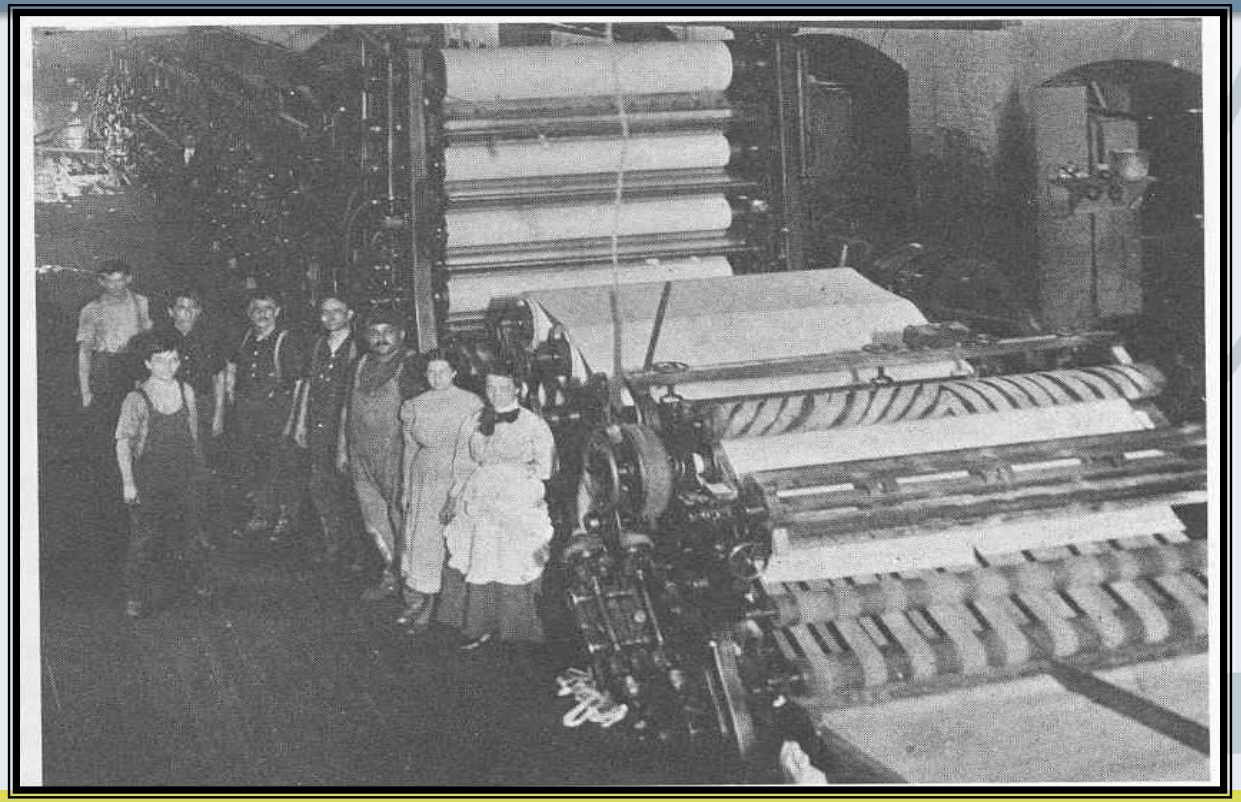
"PI Baking" Contest

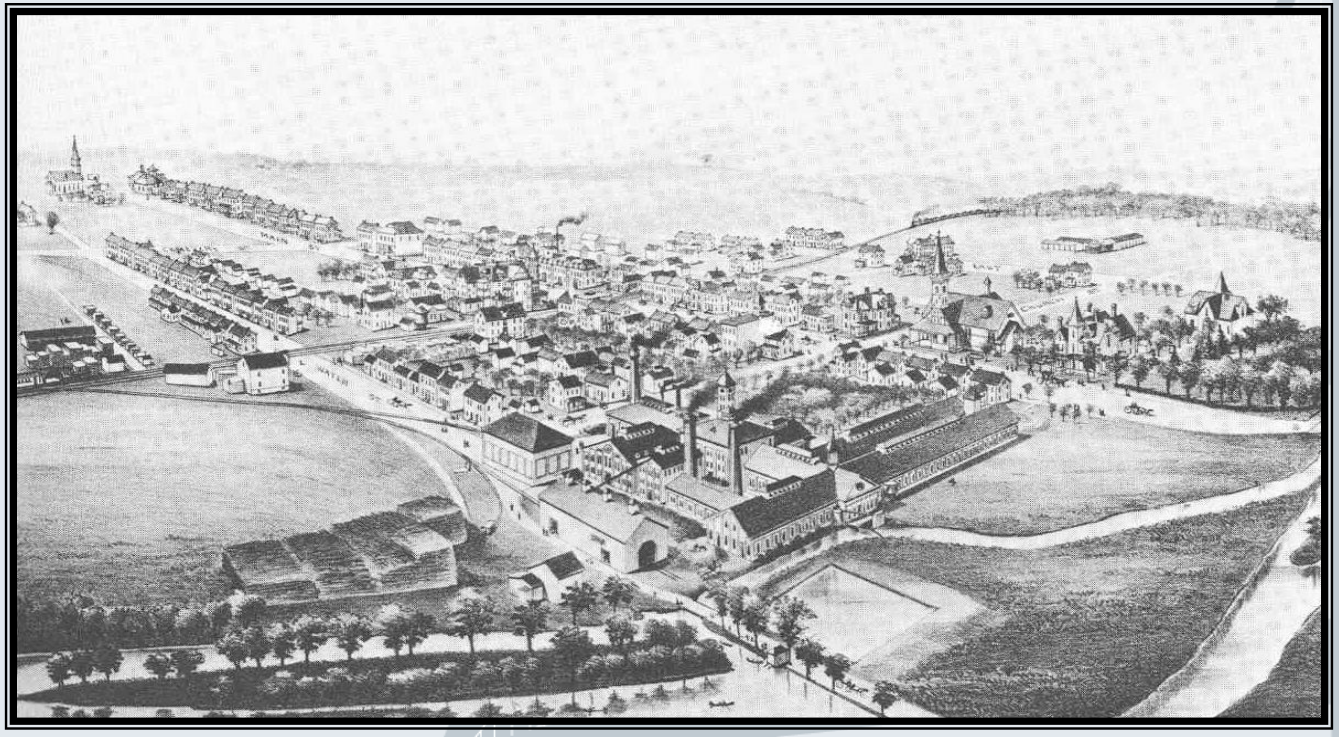
Pete Long – PI Administrator
Jason Leiby – Sr. Process Engineer

