AVEVA™ Reports for Operations

Industrial Reports for Digital Collaboration

AVΞVA

AVEVA Reports for Operations

AVEVA

Collect your data

Seamless Connectivity to Existing Automaton Systems

Over 120 drivers included

+ Manual Data Entry

Open Protocols

HMI/SCADA

Historical Archives

Web Forms

Other Data Sources

Combine all your Process, Lab, Quality, Maintenance & Operational Data

Process your data

General Functions
- First Value
- Timestamp of First Value
- Last Value
- Timestamp of Last Value
- Current Value
- Maximum
- Timestamp of Maximum Value
- Minimum
- Timestamp of Minimum Value
- Integral
- Average
- Weighted Average
- Sum
- Standard Deviation
- Standard Deviation Sample Based
- Difference

Advanced Functions
- Logged Value Counter
- Duration in the interval (hours)
- Counter
- Mean Kinetic Temperature
- Advanced Mean Kinetic Temperature
- Largest
- Smallest
- F0
- Percentile

Performance Analysis Functions
- ON Counter
- OFF Counter
- ON/OFF Counter
- Running Time
- Down Time
- System availability

Energy Management Functions
- Produced Energy
- Produced Emission

Batch Functions
- Batch ID
- Batch Start Time
- Batch End Time
- Batch Duration

Setpoint Analysis Functions
- Start time of stable period
- End time of stable period
- Duration of stable period
- Setpoint stability result
- Counter of stable periods
- Rate of change before entering stability zone
- Rate of change after exiting stability zone

Alarm Analysis Functions
- Counter of alarms
- Timestamp of First alarm
- Timestamp of Last alarm
- Alarm Maximum Duration
- Alarm Minimum Duration
- Alarm Maximum Response Time
- Alarm Minimum Response Time
- Average Alarm Rate
- Minimum Alarm Rate
- Maximum Alarm Rate
- Peak Alarm Timestamp
- Lowest alarm rate timestamp
- Count of short-duration alarms
- Count of long-duration alarms
- Count of periods per alarm rate

Direct SQL Query
- SQL Query

Pulse Analysis Functions
- Number of Pulses
- Peak Maximum Value
- Peak Minimum Value

SPC Functions
- SPC Mean
- SPC XGA
- SPC RA
- SPC SA
- SPC UCL XRA
- SPC LCL XRA
- SPC UCL XSA
- SPC LCL XSA
- SPC UCL RA
- SPC LCL RA
- SPC UCL SA
- SPC LCL SA
- SPC CP
- SPC CPK
- SPC -Sigma1
- SPC +Sigma1
- SPC -Sigma2
- SPC +Sigma2
- SPC -Sigma3
- SPC +Sigma3
- Nelson Rules Violation

Manual Input

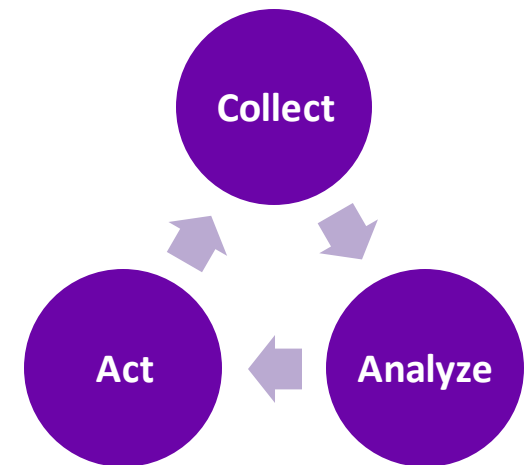Rich library of statistical and aggregation functions

