

# ControlDraw Demonstration A Safety Shutdown System Model Print and Review Report

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Note - only selected portions of the model are in this PDF

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 Table of Contents

Section	Page
Cover	1
Table of Contents	2
Project Description	3
Project Information	4
Diagrams	5
1 - Plant Overview	5
2 - Boiler Overview	6
3 - Overall Cause and Effect Matrix	7
4 - Boiler Field startup panel	8
5 - Boiler Startup Sequence	9
6 - Effect FC-0159	10
9 - Effect XY-6367 XY-6369	11
12 - Effect XY-6375	12
13 - ESD01	12
14 - ESD02	13
15 - ESD03	13
16 - ESD04	14
17 - ESD05	14
18 - ESD06	15
19 - ESD07	15
20 - ESD08	16
21 - ESD09	16
22 - ESD10	17
23 - ESD11	17
24 - ESD12	18
25 - ESD13	19
26 - Alarm State Matrix.	20
27 - ESD1 Fault Tree	21
28 - Boiler Equipment Damage	22
29 - Original Cause and Effect	23
30 - SIL Results	24
31 - Original P&ID	25
32 - On Off Valve	26
32. . . Variant 2 - Closed LS	27
32. . . Variant 4 - No limit switches	28
33 - Analog Input from Transmitter	29
34 - Alarm Switch Input	30
35 - On/Off Effector	31
36 - Control Valve	32
Data Reports:	33
Control System IO	33
Interlock Control Module	35
Measurement Analog	36
Measurement Switch	37
Deleted Pages	38

# Burner Management System Design Model

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**Project Information**

Item	Value
Project Name:	Horizon Demo Model
Client:	ControlDraw Users
Reviewer View Name:	ESDModel in e:\E\ CDReference\Samples3\Comments3.mdb
Last edited with ControlDraw Version:	1141
Printed with Reviewer Version:	482

**View Contents**

Project description words  
Information Page  
Diagram Descriptions  
32 Diagrams  
6 Data Reports  
Deleted Diagram List

**Issue History**

Date	Issue	Version	Author	Details
03/09/2008	Major Issue - 1A	221	Francis Lovering	Updated to latest ControlDraw capabilities
23/01/2005	Reissue 0A	98	Francis Lovering	Preliminary for user comments.
02/01/2005	Reissue 0A	53	Francis Lovering	After Redrawing all pages
02/01/2005	Reissue 0A	52	Francis Lovering	

Diagram 1 - Plant Overview

Diagram Version: 230

Class: Process Cell

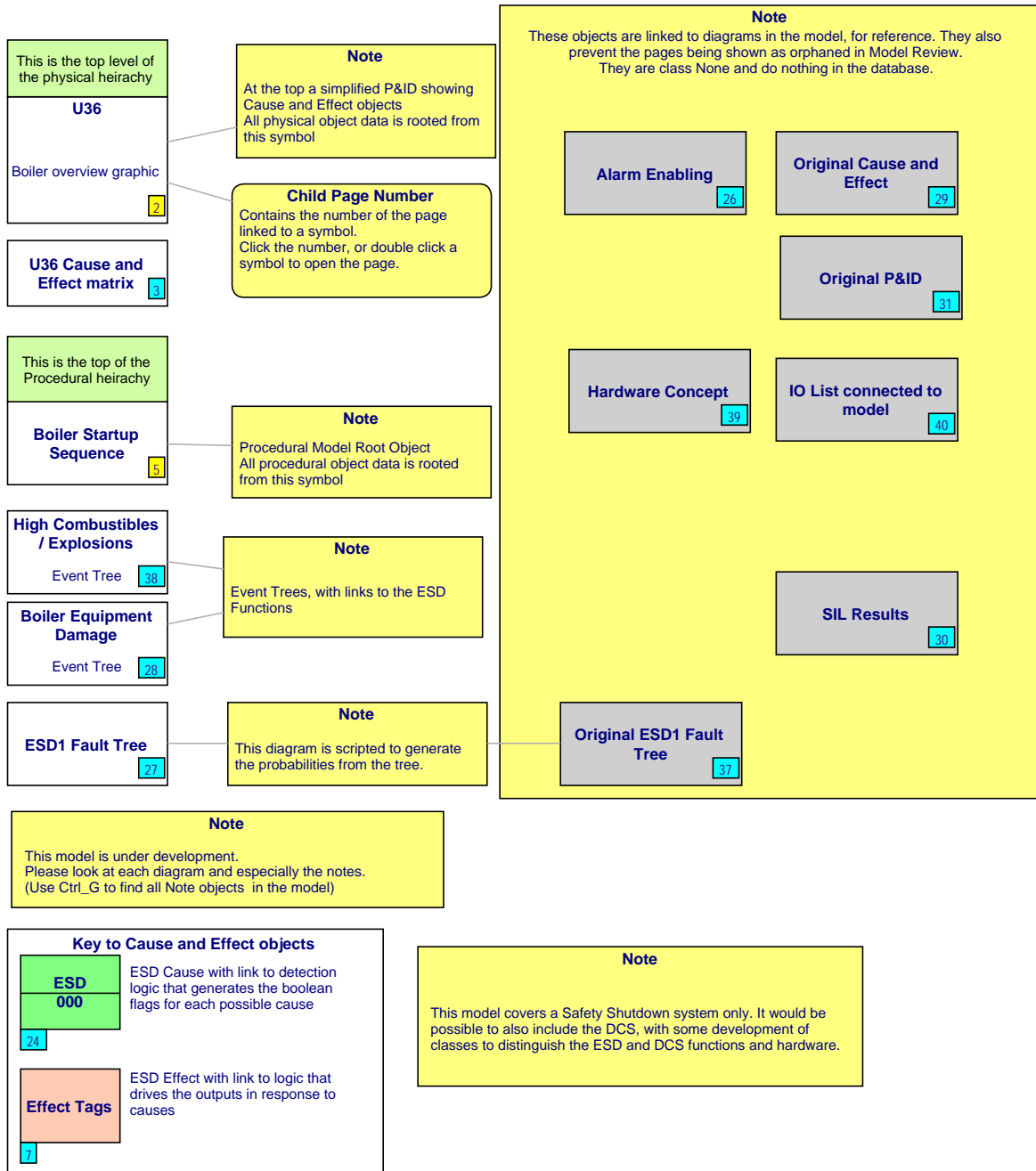
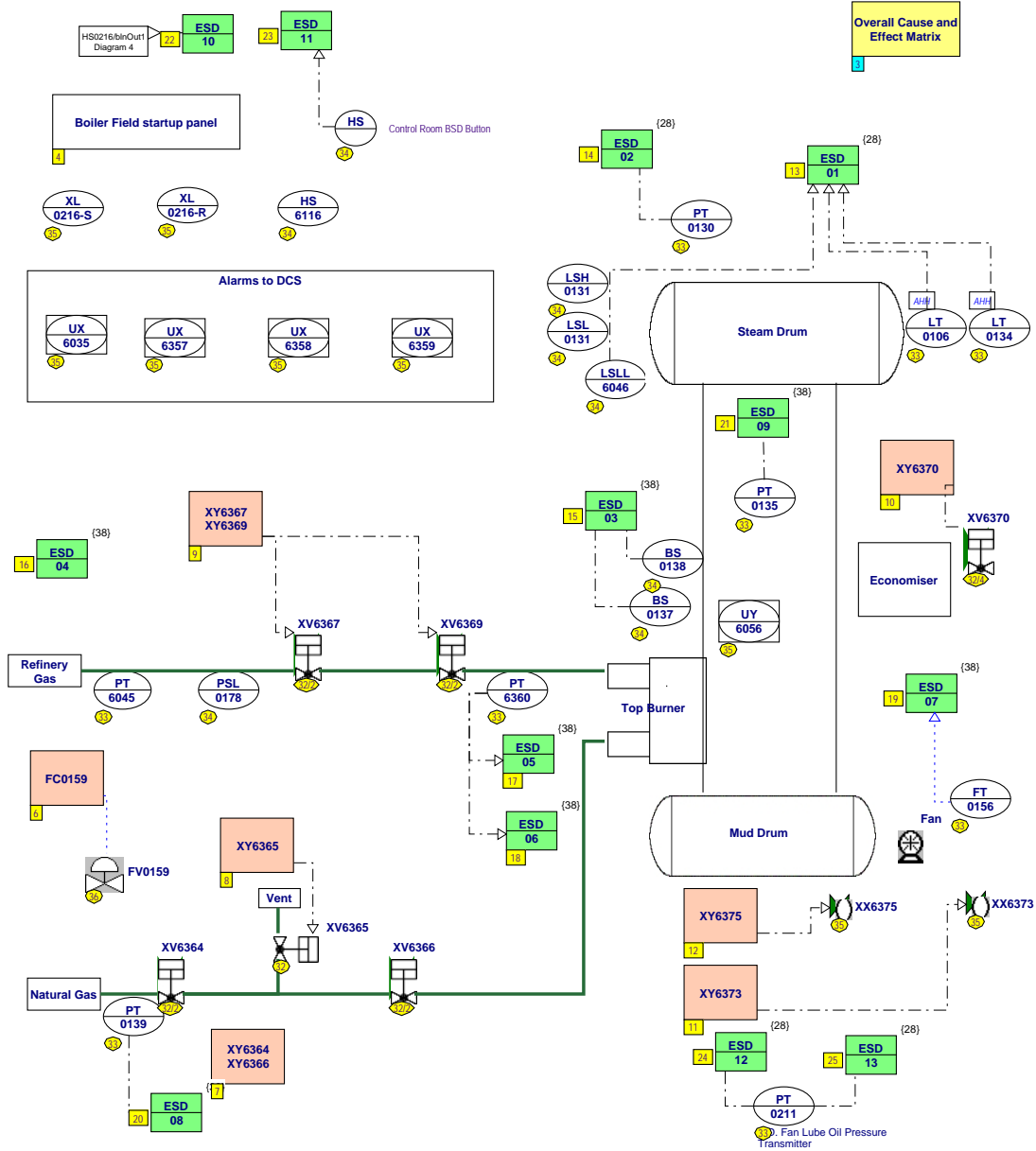


Diagram 2 - Boiler Overview

Diagram Version: 224 Class: Unit

**Note**  
 This diagram could be simplified by sub division into equipment modules, however as the process is fairly simple this has not been done.