Empowering Business in Real Time
PI Infrastructure for the Enterprise

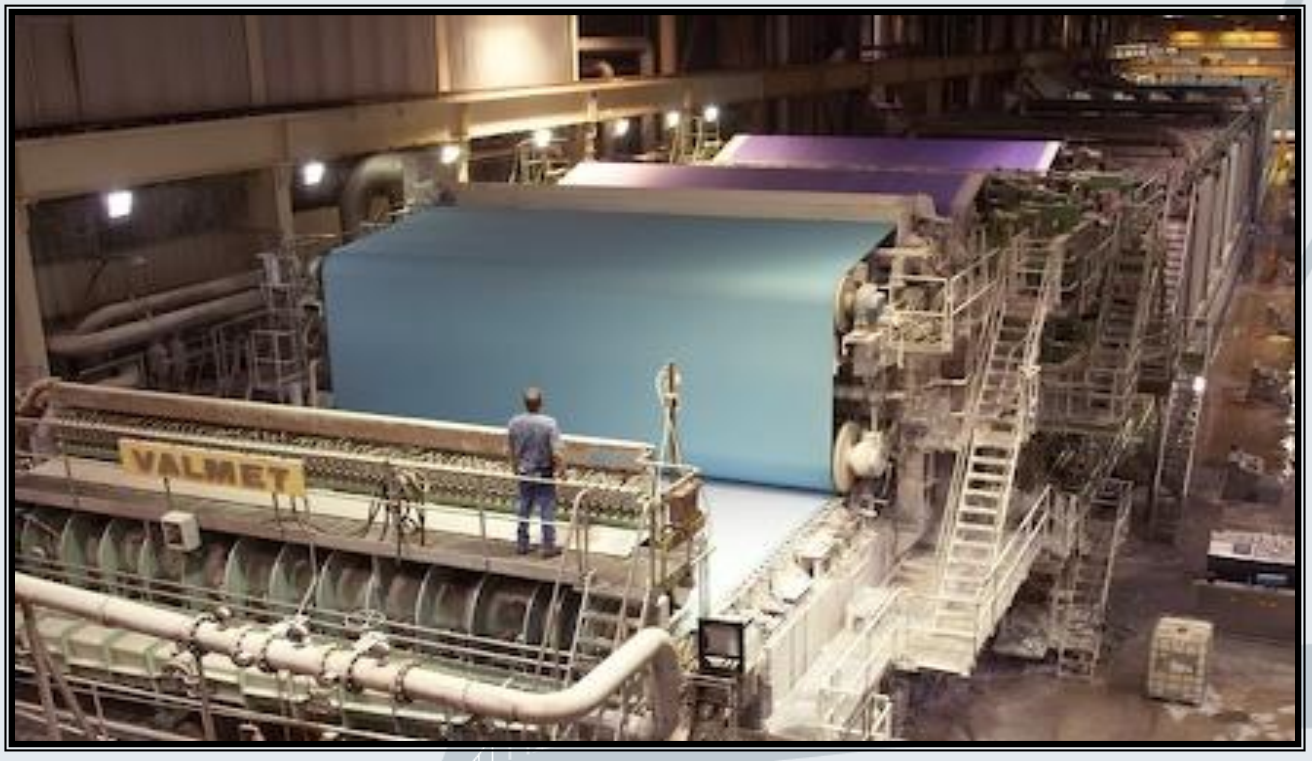
1863 - First Paper Machine



Spring Grove Mill - circa 1887

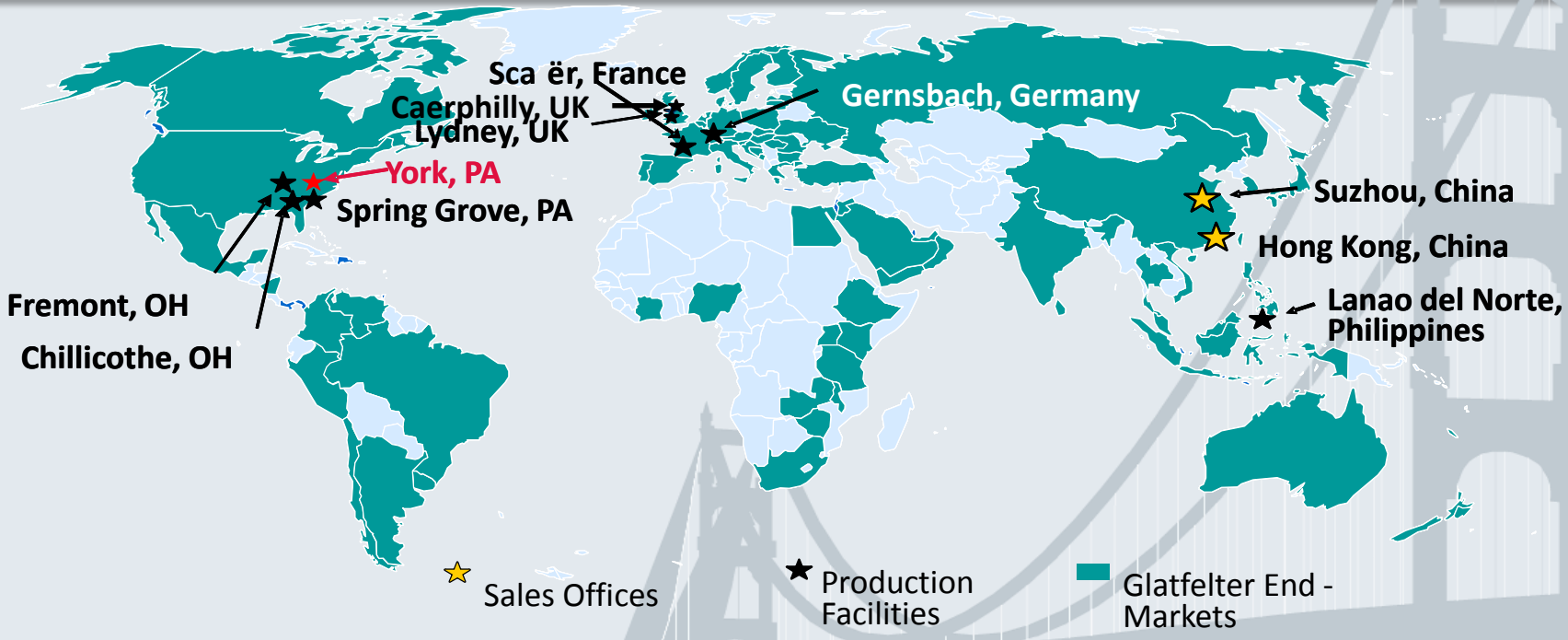


Today's Paper Machines



Spring Grove Mill Today

Glatfelter Worldwide



Glatfelter operates globally with production facilities located in the U.S., Europe and the Philippines, and it markets products into ~80 countries worldwide.

Specialty Papers

– Fine Boo

:

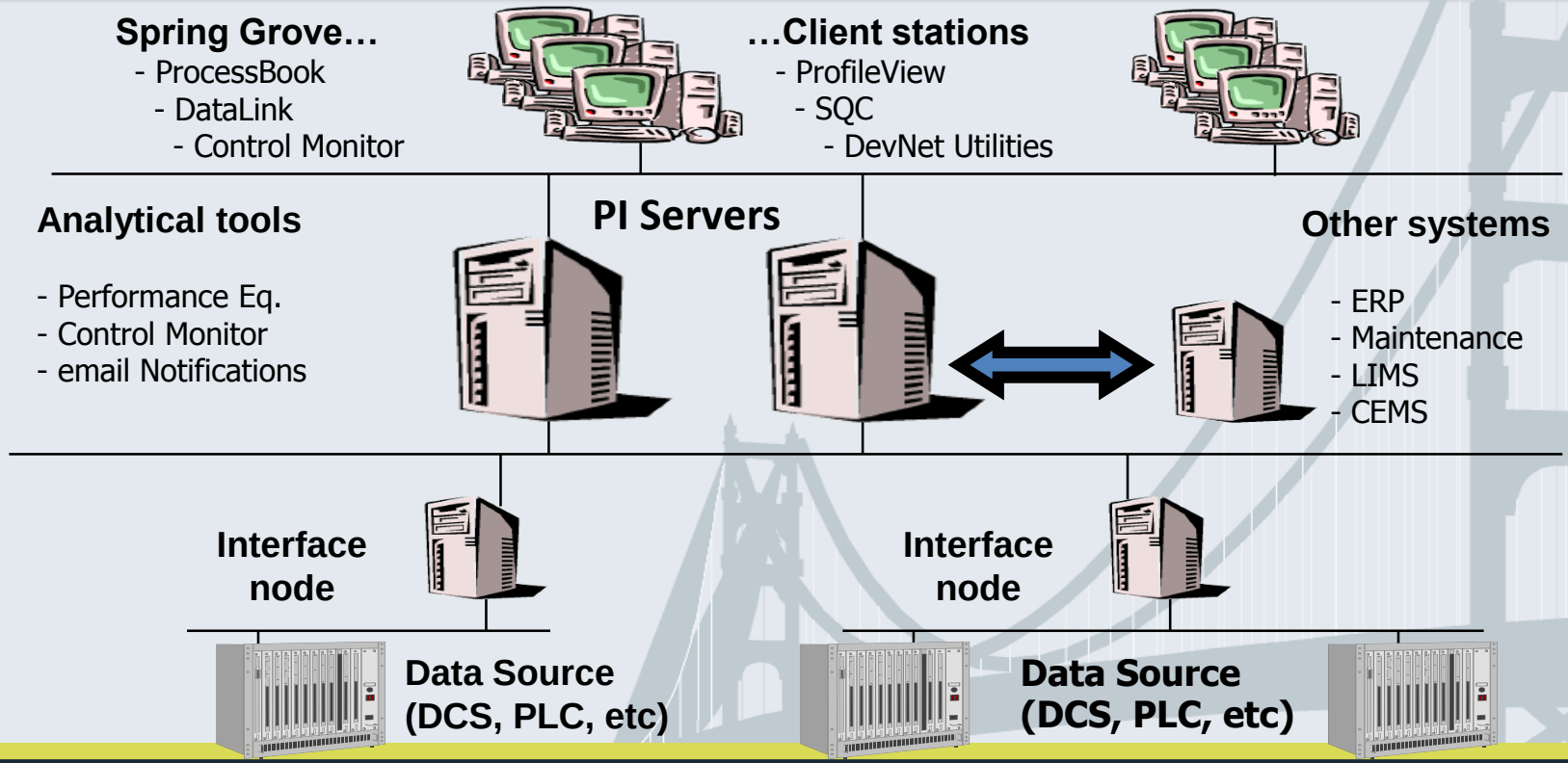
Industrial

pers

and Laminate

iture

Spring Grove Architecture…



It’s my data, and I want it now!

A Power Mower for Power Ideas

Looking for a Super Hero!

…easy as PI -or- PI is so easy a…

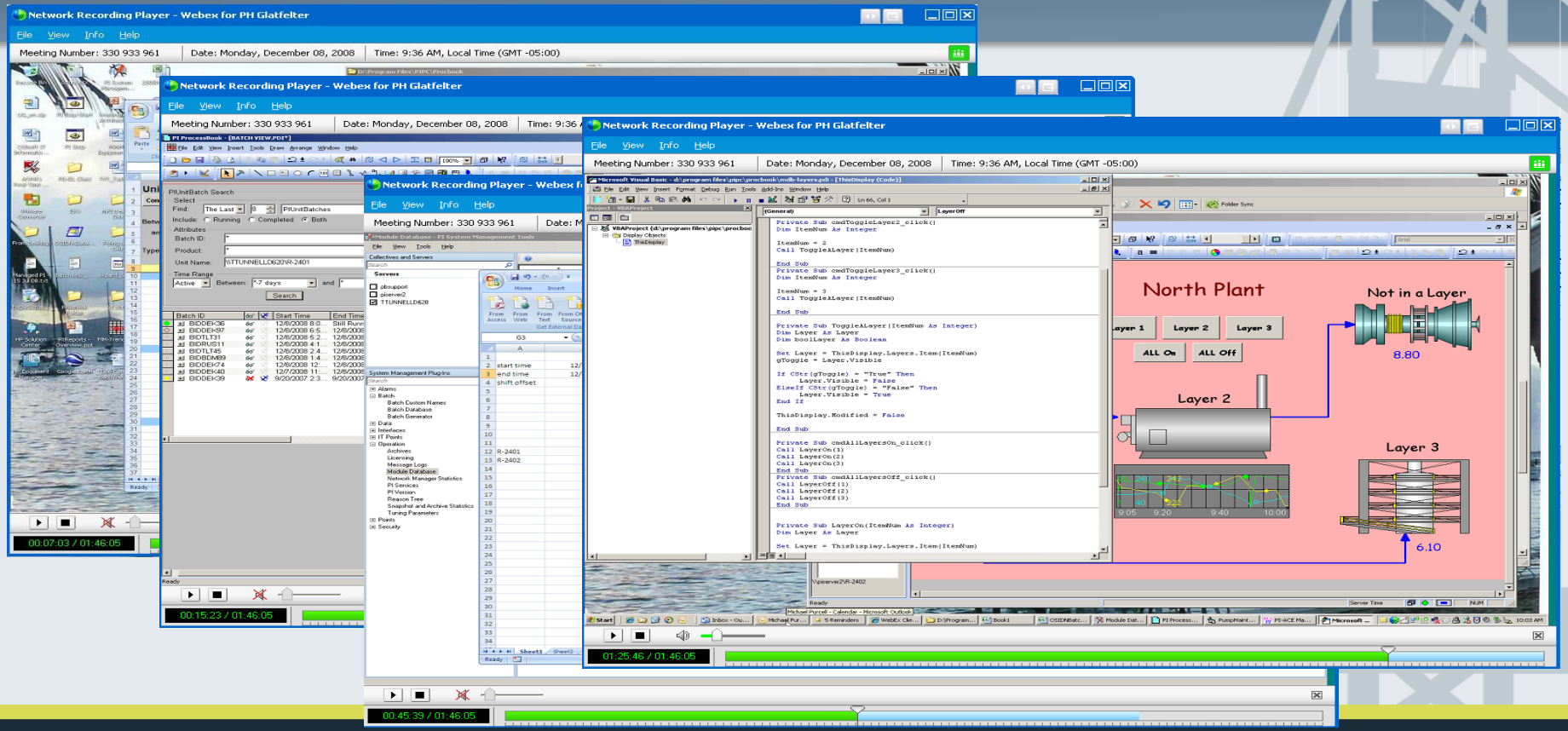
Display Case and Prizes

OSIsoft on-site Presentation

Understand a product and its capabilities and your imagination creates its uses.