AVEVA

Alarm Management

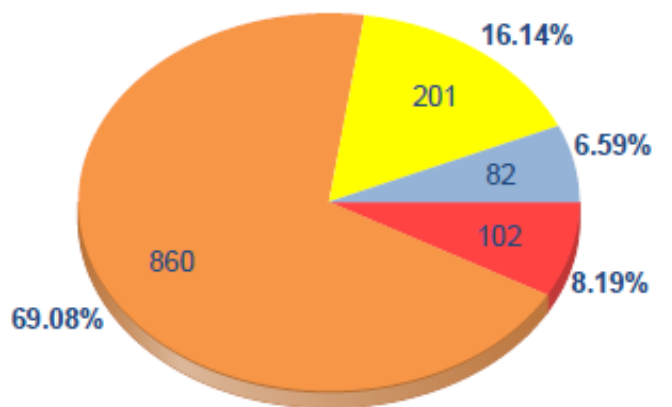## AMS/ISA 18.2 Standard

Alarm Functions & KPIs
‣ Counter of alarms
‣ T/S of first alarm
‣ T/S of last alarm
‣ Alarm max duration
‣ Alarm min duration
‣ Max response time
‣ Min response time
‣ Average alarm rate
‣ Minimum alarm rate
‣ Maximum alarm rate
‣ Peak alarm timestamp
‣ Lowest rate timestamp
‣ Count of short-duration alarms
‣ Count of long-duration alarms
‣ Count of periods per alarm rate

- All the tools to create ISA 18.2-compliant reports and dashboards – focus on what's important!

- Contextualize: Analyze alarms relative to process, lab, maintenance, production, or any other plant data

- Automatically diver results: email reports, automatically populate a browser-based portal

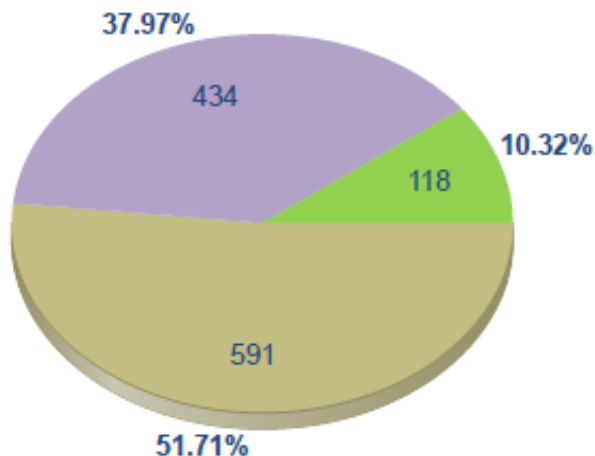- HMI integration: write back alarm metrics to larger system

Collect

Analyze

Act

Breakdown by Alarm Priority

- Critical(102)
- High(860)
- Medium(201)
- Low(82)

Segment	Value	Percent
High	860	69.08%
Medium	201	16.14%
Low	82	6.59%
Critical	102	8.19%

Breakdown by Alarm Area

- Reactor(591)
- Water Treat.(434)
- Conveyor(118)

Segment	Value	Percent
Water Treat.	434	37.97%
Conveyor	118	10.32%
Reactor	591	51.71%

