

***Data Exchange between  
Fisher Specification  
Manager and Smart  
Plant Instrumentation  
(INtools)***



# Initial Data Sheet in SmartPlant

INtools - DEMO

File Modules Edit Actions Reports Options Framework Tools Window Help

Close Export Browser Index Inst. Specs Wiring Proc. Data Calculation Loop Dwgs. Hook-Ups Calibration Maintenance DDP Spec Binder Construction Help

Instrument Specification - 101-FV -100

Page 1 Notes

INTERGRAPH		ISA Control Valve DATA SHEET				
PROJECT DEMO		DATA SHEET 1		of 1		
UNIT Crude unit 1		SPEC 70				
P.O. T-R-ESP-002/98		TAG 101-FV -100				
ITEM 3		DWG 101-21-199901				
CONTRACT		SERVICE Feed from V-8				
* MFR SERIAL						
1 Process Fluid Lean Feed		Crit Press PC 1200 bar-g				
S E R V I C E	2 Flow Rate	Units Am <sup>3</sup> /h	Max. Flow 32	Norm. Flow 30	Min. Flow 25	Shut-Off -
	3 Inlet Pressure	bar-g	14	13	12	0
	4 Outlet Pressure	bar-g	11	7	4	
	5 Inlet Temperature	°C	150	150	150	0
	6 Density/Spec. Grav. / Mol. Wt	---	0.888	0.888	0.888	-
	7 Viscosity / Specific Heats Ratio	cS	0.1	0.1	0.1	-
	8 Inlet Vapour Pressure	bar-g	0.898	0.898	0.898	-
	9 * Required Cv	-	20.4	13.4	9.64	-
	10 * Travel	%	0	0	0	0
	11 Allowable / * Predicted	dBA	90 / 65.1	69.4	77.9	-
	12					
L I N E	13 Pipe Line Size	In 4 in 80	53	* Type Spring & Diaphragm		
	& Schedule	Out 4 in STD	54	* MFR & Model FISHER /		
	15 Pipe Line Insulation	Carbon steel	55	* Size Fisher Eff Area .in		
V A L V E	16 * Type Globe		56	On/Off Modulating Yes		
	17 * Size 2 in ANSI Class CL300		57	Spring Action Open/Close Close		
	18 Max Press/Temp 50 bar-g / °C		58	* Max Allowable Pressure psig		
	19 * MFR & Model FISHER /		59	* Min Required Pressure psig		
	20 * Body/Bonnet Matl WCC Steel		60	Available Air Supply Pressure		
	21 * Liner Material / ID By Mfr / 80		61	Max 60 lbf/in <sup>2</sup> -g Min 30 lbf/in <sup>2</sup> -g		
	22 End In RF Flg in CL300		62	* Bench Range psig / psig		
	23 Connection Out RF Flg in CL300		63	Actuator Orientation By Mfr		
	24 Flg Face Finish By Mfr		64	Handwheel Type None		
	25 End Ext / Material		65	Air Failure Valve Close psi-g		
B O D Y	26 * Flow Direction Down		66			
	27 * Type of Bonnet Plain		67	Input Signal 4 20 mA dc		

