

The following is a brief outline of some of the operational functions of the **VKViewer** program. It's mainly screen captures with explanations of major functions.

VKViewer is a companion program for ValvKeep and allows the valve end user the ability to view, report and analyze their repair information from any web-browser.

VKViewer is unlike any other web-based valve repair and maintenance tool we've seen. VKViewer is truly a web-application. It's fully interactive and is far more capable than some simple static HTML display pages.

Once you've clicked the link to get to the valve repair data, you'll have to log into VKViewer. The log on screen:

Input your Login ID and Password and click "Login" to launch VKViewer.

Check this box to not have to remember your login information each time.

It's important to remember, **NEVER EVER** use the browsers back button. Always use the "Back", "Previous" or "Close" button that is on the form you're wanting to leave. As well, always try and remember to properly "Exit" from VKViewer.

VKViewer's main, grid form:

Address: http://127.0.0.1:8888/EXEC/2/09x6k4209zvm1u1coasmb1617an9

File View Commands Help

DRESSER *VK-Viewer* *ValuKeeper*

Flow Control

Exit Query Columns Find Default Data Sheet All Reports Owner: (all) Plant: (all)

View Parts Images Generic Repair Details Actions Welds Positioner

Most Recent Control Valves 20 Pg Up Pg Dn Past Due Valves Analyze Coming Due Valves Sum Parts To Replace Easy Filter

Tag Number	Next Maint Date	Manufacturer
* 1) AV-STO-LV082	2007/01/17	STOCKHAM
2) AV-STO-LV087		STOCKHAM
3) UNKNOWN		Crane
4) AV-3-LV003	2001/08/29	Edwards
5) AV-3-LV004		Edwards
6) AV-10-001	2002/02/22	Fisher
7) AV-11-LV001	2001/05/10	Crane
8) AV-11-LV002	2001/05/10	Crane
9) AV-11-LV003	2001/05/10	Crane
10) AV-11-LV004		Edwards
11) AV-11-LV005		Edwards
12) AV-11-LV006	2007/01/17	Rockwell/Edwards
13) AV-11-LV007	2001/10/10	Edwards
14) AV-11-LV008		Crane
15) AV-11-LV009		Walworth
16) AV-38-LV001		Crane
17) AV-38-LV002		Crane
18) AV-85-1	2001/09/11	Crane
19) AV-APPL-97	2001/02/16	Edwards
19 entries in page, 19 found.		

build: 4.25.060130 About On-Line Tutorial Help Desk Copyright (C) Dresser 2002 - 2006

Over the next few pages, we'll dissect it into its functional areas but a couple overview points here.

You can configure the data items that are displayed in the columns. It is possible to print a "grid" report via the "All Reports" function. The last line of the grid shows the count of repairs that met the current filter requirements (x found). By default, there is no filter and all repairs are displayed. And the number in the current page.

There is a main menu and most of the user interface behaves like a standard Windows program.

General functionality of the main form:

Exit | **Query** | **Columns** | **Find** | **Default** | **Data Sheet** | **All Reports** | **Owner:** (all) | **Plant:** (all)

Exit: Always EXIT via this button.

Query: A "Query" is a filter that you define. It allows the data in the grid to be criteria limited. For example, a Query or Filter of: Unit = 'Unit 11' would have the grid show only valves in 'Unit 11'.

Columns: Set display columns in grid.

Find: Clears any filter / query, returns to default sort order and generally returns the grid to the "default" display of all repairs for the Owner/Plant.

Default: Generates a Data Sheet of the current repair.

Data Sheet: Access to all the reports in VKViewer. Data Sheets, Summary Of Repairs, Parts In Repair, Images, Grid (where the report is essentially the grid of repairs you're looking at) and all the rest are generated here.

All Reports: Access to all the reports in VKViewer. Data Sheets, Summary Of Repairs, Parts In Repair, Images, Grid (where the report is essentially the grid of repairs you're looking at) and all the rest are generated here.

