

Editing Spec Sheets in Engineering Data Editor



Smart Instrumentation EDE Spec Sheet Editing

FLUOR[®]

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Presentation Agenda

- Smart Instrumentation Spec Sheets
- Editing Spec Sheet Pages
- Page Spec Data Dictionary
- Spec Sheet Browser View
- Engineering Data Editor View
- Defining EDE Spec User Defined Fields
- Creating EDE Spec Sheet View
- Summary of Spec Engineering Data Editor

The screenshot displays the EDE (Engineering Data Editor) software interface. The main window shows a table of instrument specifications with columns for Instrument Name, NACE, Area Class, Valve Calc, USM, LUSD, L4M, L4D, Well Construction, Well Material, and Flange Material. The table lists various instruments like 1-101-DG-TW-0012, 1-101-DG-TW-0027, etc., and their corresponding specifications.

Instrument Name	NACE	Area Class	Valve Calc	USM	LUSD	L4M	L4D	Well Construction	Well Material	Flange Material
1-101-DG-TW-0012	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
1-101-DG-TW-0027	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
1-101-DG-TW-0062	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
1-101-DG-TW-0063A	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
1-101-DG-TW-0063B	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
1-101-DG-TW-0132	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
1-101-DG-TW-0134	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
1-101-DG-TW-0139	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS

The interface also includes a search bar, a toolbar with various icons, and a sidebar with a tree view and a search field. A small table in the top right corner shows a summary of the data dictionary fields.

Field No.	Field Name	Field Type
1	Tag No.	string
2	Service	string
3	Line No.	string
4	Area Classification	string
5	Isolation Temperature	string
6	Allowable Sound Pressure Level	dbA
7	Temperature Requirements	string

Smart Instrumentation Spec Sheets

- ◆ **Smart Instrumentation Spec Sheets are more complex than most people realize**
- ◆ Instrument Data Sheet or Spec Sheet Purpose:
 - Sizing – The Process data on the Spec Form is used for Sizing
 - Selection – The Body of the Spec together with the Size selects the Manufacturer and Model
 - Quote – The Spec is issued to vendors for RFQ
 - Purchase – After Sizing and Selection the Spec is issued for purchase
 - Maintenance & Operation – Spec forms are maintained by Owner Operators for Operations

The image shows a complex, multi-sectioned form titled 'Smart Instrumentation Spec Sheet'. The form is organized into several distinct areas:

- GENERAL:** Includes fields for Item No., Equipment No., Line No., and various identification codes.
- P&ID:** Contains information about the process and instrumentation, such as Line Name, Line Size, and Line Material.
- PROCESS:** Lists process parameters like Flow Rate, Unit, and various flow rates (Max, Norm, Min).
- OPERATIONS:** Details operational requirements, including Instrument Type, Accuracy, and other performance metrics.
- CALCULATED VALUES:** A section for numerical data derived from the process information.
- SIZE:** A large section for specifying dimensions and material properties, with sub-sections for different material types.
- MATERIAL:** Specifies the exact material and manufacturer for the instrument.
- NAME:** Provides a clear name for the instrument.
- LOCATION:** Indicates where the instrument is installed.
- MAINTENANCE:** Contains notes and instructions for the instrument's upkeep.

At the bottom right, there is a 'SMART INSTRUMENTATION' logo with the word 'FLUOR' in a large, bold font. Below the logo, there are fields for 'Credit Value', 'Form No.', and 'Date'.

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1	Tag No.	cmprt_name						
2	Service	cmprt_serv						
3	Line No.	line_usrt						
4	Area Classification	spec_usrt_c01						
5	Ambient Temperature	Min.	Max.	spec_usrt_c02	spec_usrt_c03	spec_usrt_c04	spec_usrt_c05	
6	Allowable Steam Pressure Level	dbn						
7	Tightness Requirements	pst_seal_leak						
8	Available Air Supply Pressure	Min.	Max.	spec_usrt_c06	spec_usrt_c09	spec_usrt_c10	spec_usrt_c11	
9	Power Failure Position	pst_failure_action						
10	spec_usrt_c12	spec_usrt_c14						
11	Line Size and Schedule	Inlet	Outlet	line_size	uonline	sched	spec_usrt_c15	spec_usrt_c16
12	Pipe Material	spec_usrt_c17						
13	Pipe Insulation	spec_usrt_c18						
14	Process Fluid	pst_fluid_name						
15	Upstream Condition	pst_upst_cond						
16	Differential Pressure	pst_max_ahd_ahdnd_max_ahd_ahd		@ Min. Flow		@ Min. Flow		
17		F @ Min. Flow		F @ Min. Flow		@ Min. Flow		
18	Flow Rate	F @ Min. Flow	F @ Min. Flow	sd_flow_min	sd_flow_max	sd_flow_min	sd_flow_max	
19	Seal Pressure	F @ Min. Flow	F @ Min. Flow	sd_seal_min	sd_seal_max	sd_seal_min	sd_seal_max	

The PowerSoft Report (PSR) Spec Page has all the elements to create a SPI Spec form and to query SPI Tables to Present Data for a Specific Tag Number