**Diagram 3 - Overall Cause and Effect Matrix**

Diagram Version: 228 Class: Logic Function

Overall Cause and Effect Matrix

	XY6367 XY6369	FC0159	XY6364 XY6366	XY6365	XY6370	XY6375	XY6373	Notes
ESD01	Closed	5%		Open	De-Energise		Stop	Cause is combined into one memory discrete value
ESD02	Closed	5%		Open	De-Energise			This is then used in all related effects
ESD03	Closed	5%			De-Energise			The memory discrete is named ESD# Active
ESD04	Closed	5%			De-Energise			
ESD05	Closed	5%			De-Energise			
ESD06	Closed	5%			De-Energise			
ESD07	Closed	5%			De-Energise			
ESD08	Closed	5%			De-Energise			
ESD09	Closed	5%			De-Energise			
ESD10	Closed	5%			De-Energise			
ESD11	Closed	5%			De-Energise			
ESD12					De-Energise	Start		
ESD13	Closed	X	Closed	Open	De-Energise	Start	Stop	

Cause	Description	See page
ESD01	Low Low Steam Drum Level	13
ESD02	High High Steam Drum Pressure	14
ESD03	Loss of Flame	15
ESD04	Low Low Fuel Header Gas Pressure	16
ESD05	Low Low Fuel Burner Gas Pressure	17
ESD06	High High Fuel Burner Gas Pressure	18
ESD07	Low Low Combustion Air Flow	19
ESD08	Low Low Pilot Gas Header Pressure	20
ESD09	High High Furnace Pressure	21
ESD10	BSD Button	22
ESD11	Control Room BSD Button	23
ESD12	Low Lube Oil Pressure	24
ESD13	Low Low Lube Oil Pressure	25

Tagname	Output	Effect	Logic page
FC0159	Main Fuel Gas Control Valve	X	6
	Main Fuel Gas Control Valve	5%	6
XY6364 XY6366	Pilot Gas Shutdown Valves	Closed	7
XY6365	Pilot GasVentValve	Open	8
XY6367 XY6369	Main Fuel Gas Shutdown Valves	Closed	9
XY6370	Oxygen Analyzer DeEnergized	De-Energise	10
XY6373	Fan Interposing Relay	Stop	11
XY6375	Lube Oil Aux. Pump Interposing Relay	Start	12

Tagname	Description	Tag	Connects to
FC0159	Main Fuel Gas Control Valve	FV0159	Main Fuel Gas Control Valve
XY6365	Pilot GasVentValve	XV6365	Pilot Gas Vent Valve
XY6367 XY6369	Main Fuel Gas Shutdown Valves	XV6367	Main Fuel Gas Shutdown Valve
	Main Fuel Gas Shutdown Valves	XV6369	Main Fuel Gas Shutdown Valve
XY6370	Oxygen Analyzer DeEnergized	XV6370	Oxygen Analyzer
XY6373	Fan Interposing Relay	XX6373	FD Fan Interposing Relay
XY6375	Lube Oil Aux. Pump Interposing Relay	XX6375	Lube Oil Aux. Pump Interposing RE

Diagram 4 - Boiler Field startup panel

Diagram Version: 220 Class: Equipment Module

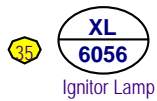
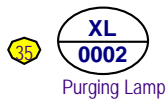
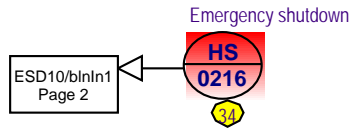




Diagram 5 - Boiler Startup Sequence

Diagram Version: 194 Class: Phase

**Note**  
 This diagram is under development. The Flowchart is not complete, but at present shows how the model can represent the flowchart using Special '\_SetSymbols' objects. These link the text in the steps to the objects in the model. This ensures that object references are correct, and that tagname changes propagate.  
 The Flowchart has been converted to a Sequential Function Chart.

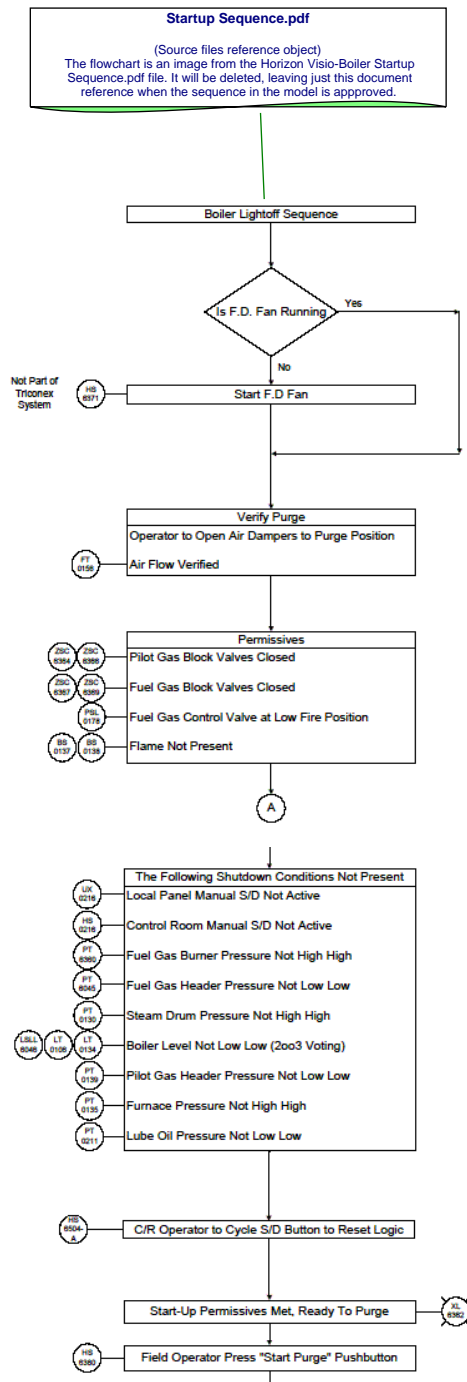
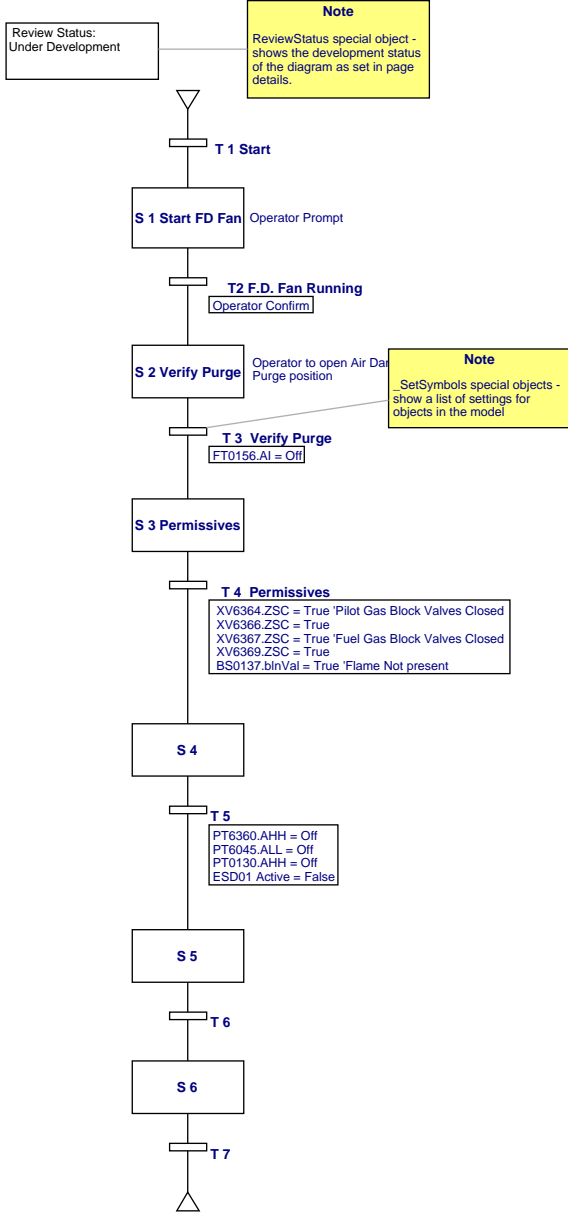