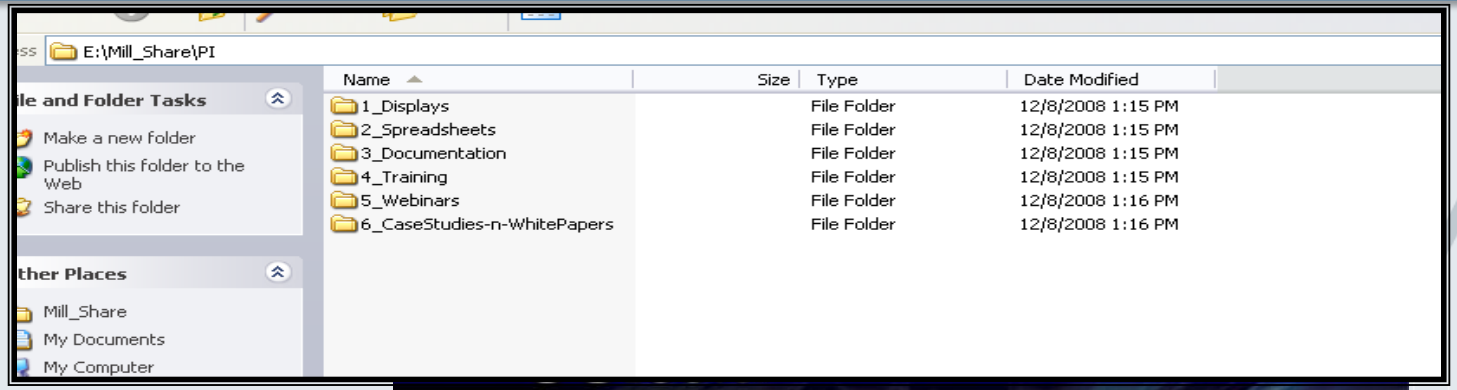
Some Q & A Time

Live Webinar

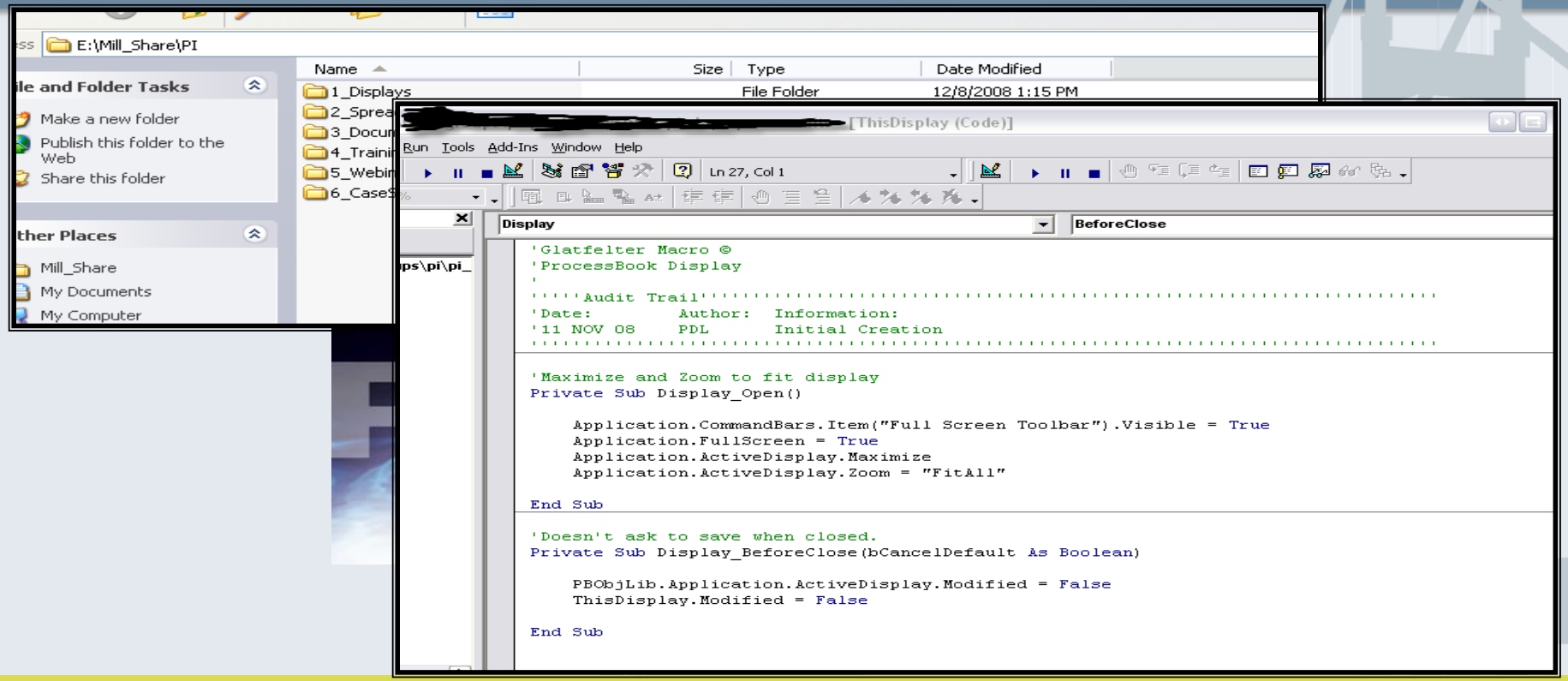


The Grand Prize

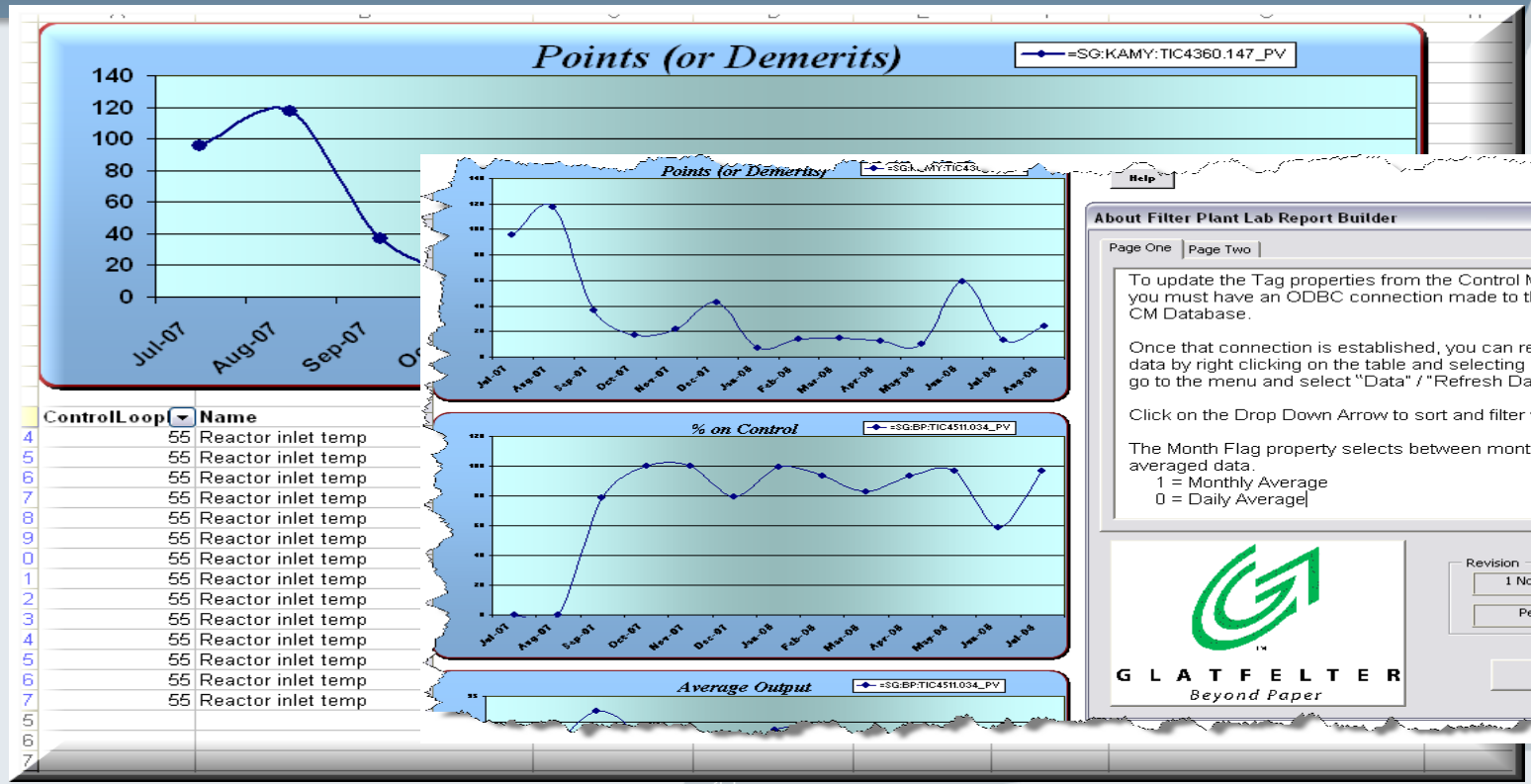
Improving the User Experience…



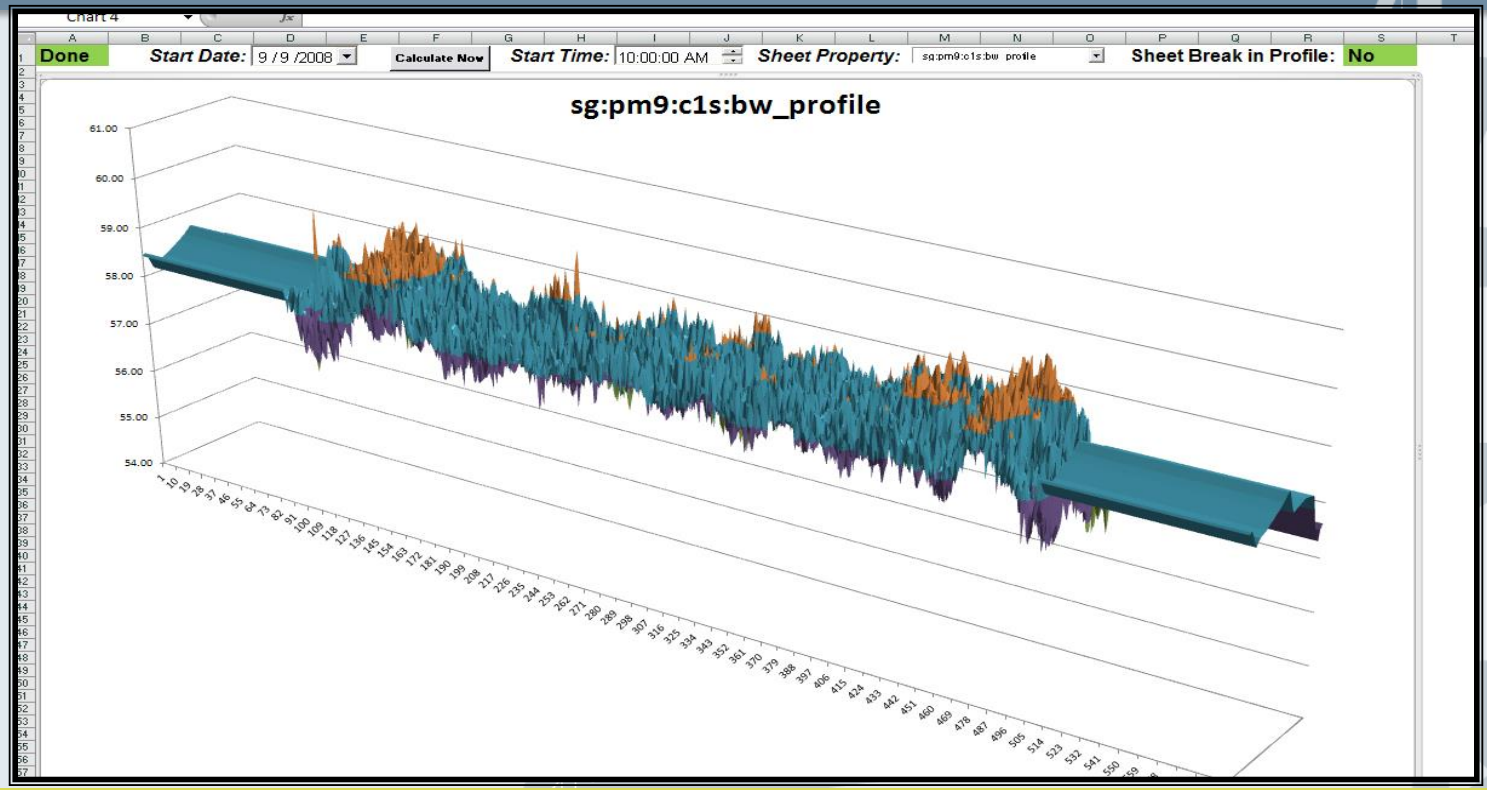
