



INAuditPro & INTurnover

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INAuditPro

- **INAuditPro & INTurnover** are web based applications providing a complete tool set for auditing the integrity, compliance and completeness of the SI database.
- **INAuditPro** provides extensive audits for your SI database within seven different modules. Each module enables the user to select which audits to run and to save as a custom audit list.
- Data filtering is available at the Plant, Area and Unit level. For example: Index UDF and UDT filters, such as MOC number.
- Detailed audit reports are batch exported to excel including punch list summaries. Datasheet audits can be hotlinked to INView to open the datasheet from within the excel reports.
- Where practical, INAuditPro provides optional SQL scripts to fix identified issues.



INAuditPro

INAuditPro Modules:

1.0 Pre-Merge Audits: For OO/As-built SI projects. Choose from over 160 audits/reports to check the project data before merging into As-Built. Distinguishes between As-Built claimed project data and new data.

2.0 Project Statistics: Provides counts of the main 54 entities. Distinguishes between claimed and new project data.

3.0 Project Panels: Identifies panels and strip/terminals used in other projects. Indicates the available strip/terminal spares.

4.0 Database Integrity: Provides 146 reports to check for anomalies that affect the overall integrity of the SI database.
















5.0 Engineering and As-Built: Provides 104 audits/reports to check for data errors and omissions.

6.0 Statistics (Engineering & As-Built): Provides 74 reports giving counts of the main domain statistics and the main SI module entities, including datasheets, Loops, and Panel strip reports revision status.

7.0 Standards: Audits 34 SI database standards/supporting tables for changes, additions, deletions and Standards not Used.



INAuditPro DB Integrity Punch List : Duplicate Items

8.0 Duplicate Items	
8.1 Duplicate Instruments 	4
8.2 Duplicate Loops 	0
8.3 Duplicate Control System Tags 	17933 
8.4 Duplicate Cables 	5631
8.5 Duplicate Panels 	0
8.6 Duplicate Strips in the Same Panel 	0
8.7 Duplicate FF Segment Numbers 	0
8.8 Duplicate Line Numbers 	2
8.9 Duplicate Equipment Numbers 	14
8.10 Duplicate P&ID Numbers 	2
8.11 Duplicate Datasheet Dwg Numbers 	1046
8.12 Duplicate Loop Dwg Numbers 	1105
8.13 Duplicate Panel Strip Drawing 	0
8.14 Duplicate Cable Sets 	0

Click to open the Excel report

Click the Wrench to open the Excel work sheet



INAuditPro

INAuditPro DB Integrity Punch List : Duplicate Items Report and fix

Only Unassigned Duplicate CS tags are deleted by the Fix

INAuditPro Module: DB Integrity										4.1.10 - 4.1.14
Group Name:		8.0 Duplicate Items								
Report Name:		8.3 Duplicate Control System Tags								
Report Date:		May 18 2022								
Audit PAU Level:		Domain: DEMO								
Records:		11, 148 (Actual Dups 17,933)								
CS Tag	Instrument	Instrument Status	Channel	Strip	Panel	Unit	Engineering Project	CS Tag ID	Instrument ID	SQL Scripts
0 TT222040.1	TT -222040					222-RESIDUE HYDROCONV TR 1	As-Built	2682022	2055671	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2682022
1 TE222131A	TE -222131A					222-RESIDUE HYDROCONV TR 1	As-Built	2311755	2057141	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2311755
2 HZSO222605A.1	HZSO -222605A					222-RESIDUE HYDROCONV TR 1	As-Built	2397172	2179238	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2397172
3 PY222531B	PY -222531B					222-RESIDUE HYDROCONV TR 1	As-Built	2058347	2058345	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2058347
4 FY222011A	FY -222011A					222-RESIDUE HYDROCONV TR 1	As-Built	2059721	2059719	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2059721
5 XYI225028	XYI -225028					225-RHC STABILIZATION UNIT	As-Built	2061592	2061590	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2061592
6 LT224020	LT -224020					224-RESIDUE STRIPPING UNIT	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883
7 FY222023	FY -222023					222-RESIDUE HYDROCONV TR 1	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883
8 FY222609	FY -222609					222-RESIDUE HYDROCONV TR 1	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883
9 TE222197A	TE -222197A					222-RESIDUE HYDROCONV TR 1	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883
0 XYI222901	XYI -222901					222-RESIDUE HYDROCONV TR 1	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883
1 TT222083.1	TT -222083.1					222-RESIDUE HYDROCONV TR 1	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883
2 TT22278	TT -22278					222-RESIDUE HYDROCONV TR 1	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883
3 PT22204	PT -22204					222-RESIDUE HYDROCONV TR 1	As-Built	2056883	2056883	Alter table Control_System_Tag Disable all triggers; Delete Control_System_Tag where CS_Tag_ID = 2056883