Diagram 6 - Effect FC-0159

Diagram Version: 230 Class: Control Module

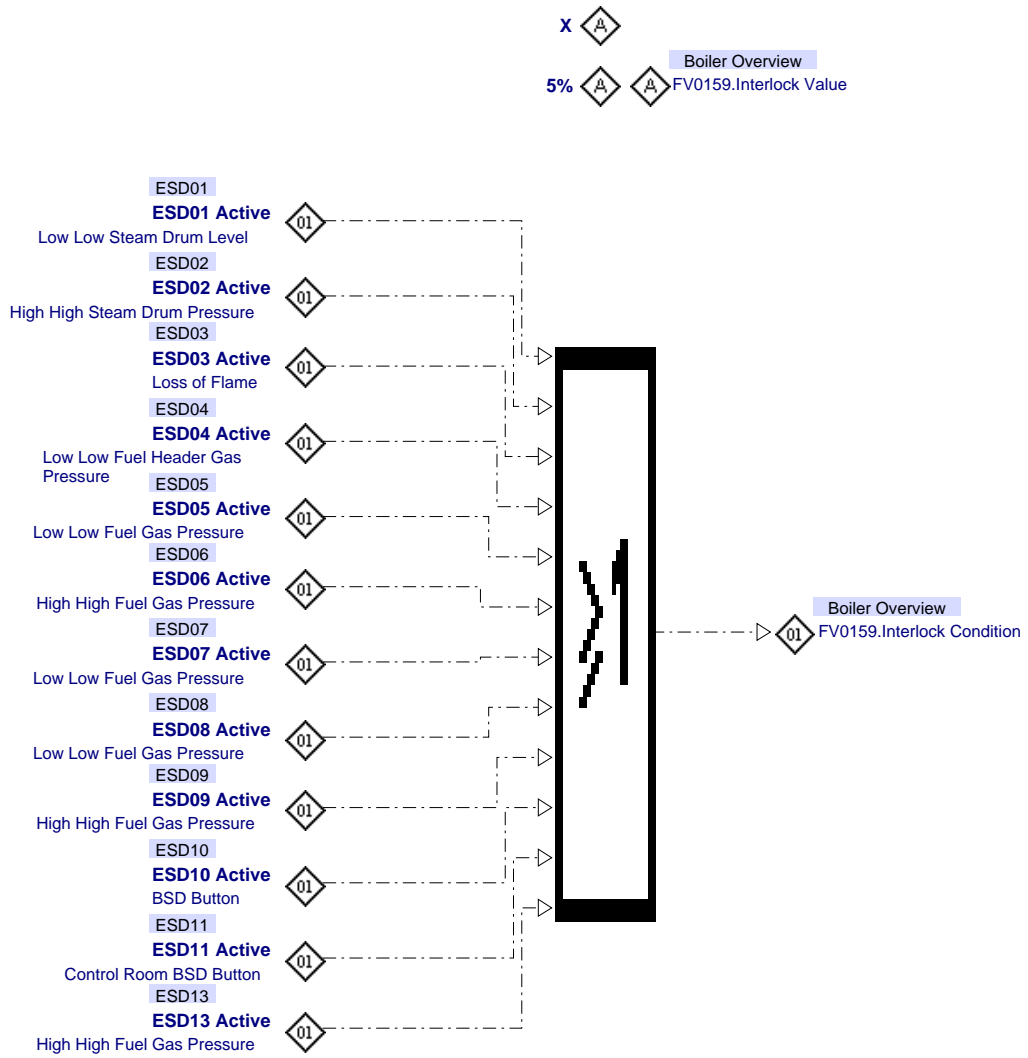
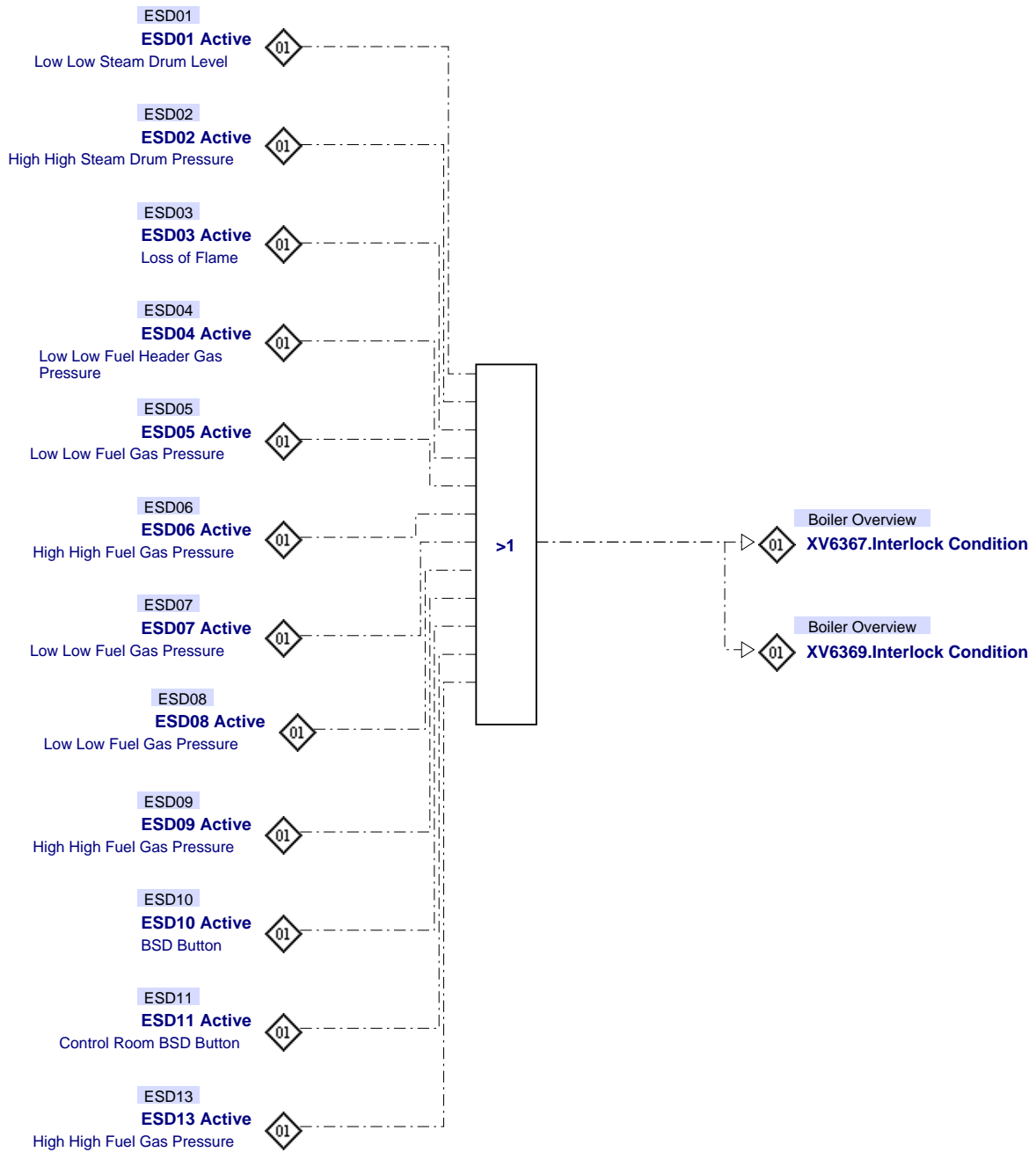


Diagram 9 - Effect XY-6367 XY-6369

Diagram Version: 212 Class: Control Module



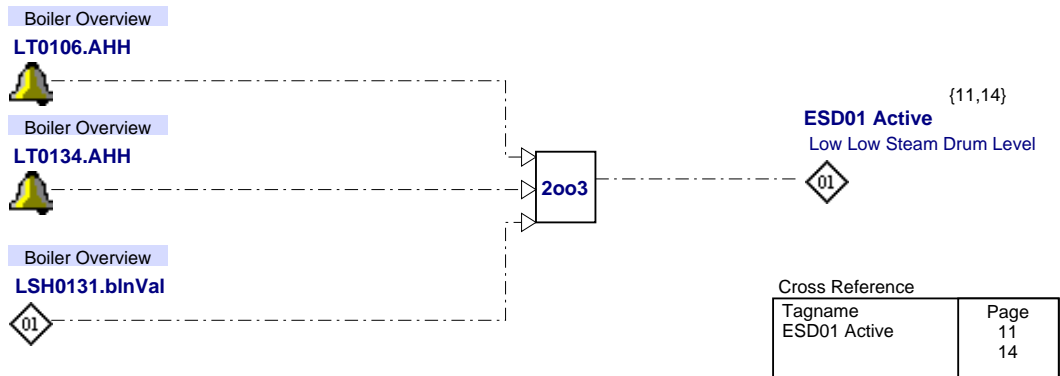
**Diagram 12 - Effect XY-6375**

Diagram Version: 181      Class: Control Module



**Diagram 13 - ESD01**

Diagram Version: 201      Class: Interlock Control Module



**Diagram 14 - ESD02**

Diagram Version: 179      Class: Interlock Control Module

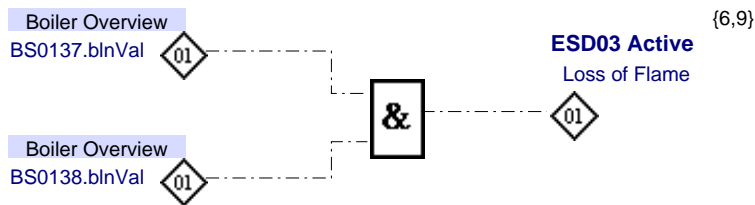


Cross Reference

Tagname	Page
ESD02 Active	6 9

**Diagram 15 - ESD03**

Diagram Version: 179      Class: Interlock Control Module



Tagname	Page
ESD03 Active	6 9

**Diagram 16 - ESD04**

Diagram Version: 179      Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD04 Active	6
	9

**Diagram 17 - ESD05**

Diagram Version: 179      Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD05 Active	6
	9