45	Seal Material	spec_usrt_c16		70	Switching Position	spec_usrt_c30				
46	Cage	Item Material	spec_usrt_c17	spec_usrt_c17	71	spec_usrt_c39	spec_usrt_c39			
47	Outlet Material	spec_usrt_c17		72	MPN	Model	spec_usrt_c21	spec_usrt_c20		
48	spec_usrt_c19	spec_usrt_c19		73	Set Pressure	spec_usrt_c26	spec_usrt_c25			
49	MPN	Model	spec_usrt_c16	spec_usrt_c16	74	Filter	Outage	spec_usrt_c29	spec_usrt_c28	
50	Type	spec_usrt_c06		75	spec_usrt_c23	spec_usrt_c22	spec_usrt_c21			
51	Size	Item	spec_usrt_c06	spec_usrt_c06	76	Hydro Pressure	spec_usrt_c11	spec_usrt_c10		
52	Air Failure Valve	spec_usrt_c02		77	Leakage	spec_usrt_c12	spec_usrt_c11			
53	Handwheel Location	spec_usrt_c01		78	spec_usrt_c18	spec_usrt_c17	spec_usrt_c16			
54	Branch Flange	spec_usrt_c03		79	Manufacturer	cmprt_man	cmprt_man			
55	spec_usrt_c09	spec_usrt_c09		80	Model	cmprt_model	cmprt_model			
Notes: spec_usrt_c01				PURCHASE		81	Purchase Order Num	spec_cmprt_po_no		
						82	Price	Item Number	spec_cmprt_p1	spec_cmprt_p1
						83	Serial Number	spec_cmprt_sn		
						INSTRUMENT SPECIFICATION				Inbwp F_OutflrSling 'nboots
						Control Valve				
						Sheet spec_# of spec_#				
No.	By	Date	Revision	Code 1	Draw. No.	Shop Name			Rev.	

Smart Instrumentation Spec Sheets

◆ **Elements of a Spec Page**

- Line work defines data grouping and areas of a spec page
- Headers and data fields are defined in the spec data dictionary for each spec page
- The notes and title block areas are also defined as a part of each spec page
- Page elements comprise a PowerSoft Report (PSR File)

GENERAL	1	Tag No.		
	2	Service		
	3	Line No.		
	4	Area Classification		
	5	Ambient Temperature:	Min.	Max.
	6	Allowable Sound Pressure Level	dBA	
	7	Tightness Requirements		
	8	Available Air Supply Pressure:	Min.	Max.
	9	Power Failure Position		
	10	spec_udf_c13		

Line work and Header Text that Corresponds to Data fields

cmpnt_name
cmpnt_serv
line_num
spec_udf_c01
spec_udf_c02 spec_udf_c03 spec_udf_c04 spec_udf_c05
spec_udf_c06
pd_seat_leak
spec_udf_c08 spec_udf_c09 spec_udf_c10 spec_udf_c11
pd_failure_action
spec_udf_c14

Data fields and Spec User Defined Fields from Tables

											bitmap (F_GetProfString ("intools.	
No.	By	Date		Revision		Code: 1	Dwg. No.:	dwg. name		Rev.:		

Spec Page Title Block with Revision data area

Smart Instrumentation Spec Sheets

The Form Description is from the Form Table

Spec Title Area is created as part of each PSR Page

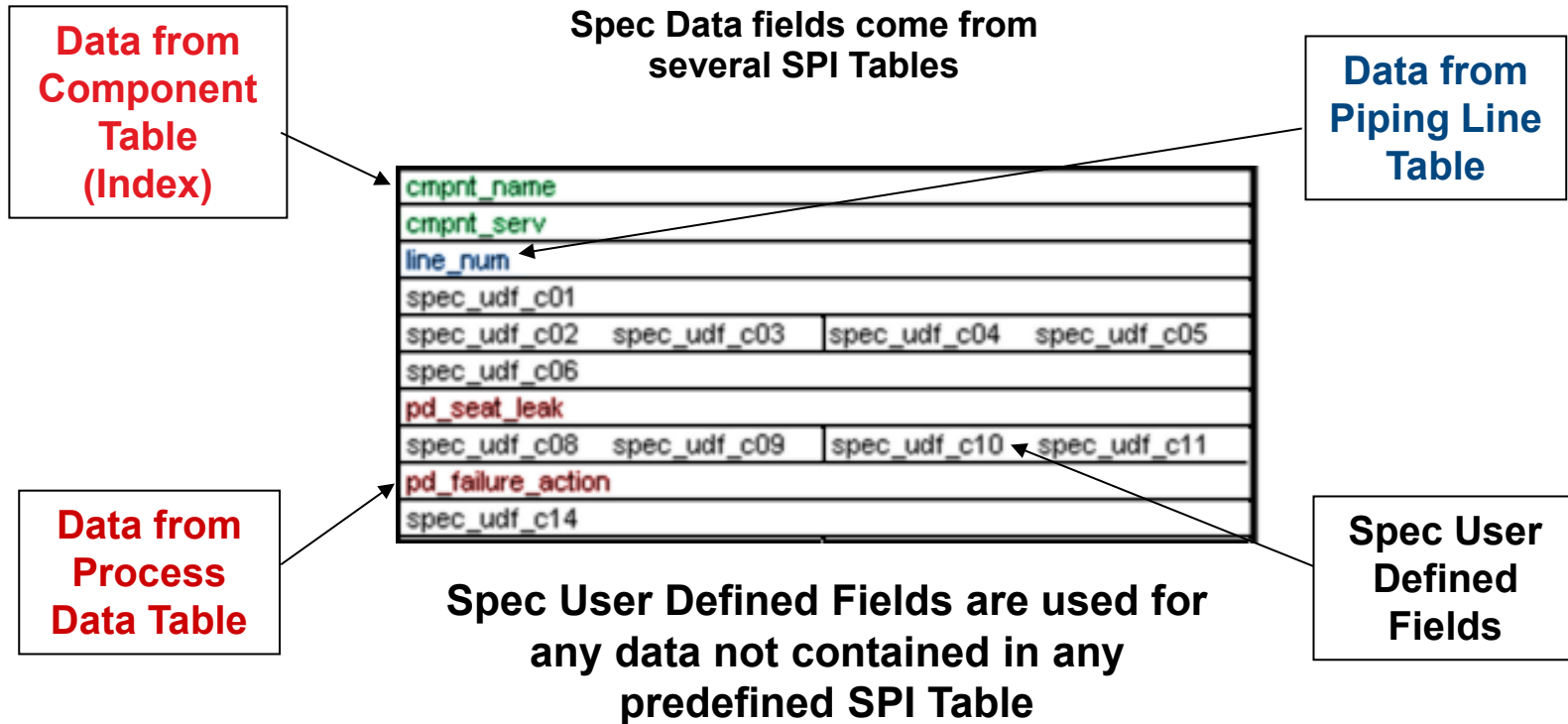
The Logo is defined in the Admin Module

				INSTRUMENT SPECIFICATION Control Valve		bitmap (F_GetPofString ("intools.	
						Sheet spec_sr of spec_sr	
No.	By	Date	Revision	Code: 1	Dwg. No.: dwg_name	Rev.:	