Only deletes UN-Assigned CS Tags

The Excel worksheet with SQL Fix scripts

SQL Fix scripts to suit the SPI DB (ORA or MS SQL)



INAuditPro Project Pre-Merger-Audit Selection List

1.0	Claimed Items Changed in the Project or in As-Built After Claimed	3.0	Project Items will Cause As-Built Duplicates
1.1	Claimed Loops Changed After Claimed	3.1	Instruments will Cause As-Built Duplicates
1.2	Claimed Loops Service Changed After Claimed	3.2	Loops will Cause As-Built Duplicates
1.3	Instruments Changed After Claimed	3.3	Panels will Cause As-Built Duplicates
1.4	Instrument Service Changed After Claimed	3.4	Strips will Cause As-Built Duplicates
1.5	Datasheet Forms Changed After Claimed	3.5	Cables will Cause As-Built Duplicates
1.6	Cables Changed After Claimed	3.6	CS Tags will Cause As-Built Duplicates
1.7	Cable Sets Changed Claimed	3.7	FF Segments will Cause As-Built Duplicates
1.8	Wire Tags Changed After Claimed	4.0	Index
1.9	Panels Changed After Claimed	4.1	Instruments Not in a Loop
1.10	Strips Changed After Claimed	4.2	Instruments with a Service Description Less Than 11 Characters
1.11	Terminals Changed After Claimed	4.3	Instruments with no P&ID Number
1.12	Control System Tags Changed After Claimed	4.4	Instruments with Instrument Type Mismatch
1.13	Wiring Equipment Changed After Claimed	4.5	Instrument Sequence Numbers with Alpha Characters
1.14	Apparatus Changed After Claimed	4.7	Equipment Numbers Added in the Project with no Instruments
1.15	Channels Changed After Claimed	4.8	Line Numbers Added in the Project with no Instruments
1.16	Segments Changed After Claimed	4.9	P&ID Drawing with no Instruments
2.0	As-Built Claimed Items Deleted in the Project	4.10	Instruments with Status Delete (or DEL)
2.1	As-Built Claimed Loops Deleted in the Project	4.11	Instruments with Status Hold
2.2	As-Built Claimed Instruments Deleted in the Project	4.12	Instrument or DCS Calibrated Range UOM Flag = D
2.3	As-Built Claimed Line Numbers Deleted in the Project	4.13	Tag Instrument Types not Defined in the SPI Standards
2.4	As-Built Claimed Equipment Deleted in the Project		
2.5	As-Built Claimed Panels Deleted in the Project		
2.6	As-Built Claimed Strips Deleted in the Project		
2.7	As-Built Claimed Terminals Deleted in the Project		
2.8	As-Built Claimed Wiring Equipment Deleted in the Project		
2.9	As-Built Claimed Cables Deleted in the Project		
2.10	As-Built Claimed Cable Sets Deleted in the Project		
2.11	As-Built Claimed Wires Deleted in the Project		
2.12	As-Built Claimed Channels Deleted in the Project		
2.13	As-Built Claimed Apparatus Deleted in the Project		
2.14	As-Built Claimed FF Segments Deleted in the Project		



