

## QIS 2017 R1 Highlights

### Production Control

Where formal control over cleaning, start up, batch acceptance and sign-off at multiple levels is required, such as in FDA regulated industries, the new QIS Production 'Flow' Control features can be used to ensure procedures are followed in the correct sequence, documentation is presented in line with related actions and formal sign-offs can be included at any point to ensure subsequent actions cannot begin until stage approval.

The screenshot displays the QIS software interface with several overlapping windows. The main window shows a 'Batch Control' screen for 'Initial Preparation' with a 'REQUIRED REFERENCE DOCUMENTS' table. A secondary window shows a 'Line Clearance' screen with a 'REQUIRED REFERENCE DOCUMENTS' table. A third window shows a 'Logsheet' with a table of production data. A fourth window shows a 'Line Clearance' table with two steps and their descriptions.

CONTROL NUMBER	DESCRIPTION
MTR-PRO-00081	Bench Moisture (TMS-0208)
MTR-PRO-00082	Coating Weight (TMS-0721)
MTR-PRO-00085	Bulk Roll Assessment (TMS-1009)

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Step	Line Clearance Items To Be
1	All paperwork and material not pertaining to the current changeover is completed without stopping the machine previous job may remain in the controlled access area acceptable to have face, backing and leader material to access area while manufacturing the current job.
2	Ensure material from the previous work order and/or less producing sellable material. If changeover is done with material from the core of the previous work order at the

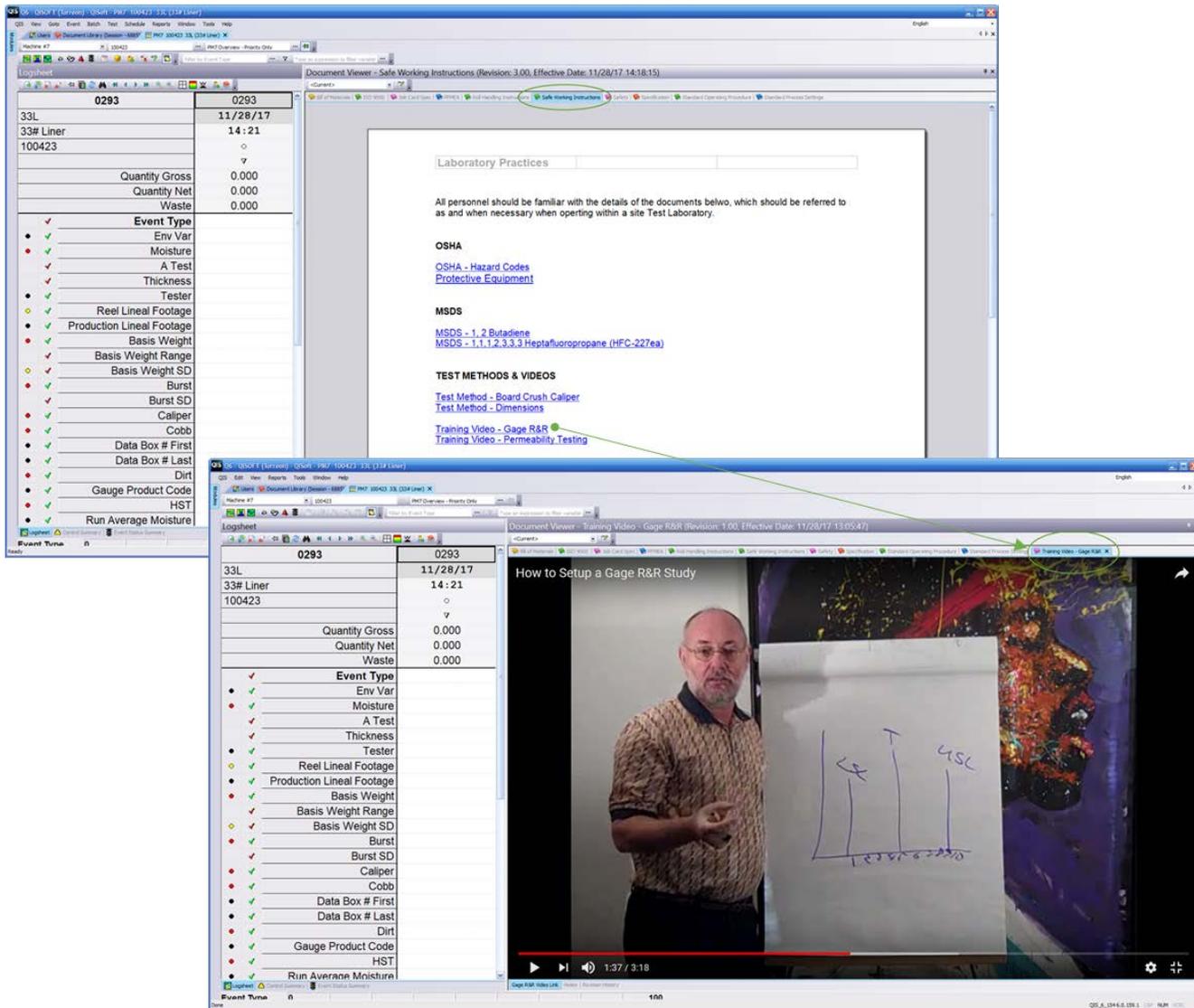
The basic requirements for a flow controlled production batch or run, is enforced Batch Start and Batch End procedures. In between, optional Batch Change and Shift Change procedures can be included if needed.