Open Spec Save Print Revision Manufacturer Model Notes Refresh

Ready

Plant: New Refiner

Area: Crude Area

Unit: Crude unit 1

2/11/2005 11:48

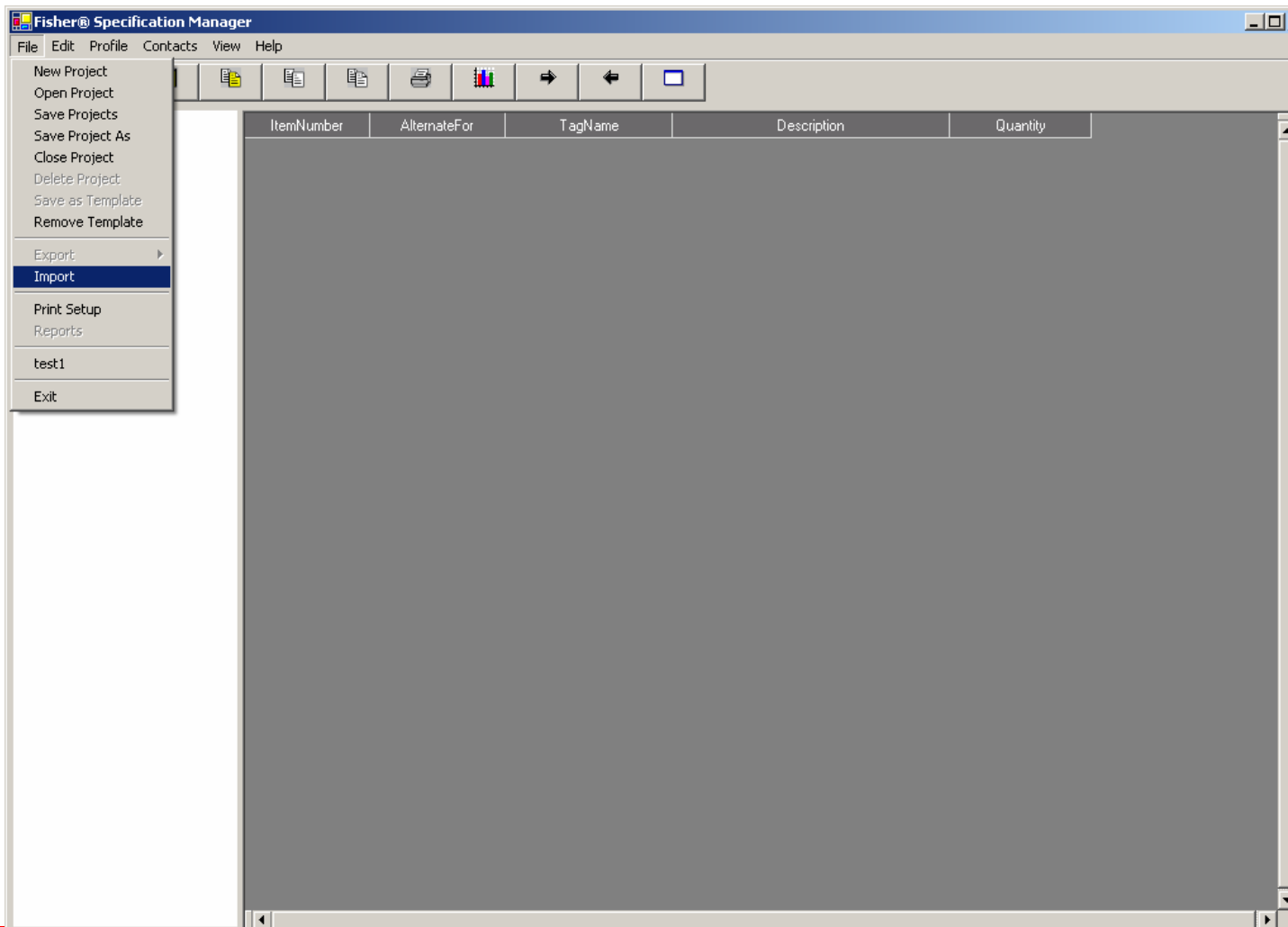
# Export Data using Fisher Interface

The screenshot shows the INtools - DEMO application window. The main window displays a table of process data. A context menu is open over the table, listing various interface options. The table has columns for Tag Number, Service, and Internal Location. The context menu includes options like SmartPlant Electrical..., DeltaV..., Meridium..., CCPlant..., Fisher FirstVUE..., Centum..., SAP..., Masoneilan ValSpeQ..., and Flowserve Performance!...

