

SOLUTION OVERVIEW



The Challenge | Limited Visibility to Key Metrics

An animal feed manufacturer requested a migration of historical data to a more functional historian. In addition, desired that the new historian provides reactor reports and production data.

Project Scope

- FactoryTalk Historian Installation
- Configure data collection from Rockwell interface
- Create data archive tags and asset framework architecture
- Create event frames for downtime information, flow totalizing and batch reports for traceability
- Migrate Data from existing Historian
- Create reports from OSI PI Data

Name:	HCl Flow (gal/min)
Description:	
Properties:	<None>
Categories:	
Default UOM:	<None>
Value Type:	Double
Default Value:	0
Display Digits:	-5
Data Reference:	PI Point
Settings...	
\\USWS0153\%...\,.\,.\Element%.%...\Element%.%Element%.%Attribute%	

Name	ObjectType	Error	pointtype	instrumenttag
Micro.400.Reactor 312.HCL Addition Totalized	PIPoint		Float32	MicroViewSE/TagServer:FactoryTalk Linx:[MicRo]_R312_Batch_HCL_Addition_Totalized
Micro.400.Reactor 312.HCL Flow (gal/min)	PIPoint		Float32	MicroViewSE/TagServer:FactoryTalk Linx:[MicRo]FT_31221_Gal_Minute
Micro.400.Reactor 312.HCL Gallons	PIPoint		Float32	MicroViewSE/TagServer:FactoryTalk Linx:[MicRo]R312_gal_HCL
Micro.400.Reactor 312.HCL Gallons 2	PIPoint		Float32	MicroViewSE/TagServer:FactoryTalk Linx:[MicRo]R312_HCL_GALLONS
Micro.400.Reactor 312.HCL lbs	PIPoint		Float32	MicroViewSE/TagServer:FactoryTalk Linx:[MicRo]R312_lbs_HCL



Technologies Used



Project Outcomes

- The manufacturer chose FactoryTalk Historian (OSI PI integrated into Rockwell Software) as their data historian.
- Flexware installed the Data Archive, Asset Framework, and PI Vision.
- Flexware configured the Factory Talk Live Data interface to collect PLC data.
- Flexware developed an OSI Tag Naming convention to facilitate Asset Framework Templates
 - Site].[Area].[Process Unit].<optional [Subunit]>.[Value]
- Create Excel Data-Link reports from Factory Talk Historian to replace operator log sheets and subsequent data entry into excel.

The screenshot shows the FactoryTalk Historian interface. On the left is a tree view of 'Elements' with a hierarchy: Elements > Micro > 500 > Reactor 501, Reactor 502, Reactor 503, Reactor 504; 100 > Ammo Tanks, Cupric Tanks, Mother Liquor Polishing, TBCC Reactor, Reactor 101; 400 > Holding Tanks > Tank 313, Tank 323, Tank 333; Reactors > Reactor 312 (highlighted), Reactor 322, Reactor 332; Spray Dryers > Spray Dryer 1, Spray Dryer 2, Spray Dryer 3, Spray Dryer 4, Spray Dryer 5. The main panel is titled 'Reactor 312' and has tabs for General, Child Elements, Attributes, Ports, Analyses, Notification Rules, and Version. The 'Attributes' tab is active, showing a table of data points. The table has columns for Name and Value. The 'HCL Flow (gal/min)' row is highlighted, showing a value of 0.048259. To the right of the table is a properties panel for the selected attribute, showing fields like Name, Description, Properties, Categories, Default UOM, Value Type, Value, Display Digits, and Data Reference. The 'Data Reference' field contains the path '\\USWS0153\\Micro.400.Reactor.312.HCL Flow (gal/min)'.

Name	Value
Elapsed Time	0
HCL Addition Totalized	0
HCL Flow (gal/min)	0.048259
HCL Gallons	0
HCL Gallons 2	0
HCL lbs	0
Oxide Accumulated	11103
Oxide lbs	11118
Oxide lbs 2	11118
Oxide Total Target	11118
Oxide Totalizer	0
Product Name	Bad Input
Product Selection	0
Recipe Batch Size	18686