INAuditPro Project Pre-Merger-Audit Selection List

5.0 Datasheets	7.0 Wiring
5.1 Datasheets with no Revision Number	7.1 Loops with Unconnected Devices
5.2 Datasheets with a Rev and no Drawing	7.2 Loops with Wired Devices
5.3 Datasheets with a Purchase Rev- no Manufacturer or Model No	7.3 Non Wired Loops with a Signaled Instrument
5.4 Datasheets with a Construction Rev - no Manufacturer or Model No	7.4 Wires with no Polarity
5.5 Datasheets with a As-Built Rev - no Manufacturer or Model No	7.5 Wires with no Color
5.6 Datasheets with a Rev and a Model Number in the Notes	7.6 Cables not Connected
5.7 Datasheets with a Rev and a Failure Mode in the Notes	7.7 Field Devices not Connected
5.8 Datasheets with a Rev and no P&ID Drawing Number	7.8 Cables only Connected at One End
5.9 Datasheets with a Rev and no Fluid State	7.9 Cables Named COPY
5.10 Datasheets with a Rev Number and no Equipment and Line No	7.10 Control System Tags with no Associated Instrument
5.11 Datasheets not Complying with SPI Standard Datasheet Profile	7.11 Field Device Panels with no Instrument
5.12 CV Datasheets with a Rev and no Fail Position	7.12 Field Device Panels with 0 Signal Levels and Sequence Numbers
5.13 Relief Valve Datasheets with a Rev and no Set Pressure	7.13 Cross Wires not Connected on Either End
5.14 Datasheets with a Rev and Process Function Mismatch	7.14 Cross Wires Connected One End with no Signal
5.15 Datasheets with a Rev and a Drawing Number Mismatch	8.0 Fieldbus and Profibus
5.16 Datasheets with a Rev - no Archive	8.1 Fieldbus Instruments
5.17 Claimed Datasheets not Modified	8.2 Profibus DP Instruments
5.18 Claimed Datasheets Modified	8.3 Profibus DA Instruments
6.0 Loops	8.4 Virtual Device Tags
6.1 Loops with no Associated Instruments	8.5 Virtual Devices in a Wrong Unit
6.2 Loops with a Rev and a Service Description <12 characters	8.6 Fieldbus or Profibus Instruments with no Virtual Device Tag
6.3 Loops with a Drawing Number and no Revision Number	8.7 Fieldbus or Profibus Instruments with Incorrect I/O Type
6.4 Loops with a Rev Number and no P&ID and no Equipment No	8.8 Conventional Instruments with Function Blocks
6.5 Loops with a Rev and no Drawing	8.9 Fieldbus or Profibus Instruments without a Function Block
6.6 Loops with a Rev and Measured Variable Mismatch	8.10 Defined Segments
6.7 Loops with a Rev - Sequence Numbers with Alpha Chars	8.11 Fieldbus or Profibus Instruments Assigned to a Segment
6.9 Loops with a Rev - Loop Instrument P&ID No. Mismatch	8.12 Segments without Drawing
6.10 Loops with a Rev - Loop Instrument Equipment No. Mismatch	8.13 Segment Drawings without a Rev
6.11 Issued Loops with no Generation Method Applied	8.14 As-Built Fieldbus or PB Instruments Moved to Different Segment
6.12 Loops with a Rev - Drawing No. Loop No. Mismatch	8.15 Segments with a Rev - no Archive
6.13 Loops with a Rev - no Archive	
6.14 Claimed Loops not Modified	
6.15 Claimed Loops Modified	



