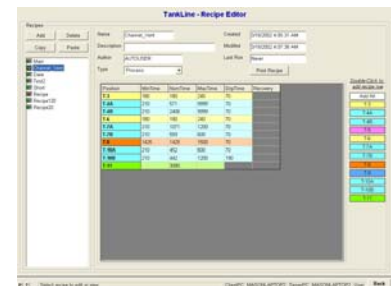
With an integral MMI capability, scripting engine, and object-oriented configuration, the user is provided an easy to support system ca-

FEATURES & CAPABILITIES

DYNAMIC & FIXED TIMEWAY SCHEDULING

FLEXTIME includes an integral scheduling engine with the capability of dynamic, fixed-mixed, and fixed time-way scheduling control.

In dynamic mode (optional) the software can optimize, fits, and schedule differing recipes on-the-fly. Optimization goals can be configured for maximizing time-in-tank, maximizing hoist utilization, and reducing cycle-time.

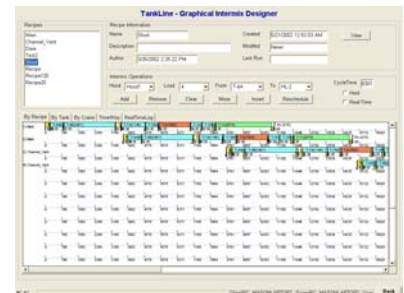


FLEXTIME—Recipe Editing Screen

GRAPHIC INTERMIX VIEW

FLEXTIME has a real-time intermix viewer that lets you see the hoist and tank schedules on a horizontal time-line, including designation of load #, recipe, and utilization.

A real-time moving marker indicates the current process state. The future and past movements and actions are shown to the left and right of the moving marker. Panning and zooming of the current graphic is supported.



FLEXTIME—Intermix Viewer

ADVANCED HOIST & SHUTTLE

FLEXTIME is designed to easily integrate with variable-speed drives and advanced distance meters such as the Trimble ICS-5000 in order to provide the state-of-the-art in hoist control. The software includes screens and interface panels which show status of drives and the meters.

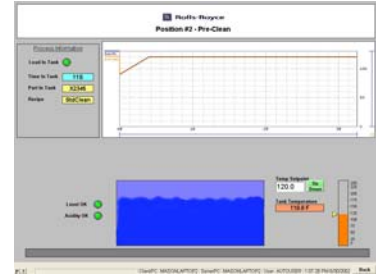
The software supports Ethernet, ControlNet, DeviceNet, Profibus, Modbus, and Allen Bradley DF1 protocols.



FLEXTIME—ICS5000 Status Screen

TANK AND SYSTEM CONTROLS

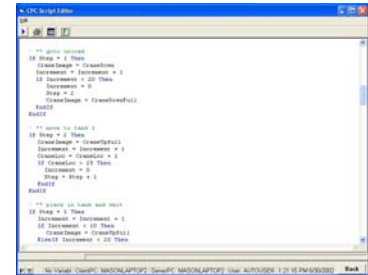
FLEXTIME can provide PID and logic control of your tanks, pumps, rectifiers, and other automation devices. Screens can include trends, buttons, and other MMI attributes. Pull-down and full-screen design can be incorporated.



FLEXTIME—Tank View with trend

PC OR PLC CONTROL CHOICE

FLEXTIME can interface with either PLC's or PC-based distributed I/O. Though FLEXTIME has an integral, multi-tasking script engine that can perform all system logic on its own, you are able to identify what logic you want in the PLC and what you want in FLEXTIME. This is always a customer's choice.

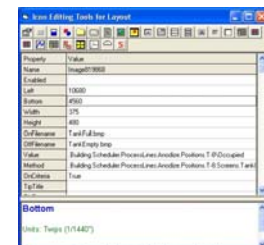


FLEXTIME—Script Editor

MMI CAPABILITIES

The software includes an integral MMI (man-machine-interface) capability including a screen designer that can be accessed during normal system operation. This capability allows the user to easily maintain and modify screens to meet future requirements.

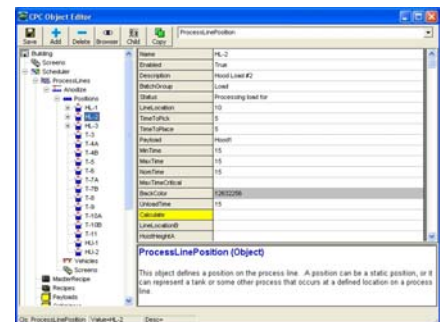
Note: ASC provides all initial screen design on system installations.



FLEXTIME—Screen Design Toolbox

OBJECT ORIENTED CONFIGURATION

FLEXTIME is designed to be 100% object-oriented. This provides great flexibility in configuration and maintenance, because each tank, crane, hoist, switch, and other control element includes a mirrored FLEXTIME software object. In this way all logic, configuration, and screens relating to the physical object is maintained within an independent software container.



FLEXTIME—Object Editor exposing TankLine structure.