Improving the User Experience…



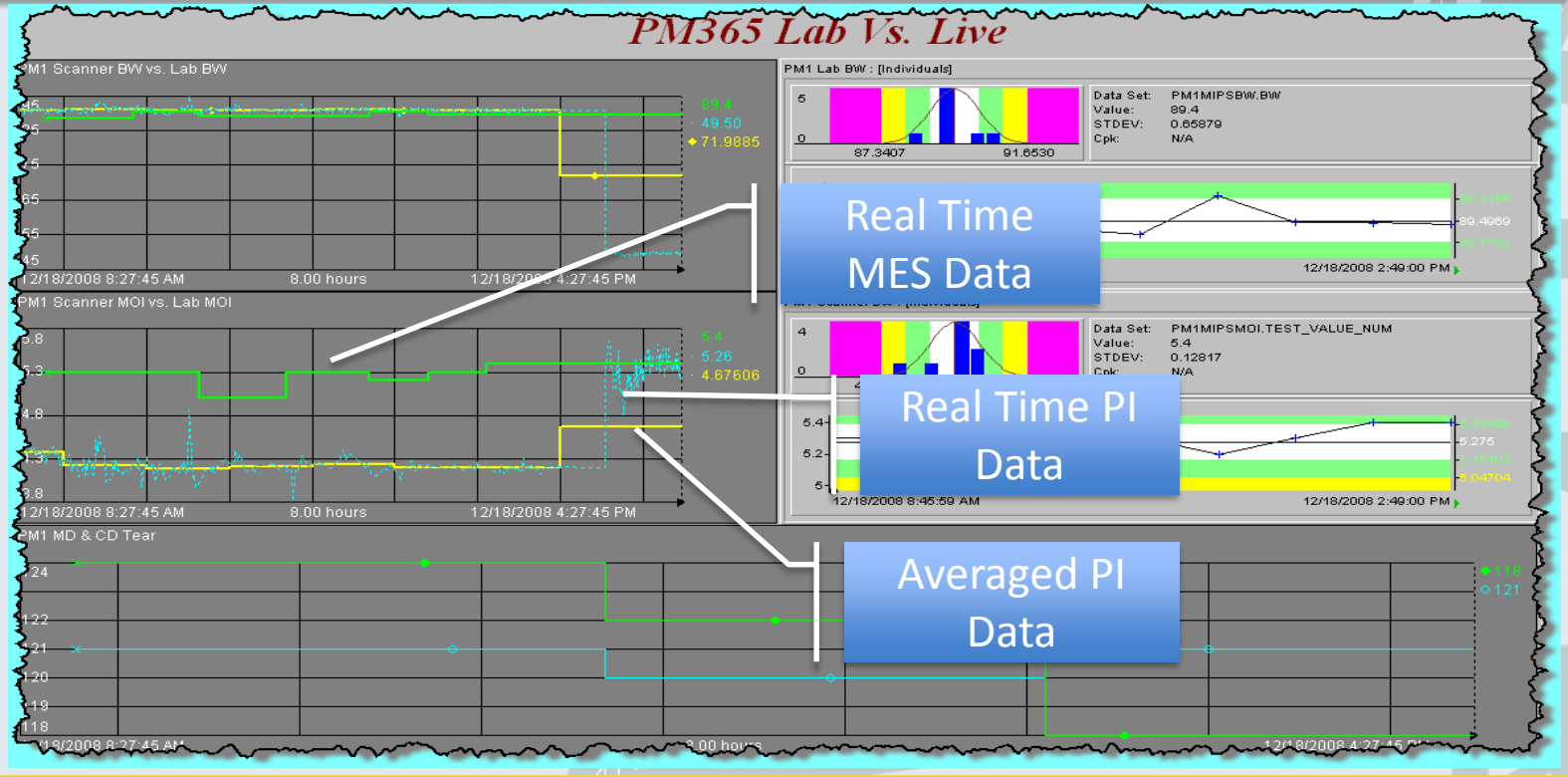
Contest example… "Value Now"



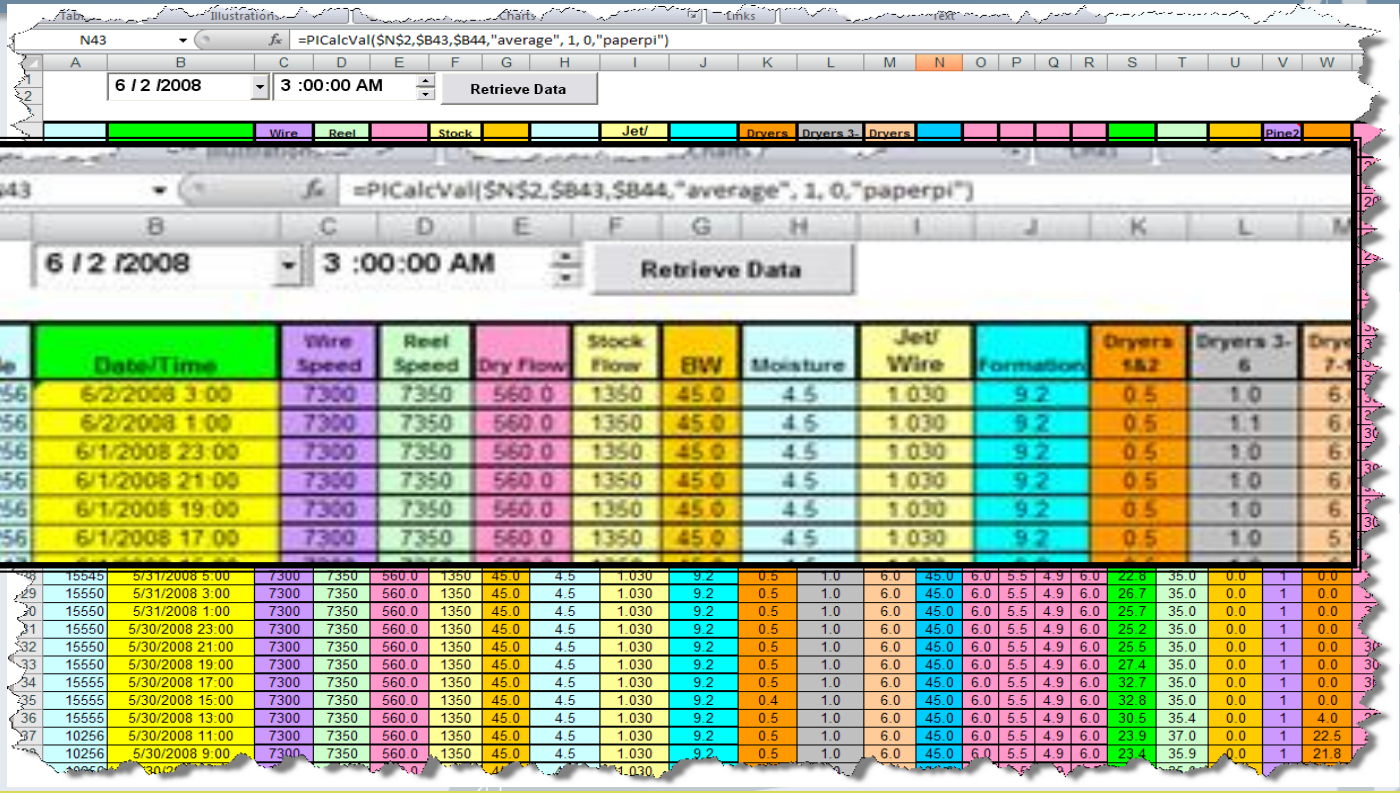
Contest example… “Value Now”



Contest example… “Value Now”