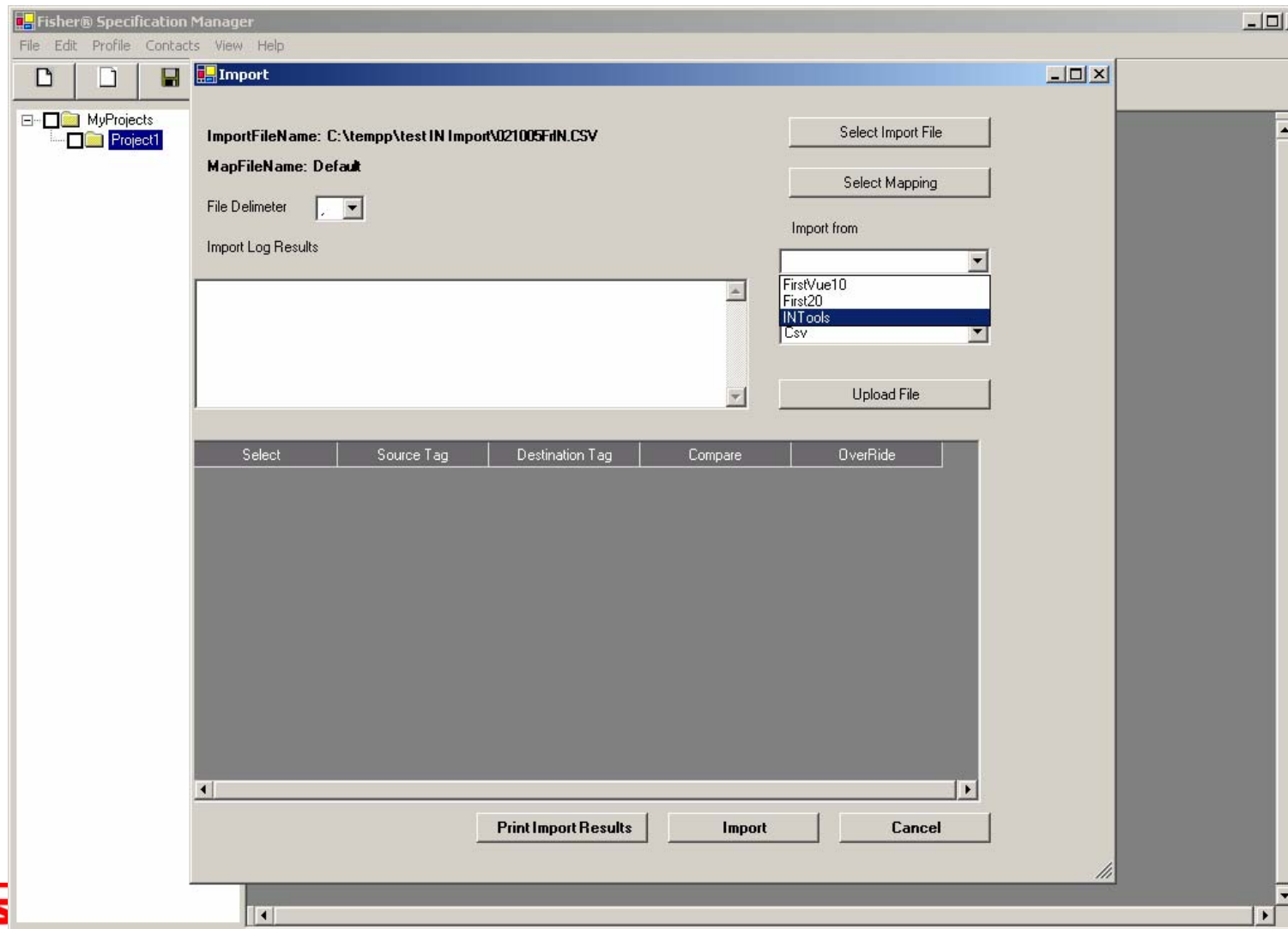
Tag Number	Service	Internal Location
101-FI -2214	Feed to B-101 Pass C	3
101-FI -100	Feed from V-8	2
101-FI -102	Feed from C-1	2
101-FI -1550	Reflux to C-1	1
101-FI -1551		1
101-FI -1552		1
101-FI -201	Stripping Steam to F-102	1
101-FI -2212	Feed to B-101 Pass A	2
101-FI -2213	Feed to B-101 Pass B	2
101-FI -2214	Feed to B-101 Pass C	2
101-FI -51	Loop for Autowiring lab	1
101-FI -52	Loop for Autowiring lab	1
101-FI -53	Loop for Autowiring lab	1
101-FI -54	Loop for Autowiring lab	1
101-FI -55	Loop for Autowiring lab	1
101-FI -56	Loop for Autowiring lab	1
101-FI -57	Loop for Autowiring lab	1
101-FI -58	Loop for Autowiring lab	1
101-FI -905	DCS closed loop	4
101-FI -906	DCS closed loop	4
101-FI -907	DCS closed loop	4
101-FI -908	DCS closed loop	4
101-FI -909	DCS closed loop	4
101-FI -910	DCS closed loop	4
101-FI -919	DCS closed loop	4
101-FV -100	Feed from V-8	4
101-FV -2212	Feed to B-101 Pass A	4
101-FV -2213	Feed to B-101 Pass B	4
101-FV -2214	Feed to B-101 Pass C	5