Revision Data is from an Internal Array controlled by SPI

The Drawing Name is from the Drawing Table

Smart Instrumentation Spec Sheets



Editing Spec Sheet Pages

◆ Internal Spec Page Editor

- Column List – shows available fields from the current query
- View Names – displays the field names
- Delete Object – removes next clicked object
- Position – locate an object by X,Y, H & W
- Duplicate – makes a copy of the next clicked object
- Computed Fields – enters an expression in a field
- Text – enter a text field (Usually a Header)
- Picture – enter a bitmap image on the page
- Line – create vertical or horizontal linework
- Show Invisible – displays any hidden objects

The screenshot shows the 'Specifications Module Page Editor - THERMOWELL' window. The main table contains the following data:

Line No.	Service	P&ID No.	Line No.	Line Size	Line Schedule	Pipe Material	Pipe Insulation	NACE Requirement	Fluid Name	Fluid State	Oper. Temperature	Max. Temperature
1	Legacy Tag Number	Primary Tag Number	udf_c01									
2	Service	P&ID No.	cmprnt_serv									
3	Line No.	P&ID No.	line_num									
4	Area Classification		spec_ufd_c02									
5	Line Size	Line Schedule	line_size	line_uom	line_sched							
6	Pipe Material	Pipe Insulation	pipe_mat_name		spec_ufd_c03							
7	NACE Requirement		spec_ufd_c01									
8	Fluid Name	Fluid State	pd_fluid_name		pd_fluid_phase							
9	Oper. Temperature	Max. Temperature	pd_temp_nor	pd_temp_uid	pd_temp_max	pd_temp_uid						
10	Thermal Shock											
11	Oper. Press.											
12	Vibrations											
13	Erosion											
14	Oxidizing Atr											
15	Flow Rate											
16	Viscosity (C											
17	Density (Op											
18	Specific Gra											
19	Process Con											
20	Construction											
21	Well Material											
22	Flange Mater											
23	Full Penetrat											
24	Coating											
25	Sensor Conn											
26	Bore Diamet											
27	Length Betw											
28	Lagging Extens											
29	Overall Length											
30	Tip Thickness											
31	Max. Insertion Diameter (Root Diameter)											
32	Min. Insertion Diameter (Tip Diameter)											
33	Tapered Length											
34	Performance Test (Wake Calc.)											
35	spec_ufd_c11											
36	Treatment											
37	Finish											
38	Stamping											
39	Back-Up Flange											
40	Weldolet Fitting											
41	spec_ufd_c36											

The 'Table Column List' dialog box is open, showing a table with columns 'Column', 'Type', and 'Description'. The table contains the following data:

Column	Type	Description
proj_id	long	Project Name
area_id	long	Area Name
plant_id	long	Plant Name
unit_id	long	Unit Name
line_i_d	long	Line Internal Diameter
case_id	long	
spec_entty_type_id	long	
spec_cmprnt_type	char(60)	Tag Type
spec_cmprnt_price	char(60)	Price
line_cmprnt_id	long	
line_id	long	Line Number

Editing Spec Sheet Pages

◆ Set Tab Order

- The tab order needs to be reset if data fields are added or removed from a spec page:
 - After editing a page (before closing) select “Action / Tab Order”
 - Select “Default Tab Order” then un-select “Tab Order”

◆ Regenerate Page

- Page Regeneration rebuilds the underlying query that defines the fields available on a spec page:
 - Allows selection of tables and fields in the query
 - Restructures the query if the page is corrupted

◆ Save as Page after Editing or Regeneration

The screenshot shows a software interface with a menu and a dialog box. The menu is open, showing options like 'Open Page...', 'Open File...', 'Form List...', 'Save', 'Save as File...', 'Save as Page...', 'Tab Order', 'Default Tab Order', 'Edit Fields and Headers', 'Change Process Function...', 'Regenerate Page...', 'Regenerate Pages in Batch Mode...', 'Delete Page...', and 'New Composite Page...'. The 'Tab Order' option is selected, and the 'Default Tab Order' option is highlighted. The dialog box is titled 'Regenerate Page' and contains a table for selecting tables, views, and columns. The table has columns for 'Table/View Name', 'Select', 'Show Columns', 'Column Name', and 'Column Type'. The 'spec_usif_c92' column is selected. The dialog also includes a 'Select all' checkbox and 'OK', 'Cancel', and 'Help' buttons.