**Diagram 18 - ESD06**

Diagram Version: 179

Class: Interlock Control Module



Cross Reference	Page
ESD06 Active	6 9

**Diagram 19 - ESD07**

Diagram Version: 179

Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD07 Active	6 9

**Diagram 20 - ESD08**

Diagram Version: 179      Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD08 Active	6
	9

**Diagram 21 - ESD09**

Diagram Version: 179      Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD09 Active	6
	9



**Diagram 22 - ESD10**

Diagram Version: 96

Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD10 Active	7 10

**Diagram 23 - ESD11**

Diagram Version: 179

Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD11 Active	6 9

**Diagram 24 - ESD12**

Diagram Version: 189

Class: Interlock Control Module



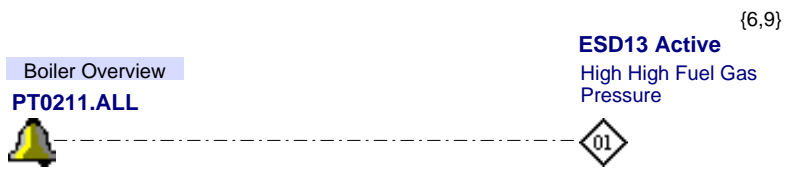
Cross Reference

Tagname	Page
ESD12 Active	13

**Diagram 25 - ESD13**

Diagram Version: 179

Class: Interlock Control Module



Cross Reference

Tagname	Page
ESD13 Active	6
	9

**Diagram 26 - Alarm State Matrix.**

Diagram Version: 230      Class: Logic Function

**Alarm State Matrix**

Using a state model provides a highly efficient way to define the enabling of alarms. The safety system, as a complete entity is defined in terms of possible states, a method that vastly reduces the number of states that have to be considered.

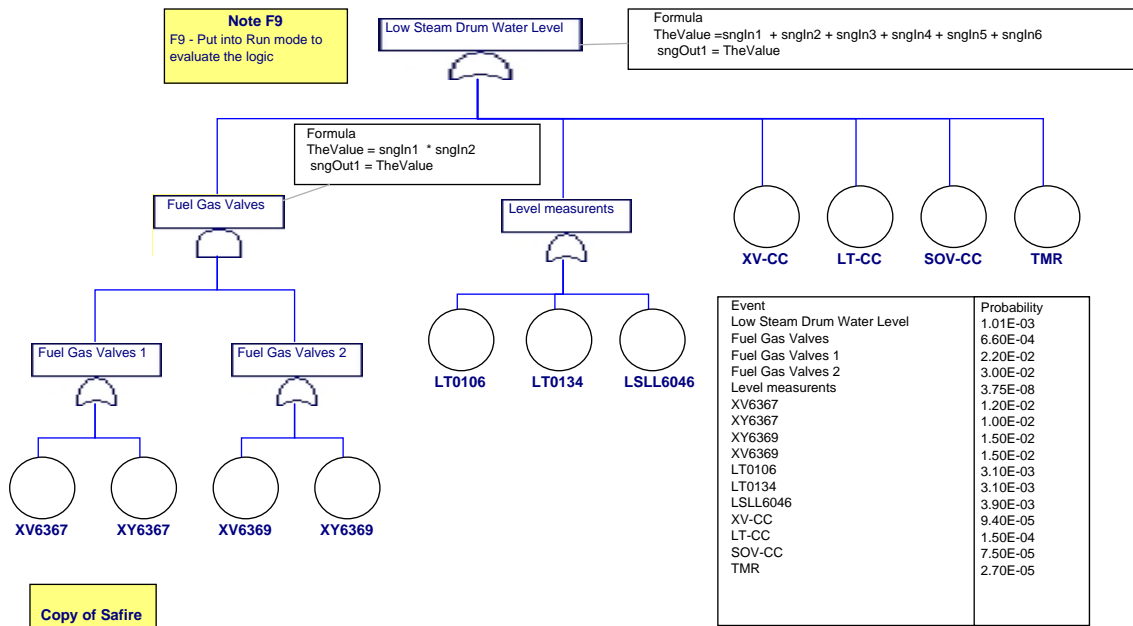
Then each possible alarm can be considered for it relevance in each state, producing an Alarm State Matrix. In this case the states correspond with operating sequence steps  
This is not yet correct, But shows how it can be done!

Alarm Enabling

	S 1 Start FD Fan	S 2 Verify Purge	S 3 Permissives	S 4	S 5	S 6
FT0156.AH	Enabled	Enabled	Enable	Enable	Enable	Enable
FT0156.AHH	Disable	Disable	Enable	Enable	Enable	Enable
FT0156.AL	Disable	Disable	Enable	Enable	Enable	Enable
FT0156.ALL	Disable	Disable	Enable	Enable	Enable	Enable
LT0106.AH	Disable	Disable	Enable	Enable	Enable	Enable
LT0106.AHH	Disable	Disable	Enable	Enable	Enable	Enable
LT0106.AL	Disable	Disable	Enable	Enable	Enable	Enable
LT0106.ALL	Disable	Disable	Enable	Enable	Enable	Enable
LT0134.AH	Disable	Disable	Enable	Enable	Enable	Enable
LT0134.AHH	Disable	Disable	Enable	Enable	Enable	Disable
LT0134.AL	Disable	Disable	Enable	Enable	Enable	Enable
LT0134.ALL	Disable	Disable	Enable	Enable	Enable	Enable
PT0130.AH	Disable	Enable	Enable	Enable	Enable	Enable
PT0130.AHH	Disable	Enable	Enable	Enable	Enable	Enable
PT0130.AL	Disable	Enable	Enable	Enable	Enable	Enable
PT0130.ALL	Disable	Enable	Enable	Enable	Enable	Enable
PT0135.AH	Disable	Enable	Enable	Enable	Enable	Enable
PT0135.AHH	Disable	Enable	Enable	Enable	Enable	Enable
PT0135.AL	Disable	Disable	Enable	Enable	Enable	Disable
PT0135.ALL	Disable	Disable	Enable	Enable	Enable	Enable
PT0139.AH	Disable	Disable	Enable	Enable	Enable	Enable
PT0139.AHH	Disable	Disable	Enable	Enable	Enable	Enable
PT0139.AL	Disable	Disable	Enable	Enable	Enable	Enable
PT0139.ALL	Disable	Disable	Enable	Enable	Enable	Enable
PT0211.AH	Disable	Disable	Enable	Enable	Enable	Enable
PT0211.AHH	Disable	Disable	Enable	Enable	Enable	Enable
PT0211.AL	Disable	Disable	Enable	Enable	Enable	Enable
PT0211.ALL	Disable	Disable	Enable	Enable	Enable	Enable
PT6360.AH	Disable	Disable	Enable	Enable	Enable	Enable
PT6360.AHH	Disable	Disable	Enable	Enable	Enable	Enable
PT6360.AL	Disable	Disable	Enable	Enable	Enable	Enable
PT6360.ALL	Disable	Disable	Enable	Enable	Enable	Enable
PT6045.AH	Disable	Disable	Enable	Enable	Enable	Enable
PT6045.AHH	Disable	Disable	Enable	Enable	Enable	Enable
PT6045.AL	Disable	Disable	Enable	Enable	Enable	Enable
PT6045.ALL	Disable	Disable	Enable	Enable	Enable	Enable

Diagram 27 - ESD1 Fault Tree

Diagram Version: 219 Class: Entity



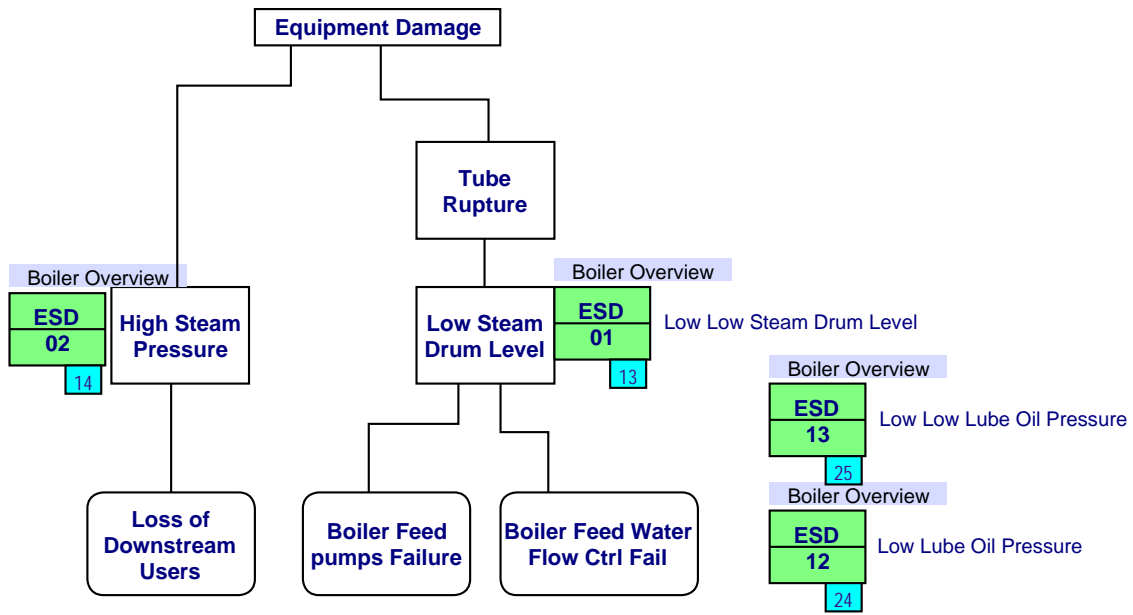
**Note F9 to Run Calculations!**  
This diagram is scripted to generate the probabilities from the tree. It does not use the recursive logic that systems such as Safire deploys (although this is a possible development - ControlDraw is full of recursive functions) Instead simple formulae are used for each 'gate'. And's produce the product of the inputs, Or's Add them. This is programmed into the object dynamics.