Owner and Plant currently selected. If you're authorized: File – Select Owner/Plant to change them.

The reports in VKViewer are created as PDF files. They are downloaded from the server to the local browser and opened locally, on your PC. You can save, print or view them as required. Some reports may be large so, please exercise patience when the report is "generating" as some may take a minute or three.

Another reports issue: pop-up blockers. With the advent of heavy pop-up advertising used by many sites, newer versions of Internet Explorer and most "companion tool bars" (like ones from Google and Yahoo) will block pop-ups. This is usually what you want BUT our reports are delivered as a "pop-up". The PDF report "pops up" in a new browser window on your PC leaving your VKViewer session in the original window. When a pop-up is blocked, you'll be told and asked what to do (the "All Reports" form has much more info on this). In summary, you want to "always allow pop-ups from this site" when you're asked.

View | [Parts](#) | [Images](#) | [Generic](#)
[Repair Details](#) | [Actions](#) | [Welds](#) | [Positioner](#)

Most Recent | Control Valves | 20

Repair Details: Brings up the form that displays the complete Repair Details (all the data collected) for the currently on repair. Referred to as the Details form.

Control Valves: Changes from "Most Recent" (last repair performed) to "All" (Most Recent and all historical repairs) to "Current Valve Only" (limits grid to a single valve).
 Changes from Relief Valves to Control Valves.

20: Count of repairs in main grid.

Parts, Images, Generic, Actions, Welds, Positioner: These bring up a form that displays that data for the currently on repair and/or valve. When you first enter the sub-form, it's limited to the currently on repair. You can however, view all the "items" for all the repairs in the current grid if you need. For example, "Parts" will display the Parts used in the currently on repair but you can display all the Parts for all the repairs in the current repair grid.

[Past Due Valves](#) [Analyze](#)
[Coming Due Valves](#) [Sum](#)
[Parts To Replace](#) [Easy Filter](#)

[Next Maint Date](#) [Manufacturer](#)

Move to: first, previous, next or last in the repairs grid. OR by a page up/down at a time.

Click the column header to sort by that column.

Links to common functions:
 Coming Due Valves – pick a time frame (this month) or calendar date for coming due valves. NOTE: you can include OR exclude past due ones.
 Parts To Replace – display parts that need replacement next repair.
 Analyze – give the breakdown of any field. Like the breakdown of Manufacturer (# of each Manufacturer in the database).
 Sum – sums any field (like Parts Cost)
 Easy Filter – simple field and limit setup for a filter (ex: Unit = Unit11).

Details Form: view the complete data about a repair:

Click the link on the right and you'll see the below.



On the Details form, you still have access to the other data items of the repair (Parts, Images, etc.) AND you can move to the first, next, previous and last repairs in the grid.

<< Back/Exit **Control Valve Details** Parts Actions Welds Images Generic Owner (all) Plant (all)

move: [Navigation Buttons] Tag Number AV-APPL-97 Most Recent True Date Tested 2000/02/16
 Serial Number NONE Manufacturer Edwards Model Number

General Contact

Job Number W007608 Customer PO 9923266
 Name Appleton Papers Equipment Location

Maintenance For Overhaul Due Date 2001/02/16
 Scheduled Unscheduled Warranty
 Valve Is To Be Replaced Status Active

Tag Number AV-APPL-97 Universal 2
 Universal 1 Serial Number NONE
 Model Number Risk / Criticality

Parts, Actions/Remarks, Welds, Images, Generic Attachments:

These are basically any additional data that needed to be attached to either the valve itself OR the specific repair.

Parts and Welds are always attached to the specific repair. Actions/Remarks (some extra information or action needed for the valve or repair) are attached to the valve. Generic items and Images can be attached to either. For example, a P&ID can be a Generic attachment to the valve. Images can be attached to either as well. An image of the original configuration or installation would be attached to the valve. As the valve was received, would be attached to the repair.