Table/View Name	Select	Show Columns	Column Name	Column Type
device_cable_view	<input type="checkbox"/>		spec_usif_c100	char(60)
device_panel_view	<input type="checkbox"/>		spec_usif_c99	char(60)
fieldbus_spec	<input type="checkbox"/>		spec_usif_c98	char(60)
hybrid_control_valve_view	<input type="checkbox"/>		spec_usif_c97	char(60)
spec_sheet_data	<input checked="" type="checkbox"/>	Show	spec_usif_c96	char(60)
usif_component	<input checked="" type="checkbox"/>	Show	spec_usif_c95	char(60)
v_profnfo	<input type="checkbox"/>		spec_usif_c94	char(60)
view_line	<input type="checkbox"/>		spec_usif_c93	char(60)
			spec_usif_c92	char(60)

Page Spec Data Dictionary

◆ Spec Data Dictionary Properties

- Displays the field headers of the data fields in the spec page query
- It allows users to select which fields are editable in a Spec Template, Browser and External Editor:
 - Templates only need data that is not unique to a tag
 - Browsers can access all the data in a spec page
 - External Editors do not need data from the Component Table

◆ Spec Data Dictionary Tables Tab

- Allows the selection of which fields are editable based on the tables they are from

Field Header	Template	Browser	Editable in IEE
Manufacturer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Model	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Purchase Order Number	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Price	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Item Number	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Serial Number	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Line Number	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Line Size	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Line Sched.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Line I.D.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Size Unit Of Measure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notes:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tag Number	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
General Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Process Fluid	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Viscosity at Operating Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Viscosity Unit Id.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Base Temp	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Temp Unit Of Measure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Base Press.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Fields selected for browser: 84

Copy From... Close Help

Page Spec Data Dictionary

- ◆ **Spec Data Dictionary Header Definitions**
 - Users need to define the headers for each data field on a Spec Page with the following steps:
 - Click on a Data Field in the Spec Page or a Field Header in the Field Properties
 - The Header and Data Field change colors then click on the Header Description in the Spec Page, the text will show up in the Field Properties Field Header
 - The user can also edit the Field Properties Field Header to add the header primary function (e.g. “TE Wire Gauge / Material”)
 - Users should continue to define the headers for every data field on the Spec Page
 - Data fields on blank lines of the can get header that describes the line and function (e.g. L14H and L14D)

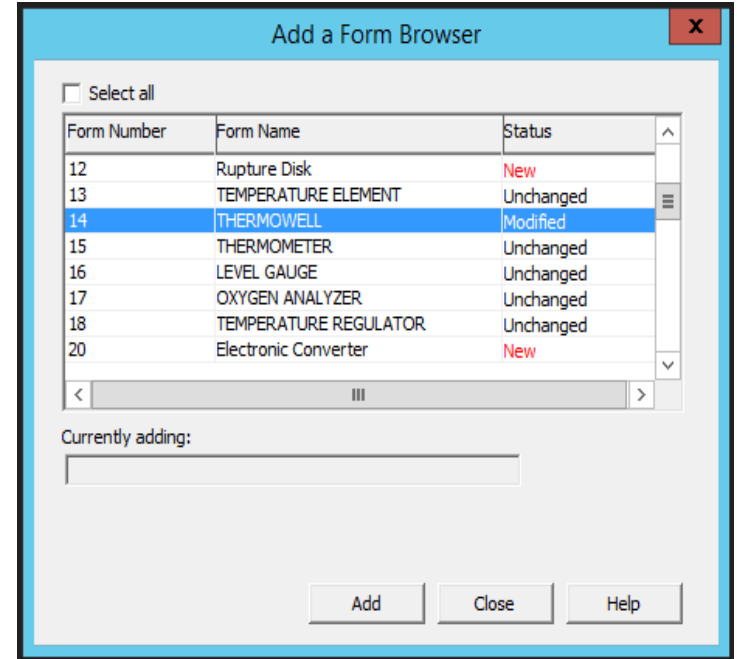
GENERAL	1	Tag Number	cmpnt_name	
	2	Service	cmpnt_serv	
	3	P & ID No.	pid_no	
	4	Line No.	line_num	
	5	Area Classification	spec_udf_c01	
PROCESS CONDITIONS	6	Fluid Name	pd_fluid_name	
	7	State	pd_fluid_phase	
	8	Pressure (psi g)	pd_press_min	pd_press_nor
	9	Temperature (°F)	pd_temp_min	pd_temp_nor
	10	Des. Press. (psi g)	pd_press_des_min	
	11	Des. Temp. (°F)	pd_design_temp_min	
ELEMENT	12	Instrument Type	spec_udf_c70	
	13	Sensor Configuration	spec_udf_c50	
	14	Wire Gauge / Material	spec_udf_c16	
	15	Spring Loaded	spec_udf_c23	
	16	Sheath Material	spec_udf_c40	
	17	Insulation	spec_udf_c19	
	18	Grounding Type	spec_udf_c49	

Field Properties	Tables	URL String		
Field Header	Template	Browser	Editable in IEE	^
Head Material	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Head Explosion Protection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▶ TE Wire Gauge / Material	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TE Element Length (in)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TT Calibration Test Certificate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TE Model	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Page Spec Data Dictionary

◆ Spec Data Dictionary Form Browser

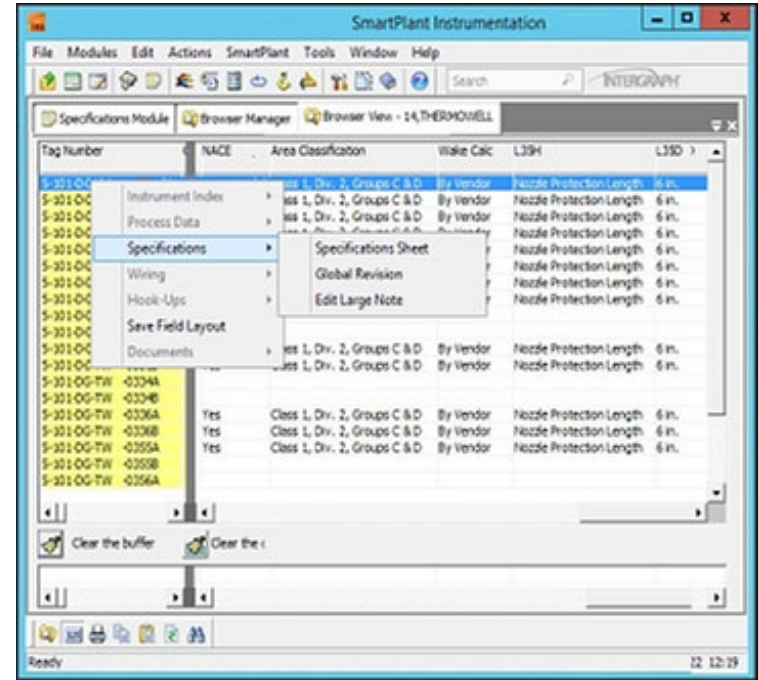
- After creating, modifying or editing a spec sheet data dictionary, the Form Browser needs to be updated.
 - Open the “Browser Manager” module then the “Browser / Form Browser”
 - Select the “Modified or New” Page Number and add the Form Browser to the Browser Manager / Specifications group
- In the Browser manager, select Specifications, then click on the Page number, Description
 - The updated browser Views are available for opening and modifying a browser view