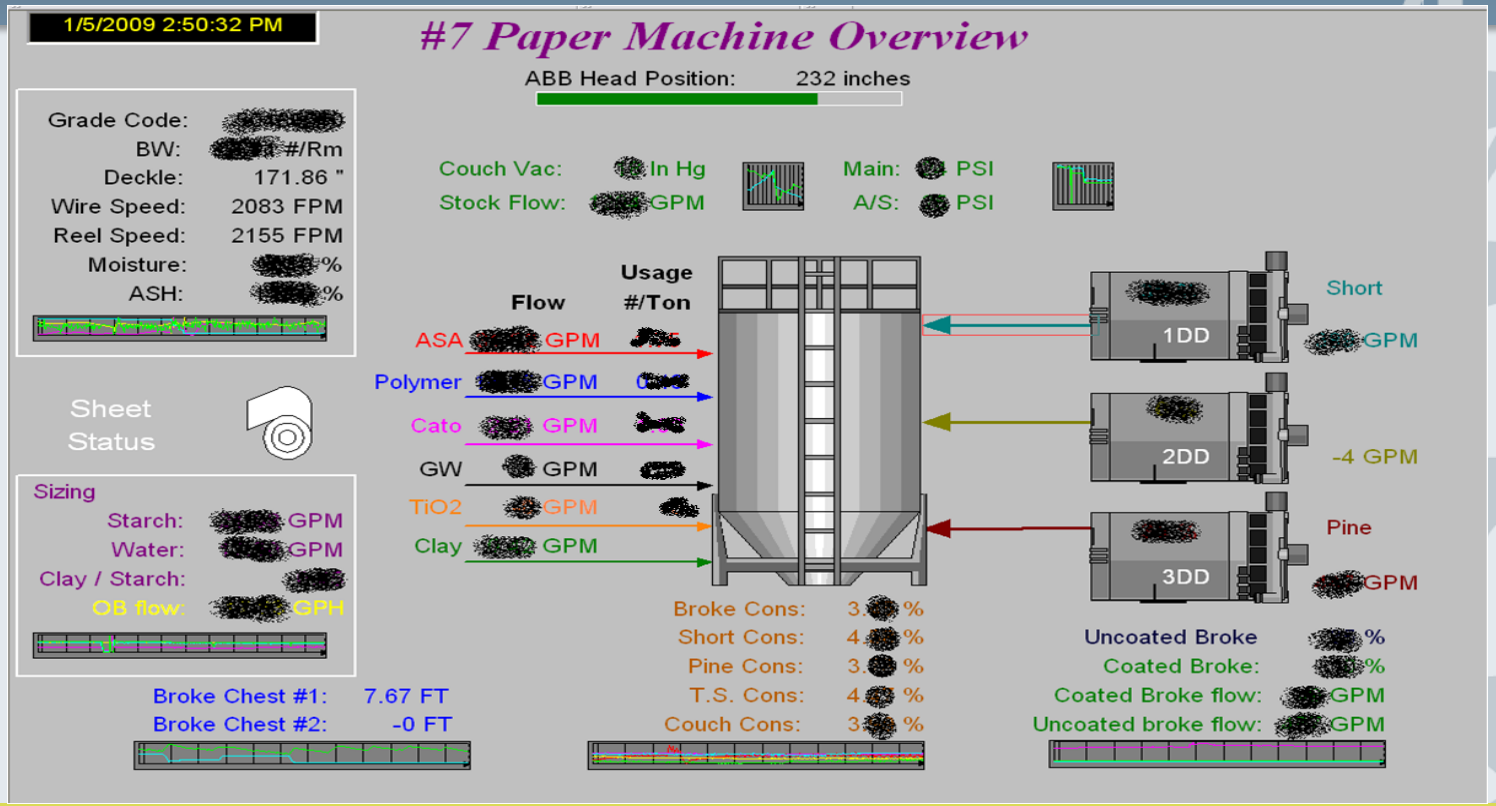
Contest example… "Value Now"



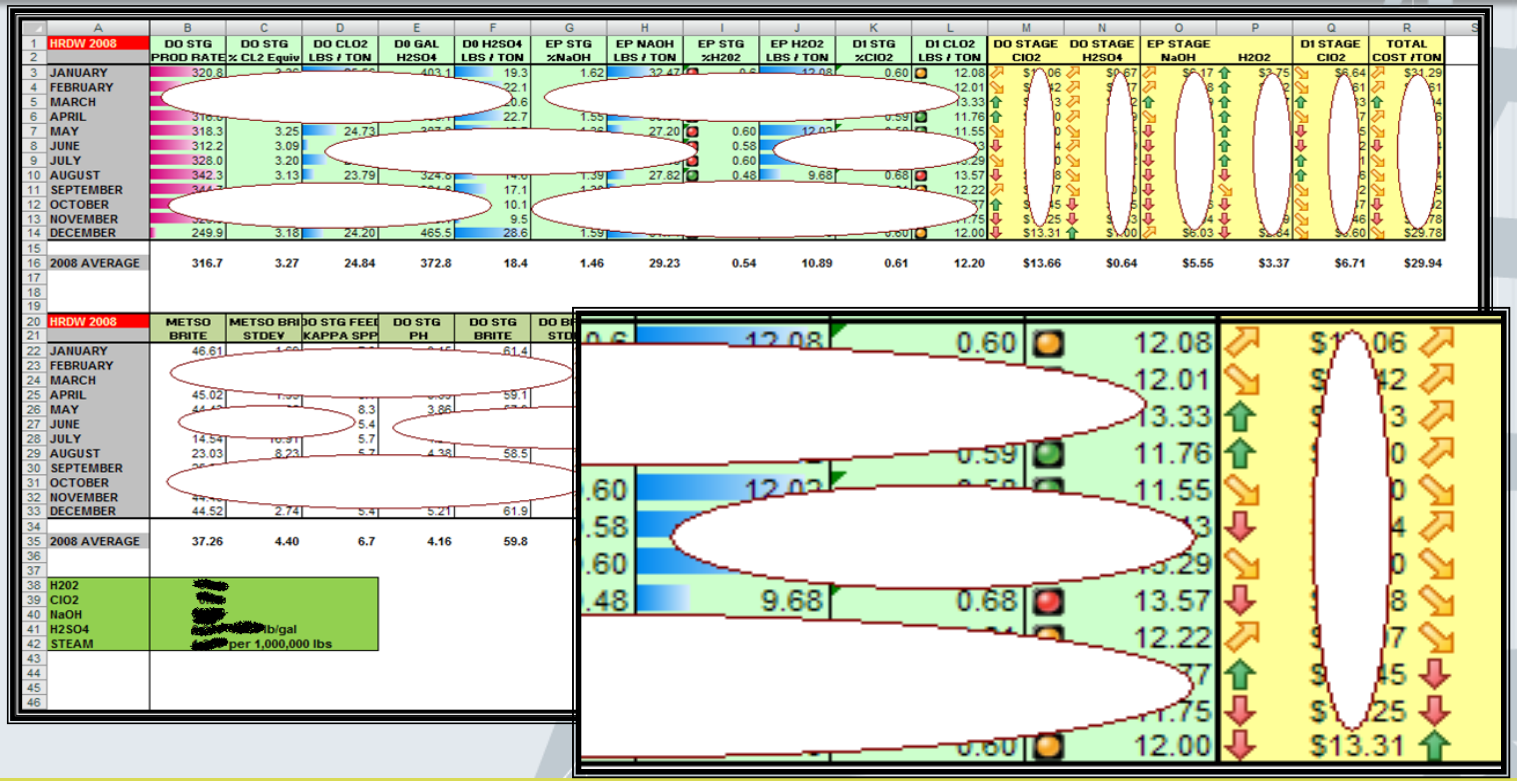
Grade	Date/Time	Wire Speed	Reel Speed	Dry Flow	Stock Flow	BW	Moisture	Jet/ Wire	Formation	Dryers 1&2	Dryers 3-6	Dryers 7-
10256	6/2/2008 3:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6
10256	6/2/2008 1:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.1	6
10256	6/1/2008 23:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6
10256	6/1/2008 21:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6
10256	6/1/2008 19:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6
10256	6/1/2008 17:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	5

15545	5/31/2008 5:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	22.8	35.0	0.0	1	0.0
15550	5/31/2008 3:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	26.7	35.0	0.0	1	0.0
15550	5/31/2008 1:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	25.7	35.0	0.0	1	0.0
15550	5/30/2008 23:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	25.2	35.0	0.0	1	0.0
15550	5/30/2008 21:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	25.5	35.0	0.0	1	0.0
15550	5/30/2008 19:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	27.4	35.0	0.0	1	0.0
15555	5/30/2008 17:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	32.7	35.0	0.0	1	0.0
15555	5/30/2008 15:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.4	1.0	6.0	45.0	6.0	5.5	4.9	6.0	32.8	35.0	0.0	1	0.0
15555	5/30/2008 13:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	30.5	35.4	0.0	1	4.0
10256	5/30/2008 11:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	23.9	37.0	0.0	1	22.5
10256	5/30/2008 9:00	7300	7350	560.0	1350	45.0	4.5	1.030	9.2	0.5	1.0	6.0	45.0	6.0	5.5	4.9	6.0	23.4	35.9	0.0	1	21.8

Contest example… "Value Now"



Contest example… “Value Now”