Alarm KPI's - Today

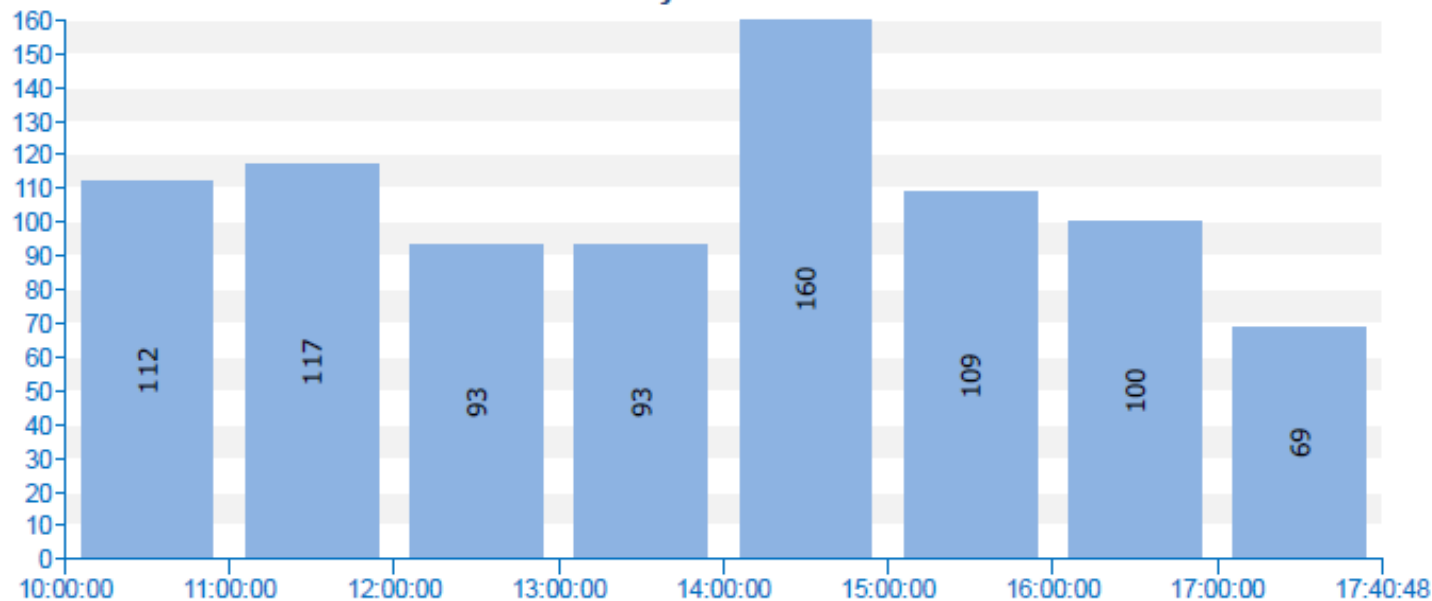|	
Count of All Alarms	948
Time of First Alarm	01/12/2021 09:14:34
Time of Last Alarm	01/12/2021 17:39:35
Peak Alarm Rate	43 /10 mins
Peak Started at	01/12/2021 14:30:00
# Nuisance Alarms	145 (<= 5 sec)

Operator Max Response Times to Alarms

Water	0:02:59
Reactor	1:39:57
Conveyor	0:01:01

Alarm Summary - Counts Sorted by Frequency (Pareto Analysis)

Start Time	Alarm Text	Priority	Number of Occurrences
01/12/2021 17:39:35	Tank System 1 - Inlet Flow Alarm	10	286
01/12/2021 17:39:34	Reactor temperature alarm	5	243
01/12/2021 17:35:15	Tank System 2 - Inlet Flow Alarm	10	156
01/12/2021 17:09:46	Conveyor speed	200	82
01/12/2021 17:37:15	Reactor level alarm	1	76
01/12/2021 17:25:00	Batch concentration	20	31
01/12/2021 17:20:40	Product storage tank level alarm	10	30
01/12/2021 14:42:07	Conveyor speed	5	27
01/12/2021 14:41:06	Reactor level alarm	5	16
01/12/2021 09:24:24	Conveyor speed	100	1

Alarm Counts by Hour - Current Shift

Hour	Count
10:00:00	112
11:00:00	117
12:00:00	93
13:00:00	93
14:00:00	160
15:00:00	109
16:00:00	100
17:00:00	69

Present – Any User, Any Time, Anywhere

Home | Connectivity | Project | Web Elements | Tools | Runtime | SPC | Custom Objects | Dashboard

Visual Theme | Help

Copy
Paste
Cut

Clipboard

Report template
Page template
Insert New Page

Project

Arial (European) | 10

B | I | U | A | A | A

Font

Text Alignment

Grid Settings
Document Units

Grid

Quick La...

Report Designer Studio | Logger Studio

Driver Configuration

List of Reports

Data models

Aa

Virtual Report Instances

Project Reports List

Run Project

Reload project

Reload reports

Edit project users

Batch definition

Remote Development Configuration

Open Project

New Project | Open Existing Project | Remote Project

Project Name :

PlantReporting

OK | Cancel

Number of Items in a Project: 0

Programs | Links | 3:36 PM

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ABOUT AVEVA

AVEVA is a global leader in engineering and industrial software driving digital transformation across the entire asset and operational life cycle of capital-intensive industries.

The company's engineering, planning and operations, asset performance, and monitoring and control solutions deliver proven results to over 16,000 customers across the globe. Its customers are supported by the largest industrial software ecosystem, including 4,200 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 4,400 employees at 80 locations in over 40 countries.

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