Spec Sheet Browser

◆ Spec Sheet Browser Functions

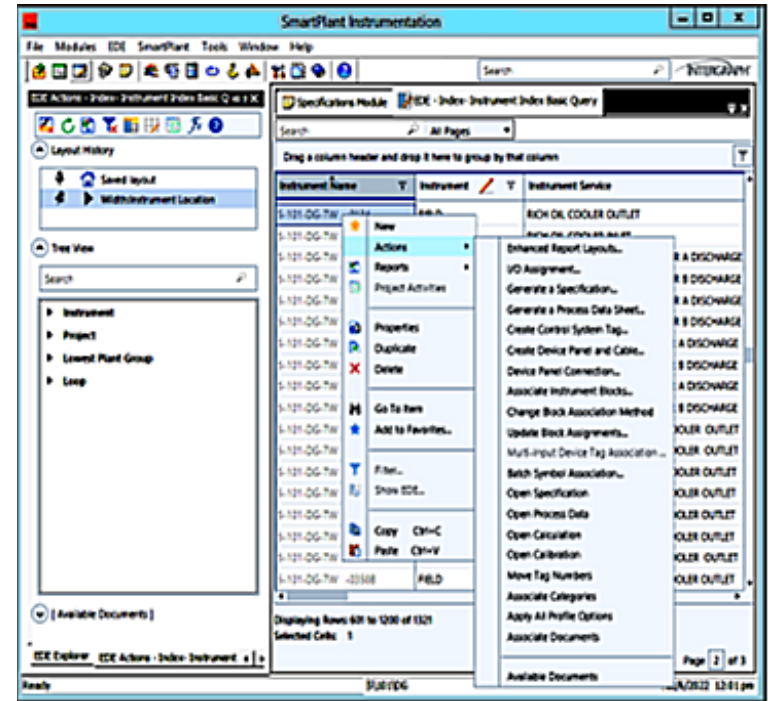
- Normal Spec Browser commands:
 - Count – selected record count
 - Print – sends browser view to Printer or Save as
 - Copy – copies the selected record to the buffer
 - Paste – paste the buffer contents to current record
 - Refresh – reloads the view from the database
 - Find – allows the user to search fields in the view
- Limited Right Click functions:
 - Specifications:
 - Specification Sheet
 - Global Revision
 - Edit Large Note
 - Save Field Layout



Engineering Data Editor View

◆ Engineering Data Editor Functions:

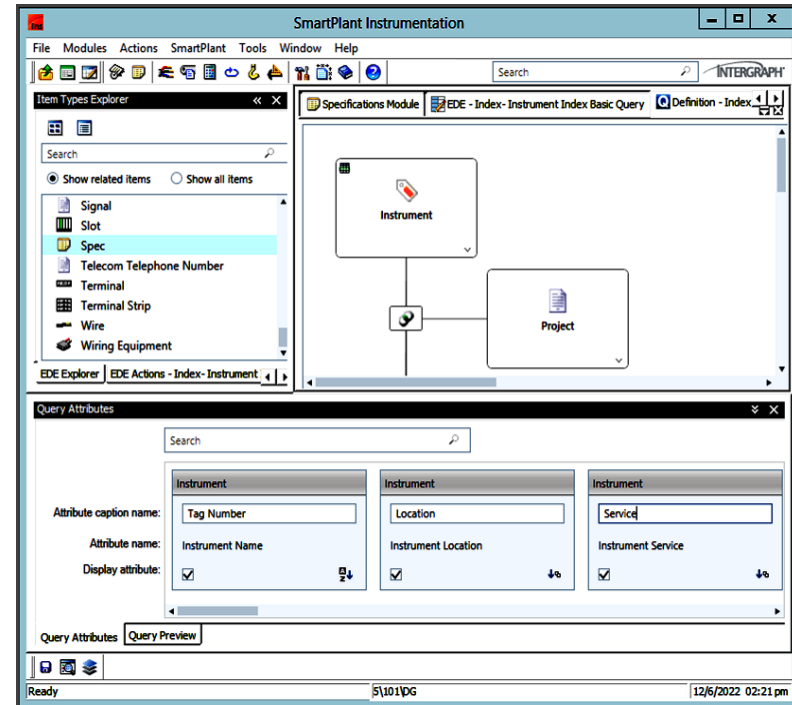
- Extensive search functions in both the view and database
- Ability to edit all Data Fields including Pick Lists
- Ability to add Tables and Fields to a view
- Comprehensive right click menus that allow:
 - Actions – open, create and generate modules and data sheets
 - Reports – generate or save-as all documents associated with a tag
 - Properties – opens Tag Number Properties dialog box for editing all primary tag data
 - Copy and Paste – across multiple columns and records



Engineering Data Editor View

◆ Edit EDE Definitions:

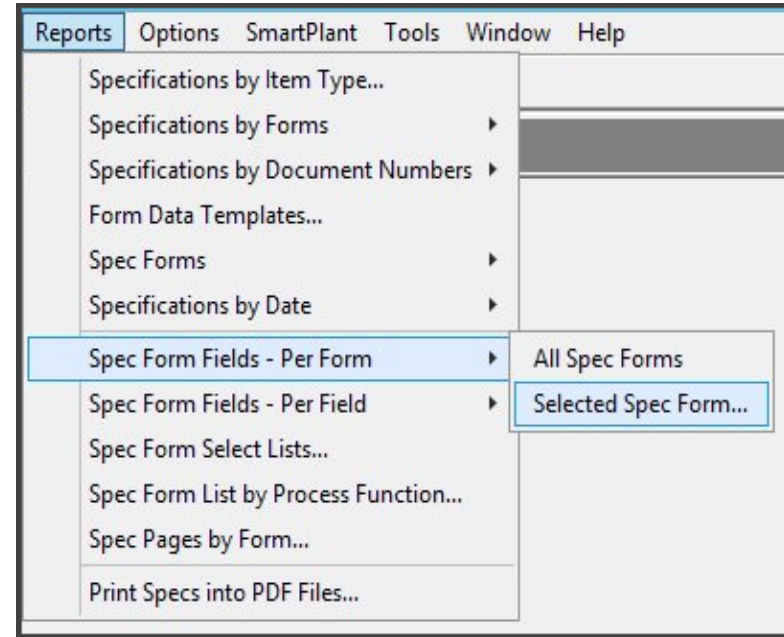
- Enables users to add Tables (Item Types) and Fields (Attributes) to the EDE view
- Establish relationships between Tables
- Remove Fields from an EDE view
- Adding “Spec” Tables to an EDE view:
 - Specification Sheet attributes only include data fields that are common across all spec types
 - Custom Fields attributes only list the Spec_udf field names and are not headered with data from the Spec Data Dictionary
 - Custom fields have different headers depending on each spec form data dictionary
 - Users must create a unique EDE view for each different Spec Page with proper headers



Defining EDE Spec User Defined Fields

◆ Steps to define EDE Spec fields:

- Each Spec Page that needs an EDE view needs to have an updated Spec Data Dictionary
- The Headers for each Spec_UDF must be defined in the Spec Data Dictionary
- The user will need to export the Spec Fields and Headers out of Smart Instrumentation to define the EDE headers needed for each Spec Page
- To export the Spec Page Headers:
 - In the Specification Module select the “Reports / Spec Form Fields – Per Form / Selected Spec Form...” and select the named Spec Page
 - In the “Print Preview” – Save as a CSV file named with the Spec Page number or Name



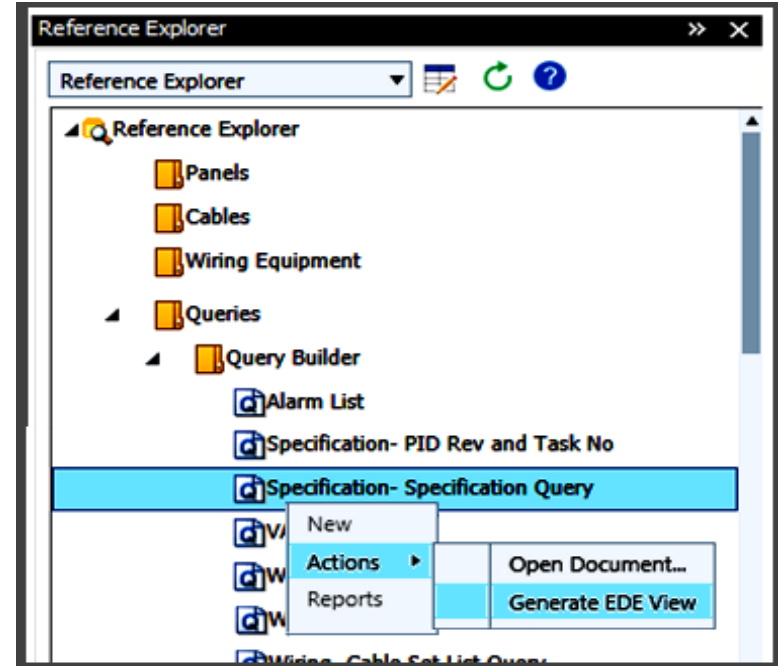
Defining EDE Spec User Defined Fields

- ◆ **Steps to define EDE Spec fields (continued):**
 - Open the CSV file and remove all columns except “Column Name” and “Column Header”
 - Remove all rows that are not “spec_udf_..” fields as only those fields need to be redefined in the EDE
 - Rename “Column Name” and “Column Header” to “Spec Field” and “Spec Header”
 - Add a column for “EDE Header”
 - Cut and Paste the “Spec Headers” to the “EDE Header” column and edit the header text to condense the header to better fit an EDE view
 - Save the Spec .CSV file as the “Form Number and Name”

	A	B	C
1	Spec Field	Spec Header	EDE Header
2	spec_udf_c01	NACE Requirement	NACE
3	spec_udf_c02	Area Classification	Area Class
4	spec_udf_c10	Wake Calc	Wake Calc
5	spec_udf_c11	L35H	L35H
6	spec_udf_c49	L35D	L35D
7	spec_udf_c47	L43H	L43H
8	spec_udf_c17	L43D	L43D
9	spec_udf_c26	Well construction	TW construction
10	spec_udf_c27	Well Material	TWI Material
11	spec_udf_c28	Flange Material	Flange Matl
12	spec_udf_c03	Pipe Insulation	Pipe Insulation
13	spec_udf_c06	Velocity	Velocity
14	spec_udf_c101	Process Connection	Process Conn
15	spec_udf_c102	Process Connection Size	Process Conn Size
16	spec_udf_c103	Process Connection Rating	Process Conn Rating
17	spec_udf_c13	Length uom	Length uom