**Note Safire Links!**  
Developments could link this Model to the Safire model, if Safire is to be retained.

Event	Formula
Low Steam Drum Water Level	TheValue =sngIn1 + sngIn2 + sngIn3 + sngIn4 + sngIn5 + sngIn6 : sngOut1 = TheValue
Fuel Gas Valves	TheValue = sngIn1 * sngIn2 : sngOut1 = TheValue
Fuel Gas Valves 1	TheValue =sngIn1 + sngIn2 : sngOut1 = TheValue
Fuel Gas Valves 2	TheValue =sngIn1 + sngIn2 : sngOut1 = TheValue
Level measurements	TheValue = sngIn1 * sngIn2 * sngIn3 : sngOut1 = TheValue
XV6367	sngOut1 = TheValue
XY6367	sngOut1 = TheValue
XY6369	sngOut1 = TheValue
XV6369	sngOut1 = TheValue
LT0106	sngOut1 = TheValue
LT0134	sngOut1 = TheValue
LSLL6046	sngOut1 = TheValue
XV-CC	sngOut1 = TheValue
LT-CC	sngOut1 = TheValue
SOV-CC	sngOut1 = TheValue
TMR	sngOut1 = TheValue

**Diagram 28 - Boiler Equipment Damage**

Diagram Version: 217 Class: Entity



**Note**

This diagram is shows how an Event Tree can be drawn and linked to the relevant diagrams. The links are jumps because the diagram is informative rather than being data generating. An alternative structure could be used where this type of diagram is actually a data generating parent however at present this model is not structured that way.

Diagram 29 - Original Cause and Effect

Diagram Version: 172 Class: None



CAUSE & EFFECT MATRIX

UNIT/EQUIPMENT NO.  
Boiler #1

TAG NO.	TYPE	SAFE STATE	OUTPUT	EFFECT	PROCESS SAFE RESPONSE TIME
XY-6367 XY-6369	D.O.	FC	Main Fuel Gas Shutdown Valves	Closed	
FC-0159	DCS	N/A	Main Fuel Gas Control Valve	5%	
XY-6364 XY-6366	D.O.	FC	Pilot Gas Shutdown Valves	Closed	
XY-6365	D.O.	FO	Pilot Gas Vent Valve	Open	
XY-6370	D.O.	Off	Oxygen Analyzer	De-Energized	
XY-6375	D.O.	Off	Lube Oil Aux. Pump Interposing Rl	Start	
XY-6373	D.O.	Off	FD Fan Interposing Relay	Stop	

**Note**  
Here the original Cause and Effect chart has been pasted in as a picture. ControlDraw does Cause and Effect charts via a collection of objects and links and a matrix, as shown on the Cause and Effect diagram

TAG NO.	TYPE	SAFE STATE	OUTPUT	EFFECT	PROCESS SAFE RESPONSE TIME
XY-6367 XY-6369	D.O.	FC	Main Fuel Gas Shutdown Valves	Closed	
FC-0159	DCS	N/A	Main Fuel Gas Control Valve	5%	
XY-6364 XY-6366	D.O.	FC	Pilot Gas Shutdown Valves	Closed	
XY-6365	D.O.	FO	Pilot Gas Vent Valve	Open	
XY-6370	D.O.	Off	Oxygen Analyzer	De-Energized	
XY-6375	D.O.	Off	Lube Oil Aux. Pump Interposing Rl	Start	
XY-6373	D.O.	Off	FD Fan Interposing Relay	Stop	

	PROCESS DEVIATION	TYPE	LOGIC	TAG NO.	TD	TRIP SETPOINT	MAINT. BYPASS	OPERATING RANGE/LIMIT	PROCESS SAFE RESPONSE TIME							Notes	
									1	2	3	4	5	6	7		
1	Low Low Steam Drum Level	D.I.	LSSL-0046	x sec	20%			0 - 100 %									
		A.I.	LT-0106	x sec	7.2" w.c.	HS-4361		0 - 30 "w.c.	1	X	C	X	X	X			
		A.I.	LT-0134	x sec	5.8" w.c.			0 - 30 "w.c.									
2	High High Steam Drum Pressure	A.I.	1001	PT-0130	x sec	0 - 1000 psi	HS-0130	700 psi	2	X	C	X	X	X			
3	Loss of Flame	D.I.	2002	BS-0138 BS-0137	x sec	-	HS-0039	-	3	X	C	X	X	X			
4	Low Low Fuel Header Gas Pressure	A.I.	1001	PT-6045	x sec	0 - 75 psig	HS-6045	10 psig	4	X	C			X			
5	Low Low Fuel Burner Gas Pressure	A.I.	1001	PT-6360	x sec	10 psig	HS-4360	0 - 30 psig	5	X	C			X			
6	High High Fuel Burner Gas Pressure	A.I.	1001	PT-6360	x sec	28 psig	HS-4360	0 - 30 psig	6	X	C			X			
7	Low Low Combustion Air Flow	A.I.	1001	FT-0156	x sec		HS-0156		7	X	C	X	X	X			
8	Low Low Pilot Gas Header Pressure	A.I.	1001	PT-0139	x sec	0 - 10 psig	HS-6041	6 psig	8	X	C	X	X	X			
9	High High Furnace Pressure	A.I.	1001	PT-0135	x sec	-5 - 15 "w.c.	HS-0135		9	X	C	X	X	X			
10	ESD Button	D.I.	1001	UX-0216	-	-	-	-	10	X	C	X	X	X			
11	Control Room ESD Button	D.I.	2002	HS-0216 (Note 1)	-	-	-	-	11	X	C	X	X	X			
12	Low Lube Oil Pressure	A.I.	1001	PT-0211	x sec	0 - 25 psig	-	8 psig	12						X		
13	Low Low Lube Oil Pressure	A.I.	1001	PT-0211	x sec	0 - 25 psig	-	3 psig	13	X	X	X	X	X	X	X	

**Diagram 30 - SIL Results**

Diagram Version: 209

Class: None

esdstuff		Imported from Horizon data			
PFD HRF	Safety Function	PFD	HRF	Calc SIL	Req SIL
ESD1	Low Low	1.49-E-03	670	2	0
ESD2	Steam Drum Level	1.76-E-02	60	1	1
ESD3-1	High High	1.58E-03 635	635	2	2
ESD3-2	Steam Drum Pressure	1.58E-03 635	635	2	1
ESD3-3	High High	1.58E-03 635	635	2	2
ESD3-4	Steam Drum Pressure	1.88E-03 532	532	2	2
ESD3-5	Pressure	1.58E-03 635	635	2	2

RealTag	ESD	Usertext
U36.ESD01	True	Low Low Steam Drum Level
U36.ESD02	True	High High Steam Drum Pressure
U36.ESD03	True	Loss of Flame
U36.ESD04	True	Low Low Fuel Header Gas Pressure
U36.ESD05	True	Low Low Fuel Burner Gas Pressure
U36.ESD06	True	High High Fuel Burner Gas Pressure
U36.ESD07	True	Low Low Combustion Air Flow
U36.ESD08	True	Low Low Pilot Gas Header Pressure
U36.ESD09	True	High High Furnace Pressure
U36.ESD10	True	BSD Button
U36.ESD11	True	Control Room BSD Button
U36.ESD12	True	Low Lube Oil Pressure
U36.ESD13	True	Low Low Lube Oil Pressure