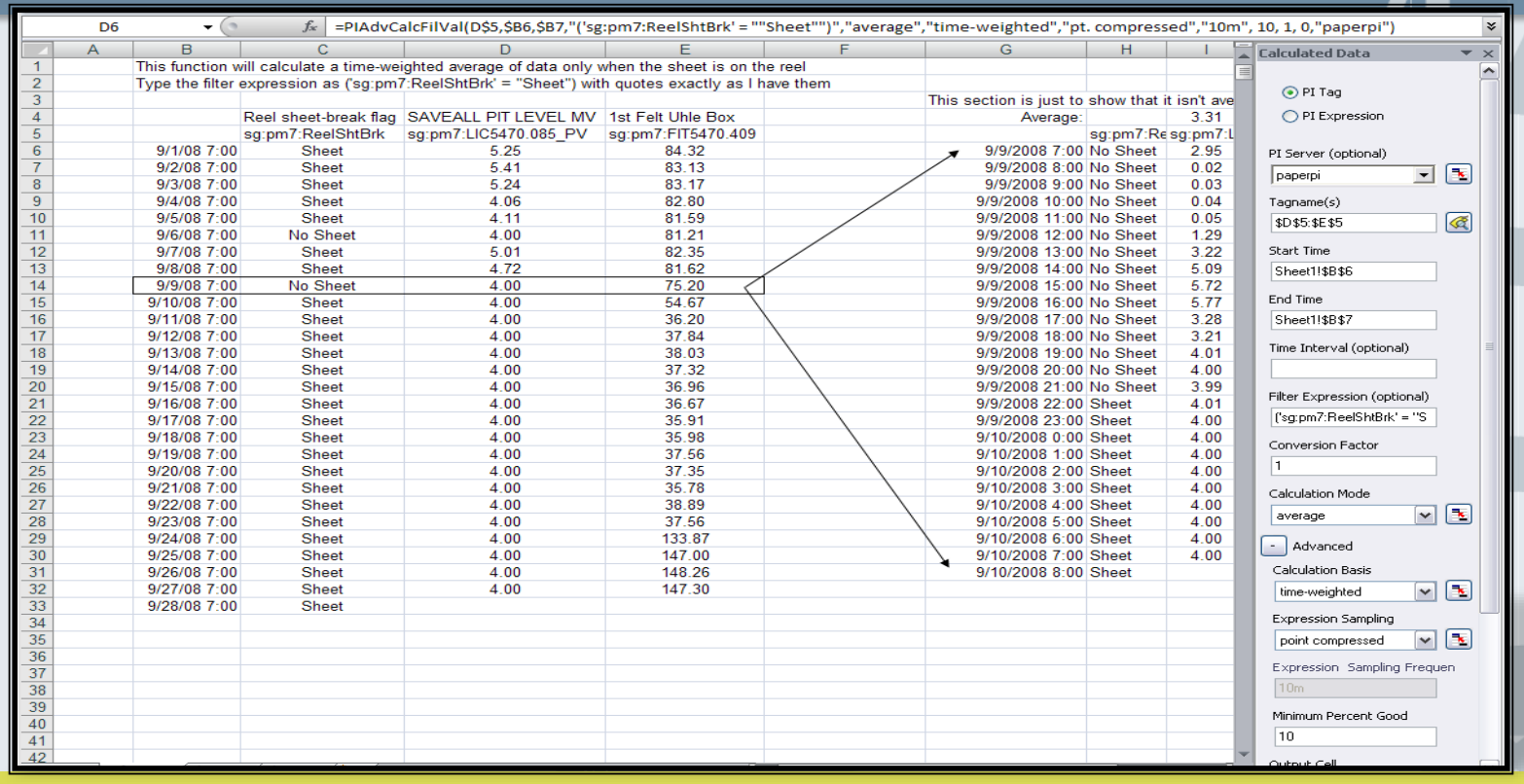


	DO STG PROD RATE	DO STG % CL2 Equiv	DO CLO2 LBS / TON	D0 GAL H2SO4	D0 H2SO4 LBS / TON	EP STG %NaOH	EP NAOH LBS / TON	EP STG %H202	EP H202 LBS / TON	D1 STG %CIO2	D1 CLO2 LBS / TON	DO STAGE CIO2	DO STAGE H2SO4	EP STAGE NaOH	EP STAGE H2O2	D1 STAGE CIO2	TOTAL COST /TON
HRDW 2008																	
JANUARY	320.8			403.1	19.3	1.62	32.47		12.08	0.60	12.08	$1.06	$0.67	$6.17	$3.75	$6.64	$31.29
FEBRUARY					22.1						12.01						
MARCH					20.6						13.33						
APRIL	316.0				22.7	1.55				0.59	11.76						
MAY	318.3	3.25	24.73				27.20	0.60	12.03		11.55						
JUNE	312.2	3.09						0.58									
JULY	328.0	3.20						0.60									
AUGUST	342.3	3.13	23.79	324.6		1.39	27.82	0.48	9.68	0.68	13.57						
SEPTEMBER	344.2				17.1						12.22						
OCTOBER					10.1												
NOVEMBER					9.5												
DECEMBER	249.9	3.18	24.20	465.5	28.6	1.59				0.60	12.00	$13.31	$1.00	$6.03			$29.78
2008 AVERAGE	316.7	3.27	24.84	372.8	18.4	1.46	29.23	0.54	10.89	0.61	12.20	$13.66	$0.64	$5.55	$3.37	$6.71	$29.94

	METSO BRITE	METSO BRI STDEV	DO STG FEE KAPPA SPP	DO STG PH	DO STG BRITE	DO BR STD
HRDW 2008						
JANUARY	46.61				61.4	
FEBRUARY						
MARCH						
APRIL	45.02				59.1	
MAY			8.3	3.86		
JUNE			5.4			
JULY	14.54		5.7			
AUGUST	23.03	8.23	5.7	4.38	58.5	
SEPTEMBER						
OCTOBER						
NOVEMBER						
DECEMBER	44.52	2.74	5.4	5.21	61.9	
2008 AVERAGE	37.26	4.40	6.7	4.16	59.8	

H202	[redacted]
CIO2	
NaOH	
H2SO4	lb/gal
STEAM	per 1,000,000 lbs

Contest example… "Value Now"



D6 =PIAdvCalcFilVal(D$5,$B6,$B7,"('sg:pm7:ReelShtBrk' = ""Sheet"")","average","time-weighted","pt. compressed","10m", 10, 1, 0,"paperpi")

	A	B	C	D	E	F	G	H	I
1		This function will calculate a time-weighted average of data only when the sheet is on the reel							
2		Type the filter expression as ('sg:pm7:ReelShtBrk' = "Sheet") with quotes exactly as I have them							
3							This section is just to show that it isn't ave		
4			Reel sheet-break flag	SAVEALL PIT LEVEL MV	1st Felt Uhle Box		Average:		3.31
5			sg:pm7:ReelShtBrk	sg:pm7:LIC5470.085_PV	sg:pm7:FIT5470.409			sg:pm7:Re	sg:pm7:L
6		9/1/08 7:00	Sheet	5.25	84.32		9/9/2008 7:00	No Sheet	2.95
7		9/2/08 7:00	Sheet	5.41	83.13		9/9/2008 8:00	No Sheet	0.02
8		9/3/08 7:00	Sheet	5.24	83.17		9/9/2008 9:00	No Sheet	0.03
9		9/4/08 7:00	Sheet	4.06	82.80		9/9/2008 10:00	No Sheet	0.04
10		9/5/08 7:00	Sheet	4.11	81.59		9/9/2008 11:00	No Sheet	0.05
11		9/6/08 7:00	No Sheet	4.00	81.21		9/9/2008 12:00	No Sheet	1.29
12		9/7/08 7:00	Sheet	5.01	82.35		9/9/2008 13:00	No Sheet	3.22
13		9/8/08 7:00	Sheet	4.72	81.62		9/9/2008 14:00	No Sheet	5.09
14		9/9/08 7:00	No Sheet	4.00	75.20		9/9/2008 15:00	No Sheet	5.72
15		9/10/08 7:00	Sheet	4.00	54.67		9/9/2008 16:00	No Sheet	5.77
16		9/11/08 7:00	Sheet	4.00	36.20		9/9/2008 17:00	No Sheet	3.28
17		9/12/08 7:00	Sheet	4.00	37.84		9/9/2008 18:00	No Sheet	3.21
18		9/13/08 7:00	Sheet	4.00	38.03		9/9/2008 19:00	No Sheet	4.01
19		9/14/08 7:00	Sheet	4.00	37.32		9/9/2008 20:00	No Sheet	4.00
20		9/15/08 7:00	Sheet	4.00	36.96		9/9/2008 21:00	No Sheet	3.99
21		9/16/08 7:00	Sheet	4.00	36.67		9/9/2008 22:00	Sheet	4.01
22		9/17/08 7:00	Sheet	4.00	35.91		9/9/2008 23:00	Sheet	4.00
23		9/18/08 7:00	Sheet	4.00	35.98		9/10/2008 0:00	Sheet	4.00
24		9/19/08 7:00	Sheet	4.00	37.56		9/10/2008 1:00	Sheet	4.00
25		9/20/08 7:00	Sheet	4.00	37.35		9/10/2008 2:00	Sheet	4.00
26		9/21/08 7:00	Sheet	4.00	35.78		9/10/2008 3:00	Sheet	4.00
27		9/22/08 7:00	Sheet	4.00	38.89		9/10/2008 4:00	Sheet	4.00
28		9/23/08 7:00	Sheet	4.00	37.56		9/10/2008 5:00	Sheet	4.00
29		9/24/08 7:00	Sheet	4.00	133.87		9/10/2008 6:00	Sheet	4.00
30		9/25/08 7:00	Sheet	4.00	147.00		9/10/2008 7:00	Sheet	4.00
31		9/26/08 7:00	Sheet	4.00	148.26		9/10/2008 8:00	Sheet	
32		9/27/08 7:00	Sheet	4.00	147.30				
33		9/28/08 7:00	Sheet						
34									
35									
36									
37									
38									
39									
40									
41									
42									

Calculated Data

PI Tag
PI Expression

PI Server (optional): paperpi

Tagname(s): $D$5:$E$5

Start Time: Sheet1!$B$6

End Time: Sheet1!$B$7

Time Interval (optional):

Filter Expression (optional): ('sg:pm7:ReelShtBrk' = "S

Conversion Factor: 1

Calculation Mode: average

Advanced

Calculation Basis: time-weighted

Expression Sampling: point compressed

Expression Sampling Frequen: 10m

Minimum Percent Good: 10

Output Cell

Contest example… "Value Now"