Defining EDE Spec User Defined Fields

- ◆ **Steps to define EDE Spec fields (continued):**
 - For each Spec Page Name and Form Number the user needs to create an EDE view, they will need to Generate a separate EDE view
 - In the “Reference Explorer / Queries / Query Builder”, Select the “Specification- Specification Query / Actions / Generate EDE View”
 - Each EDE View should be named with the Spec Page Name and Form Number
 - The “View Type” can be either “General” or “Private” or create a new “View Type” named “Specifications”
 - The “Published Document Type” is “Instrument Index”
 - The “Page Size” is up to the individual user



Defining EDE Spec User Defined Fields

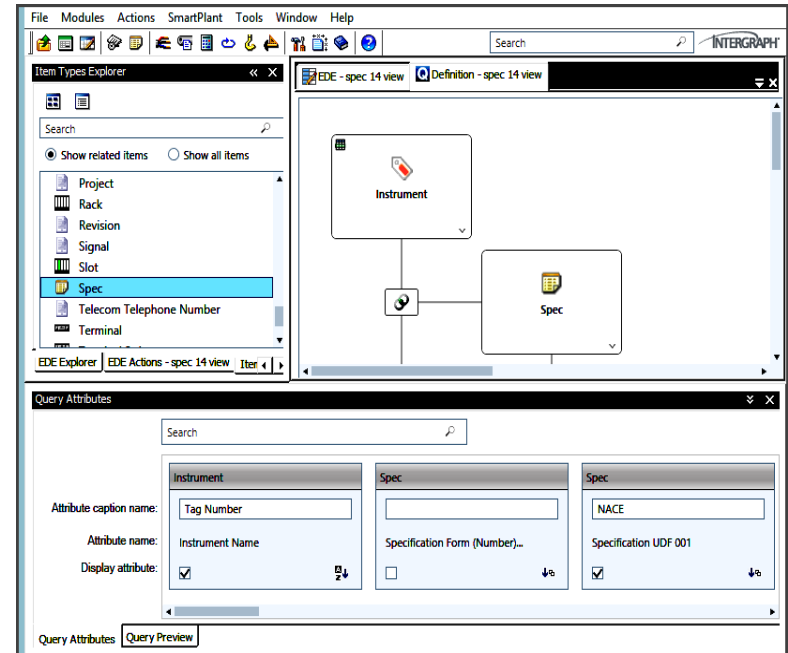
- ◆ **Steps to define EDE Spec fields (continued):**
 - Open a new EDE Spec view
 - Filter on the “Specification Form (Number)” or “Form Name”
 - In the “Tree View” open the “Spec / Custom Fields”
 - Referencing the specific Spec CSV file created for the Form Name to select the Spec_udf_... Fields required to be included in the new EDE view
 - It is recommended that the user save the EDE view at each stage of the definition build

The screenshot displays the EDE Explorer software interface. The main window shows a table of instrument specifications with columns for Instrument Name, Spec, and Form Name. The table contains 12 rows of data. On the left, there is a 'Tree View' panel showing a hierarchical structure of the project, including 'Spec', 'Loop', 'Changes Tracking', and 'Custom Fields'. The 'Custom Fields' folder is expanded, showing a sub-folder named 'Loop.UDF.01'. The 'Layout History' panel shows a list of saved layouts, including 'Filter:Form Name;' and 'Split'. The 'View Actions' panel shows a list of actions, including 'Width:Specification Form (Number)'. The status bar at the bottom indicates 'Displaying Rows: 24' and 'Selected Cells: 0'.

Instrument Name	Spec	Form Name
5-101-DG-TW -0012	14	THERMOWELL
5-101-DG-TW -0027	14	THERMOWELL
5-101-DG-TW -0062	14	THERMOWELL
5-101-DG-TW -0063A	14	THERMOWELL
5-101-DG-TW -0063B	14	THERMOWELL
5-101-DG-TW -0132	14	THERMOWELL
5-101-DG-TW -0134	14	THERMOWELL
5-101-DG-TW -0139	14	THERMOWELL
5-101-DG-TW -0329A	14	THERMOWELL
5-101-DG-TW -0329B	14	THERMOWELL
5-101-DG-TW -0331A	14	THERMOWELL
5-101-DG-TW -0331B	14	THERMOWELL