Diagram 31 - Original P&ID

Diagram Version: 219

Class: None

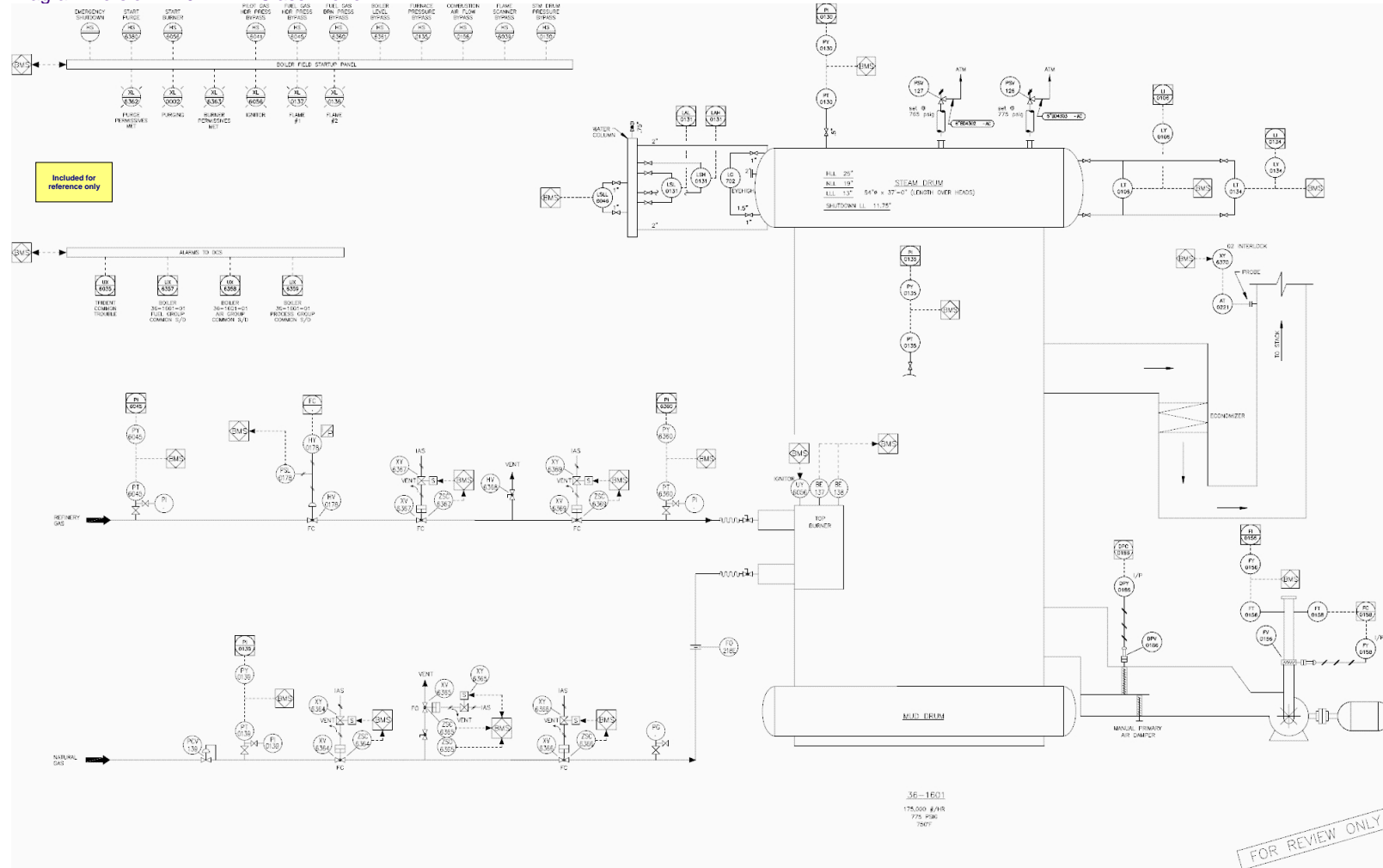
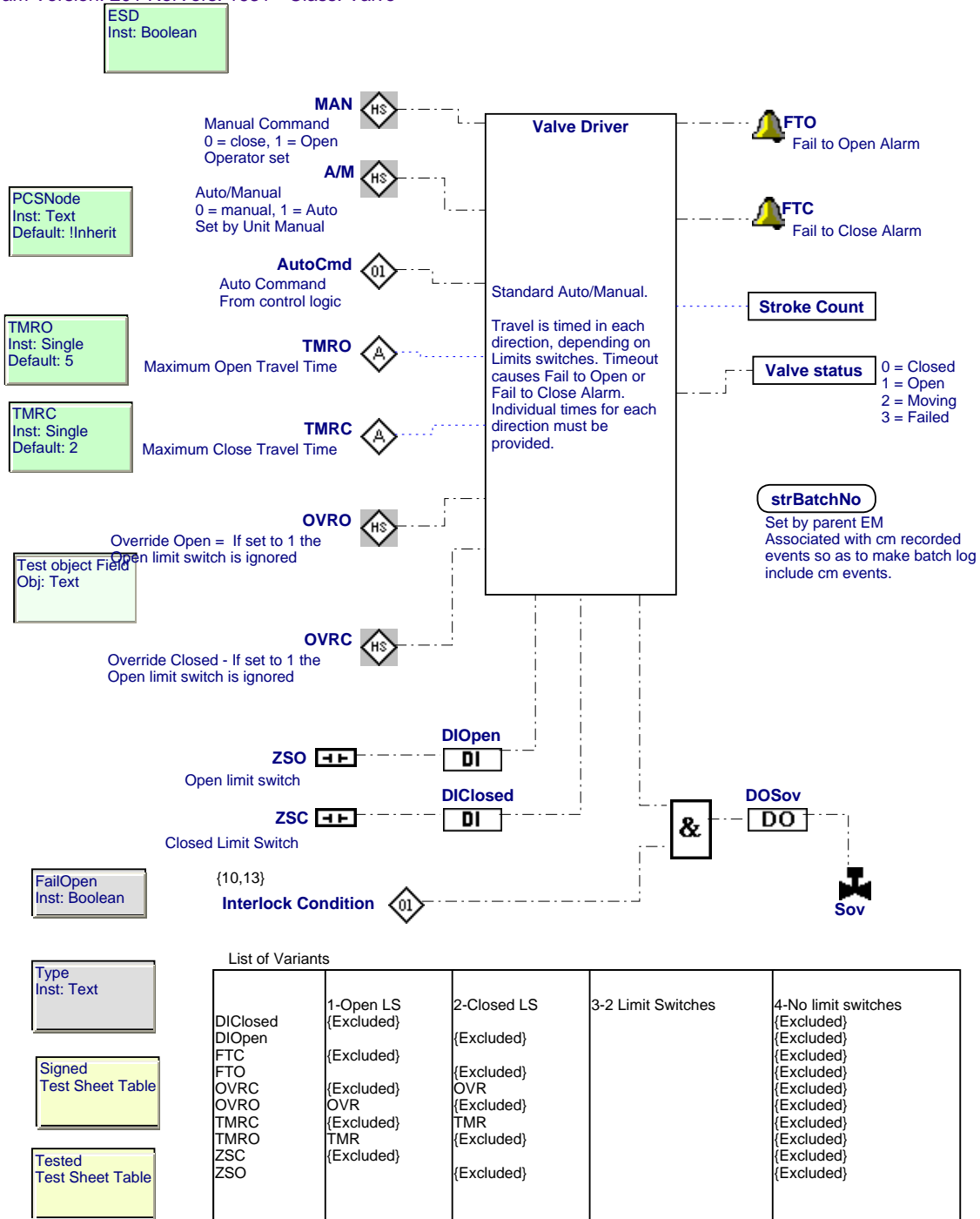


Diagram 32 - On Off Valve

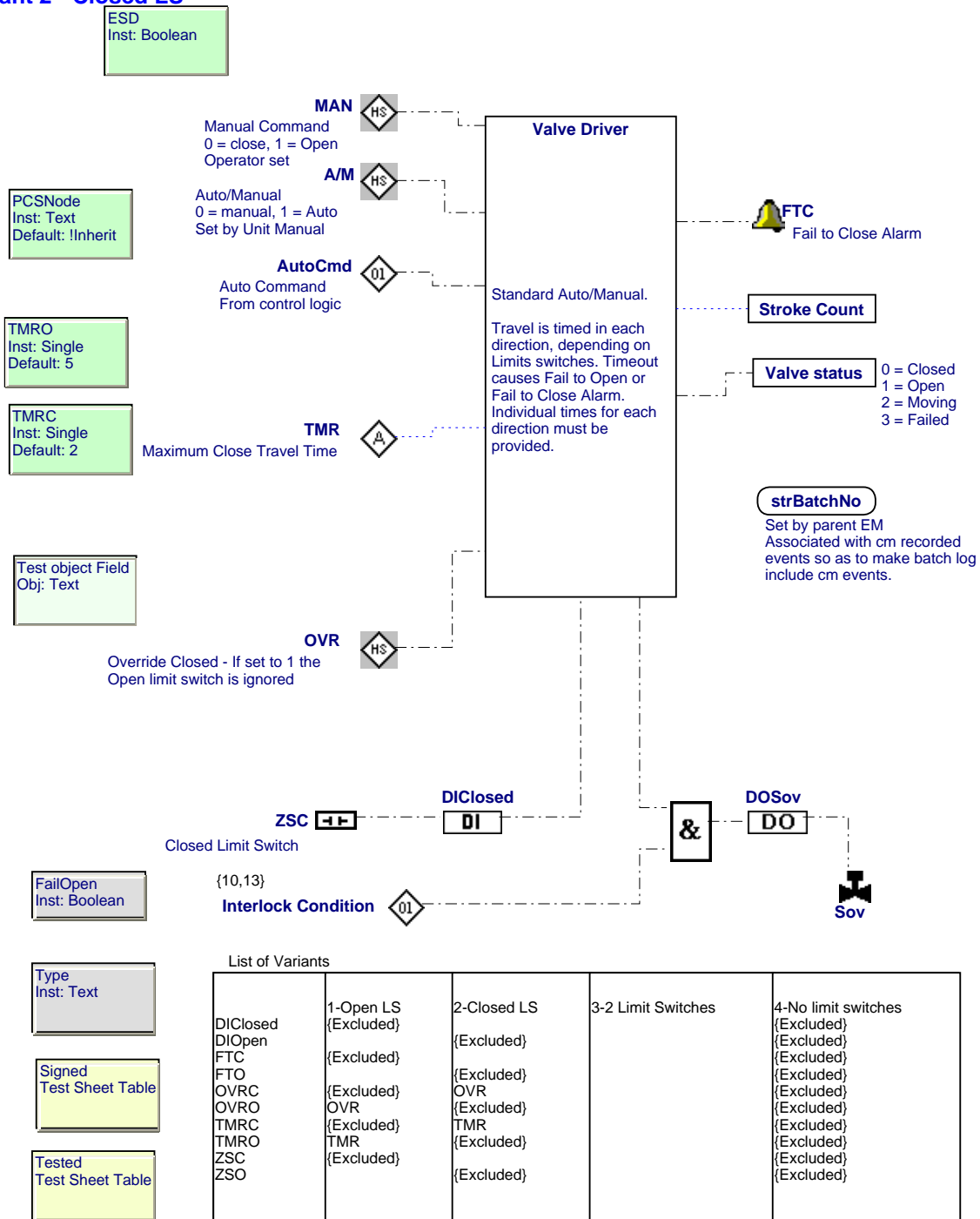
Diagram Version: 201 RefVers: 1631 Class: Valve