INAuditPro Project Pre-Merger-Audit Selection List

9.0	As-Built - Project Revision Comparison	13.0	Claimed Items Marked for Release to AS-Built and Not Released
9.1	Datasheet Revision Numbers	13.1	Claimed Loops Marked for Release and Not Released
9.2	Loop Drawing Revision Numbers	13.2	Claimed Instruments Marked for Release and Not Released
9.3	Panel Strip Report Revision Numbers	13.3	Claimed Line Numbers Marked for Release and Not Released
9.4	Fieldbus Segment Drawing Revision Numbers	13.4	Claimed Equipment Marked for Release and Not Released
10.0	Items Used in Other Projects	13.5	Claimed Panels Marked for Release and Not Released
10.1	Instruments Used in Other Projects	13.6	Claimed Strips Marked for Release and Not Released
10.2	Loops Used in Other Projects	13.7	Claimed Terminals Marked for Release and Not Released
10.3	Cables Used in Other Projects	13.8	Claimed Wiring Equipment Marked for Release and Not Released
10.4	Panels Used in Other Projects	13.9	Claimed Cables Marked for Release and Not Released
10.5	Datasheets Used in Other Projects	13.10	Claimed Cable Sets Marked for Release Not Released
10.6	Panel-Strips Used in Other Projects	13.11	Claimed Wires Marked for Release and Not Released
12.0	Duplicate Items in the Project	13.12	Claimed Channels Marked for Release and Not Released
12.1	Duplicate Instruments in the Project	13.13	Claimed Apparatus Marked for Release and Not Released
12.2	Duplicate Loops in the Project	14.0	Process Data on a Datasheet with a Rev
12.3	Duplicate Control System Tags in the Project	14.1	Thermowell Tags with no Max Velocity
12.4	Duplicate Cables in the Project	14.2	Tags with a Specific Gravity More than 1.8
12.5	Duplicate Panels in the Project	14.3	Tags with a Density Less than 1 kg/m ³
12.6	Duplicate Strips in the Same Panel	14.4	CV Tags with Outlet Size Bigger than Inlet
12.7	Duplicate FF Segment Numbers	14.5	Tags with Design or Working Press Set to Abs
12.8	Duplicate Line Numbers	14.6	PSV Tags with no Set Pressure
12.9	Duplicate Equipment Numbers	14.7	Tags with Multiple Governing Process Cases
12.10	Duplicate Datasheet Dwg Numbers	14.8	Flow Tags Missing Design Temp or Press
12.11	Duplicate Loop Dwg Numbers	14.9	Press Tags Missing Design Temp or Press
12.12	Duplicate Panel Strip Drawing	14.10	Temp Tags Missing Design Temp or Press
12.13	Duplicate Cable Sets	14.11	Level Tags Missing Design Temp or Press
		14.12	CV Tags Missing Design Temp or Press
		14.13	CV Tags with a Sound Level > 85
		14.14	PD Missing Governing Case ID



INTurnover

- **INTurnover** provides a solution for auditing SI datasheet data and more. Works with hosted and non-hosted projects in an engineering or OO/As-Built configuration.
- Provides a simple interface for the user to select which datasheet data fields to audit.
- Provides custom-defined data relationship rules: select a datasheet data field and its dependent data field. For example, on a control valve datasheet, select the positioner manufacturer and model number data fields and the positioner tag data field. INTurnover will only check for the positioner manufacturer and model if the positioner tag has been applied.
- Provides custom filtering exceptions by instrument types: For example, if a PG - does not require a location drawing, the location drawing data fields are not counted in the % incomplete.
- Provides extensive data filtering: For example, by Plant, Area, Unit, Project Number, MOC number, Revision status, select instrument status values to exclude (DEL).



INTurnover

- Provides mapping and auditing reports and a bar chart audit report showing % Incomplete.
- Provides additional checks for non-hosted projects, comparing the following hosted and non-hosted SI supporting tables entities:
 1. Compares and reports changes in the project to the datasheets/spec pages data field definitions, including additions and deletions.
 2. Compares and reports changes in the project to the instrument types, including additions and deletions.
 3. Compares and reports changes in the project to the instrument profiles including additions and deletions.
 4. Compares and reports change to I/O types in the project including additions and deletions.