# Import data in Fisher Specification Manager



# Import Screen in Fisher Specification Manager



# Import Data

**Import**

ImportFileName: C:\tempptest\IN Import\021005FidN.CSV

MapFileName: Default

File Delimiter: ,

Import Log Results

Problems encountered while Importing for Tag1  
Field not recognized by FSM: POItemNum  
Field not recognized by FSM: MFRSerial  
Field not recognized by FSM: LineType  
Field not recognized by FSM: LineNumber  
Total Errors: 4

Select Import File

Select Mapping

Import from: INTools

Select Import File Type: Csv

Upload File

Select	Source Tag	Destination Tag	Compare	OverRide
<input checked="" type="checkbox"/>		101-FV -100	<a href="#">Compare</a>	<input type="checkbox"/>

Print Import Results   Import   Cancel





# Export Completed Data Sheet

**Fisher® Specification Manager**

File Edit Profile Contacts View Help

New Project  
Open Project  
Save Projects  
Save Project As  
Close Project  
Delete Project  
Save as Template  
Remove Template

Export  
Import  
Print Setup  
Reports  
test1  
Exit

ISA Sheet Installation Data Valve Sizing Valve Selection Valve Construction Actuator Selection Positioner Additional Accessories

-100

13	Size, Schedule in:	4 in,80		54	Mfg./Model:	FISHER/667	
14	Size, Schedule out:	4 in,STD		55	Size:	40	Eff. Area 69.0in <sup>2</sup>
15	Insulation:	Carbon steel		56	On/Dif:		Modulating Yes
	LVLE BODY/BONNET	Type	Globe	57	Spring Action:	Close	
	Size:	2 Inch	ANSI	58	Max Allow Press:	90psig	
	End Connection:	CL300		59	Min. Reqd Press:	18.00psig	
18	Max Press Temp:	50 bar(g)/deg C		60	Available Air Supply Pressure		
19	Mfg. /Model:	FISHER/ET		61	Max:	60psig	Min: 30psig
20	Body Bonnet Mat:	WCC Steel		62	Bench Range:	6.00psig-14.97psig	
21	Liner Mat/ID:	By Mfr		63	Act Orientation:	By Mfr	
22	End Connection In:	2 Inch CL300 RF Flg		64	Hand/Wheel Type:	None	
23	End Connection Out:	2 Inch CL300 RF Flg		65	Air Failure Valve:	Close	Set at: psi-g
24	Flg Face Finish:	By Mfr		66			
25	End Ext/ Mat:			67	Input Signal:	4-20mA dc	
26	Flow Direction:	Down		68	Positioner Type:	electro-pneumatic	
27	Bonnet Type:	Plain		69	Mfg./Model:	Fisher/DVC6000/AD	
28	Lub-ISO-Valve:	None		70	Positioner Action:	Increases	
29	Packing Material:	Single PTFE		71	Gauges:	Supply, 0	By-Pass NONE
30	Packing Type:	V-Ring;Spring Type		72	Cam Characteristic:	Linear	
31				73			
32	Trim Type:	Trim Number1		74	SWITCHES		
33	Size:	25/16 Inch	Travel: 1 1/8 Inch	75	Type:		Qty:
34	Characteristic:	Equal %		76	Mfg./Model:	/	
35	Balanced/Unbalanced:	Balanced		77	Contacts/Rating:		
36	Rated Cv:	59.7	Fl: 0.85	78	Actuation Points:		
37	Material:	S41600 (416 SST)		79	AIRSET		
38	Seat Material:	S41600 (416 SST)		80	Mfg./Model:	Fisher/67CFR	
39	Cage:	CB7Cu-1 (17-4 PH SST)			Set Pressure	nsin	
40	Stem Material:	S31600 (316 SST)					
41							

Next

Microsoft Office... Microsoft PowerPoi... Fisher® Specific... INtools - DEMO Desktop 1:04 PM





# Select INtools (SmartPlant) format

The screenshot shows the Fisher@ Specification Manager interface. An 'Export' dialog box is open, allowing the user to select the output format. The 'Default Map To' dropdown is expanded, showing 'INTools' as the selected option. The background specification sheet includes the following data:

PIPE LINE	53 Actuator Type:	Spring & Diaphragm
13 Size, Schedule in:	54 Mfg. Model:	FISHER/667
14 Size, Schedule out:	55 Size:	4n
	Eff. Area:	69.0in2
	Modulating:	Yes
	Min:	30psig
		ig-14.97psig
	Set at:	psi-g
	A dc	
	-pneumatic	
	DVCS000/AD	
	ses	
	y. 0 By-Pass	NONE
33 Size:	2.5716 inch	Travel: 1.1781 inch
34 Characteristic:	Equal %	
35 Balanced/Unbalanced:	Balanced	
36 Rated Cv:	59.7	FI: 0.85 Xt: 0.834
37 Material:	S41600 (416 SST)	
38 Seat Material:	S41600 (416 SST)	
39 Cage:	CB7Cu-1 (17-4 PH SST)	
40 Stem Material:	S31600 (316 SST)	
74 Type:		Qty:
75 Mfg./Model:	/	
76 Contacts/Rating:		
77 Actuation Points:		
78	AIRSET	
79 Mfg./Model:	Fisher/67CFR	



# SmartPlant Import Routine

The screenshot shows the INtools Import - DEMO application window. The 'Tools' menu is circled in red, and the 'FIRSTVUE' icon is highlighted. The 'Link Explorer' window is open, displaying a tree view on the left and a table of link details on the right.

**Link list (Left Panel):**

- All
- Add Spec1 (Spec #1)
- Add Spec1 (Spec #71)
- CABINET RACK - Foxboro
- CABINET RACK - Foxboro (Complementary)
- cadpipe - component
- cadpipe - component mfr.
- cadpipe - line
- cadpipe - loop
- cadpipe - loop function
- Centum Cabinet Rack
- Centum Channel
- Centum Component
- Centum Component System I/O Type
- Centum Control System Tag
- Centum Drawing
- Centum InstType
- Centum Panel
- Centum Panel Strip
- Centum Strip\_mfr
- Centum Terminal
- Centum UDF\_Component
- Centum Wire Group
- Centum Strip mfr model
- CHANNEL - Foxboro
- CHANNEL - Foxboro (complementary)
- Component
- COMPONENT - Foxboro
- COMPONENT - LINE 2 PDS
- COMPONENT (CCPlant)
- COMPONENT FUNCTION TYPE PDS
- COMPONENT IO (CCPlant)

**Contents of group: All (Table):**

Link Name	Target Name	Version	Source Name	Dbms	Profile
Add Spec1 (Spec #1)	ADD_SPEC1	Default	F:\intools51\exportfromperf	ODBC	VUE=PB INTERSO
Add Spec1 (Spec #71)	ADD_SPEC1	Default	F:\intools51\exportfromperf	ODBC	VUE=PB INTERSO
CABINET RACK - Foxboro	CABINET_RACK	Default	C:\FOX\CAD\IMPORT\DBI	ODBC	DBASE=PB Intersol
CABINET RACK - Foxboro (Compleme	CABINET_RACK	Default	C:\FOX\CAD\IMPORT\DBI	ODBC	DBASE=PB Intersol
cadpipe - component	COMPONENT	Default	C:\NTOOLS\INBALLOO	ODBC	DBASE=PB Intersol
cadpipe - component mfr.	COMPONENT_MFR	Default	C:\NTOOLS\INBALLOO	ODBC	DBASE=PB Intersol
cadpipe - line	LINE	Default	C:\NTOOLS\INBALLOO	ODBC	DBASE=PB Intersol
cadpipe - loop	LOOP	Default	C:\NTOOLS\INBALLOO	ODBC	DBASE=PB Intersol
cadpipe - loop function	LOOP_FUNCTION	Default	C:\NTOOLS\INBALLOO	ODBC	DBASE=PB Intersol
Centum Cabinet Rack	CABINET_RACK	Default	E:\import\0101.TXT	ODBC	TEXT CENTUM=PB
Centum Channel	CHANNEL	Default	E:\import\0103.TXT	ODBC	TEXT CENTUM=PB
Centum Component	COMPONENT	Default	E:\import\0103.TXT	ODBC	TEXT CENTUM=PB
Centum Component System I/O Type	COMPONENT_SYS_I	Default	C:\import\0101.txt	ODBC	TEXT CENTUM=PB
Centum Control System Tag	CONTROL_SYSTEM	Default	C:\import\0101.txt	ODBC	TEXT CENTUM=PB
Centum Drawing	DRAWING	Default	C:\import\0101.txt	ODBC	TEXT CENTUM=PB
Centum InstType	COMPONENT	Default	E:\IMPORT\INSTTYPE01	ODBC	TEXT CENTUM=PB
Centum Panel	PANEL	Default	E:\import\0101.TXT	ODBC	TEXT CENTUM=PB
Centum Panel Strip	PANEL_STRIP	Default	E:\import\0101.TXT	ODBC	TEXT CENTUM=PB
Centum Strip_mfr	STRIP_MFR	Default	E:\NServer\import\0101.1	ODBC	TEXT CENTUM=PB
Centum Terminal	PANEL_STRIP_TERM	Default	E:\import\0101.TXT	ODBC	TEXT CENTUM=PB
Centum UDF_Component	UDF_COMPONENT	Default	E:\import\0103.TXT	ODBC	TEXT CENTUM=PB
Centum Wire Group	WIRE_GROUP	Default	C:\import\0101.txt	ODBC	TEXT CENTUM=PB
Centum Strip mfr model	STRIP_MFR_MOD	Default	C:\import\0101.txt	ODBC	TEXT CENTUM=PB
CHANNEL - Foxboro	CHANNEL	Default	C:\FOX\CAD\IMPORT\DBI	ODBC	DBASE=PB Intersol

