

CONTROL MONITOR

- SAY PLANT

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Loop가	Control	Tuning	PID Equation
80%가	Controller 66% ~ 가	Control Loop Tuning 가 parameter 가	Control Loop (Valve, Measure, PID Tuning Auto Tuning
Start-up License Tuning 가	가	Tuning Identification Tuning	Grade가
Control Loop Valve, Measurement, Oscillation),	Controller (, PID	Control Arts Inc. Control Monitor 4 가 History Data DCS Control Loop, Model Identification	Tuning
, Advanced Application (DMS, RTO, ERP,)	Regulatory	Tuning Simulation Test	Plant 가
Controller Tuning APC Loop Tuning 가	APC Loop	Single Loop Loop	MPC, Level

- Controller Surge
- Control Loop Performance
 - Loop
 - Loop Re-Tune
 - Controller Upgrade
 - Custom Analysis Technique controller 가
 - PID
 - Model Base Controller
 - Level controller
 - Control Loop
 - Single Loop
 - RTDB
 - Customization
 - Alarm System Alarm -
 - Control Loop

	performance index
Scheduled controller performance reports	(Controller)
In-depth single loop analysis	Graphic Controller
Level controller analysis	Level Controller가 Level Surge
Process Model Identification	Low Order Step Weight Model 가 Model Single Multi-Loop
PID / MVC controller tuning	PID Multi-Variable Controller Design Process Model Closed-Loop Plant Response Simulation

1. Control Monitor 6가

Controller performance history	Control Parameter (Plot) ◆ continuous : setpoints, measurements, outputs ◆ discrete : controller changes, alarms,
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2. Toolkit Overview

- Tuning 가
- 가
- Oscillation 가
- APC 가 가

3. _____

Control Loop 성능 평가 및 Tuning 소프트웨어

- Continuous, Discrete, Step-Weight, PID Controller, Advanced Single Loop Controller, Multi-variable Control
- Data Set
- Tool
- Input Output Non-Linear Transformation 가
- Multi-variable 가
- PID Controller IMC tuning rule DCS Customization 가
- Single Multi-Loop Simulation
- DMC Simulation

Special note for AspenTech users:

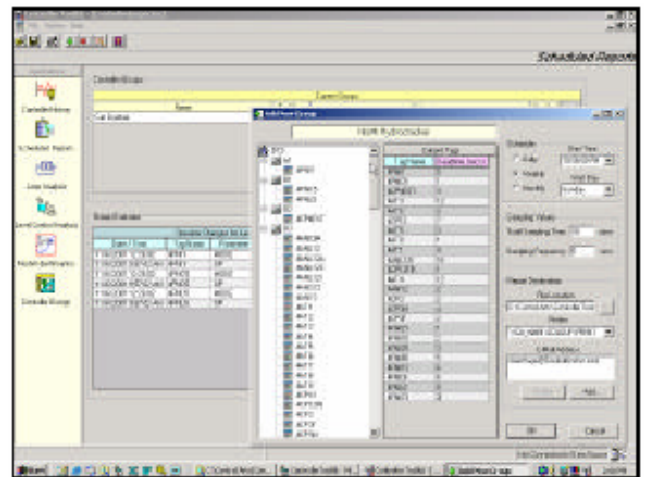
- low-order transfer function identification step
- impulse weight identification 10

Test가 가
DMC Control Controller
Identified Model
Tag Drag & Drop
Matrix

Model
Input/Output Configuration
Output Package
가 Model Parameter
가
Multi-Variable Controller 가
Simulation
Multivariable Controller
Relative Gain
Array
Model Mismatch
Multivariable Controller 가

4. Benefits

가 Controller



Control Loop 성능 평가 및 Tuning 소프트웨어

Report

Control Arts Inc. Control Monitor [1] Valve가 , , , Controller Loop , Loop Summary Report e-mail Click 가