**Diagram 32 - On Off Valve**

Diagram Version: 201 RefVers: 1631 Class: Valve

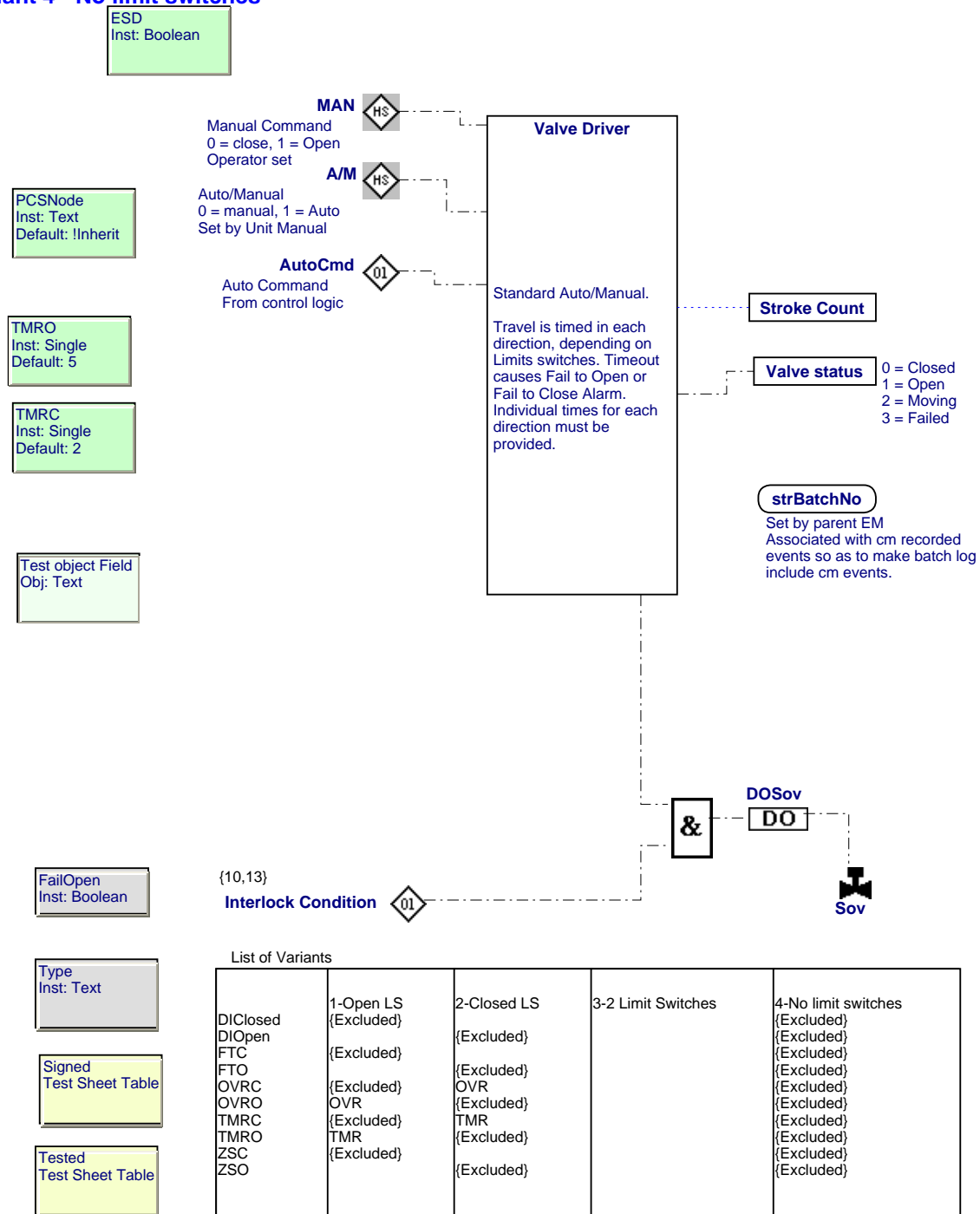
**Variant 2 - Closed LS**



**Diagram 32 - On Off Valve**

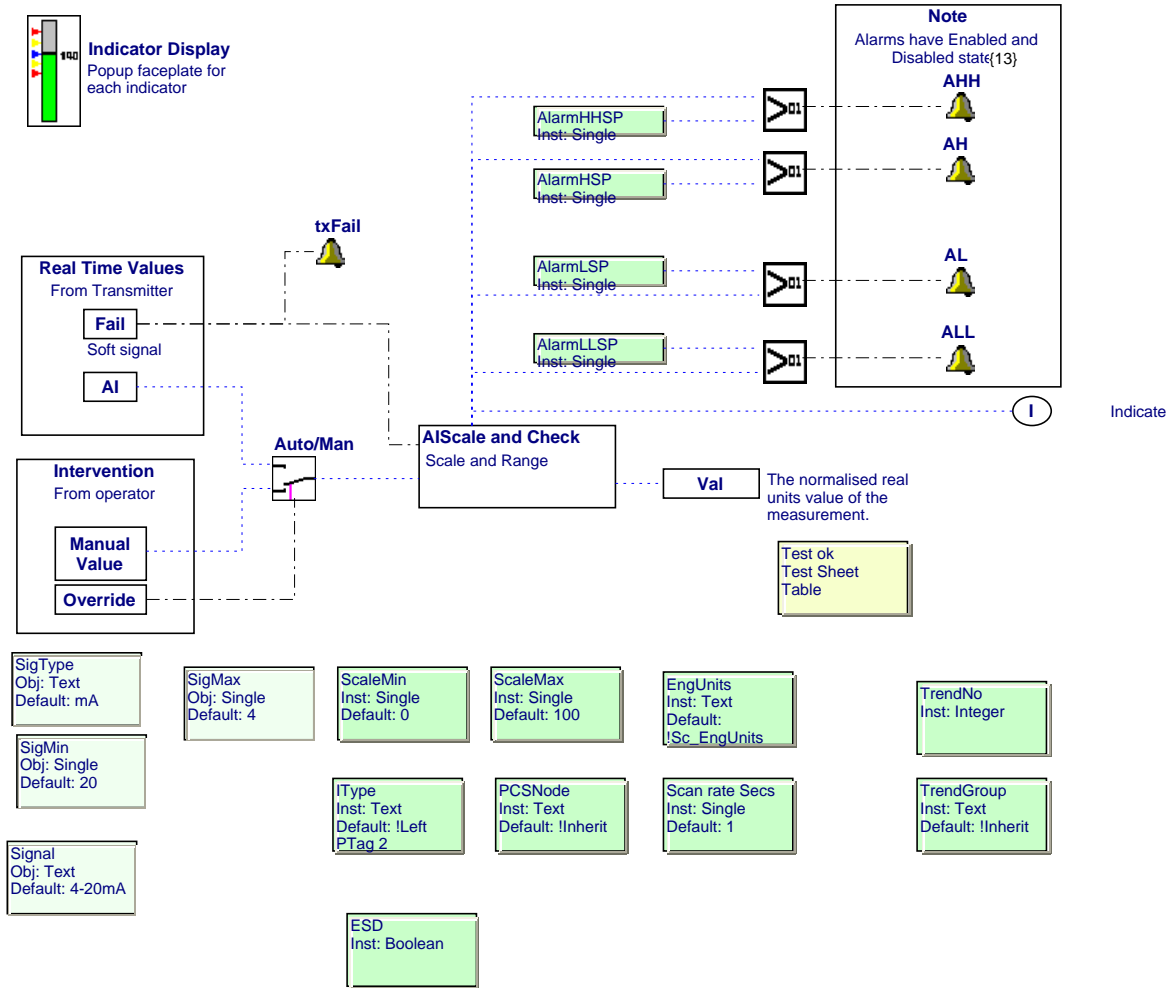
Diagram Version: 201 RefVers: 1631 Class: Valve

**Variant 4 - No limit switches**



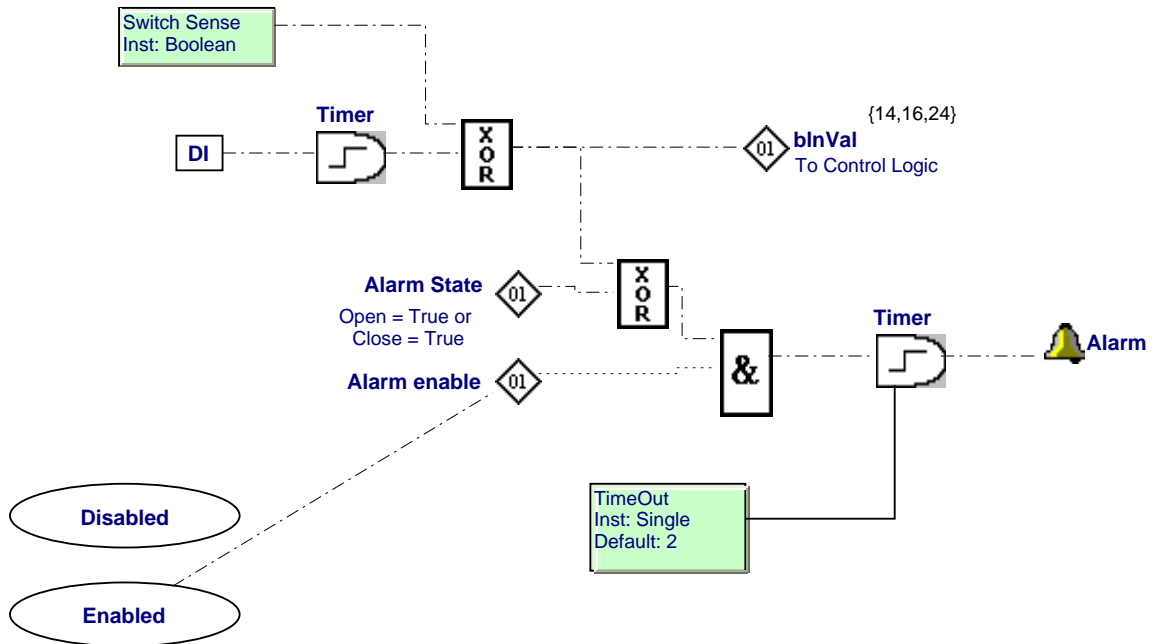
**Diagram 33 - Analog Input from Transmitter**