**Default source file directory:** [Empty field]

**Bottom Panel:**

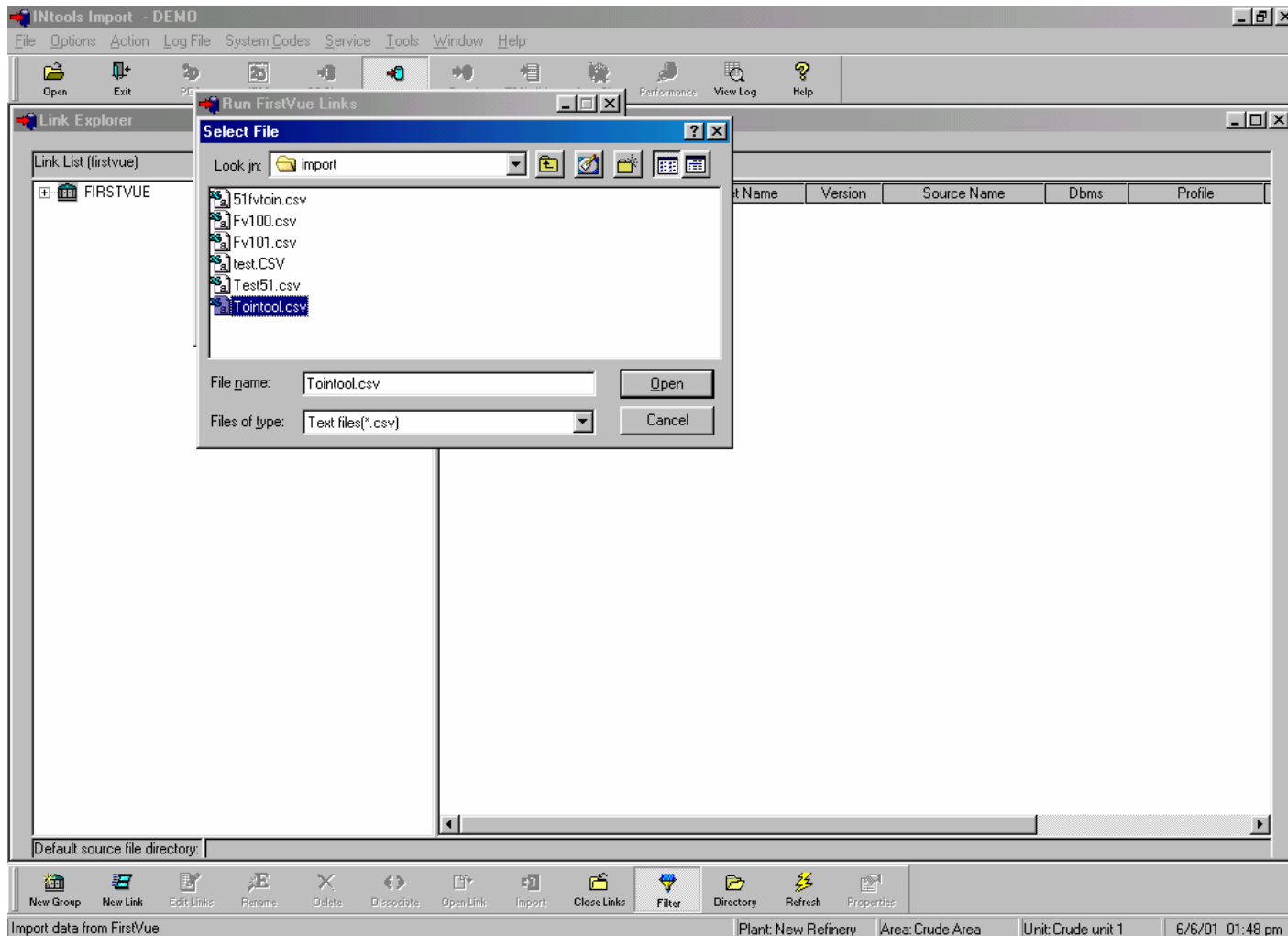
- Ready
- Plant: New Refinery
- Area: Crude Area
- Unit: Crude unit 1
- 6/6/01 04:15 pm