Through use of QIS Templates and nested Templates, the required sequence of all checks and tests can be built. The completion of each phase in this sequence can be subject to one or more authorised users sign off, configured using the new QIS Digital Signature variable type. The next phase cannot be started until the prior phase is completed.

Although based on the same core QIS Logsheet architecture, the interface for the control events utilizes a form based data entry, presenting operators with a formal step by step view with associated instructions or procedures to follow. This is all built using existing QIS objects: templates, event types, variables and others, thus ensuring complete flexibility and end user customisation.

Other related changes include the ability to:





## OEE Updates

2017R1 includes the first stage of OEE updates with more planned for the next release. The updates included in this release focus mainly on the back-end changes in OEE calculations. We have removed OEE periods and OEE production accumulation focusing on calculating OEE on demand.

## Real Time Display (RTD) Enhancements

There are several enhancements to the RTD such as the inclusion of additional specification items in the Logsheet columns display including: -

- Sample Size
- Sample Frequency
- Test Standard

Also included here now are the Variable Status and Test Schedule, making the display of both these items optional.

The screenshot displays the QISOFT Logsheet interface for Machine #7 (107889) with the title 'PM7 Process Variables'. The main window shows a table with columns for 'Sample Size', 'Sample Frequency', and two columns for dates and times. A 'Logsheet Columns and Rows' dialog box is open, showing a list of specification items with checkboxes to toggle their visibility. The dialog box is titled 'Logsheet Columns and Rows' and has a 'Specification Display' tab. The 'Production Information' sub-tab is active. The list of items includes: Status, Test Schedule, Units, Test Standard, Priority, Absolute Minimum, Lower Individual Limit, Lower Specification Limit, Lower Control Limit, Aim, Upper Control Limit, Upper Specification Limit, Upper Individual Limit, Absolute Maximum, Sample Size, Sample Frequency, and Notes. The 'Sample Size' and 'Sample Frequency' checkboxes are checked.

Variable	Sample Size	Sample Frequency	0291	1010
33L			06/03/13	11/29/17
33# Liner			20:11	08:08
107889			0	0
Quantity Gross			24,900.000	
Quantity Net			0.000	
Waste			24,900.000	
Unassigned Waste			24,900.000	
<b>Basis Weight</b>	1	1 Event	34.800	
Burst	6	3 Event	102.70	
Cobb	6	1 Event	7.57	
Dirt	6	1 Event	549.77	
HST	10	1 Batch	95.90	
Moisture -Scanner	5	1 Event	6.50	
Moisture Lab	1	1 Event	6.61	
Run Average Moisture	1	1 Event	6.80	
Moisture Cpk			0.63	
Moisture Calibration Check	3	1 Event	0.11	
Ring Crush	6	6 Event	149.85	
STFI	6	1 Event	30.30	
ZDT	1	1 Event	39.72	
Caliper	6	1 Event	7.57	
Porosity	6	3 Event	26.08	
Smoothness	6	1 Shift	379	
Gauge Code	1	1 Shift	10	
Lab Temperature	1	1 Hour	66.9	
Dosing Rate	1	3 Event	4.7	

At the bottom of the Logsheet window, there is a 'BASISWT' summary bar with values: 15.000, 29.000, 31.430, 31.790, 33.680, 34.150, 34.510. The status bar also shows '95.000 Basis Weight key'.