INTurnover

Mapping Datasheet Data Fields

Select CNUM 101 Form 1 PH - CONTROL VALVE Audit Fields

Save Up Down Close

Page1 Mapped Fields

Group	LNo	Header	Column	Table	Action
PROCESS	16	Density UOM	pd_dens_uid	pd_general	⌵ ⌶ ✕
PROCESS	17	Specific Gravity Max	pd_spec_grav_max	pd_general	⌵ ⌶ ✕
PROCESS	17	Specific Gravity Min	pd_spec_grav_min	pd_general	⌵ ⌶ ✕
PROCESS	17	Specific Gravity Nor	pd_spec_grav_nor	pd_general	⌵ ⌶ ✕
PROCESS	19	Viscosity Max	pd_visc_max	pd_general	⌵ ⌶ ✕
PROCESS	19	Viscosity Min	pd_visc_min	pd_general	⌵ ⌶ ✕
PROCESS	19	Viscosity Nor	pd_visc_nor	pd_general	⌵ ⌶ ✕
PROCESS	19	Viscosity UOM	pd_visc_uid	pd_general	⌵ ⌶ ✕
PROCESS	27	Fluid Name	pd_fluid_name	pd_general	⌵ ⌶ ✕
PROCESS	28	Fluid Sta	pd_fluid_phase	pd_general	⌵ ⌶ ✕
VALVE BODY	35	Design Press UOM Flag	pd_press_des_uflg	pd_general	⌵ ⌶ ✕
VALVE BODY	35	Design Press U	pd_press_des_uid	pd_general	⌵ ⌶ ✕
VALVE BODY	35	Design Press	pd_press_des	pd_general	⌵ ⌶ ✕
VALVE BODY	36	Design Temp Min	pd_design_temp_min	pd_general	⌵ ⌶ ✕
VALVE BODY	36	Design Temp UOM	pd_design_temp_uid	pd_general	⌵ ⌶ ✕
POSITIONER	75	Manufactu	pd_manuf	pd_general	⌵ ⌶ ✕
POSITIONER	76	Model	pd_model	pd_general	⌵ ⌶ ✕
POSITIONER	77	Type	pd_type	pd_general	⌵ ⌶ ✕

Option to edit the headings or delete a row

Select a data field to add it to the Audit List

Lists selected data fields with the datasheet line number and headings



INTurnover

Datasheet (DS) Forms Compare Different Domains/Projects

DS Form Compare

CNUM: 101 Form: 1 PH - CONTROL VALVE

Page1 ■ Changed Fields

Page1	Page2	Changed Fields
1	1	Tag No.
1	1	cmprnt_name
1	1	Plant Name
1	1	Area Name
1	1	Location
1	1	cmprnt_loc_id
1	1	Unit Name
1	1	Line No.
1	1	line_num
1	1	Equipment No.
1	1	equip_id
1	1	Area Class
1	1	spec_ufd_c42
1	1	Zone
1	1	spec_u Group
1	1	spec_ufd_c9
1	1	Line Size
1	1	line_size
1	1	line_um
1	1	spec_ufd_c13
1	1	LookupDisplayLine_um
1	1	Schedule
1	1	In
1	1	Out
1	1	Pipe Material
1	1	spec_ufd_c25
1	1	Units
1	1	Min. Flow
1	1	pd_flow_min
1	1	pd_flow_max
1	1	pd_flow_nor
1	1	if (pd_flow_ufd) pd_flow_min