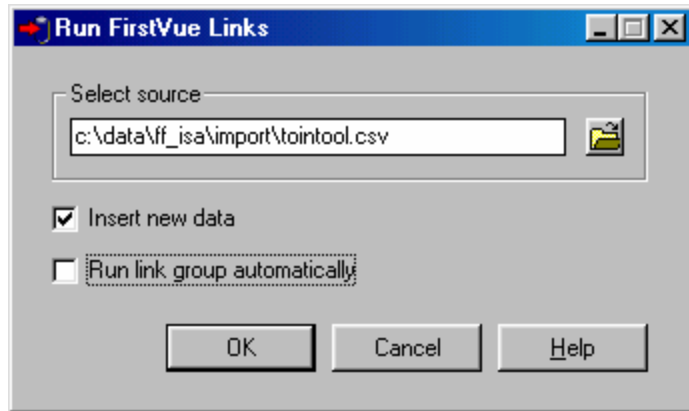
# SmartPlant Import Routine: Open File

The screenshot displays the INtools Import application interface. A 'Select File' dialog box is open, showing a list of files in the 'import' directory: 51fvtoin.csv, Fv100.csv, Fv101.csv, test.CSV, Test51.csv, and Tointool.csv. The 'Files of type' dropdown menu is expanded, and a red arrow points to it with the text 'Check file type filter'. The background window, 'Run FirstVue Links', contains a table with columns: Link Name, Version, Source Name, Dbms, and Profile. The 'Link Explorer' pane on the left shows a tree view with 'FIRSTVUE' selected. The Windows taskbar at the bottom shows the Start button, taskbar icons for Calendar, PowerPoint, and INtools Import, and the system tray with the date and time (6/6/01 01:48 PM).

# SmartPlant Import Routine: Select File



# SmartPlant Import Routine: Settings



# SmartPlant Import Routine: Import

The screenshot shows the INtools Import - DEMO application window. The 'Link Exp' menu is open, with 'Import' selected. The main window displays a table titled 'Contents of group: FIRSTVUE' with the following data:

Link Name	Target Name	Version	Source Name	Dbms	Profile
FirstVue - Index	Instrument Index	Default	c:\data\ff_isa\import\toinc	ODBC	VUE=PB INTERSOLV
FirstVue - PD/Calcs	Process Data - Contro	Default	c:\data\ff_isa\import\toinc	ODBC	VUE=PB INTERSOLV
Spec Sheet Data	SPEC_SHEET_DATA	Default	c:\data\ff_isa\import\toinc	ODBC	VUE=PB INTERSOLV
Spec Sheet Data 0	ADD_SPEC1	Default	c:\data\ff_isa\import\toinc	ODBC	VUE=PB INTERSOLV

Taskbar showing the Start button, a red 'FI' logo, and several open applications: Calendar - Microsoft O..., Microsoft PowerPoint ..., FIRSTVUE - [TEST1..., INtools Import - ..., and IN\_DEMO. The system tray shows the date and time as 6/6/01 01:52 pm.

# Completed Data Sheet imported in INtools

**INtools - DEMO**

File Modules Actions View Framework Tools Window Help

Close Export Browser Index Inst. Specs Wiring Proc. Data Calculation Loop Dwgs. Hook-Ups Calibration Maintenance DDP Spec Binder Construction Help