Grade	Date/Time	Wire Speed	Dry Flow	Stock Flow	BW	GW	ASA	TiO2	OB	1DD	2DD	Pine 2DD	3DD	4DD	Short 3DD	Pine	Short	Broke	Coated	12/3/2008	Deckle	Main	5th
14468	12/3/2008 21:00	1628	446.3	1203	68	152	0.66	0	0.0	20.6	20.6	0	22.0	22.4	0	44.4	41.2	14.1			181.4		
14468	12/3/2008 20:00	1628	448.5	1193	68	151	0.70	0	0.0	20.8	20.8	0	22.0	22.6	0	44.6	41.6	13.0			181.4		
14468	12/3/2008 19:00	1628	450.0	1199	68	147	0.73	0	0.0	20.9	20.4	0	22.0	22.6	0	44.6	41.3	13.6			181.3		
14468	12/3/2008 18:00	1628	453.2	1232	68	145	0.76	0	0.0	20.1	20.0	0	22.0	22.7	0	44.7	40.1	14.9			181.1	38.1	24
14468	12/3/2008 17:00	1628	454.2	1317	68	148	0.78	0	0.0	20.0	20.0	0	22.0	22.8	0	44.8	40.0	15.0			181.2	38.1	26
14468	12/3/2008 16:00	1628	448.1	1357	67	148	0.81	0	0.0	20.0	20.0	0	22.0	22.9	0	44.9	40.0	15.0			181.7	38.0	27
14468	12/3/2008 15:00	1628	449.7	1290	67	147	0.83	0	0.0	20.0	20.0	0	22.0	22.8	0	44.8	40.0	15.2			181.8	38.1	29
14468	12/3/2008 14:00	1627	459.8	1268	68	144	0.86	0	0.0	20.0	20.0	0	21.3	21.3	0	42.5	40.0	17.5			181.8	39.0	29
14468	12/3/2008 13:00	1627	467.3	1262	68	136	0.88	0	0.0	20.0	20.0	0	19.4	19.4	0	38.8	40.0	21.2	0.0		181.6	40.2	26
14468	12/3/2008 12:00	1628	475.3	1279	68	126	0.90	0	0.0	20.0	20.0	0	16.3	16.3	0	32.6	40.0	27.4	0.0		181.4	43.0	25
14468	12/3/2008 11:00	1628	475.3	1273	67	123	0.90	0	0.0	20.0	20.0	0	15.0	15.0	0	30.0	40.0	30.0	0.0		183.2	44.0	24
14468	12/3/2008 10:00	1628	467.8	1235	67	129	0.90	0	0.0	20.0	20.0	0	16.4	16.4	0	32.8	40.0	27.2	0.0		190.1	44.0	25
14468	12/3/2008 9:00	1628	462.1	1219	67	131	0.90	0	0.0	20.0	20.0	0	17.5	17.5	0	35.0	40.0	25.0	0.0		189.8	43.7	25
14468	12/3/2008 8:00	1628	460.9	1207	67	138	0.90	0	0.1	20.0	20.0	0	19.7	19.7	0	39.4	40.0	20.6	0.0		190.5	44.1	32
14468	12/3/2008 7:00	1628	463.4	1204	68	140	0.90	0	0.1	20.0	20.0	0	21.0	21.0	0	42.0	40.0	18.0	0.0		190.6	45.0	33
14468	12/3/2008 6:00	1628	466.9	1205	68	137	0.90	0	0.2	20.0	20.0	0	20.8	20.8	0	41.6	40.0	18.4	0.0		190.4	45.1	32
14468	12/3/2008 5:00	1628	464.0	1197	68	130	0.90	0	0.2	20.0	20.0	0	20.0	20.0	0	40.0	40.0	20.0	0.0		190.5	45.0	29
14468	12/3/2008 4:00	1767	460.9	1193	61	162	0.92	0	9.2	25.6	8.6	0	20.0	20.0	0	40.0	34.2	25.7	0.0		184.5	40.3	33
9361	12/3/2008 3:00	1927	479.1	1247	61	154	0.97	0	22.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		184.0	52.1	36
9361	12/3/2008 2:00	1927	482.9	1258	61	154	1.02	0	22.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		185.1	52.1	36
9361	12/3/2008 1:00	1927	486.6	1261	61	154	1.07	0	22.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		186.5	50.6	36
9361	12/3/2008 0:00	1927	490.4	1256	61	158	1.12	0	22.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		186.5	49.9	35
9361	12/2/2008 23:00	1927	494.1	1257	61	157	1.18	0	22.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		186.5	50.0	35
9361	12/2/2008 22:00	1926	494.2	1253	61	153	1.23	0	22.1	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		186.8	50.1	36
9361	12/2/2008 21:00	1932	486.4	1236	60	141	1.34	0	21.6	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		186.2	47.7	32
9351	12/2/2008 20:00	2002	424.1	1086	52	164	3.10	0	18.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		184.8	35.8	22
9351	12/2/2008 19:00	2002	421.2	1078	52	164	3.10	0	18.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		184.8	36.0	22
9351	12/2/2008 18:00	2002	418.4	1076	52	166	3.10	0	11.2	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		184.1	31.5	21
9351	12/2/2008 17:00	2002	415.6	1087	52	168	3.10	0	16.3	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.4	35.8	22
9351	12/2/2008 16:00	2002	413.4	1094	52	167	3.10	0	18.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.5	36.1	21
9351	12/2/2008 15:00	2002	411.4	1098	52	163	3.10	0	18.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.4	36.0	20
9351	12/2/2008 14:00	2002	409.5	1102	52	163	3.10	0	18.1	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.5	36.0	20
9351	12/2/2008 13:00	2002	417.7	1100	52	167	3.10	0	18.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.7	36.0	21
9351	12/2/2008 12:00	2002	422.6	1095	52	157	3.10	0	18.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.8	36.1	20
9351	12/2/2008 11:00	2001	420.3	1087	52	147	3.10	0	18.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.7	36.1	20
9351	12/2/2008 10:00	2002	417.9	1081	52	138	3.10	0	17.7	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.5	36.0	21
9351	12/2/2008 9:00	2002	414.6	1082	52	148	3.10	0	17.0	30.0	0.0	1	20.0	20.0	0	40.0	30.0	30.0	0.0		183.0	35.9	23
9351	12/2/2008 8:00	1985	407.7	1059	53	171	2.62	0	18.0	30.6	0.0	1	20.0	20.0	0	40.0	30.6	29.4	0.0		181.7	38.4	22
5850	12/2/2008 7:00	1901	355.3	905	50	317	1.10	0	21.0	35.0	0.0	1	20.0	20.0	0	40.0	35.0	25.0	0.0		176.6	37.9	21
5850	12/2/2008 6:00	1901	353.4	902	50	321	1.10	0	21.0	35.0	0.0	1	20.0	20.0	0	40.0	35.0	25.0	0.0		176.5	38.1	21
5850	12/2/2008 5:00	1901	351.4	891	51	318	1.10	0	21.0	35.0	0.0	1	20.0	20.0	0	40.0	35.0	25.0	0.0		176.6	38.2	21
5850	12/2/2008 4:00	1901	349.5	894	51	321	1.10	0	21.0	35.0	0.0	1	20.0	20.0	0	40.0	35.0	25.0	0.0		176.9	38.2	22
5850	12/2/2008 3:00	1901	347.6	908	50	326	1.10	0	21.0	35.0	0.0	1	20.0	20.0	0	40.0	35.0	25.0	0.0		176.9	38.2	22
5850	12/2/2008 2:00	1901	345.9	907	51	328	1.10	0	19.0	35.0	0.0	1	20.0	20.0	0	40.0	35.0	25.0	0.0		176.8	35.2	21

Collecting the Vote:

GLATFELTER

OSIsoft.

Glatfelter PI Baking Contest Voting Site

It's finally coming to an end; no more email updates, no more pleas.
All the projects have been submitted, and now the only thing left is to vote for your favorite project.

Here are some suggestions that you can use for choosing the winning project:

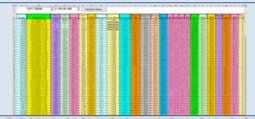
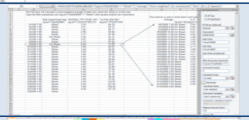
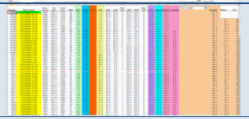
- Is the Project useful for troubleshooting Historical Events?
- Can the Project compare current conditions with previous operations?
- Does the Project compile many complex tasks into an easy-to-use tool?
- Can the Project make our daily job easier?

All entries will be awarded a prize, but the Grand Prize is a free ticket to the 2009 OSIsoft User Conference

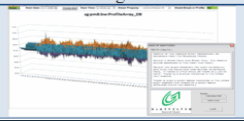
User Conference Info

Below are the projects that were submitted:
Just click on the project icon to see more information on the project and to test it out (if you have PI).

Entries eligible for the contest:

Tim [redacted]		
Steve [redacted]		
Jason [redacted]		
Paul [redacted]		

Entries not eligible for the contest:



Collecting the Vote:

GLATFELTER

OSIsoft.

Project 3 by Ste

The spreadsheet imports data from the ABB DCS
Excel calculates the monthly average cost per ton o

The data captured the benefits of a cost reduction t
peroxide (H2O2) and sulfuric acid (H2SO4) witho
the costs are trending above, below, or near yearly
based on the cell values to improve easy readability

Office 2007 is required for the cool arrows.

To vote for this project, click on "Vote for Me!" ar

Please only vote for one project.

Preview the Project in Excel
Preview the Project in Excel

Edit Hyperlink

Link to:
- Existing File or Web Page
- Place in This Document
- Create New Document
- E-mail Address

Text to display: Vote for Me!

ScreenTip...

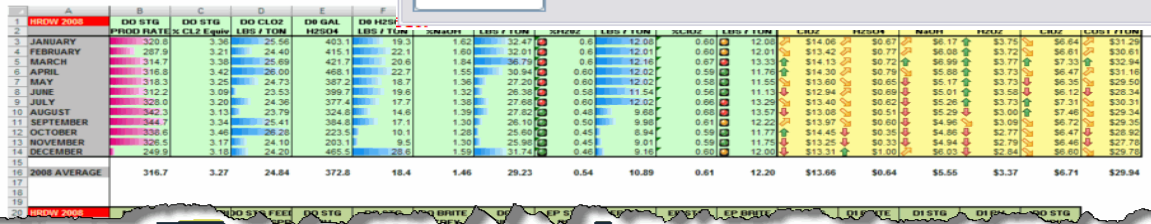
E-mail address: mailto:Pete.Long@Glatfelter.com

Subject: Vote%20For%20Paul's%20Spreadsheet

Recently used e-mail addresses:
mailto:Pete.Long@Glatfelter.com?subject=Vote%20For%20Paul's%20Spreadsheet
mailto:Pete.Long@Glatfelter.com?subject=Vote%20For%20Jason's%20Opp%20Log

Remove Link

OK Cancel



	DO STG PROD RATE	DO STG % CL2 Equiv	DO CLO2 LBS / TON	D8 GAL H2SO4	D8 H2SO4 LBS / TON											
HRDW 2008																
JANUARY	320.6	3.36	25.56	403.1	19.3	1.62	32.47	0.6	12.08	0.60	12.08	$14.06	$0.67	$6.17	$3.75	$6.64	$31.29
FEBRUARY	287.9	3.21	24.40	415.1	22.1	1.60	32.01	0.6	12.01	0.60	12.01	$13.42	$0.77	$6.08	$3.72	$6.61	$30.61
MARCH	314.7	3.38	25.69	421.7	20.6	1.84	36.79	0.6	12.16	0.67	13.33	$14.13	$0.72	$6.99	$3.77	$7.33	$32.94
APRIL	316.8	3.42	26.00	468.1	22.7	1.55	30.94	0.60	12.02	0.59	11.76	$14.30	$0.79	$5.88	$3.73	$6.47	$31.16
MAY	318.3	3.25	24.73	387.2	18.7	1.36	27.20	0.60	12.02	0.58	11.55	$13.60	$0.65	$5.17	$3.73	$6.35	$29.50
JUNE	312.2	3.09	23.53	399.7	19.6	1.32	26.38	0.58	11.54	0.56	11.13	$12.94	$0.69	$5.01	$3.58	$6.12	$28.34
JULY	328.0	3.20	24.36	377.4	17.7	1.38	27.68	0.60	12.02	0.66	13.29	$13.48	$0.62	$5.26	$3.73	$7.31	$30.31
AUGUST	342.3	3.13	23.79	324.8	14.6	1.39	27.82	0.48	9.68	0.68	13.57	$13.08	$0.51	$5.29	$3.00	$7.46	$29.34
SEPTEMBER	344.7	3.34	25.41	384.8	17.1	1.30	26.10	0.50	9.98	0.61	12.22	$13.97	$0.60	$4.96	$3.09	$6.72	$29.35
OCTOBER	338.6	3.46	26.28	223.5	10.1	1.28	25.60	0.45	8.94	0.59	11.77	$14.45	$0.35	$4.86	$2.77	$6.47	$28.92
NOVEMBER	326.5	3.17	24.10	203.1	9.5	1.30	25.90	0.45	9.01	0.59	11.75	$13.25	$0.33	$4.94	$2.79	$6.46	$27.78
DECEMBER	249.9	3.18	24.20	465.5	28.6	1.59	31.74	0.46	9.16	0.60	12.00	$13.31	$1.00	$6.03	$2.84	$6.60	$29.78
2008 AVERAGE	316.7	3.27	24.84	372.8	18.4	1.46	29.23	0.54	10.89	0.61	12.20	$13.66	$0.64	$5.55	$3.37	$6.71	$29.94
HRDW 2008																


SimpsonCrazy.com
Always Real. Always Simpsons.