1	1	if (pd_flow_ufd) pd_flow_max
1	1	if (pd_flow_ufd) pd_flow_nor
1	1	Outlet Pressure
1	1	if (pd_press_ufd) pd_press_min
1	1	if (pd_press_ufd) pd_press_max
1	1	if (pd_press_ufd) pd_press_nor
1	1	Operating Temperature
1	1	pd_temp_min
1	1	pd_temp_max
1	1	pd_temp_nor
1	1	Operating Density
1	1	pd_dens_min
1	1	pd_dens_max
1	1	pd_dens_nor
1	1	Operating S.G.
1	1	pd_sgs_at_mm
1	1	pd_spsc_aray_max
1	1	Molecular Weight
1	1	spec_ufd_c141
1	1	Operating Viscosity
1	1	pd_visc_min
1	1	pd_visc_max
1	1	pd_visc_nor
1	1	Specific Heat Ratio
1	1	pd_cp_cv_min
1	1	pd_cp_cv_max
1	1	pd_cp_cv_nor
1	1	Inlet Vapour Pressure
1	1	if (pd_vap_press) pd_vap_press_min
1	1	if (pd_vap_press) pd_vap_press_max
1	1	if (pd_vap_press) pd_vap_press_nor
1	1	Sound Press. Lvl Allow./Pred.
1	1	spec_ufd_c05
1	1	spec_ufd_c10
1	1	spec_ufd_c209
1	1	Notes
1	1	spec_ufd_c19
1	1	spec_ufd_c08
1	1	spec_ufd_c10
1	1	spec_ufd_c209
1	1	Fluid
1	1	pd_fluid_phase
1	1	Model No.
1	1	spec_ufd_c57
1	1	spec_ufd_c56
1	1	spec_ufd_c47
1	1	Critical Pressure
1	1	pd_critc_press
1	1	if (pd_critc_pre) pd_critc_pre
1	1	Compressibility Factor
1	1	pd_compres_flow_nor
1	1	Tag No.
1	1	Dev. Seq. Addr.
1	1	spec_ufd_c134
1	1	spec_ufd_c46
1	1	% Superheat
1	1	spec_ufd_c216
1	1	spec_ufd_c118
1	1	Body Type
1	1	spec_ufd_c146
1	1	looktoDialact
1	1	ANSI Class
1	1	spec_ufd_c91
1	1	Max Pressure
1	1	pd_press_max
1	1	if (pd_press_max) pd_press_max
1	1	Max Temperature
1	1	pd_design_temp_min
1	1	pd_design_tem
1	1	Body/Bonnet Material
1	1	pd_body_material
1	1	Line Material
1	1	id
1	1	spec_ufd_c78
1	1	spec_ufd_c1
1	1	spec_ufd_c79
1	1	spec_uspec_uspec_us
1	1	End
1	1	In
1	1	Out
1	1	spec_ufd_c80
1	1	spec_uspec_uspec_us
1	1	Flg Face Finish
1	1	spec_ufd_c85
1	1	End Ent./Material
1	1	spec_ufd_c84
1	1	spec_ufd_c82
1	1	Flow Direction
1	1	Bonnet Type
1	1	spec_ufd_c86
1	1	spec_ufd_c87
1	1	Lab. & Isp. Vlv.
1	1	spec_ufd_c86
1	1	spec_ufd_c87
1	1	Packing Material
1	1	spec_ufd_c71
1	1	Packing Type
1	1	spec_ufd_c43
1	1	Boiling Material
1	1	spec_ufd_c136
1	1	Boiling Type
1	1	spec_ufd_c90