Anyway, each of these basically work the same. Click one of the below to access:



Then, you see a form like this:

Tag Number	Date	Material	Quantity
AV-APPL-97	2000/09/07		
Part Number	Work Performed	Source	Price / Extended
	Replaced		0
Part Name	Recommendation	Code	Cost / Extended
Packing Set			0
Condition Received	2nd Cond Received	Univ 2	
Req's Replacing			
<input type="checkbox"/> Recommended Spare	<input type="checkbox"/> Part On Order	Delivery Date	

Show: 50 < Page Page > Set: Query Columns Default

Limit To: Current Repair Only

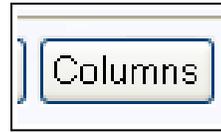
Tag Number	Part Number	Part Name	Condition Received
1) AV-APPL-97		Packing Set	Req's Replacing
2) AV-APPL-97		Outlet Flange	Pitted
3) AV-APPL-97		Stem	Corroded Severe
4) AV-APPL-97		Inlet Flange	Pitted
5) AV-APPL-97		Packing Bolts	Cracked
6) AV-APPL-97		Yoke Rods	Cracked
6 Parts in page, 6 found.			

The basic functions are all the same as the main form (Columns, Query, Default, clicking a column header to sort by it, moving through the grid). However, there is an additional function: **Limit To**: This allows you to view items for some specific repairs in the grid. Current Repair Only is the default. If you change it to All Repairs In Grid, this form will include the items for all the repairs in the main grid.

Finally, ALWAYS return via the << **Back** button in the upper left.

The Columns visible in grids:

Each grid is configurable via the Columns command.



Click it and you'll see:

Address http://127.0.0.1:8888/EXEC/12/09x6k4209zvmtu1coasmb1617an9

[<< Back](#) *Set Grid Columns For: Control Valves Grid*

Current Displayed Columns *

- Tag Number
- Next Maint Date
- Manufacturer
- Model Number
- Serial Number

Select An Available Column

@ Static Press

Additional Available Columns:

- Owner Name
- Plant Location
- Plant Area
- Parts Count
- Image Count
- Generic Count
- Action/Remark Count

* Only columns that are in the grid can be:

- sorted on (by clicking the column header)
- filtered (have the view specified by)
For example: Due in next 6 months
- used to Find a record

So, always ensure any column to be used for any of those purposes are INCLUDED in the Display Columns!

Add

up Remove Current

dn Cancel Apply

The form is pretty straight forward to use:

- 1) select any required column from the Available Columns drop down
- 2) 'Add' it to the Current Displayed Columns list
- 3) 'Apply' to have the grid show the new selections

If you need to remove a column you can select it and click 'Remove Current'. 'Up' and 'Dn' move the currently selected column up or down in the list.

If you've clicked Columns from the main grid, in the upper right you'll see some additional columns you can check-off to display. These columns will tend to slow down the response of the grid however. When you exit and re-enter the program, your columns will be as they were when you left