Diagram Version: 179 RefVers: 1622 Class: Measurement Analog



**Diagram 34 - Alarm Switch Input**

Diagram Version: 178 RefVrs: 1621 Class: Measurement Switch



Signed  
Test Sheet Table

PCSNode  
Inst: Text  
Default: !Inherit

Type  
Obj: Text

TrendNo  
Inst: Integer

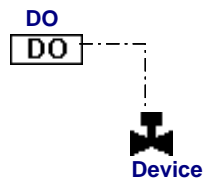
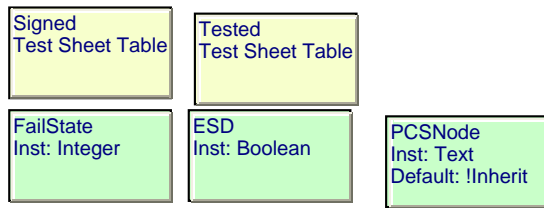
TrendGroup  
Inst: Text  
Default: !Inherit

Tested  
Test Sheet Table

ESD  
Inst: Boolean

**Diagram 35 - On/Off Effector**

Diagram Version: 186 RefVers: 1627 Class: EffectorDiscrete

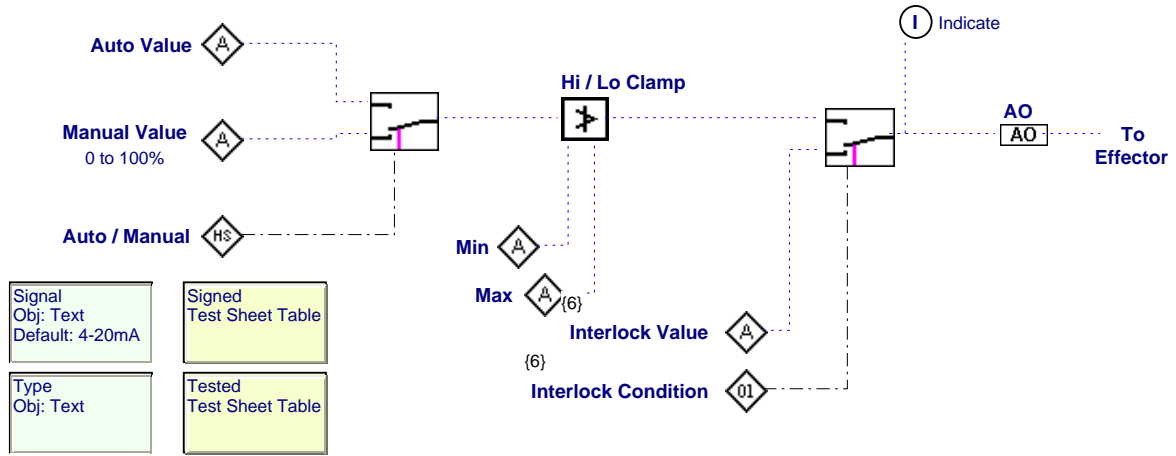


**Diagram 36 - Control Valve**

Diagram Version: 226 RefVers: 1641 Class: Effector Analog

**Note**

All Control Valves, regardless of whether they fail open or closed, are treated as 0% = Closed and 100%



Signal  
Obj: Text  
Default: 4-20mA

Signed  
Test Sheet Table

Type  
Obj: Text

Tested  
Test Sheet Table

Fail Open  
Inst: Boolean

**note**

Status always logged at specified time intervals  
Operator can also force to log now

PCSNode  
Inst: Text  
Default: !Inherit

ESD  
Inst: Boolean



## Data Report: Control System IO

RealTag	External Tag	PCSNode	IO Type	Card	Channel
U36.UX6035.DO	36-UX-6035		DO	4	25
U36.UY6056.DO	36-UY-6056		DO	3	1
U36.UX6357.DO	36-UX-6357		DO	4	26
U36.UX6358.DO	36-UX-6358		DO	4	27
U36.UX6359.DO	36-UX-6359		DO	4	28
U36.XL0216-R.DO	36-XL-0216-R		DO		
U36.XL0216-S.DO	36-XL-0216-S		DO		
U36.LSLL6046.DI	36-LSLL-6046		DI	2	16
U36.LT0106.AI	36-LT-0106		AI	1	2
U36.LT0134.AI	36-LT-0134		AI	1	3
U36.PT0130.AI	36-PT-0130		AI	1	7
U36.BS0138.DI	36-BS-0138		DI	2	15
U36.BS0137.DI	36-BS-0137		DI	2	14
U36.HS6116.DI	36-HS-6116		DI	2	2
U36.PT6045.AI	36-PT-6045		AI		
U36.PT6360.AI	36-PT-6360		AI		
U36.FT0156.AI	36-FT-0156		AI	1	1
U36.PT0139.AI	36-PT-0139		AI	1	4
U36.PT0135.AI	36-PT-0135		AI	1	8
U36.PT0211.AI	36-PT-0211		AI	1	9
U36.XV6367.DOSov	36-XY-6367		DO	3	5
U36.XV6367.DIClosed	36-ZSC-6367		DI	2	21
U36.XV6369.DOSov	36-XY-6369		DO	3	6
U36.XV6369.DIClosed	36-ZSC-6369		DI	2	22
U36.FV0159.AO	36-FV-0159		AO		
U36.XV6366.DOSov	36-XY-6366		DO	3	4
U36.XV6366.DIClosed	36-ZSC-6366		DI	2	20
U36.XV6364.DOSov	36-XY-6364		DO	3	2
U36.XV6364.DIClosed	36-ZSC-6364		DI	2	18
U36.XV6365.DOSov	36-XY-6365		DO	3	3
U36.XV6365.DIClosed	36-ZSC-6365		DI	2	19
U36.XV6365.DIOpen	36-ZSO-6365		DI	2	23
U36.XV6370.DOSov	36-XY-6370		DO	3	7
U36.XX6375.DO	36-XX-6375		DO		
U36.XX6373.DO	36-XX-6373		DO		
U36.PSL0178.DI	36-PSL-0178		DI	2	17
U36.XL0002.DO	36-XL-0002		DO	4	4
U36.XL0137.DO	36-XL-0137		DO	4	7
U36.HS0130.DI	36-HS-0130		DI	2	10
U36.XL0138.DO	36-XL-0138		DO	4	8
U36.HS0135.DI	36-HS-0135		DI	2	11
U36.XL6056.DO	36-XL-6056		DO	4	6
U36.HS0156.DI	36-HS-0156		DI	2	12
U36.XL6362.DO	36-XL-6362		DO	4	3
U36.XL6363.DO	36-XL-6363		DO	4	5
U36.HS6039.DI	36-HS-6039		DI	2	13
U36.HS6041.DI	36-HS-6041		DI	2	6
U36.HS6045.DI	36-HS-6045		DI	2	7
U36.HS6056.DI	36-HS-6056		DI	2	4
U36.HS6360.DI	36-HS-6360		DI	2	8
U36.HS6361.DI	36-HS-6361		DI	2	9
U36.HS0216.DI	36-HS-0216		DI		

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RealTag	External Tag	PCNode	IO Type	Card	Channel
U36.HS6380.DI	36-HS-6380		DI	2	5
U36.LSL0131.DI	36-LSL-0131		DI		
U36.LSH0131.DI	36-LSH-0131		DI		
U36.HS.DI	36-HS--		DI		

**Data Report: Interlock Control Module**

ObjectTag	Page Tag	RealTag	DataVersion	External	Hazard	SIL Level	Alarmed
UC	UC102	R101.UC102	12		Low	1	<input type="checkbox"/>

*Error in report !*

*Too few parameters. Expected 2.*

Data Report: Measurement Analog

RealTag	Scan rate Secs	IType	ScaleMin	ScaleMax	EngUnits	AlarmLLSP	AlarmLSP	AlarmHHSP	AlarmHSP	PCSNode	TrendGroup	TrendNo
U36.LT0106	1	LT	0	100	%	0	0	9999999	9999999			
U36.LT0134	1	LT	0	100	%	0	0	9999999	9999999			
U36.PT0130	1	PT	0	100	Bar	0	0	9999999	9999999			
U36.PT6045	1	PT	0	100	Bar	0	0	9999999	9999999			
U36.PT6360	1	PT	0	100	Bar	0	0	9999999	9999999			
U36.FT0156	1	FT	0	100	m3/hr	0	0	9999999	9999999			
U36.PT0139	1	PT	0	100	Bar	0	0	9999999	9999999			
U36.PT0135	1	PT	0	100	Bar	0	0	9999999	9999999			
U36.PT0211	1	PT	0	100	Bar	0	0	9999999	9999999			

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**Data Report: Measurement Switch**

RealTag	CM Tag	TimeOut	Switch	PCSNode	TrendGr	TrendNo
R101.LSHH203	LSHH-20	2	<input type="checkbox"/>	Controller 1		

*Error in report !*

*Too few parameters. Expected 1.*