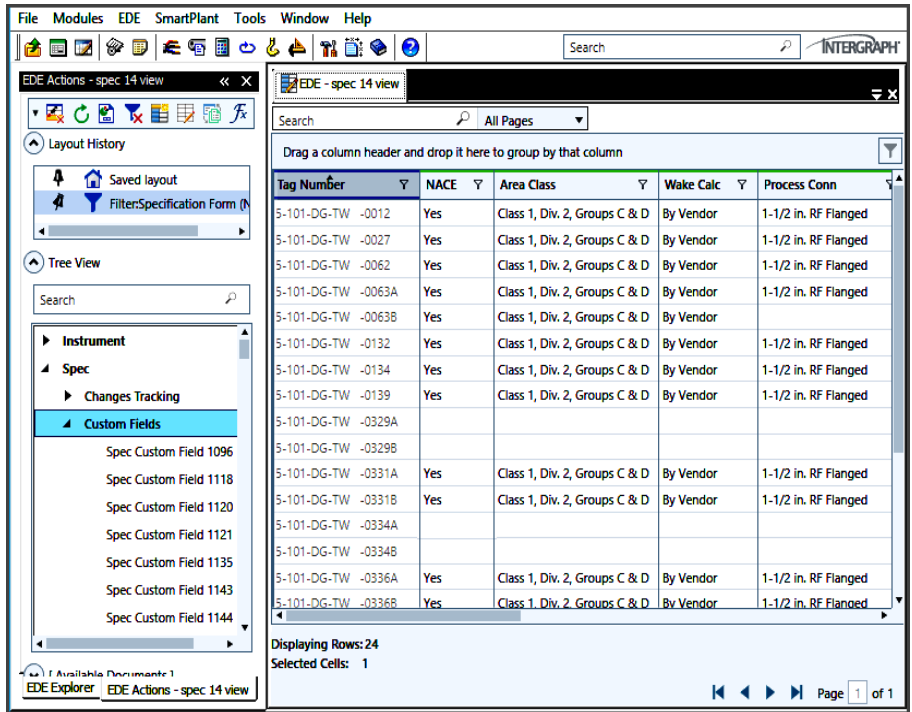
Creating EDE Spec Sheet View

- ◆ **Create an EDE View with defined spec fields**
 - Select “Edit EDE Definitions”
 - Uncheck the “Display Attributes” for all fields except “Instrument Name”, : and all “Spec_udf_...”
 - Do not remove any Attributes as this may corrupt the EDE view I
 - Referencing the specific Spec CSV file created for the Form Name and enter the Header for each “Spec_udf_...” Attribute caption name
 - The user may need to display the Specification Form (Number) to correct the EDE View filter
 - Save the View and close the EDE Definitions



Creating EDE Spec Sheet View

- ◆ The Spec EDE View is now created
- ◆ All the EDE functions can now be used to edit the Spec_UDF fields for the specific Spec Form
- ◆ If additional filtering is needed, return to the EDE View Definition to add the needed attributes
- ◆ Repeat this process for each spec form that needs an EDE view for editing



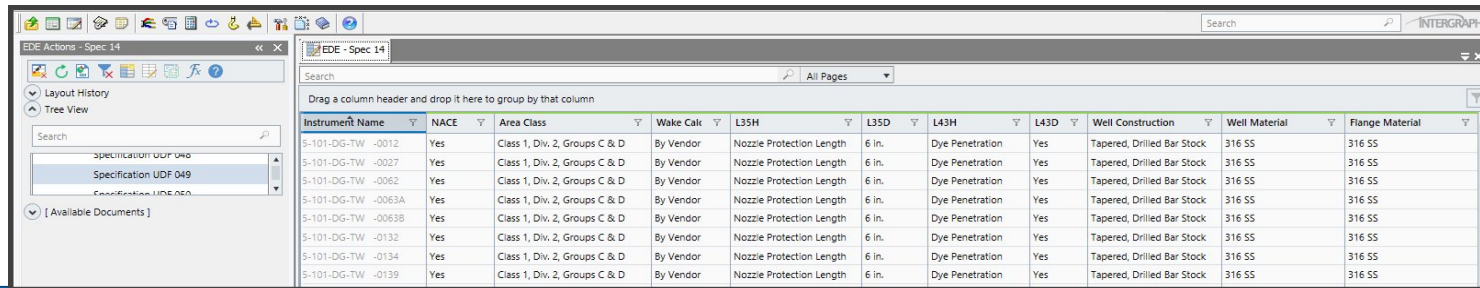
The screenshot displays the 'EDE Actions - spec 14 view' window. On the left, a 'Tree View' shows a hierarchy: Instrument > Spec > Changes Tracking > Custom Fields. The main area contains a table with the following data:

Tag Number	NACE	Area Class	Wake Calc	Process Conn
5-101-DG-TW -0012	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0027	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0062	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0063A	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0063B	Yes	Class 1, Div. 2, Groups C & D	By Vendor	
5-101-DG-TW -0132	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0134	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0139	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0329A				
5-101-DG-TW -0329B				
5-101-DG-TW -0331A	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0331B	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0334A				
5-101-DG-TW -0334B				
5-101-DG-TW -0336A	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged
5-101-DG-TW -0336B	Yes	Class 1, Div. 2, Groups C & D	By Vendor	1-1/2 in. RF Flanged

At the bottom, it indicates 'Displaying Rows: 24' and 'Selected Cells: 1'. The status bar shows 'Page 1 of 1'.

Summery of creating a Spec Engineering Data Editor

- Smart Instrumentation Spec Sheets are not normally edited by the Engineering Data Editor (EDE)
- The EDE cannot read the Spec Page Data Dictionary
- The Spec Data Dictionary needs to be built for each Spec sheet Page and Form
- The Headers defined in the Spec Data Dictionary need to be exported as a .CSV for defining an EDE view
- An EDE view needs to be defined for each Spec sheet Page and Form using the Headers in the .CSV file
- Only the Spec Custom Fields need to be included Spec EDE View as all other tables are available in other EDE Views



The screenshot displays the EDE interface for 'Spec 14'. It features a search bar at the top right, a toolbar with various icons, and a left-hand navigation pane with 'Layout History' and 'Tree View' sections. The main area contains a data table with the following columns: Instrument Name, NACE, Area Class, Wake Calc, L35H, L35D, L43H, L43D, Well Construction, Well Material, and Flange Material. The table contains 10 rows of data.

Instrument Name	NACE	Area Class	Wake Calc	L35H	L35D	L43H	L43D	Well Construction	Well Material	Flange Material
5-101-DG-TW -0012	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
5-101-DG-TW -0027	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
5-101-DG-TW -0062	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
5-101-DG-TW -0063A	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
5-101-DG-TW -0063B	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
5-101-DG-TW -0132	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
5-101-DG-TW -0134	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS
5-101-DG-TW -0139	Yes	Class 1, Div. 2, Groups C & D	By Vendor	Nozzle Protection Length	6 in.	Dye Penetration	Yes	Tapered, Drilled Bar Stock	316 SS	316 SS

QUESTIONS?



“With big data comes big responsibilities”

~ Kate Crawford