CNUM: 9101 Form: CONTROL VALVE, MODULATING (FF)

Page1 ■ Changed Fields

Page1	Page2	Changed Fields
1	1	Tag No.
1	1	cmprnt_name
1	1	Plant Name
1	1	Area Name
1	1	Location
1	1	cmprnt_loc_id
1	1	Unit Name
1	1	Line No.
1	1	line_num
1	1	Equipment No.
1	1	equip_id
1	1	Area Class
1	1	spec_ufd_c42
1	1	Zone
1	1	spec_u Group
1	1	spec_ufd_c9
1	1	Line Size
1	1	line_size
1	1	line_um
1	1	spec_ufd_c13
1	1	LookupDisplayLine_um
1	1	Schedule
1	1	In
1	1	Out
1	1	Pipe Material
1	1	spec_ufd_c15
1	1	Units
1	1	Min. Flow
1	1	pd_flow_min
1	1	pd_flow_max
1	1	pd_flow_nor
1	1	if (pd_flow_ufd) pd_flow_min
1	1	if (pd_flow_ufd) pd_flow_max
1	1	if (pd_flow_ufd) pd_flow_nor
1	1	Outlet Pressure
1	1	if (pd_press_ufd) pd_press_min
1	1	if (pd_press_ufd) pd_press_max
1	1	if (pd_press_ufd) pd_press_nor
1	1	Operating Temperature
1	1	pd_temp_min
1	1	pd_temp_max
1	1	pd_temp_nor
1	1	Operating Density
1	1	pd_dens_min
1	1	pd_dens_max
1	1	pd_dens_nor
1	1	Operating S.G.
1	1	pd_spsc_aray_min
1	1	pd_spsc_aray_max
1	1	Molecular Weight
1	1	spec_ufd_c141
1	1	Operating Viscosity
1	1	pd_visc_min
1	1	pd_visc_max
1	1	pd_visc_nor
1	1	Specific Heat Ratio
1	1	pd_cp_cv_min
1	1	pd_cp_cv_max
1	1	pd_cp_cv_nor
1	1	Inlet Vapour Pressure
1	1	if (pd_vap_press) pd_vap_press_min
1	1	if (pd_vap_press) pd_vap_press_max
1	1	if (pd_vap_press) pd_vap_press_nor
1	1	Sound Press. Lvl Allow./Pred.
1	1	spec_ufd_c05
1	1	spec_ufd_c10
1	1	spec_ufd_c11
1	1	spec_ufd_c109
1	1	Notes
1	1	spec_ufd_c19
1	1	spec_ufd_c08
1	1	spec_ufd_c10
1	1	spec_ufd_c210
1	1	spec_ufd_c211
1	1	spec_ufd_c212
1	1	Fluid
1	1	pd_fluid_phase
1	1	Model No.
1	1	spec_ufd_c57
1	1	spec_ufd_c56
1	1	spec_ufd_c47
1	1	Critical Pressure
1	1	pd_critc_press
1	1	if (pd_critc_pre) pd_critc_pre
1	1	Compressibility Factor
1	1	pd_compres_flow_nor
1	1	Tag No.
1	1	Dev. Seq. Addr.
1	1	spec_ufd_c134
1	1	spec_ufd_c46
1	1	% Superheat
1	1	spec_ufd_c216
1	1	spec_ufd_c118
1	1	Body Type
1	1	spec_ufd_c146
1	1	looktoDialact
1	1	ANSI Class
1	1	spec_ufd_c91
1	1	Max Pressure
1	1	pd_press_max
1	1	if (pd_press_max) pd_press_max
1	1	Max Temperature
1	1	pd_design_temp_min
1	1	pd_design_tem
1	1	Body/Bonnet Material
1	1	pd_body_material
1	1	Line Material
1	1	id
1	1	spec_ufd_c78
1	1	spec_ufd_c1
1	1	spec_ufd_c79
1	1	spec_uspec_uspec_us
1	1	End
1	1	In
1	1	Out
1	1	spec_ufd_c80
1	1	spec_uspec_uspec_us
1	1	Flg Face Finish
1	1	spec_ufd_c85
1	1	End Ent./Material
1	1	spec_ufd_c84
1	1	spec_ufd_c82
1	1	Flow Direction
1	1	Bonnet Type
1	1	spec_ufd_c86
1	1	spec_ufd_c87
1	1	Lab. & Isp. Vlv.
1	1	spec_ufd_c86
1	1	spec_ufd_c87
1	1	Packing Material
1	1	spec_ufd_c71
1	1	Packing Type
1	1	spec_ufd_c43
1	1	Boiling Material
1	1	spec_ufd_c136
1	1	Boiling Type
1	1	spec_ufd_c90
1	1	Spec. Mod.
1	1	spec_ufd_c90
1	1	spec_ufd_c91
1	1	spec_ufd_c92
1	1	spec_ufd_c93
1	1	spec_ufd_c94
1	1	spec_ufd_c95
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1	1	spec_ufd_c196
1	1	spec_ufd_c197
1	1	spec_ufd_c198
1	1	spec_ufd_c199
1	1	spec_ufd_c200

- 70 Orientation
- 71 HndWhl Type
- 72 Fail Position
- 73 Drift to
- 74 spec_ufd c219

- spec_ufd c54
- spec_ufd c61
- pd failure action
- spec_ufd c222
- spec_ufd c235

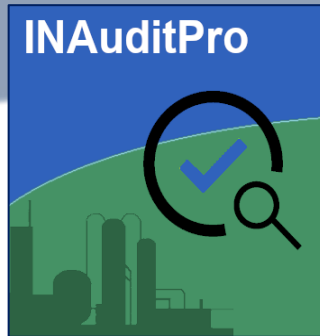
LNo 72: pd_failure_action

1st Form has correct mapping

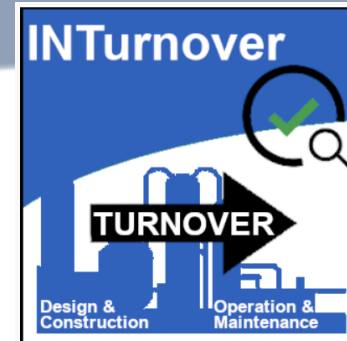
2nd Form has different/incorrect mapping

- 70 Orientation
- 71 HndWhl Type
- 72 Fail Position
- 73 Drift to
- 74 spec_ufd c219

LNo 72: udf_c11



And



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Questions?

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