**Specification Sheet Preview - 101-FV -100**

Process Fluid		Lean Feed					Crit Press PC 1200 bar-g
S E R V I C E	Units	Max. Flow	Norm. Flow	Min. Flow	Shut-Off		
2	Flow Rate	Am <sup>3</sup> /h	32	30	25	-	
3	Inlet Pressure	bar-g	14	13	12	0	
4	Outlet Pressure	bar-g	11	7	4		
5	Inlet Temperature	°C	150	150	150	0	
6	Density / Spec. Grav. / Mol. Wt	---	0.888	0.888	0.888	-	
7	Viscosity / Specific Heats Ratio	cS	0.1	0.1	0.1	-	
8	Inlet Vapour Pressure	bar-g	0.898	0.898	0.898	-	
9	* Required Cv	-	20.4	13.4	9.64	-	
10	* Travel	%	24.9	16.7	12.2	0	
11	Allowable / * Predicted	dBA	90 / 50.8	90 / 68.3	90 / 73.1	-	
12						-	

13	Pipe Line Size	In 4 in 80	53	* Type	Spring & Diaphragm
14	& Schedule	Out 4 in STD	54	* MFR & Model	FISHER / 667
15	Pipe Line Insulation	Carbon steel	55	* Size	40 Fisher Eff Area 69.02 in
16	* Type	Globe	56	On/Off	Modulating Yes
17	* Size	2 in ANSI Class CL300	57	Spring Action	Open/Close Close
18	Max Press/Temp	0 bar-g / °C	58	* Max Allowable Pressure	90 psig
19	* MFR & Model	FISHER / ET	59	* Min Required Pressure	18 psig
20	* Body/Bonnet Matl	WCC Steel	60	Available Air Supply Pressure	
21	* Liner Material / ID	By Mfr / 80	61	Max 60 lbf-in-g	Min 30 lbf-in-g
22	End	In RF Flg 2 in CL300	62	* Bench Range	6 psig / 14.97 psig
23	Connection	Out RF Flg 2 in CL300	63	Actuator Orientation	By Mfr
24	Flg Face Finish	By Mfr	64	Handwheel Type	None
25	End Ext / Material		65	Air Failure Valve	Close psi-g
26	* Flow Direction	Down	66		

Access instrument documents | Plant: New Refiner | Area: Crude Area | Unit: Crude unit 1 | 2/15/2005 09:50

# Completed Data Sheet in INtools

INtools - DEMO

File Modules Actions View Framework Tools Window Help

Close Export Browser Index Inst. Specs Wiring Proc. Data Calculation Loop Dwg. Hook-Ups Calibration Maintenance DDP Spec Binder Construction Help

Specification Sheet Preview - 101-FV -100

25	End Ext / Material		65	Air Failure Valve	Close		psi-g	
26	* Flow Direction	Down	66					
27	* Type of Bonnet	Plain	67	Input Signal	4	20	mA dc	
28	Lub & Iso Valve	None Lube No	68	* Type	electro-pneumatic			
29	* Packing Materia	Single PTFE	69	* MFR & Model	Fisher	/ DVC6000/AD		
30	* Packing Type	V-Ring;Spring Type	70	* On Incr Signal Output Incr/Decr	Increases			
31			71	Gauges , Supply, Output	Bypass	NONE		
32	* Type Trim Number1		72	* Cam Characteristic	Linear			
33	* Size	2.312 Inch	73					
34	* Characteristic	Equal %	74	Type		Quantity		
35	* Balanced / Unbalanced	Balanced	75	* MFR & Model	/			
36	* Rated CV	59.7 Cv	76	Contacts / Rating				
37	* Plug/ Ball/ Disk Material	S41600 (416 SST)	77	Actuation Points				
38	* Seat Material	S41600 (416 SST)	78					
39	* Cage / Guide Material	CB7Cu-1 (17-4 PH SST)	79	* MFR & Model	Fisher	/ 67CFR		
40	* Stem Material	S31600 (316 SST)	80	* Set Pressure	By Mfr	psig		
41			81	Filter	YES	Gauge	Yes	
42			82					
43	NEC Class	Group	Div	83	* Hydro			
44				84	ANSI/FCI Leakage Class	ANSI CL IV		
45				85				
46				86				
47				Rev.	Date	Description	Orig.	App.
48				0	11/22/1998	For bids	MS	
49								
50								
51								
52								

Notes: 1. Valve to be supplied fully assembled, marked , with certificate

\* Information supplied by manufacturer unless already ISA Form S20.50, Rev. 1

Refresh Print Print All First Page Prev Page Next Page Last Page First Report Prev Report Next Report Last Report Save As Zoom

Access instrument documents Plant: New Refineru Area: Crude Area Unit: Crude unit 1 2/11/2005 01:08