Future Drives… "Value over Time"

Pick Grade | Run Report | Help

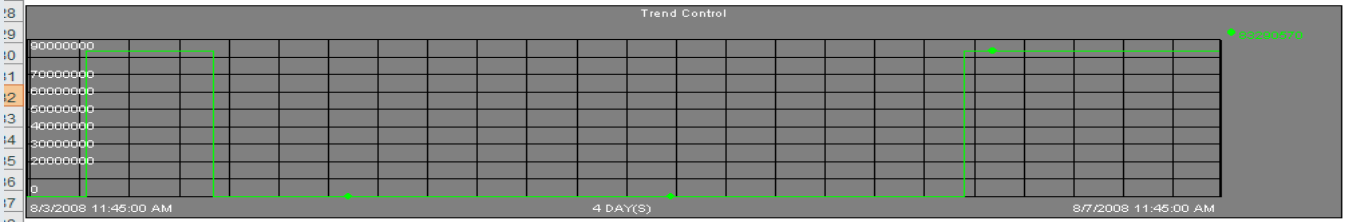
Date: 8/5/2008
Time: 11:45:00 AM
Search Time: 8/5/08 11:45 AM
Grade Request: 14648

Run Start: 11-Aug-08 07:21:56 PM
Run End: 12-Aug-08 12:23:55 PM
Run Duration Days: 0.71

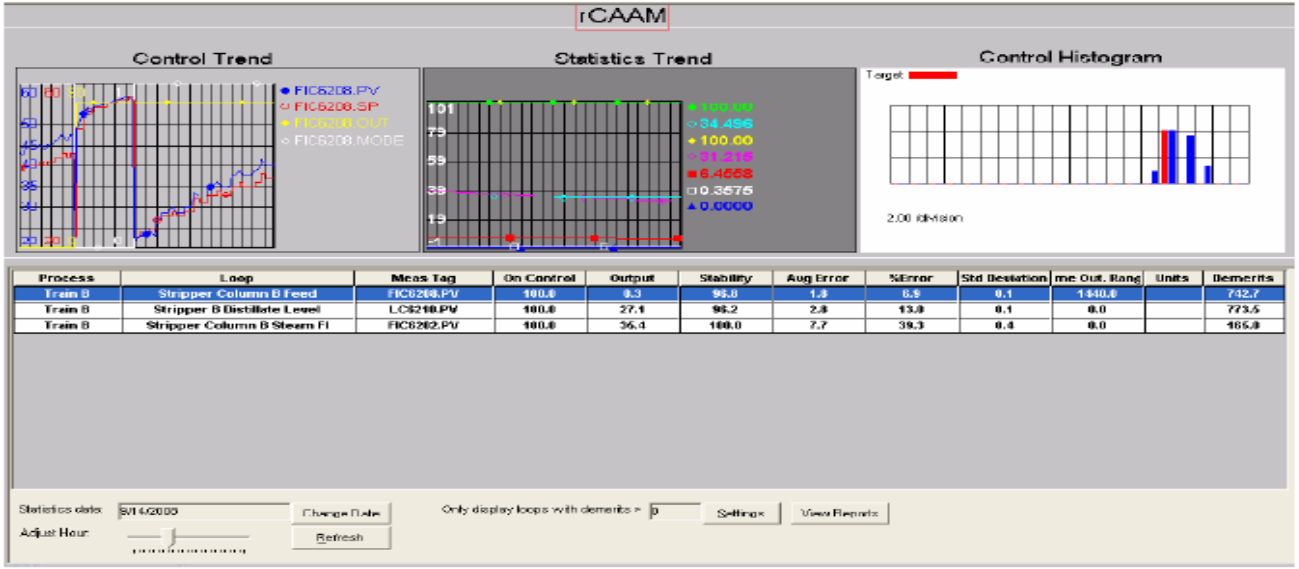
$ per Hour:	$50,859.59		
$ per Ton:	$5,408.02		
Totals:	$866,294.88	$869,727.52	$3,432.64

Product	Units	Act. Usage	Conv. Factor	Rate	Std Use	Use Difference	Act. Cost	Std Cost	Cost Difference
Refiner 1 - HW	TPD	29.22	1	$350.00		-29.22	$10,226.71	$10,482.38	$255.67
Refiner 2 - HW	TPD	24.55	1	$350.00		-24.55	$8,592.85	$8,399.66	-$193.19
Refiner 3 - SW	TPD	66.25	1	$468.00		-66.25	$31,004.32	$31,779.43	$775.11
BROKE-BL CH	GPM	124.82	3.5	$700.00		-124.82	$305,807.70	$298,932.26	-$6,875.44
Cato Flow	GPM	86.89	0.75	$5.00		-86.89	$325.84	$333.99	$8.15
R-68 RED	GPM	-28.71	0.6	$5.00		28.71	-$86.12	-$84.19	$1.94
R-68 BLUE	GPM	24162.85	0.8	$5.00		-24162.85	$96,651.40	$99,067.68	$2,416.28
Polymer Flow	GPM	2363.40	0.35	$5.00		-2363.40	$4,135.95	$4,042.97	-$92.99
TIO2 High Flow MV	GPM	62.80	0.25	$5.00		-62.80	$78.50	$80.46	$1.96
TIO2 LO Flow	GPM	74.64	0.25	$5.00		-74.64	$93.30	$91.20	-$2.10
Glatco Wht Flow MV	GPM	24219.90	0.63	$22.25		-24219.90	$339,502.42	$347,989.98	$8,487.56
Starch Flow	GPM	14829.47	0.81	$5.00		-14829.47	$60,059.35	$58,709.04	-$1,350.31
50# to pm1	klb/hr	47449.40	1	$0.01		-47449.40	$602.61	$602.61	$0.00
Hourly Margin	Days	0.71	24	$546.00		-0.71	$9,300.05	$9,300.05	$0.00
Production	Tons	160.19							

Trend Start: 03-Aug-08 11:45:00 AM
Trend End: 07-Aug-08 11:45:00 AM



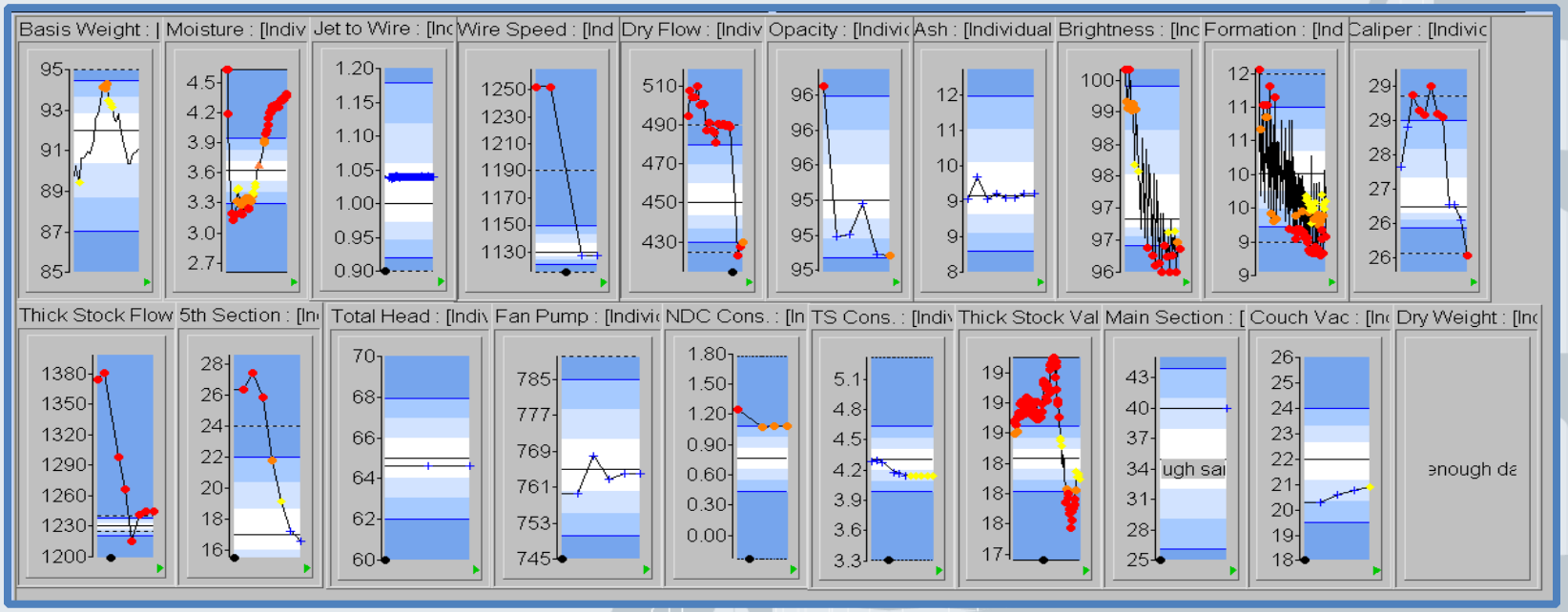
Future Drives… "Value over Time"



The RoviSys Company Aurora, Ohio 330.562.8600
www.rovisys.com Apex, North Carolina 919.387.1200

ROVISYS
Independent Automation Solutions

Future Drives… "Value over Time"



Wrap-up... "Value Now, Value over Time"

Project	Save Money	Save Time	Improve Visibility	Increase Production	Reduce Downtime
C.M. Trending		✔	✔		✔
3D Profiles		✔	✔	✔	
Lab Compare	✔	✔	✔	✔	✔
Run Properties	✔	✔	✔	✔	✔
P.M. Overview		✔	✔		
Cost vs. Quality	✔	✔	✔	✔	
Adv. Calc. Tutorial		✔	✔		
B.R. Efficiency	✔	✔	✔	✔	

“PI Baking” Contest Q & A

GLATFELTER

Thank You!