Trend 가

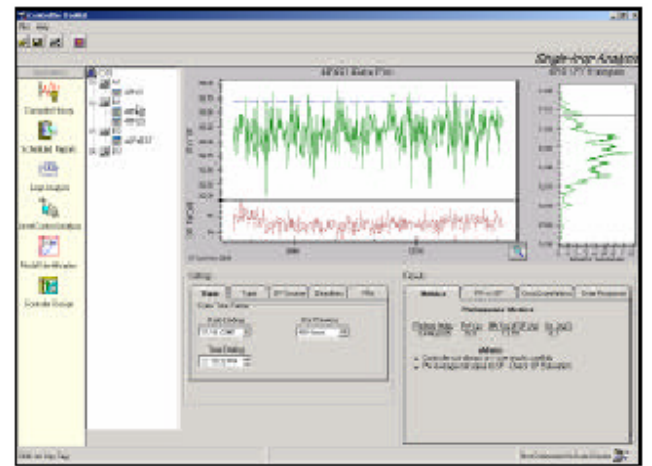
- Controller가 ?
- ?
- Alarm Loop ?

Control Monitor Loop History Display [2]

Control Loop Tuning Tag

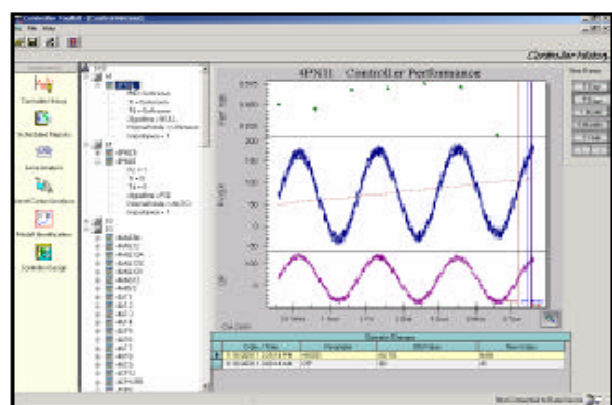
Click 가

Tuning



3

efficient model identification component Tuning parameter

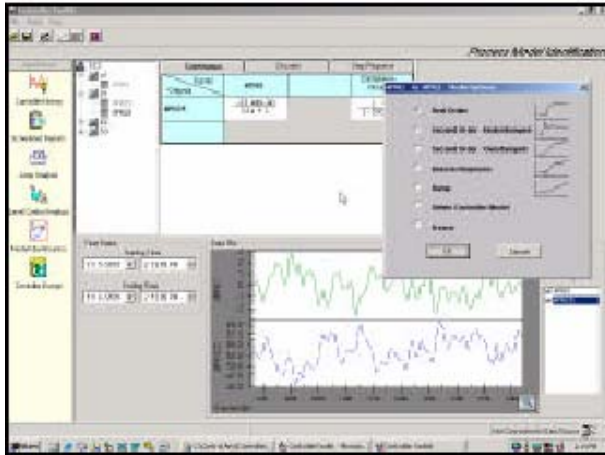


2

Single Loop

Step Test PID Controller, Model Based Controller, Inferential Model Low-Order Transfer Function

[4]



4

5. Control Arts Patented Technologies

Control Arts Control Loop Performance
가 Alarm 4가

• MPC (Model Predictive Controller)
Performance 가

• Non-Deadtime Compensated Controller
Performance 가

• Integrating Process Controller
Performance 가

• Alarm

MPC (Model Predictive Controller)
Performance 가 (6,459,939)

Controller 가 가

” “
Controller ”

가 Model

Predictive Controller

가

Model Predictive Controller

Controller

가

Non-Deadtime Compensated Controller

Performance 가 (Patent 9,501,129)

가 가 Model
Controller 가 가

Non-Deadtime Controller가

Non-Deadtime Compensated Controller
PID Controller

Continuous Controller 95%

Controller

PID Control

(, Deadtime)

Controller

Controller

가

Integrating Process Controller , Alarm
 Performance 가 (Patent 9,595,981)
 Controller 가
 (, Level) Alarm PV
 PV Alarm
 (Predictive Sense) , Alarm
 Setting 가
 PV
 Controller APC (MPC)
 가 , APC
 Surge ,
 Vessel Controller Solutions , 가
 (MV) Control Loop Tuning
 APC
 MV Surge Vessel . ()
 Controller
 Surge Vessel
 Alarm (Patent
 9,649,227)
 Alarm Normal Operation
 Alarm 가
 2가
 , Alarm 가