## Event Status Summary

The Event Status Summary has been updated to include Event Variable status and Event Acceptance & Control status change history in a single layout, giving you instant access to understanding event status, its history and the items affecting it.

Q6 - QISOFT (Raleigh) - System Admin - PM7 100421 33L (33# Liner)

Machine #7 100421

Event Status Summary

Reel	Date	Time	QIS	Manual	Completed	Flags
0216	11/29/17	08:08				
0291	06/03/13	20:11				
0290	06/03/13	20:01		✓		
0289	06/03/13	19:51				
0288	06/03/13	19:36				
0287	06/03/13	19:25				
0286	06/03/13	19:13		✓		
0285	06/03/13	19:01		✓		
0284	06/03/13	18:48		✓		
0283	06/03/13	18:35		✓		
0282	06/03/13	18:23				
0281	06/03/13	18:09				
0280	06/03/13	17:57		✓		
0279	06/03/13	17:43				
0278	06/03/13	17:28				
0277	06/03/13	17:17				
0276	06/03/13	17:07				
0275	06/03/13	16:54				
0274	06/03/13	16:41		✓		
0273	06/03/13	16:30		✓		
0272	06/03/13	16:18		✓		
0271	06/03/13	16:07				
0270	06/03/13	15:55		✓		

Event Status Details

- Cobb Manufacturing Specification ✓
- Dosing Rate Manufacturing Specification ✓
- Run Average Moisture Manufacturing Specification ✓
- Basis Weight Manufacturing Specification ✓
- Production Lineal Footage Manufacturing Specification ✓
- Bulk Roll Quality Attribute ✓

Change History

Old	New	User	Conf	Date	Reason
	✓	SYS		06/19/14 14:01	Roll map indicates moisture profile OK

## Event Combine Enhancements

The Event Combine feature allows for two individual QIS events to be merged into a single event. New options added in this QIS 2017 R1 Includes the ability to select both the gross and net quantities for the resulting combined event as well as Event Type, Shift and Tester.

**Combine Events**

- Allow product to be changed
- Allow date and time to be overwritten
- Allow quantities to be overwritten
- Allow type to be overwritten
- Allow shift to be overwritten
- Allow tester to be overwritten
- Allow variable data to be overwritten

Restrict by creating Process Link

Source  ...

Target  ...

Maximum time difference between events

(hours)  (mins)

Check event against mask

Source

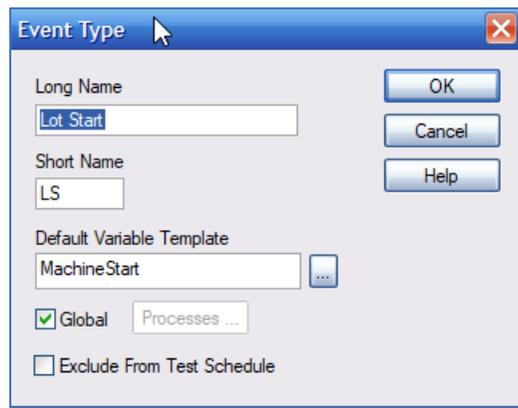
Target

Use regular expressions

## Event Type Enhancements

The introduction of event types in QIS allowed for distinctly different data collection events within a single process. In 2017 R1 adds the ability to assign a default template to an event type, which results in the Logsheet displaying specific variables relevant to the individual event type selected. This presents operators with the variable list and data which matches the selected event type.

Event types can now also be “excluded from test schedule” which prevents events of certain types interfering with the main process test schedule.



## Audit Trail

QIS 2017 R1 includes improved handling of batch and event name changes with recording of the previous name, making investigation quicker and easier.

The examples below show the additional Notes field showing the changed values:

Date & Time	Action	User	V Name (short)	Name (long)	Notes
12/03/17 12:10	Modified	SYS	Mill Water Pres	Mill Water Pressure- Total	Name changed from 'Mill Water P' ('Mill Water Pressure- Total')

Date & Time	Action	User	W Name (short)	Notes
12/03/17 12:07	Modified	SYS	D M7	Name changed from 'Machine 7' ('Machine 7')