Past Due Valves

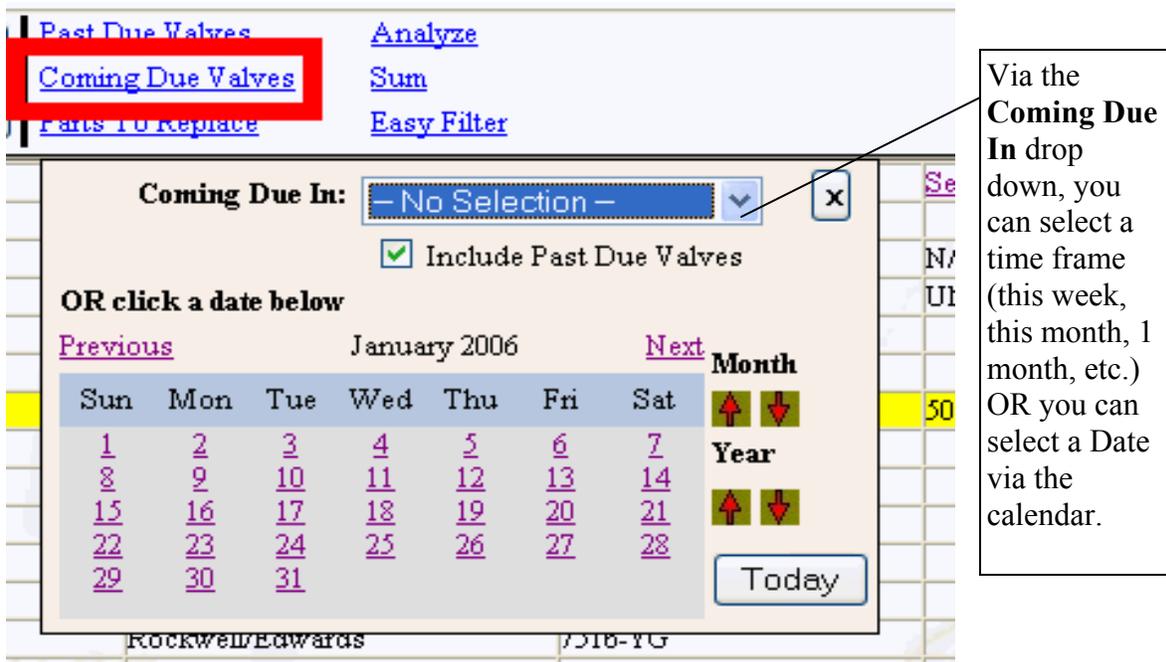
The easiest and quickest way to see Past Due Valves (any Most Recent repair for a valve who's Next Maintenance Date is before today) is to click the link on the main page.



the grid will now be filtered to only Past Due Valves.

Coming Due Valves

The coming due functions are a bit more flexible. Once clicked, you'll see the Coming Due panel, shown below:



Via the **Coming Due In** drop down, you can select a time frame (this week, this month, 1 month, etc.) OR you can select a Date via the calendar.

The **Include Past Due Valves** check box is significant. It allows the inclusion of valves that are past due (ie. Next Maintenance Date is BEFORE today) or not. If you are looking for ONLY what's coming due, say by the end of the month and NOT what's past due, make sure **Include Past Due Valves** is unchecked.

Parts To Replace



This link will open the Parts form with a filter applied of "Part Recommendation = Replace". The Parts grid will include parts from ALL the repairs in the main grid. (The **Limit To** is changed from *Current Repair Only* to *All Repairs In Grid*. When you exit the Parts form, the filter is cleared.

[Analyze](#)
[Sum](#)

Analyze and Sum Links:

These two functions are very similar. Analyze and Sum both allow you to select any field (if it isn't currently in the display grid, it will be added) and then, that field is either analyzed (basically counted) or summed (added up). Below is the form for Analyze:

Analysis Breakdown:	Count	%
crane	8	42
edwards	6	31
fisher	1	5
rockwell/edwards	1	5
stockham	2	10
walworth	1	5

You can see the Manufacturer field is selected and it's results are shown. The selected field will have all it's unique entries listed and counted. As well, a % of total population will be calculated. **Sum** adds the contents of the selected field and displays it.

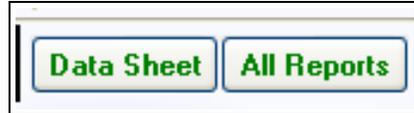
Easy Filter: [Easy Filter](#)

A **Query** can be built using multiple fields and differing logic between the items of the filter. An *Easy Filter* is a simple, single field filter.

Select Field: Manufacturer
Is: Equal
Consolidated *
* filter is case sensitive
Apply Filter Clear Filter

After you click the link, you'll see a panel. You select a field, how to filter it (the **Is**; Equal, Not Equal, Contains, etc.) and the actual text you want filtered. After you click **Apply Filter**, the grid will reflect the filter. If the field isn't already chosen as a column, it will be.

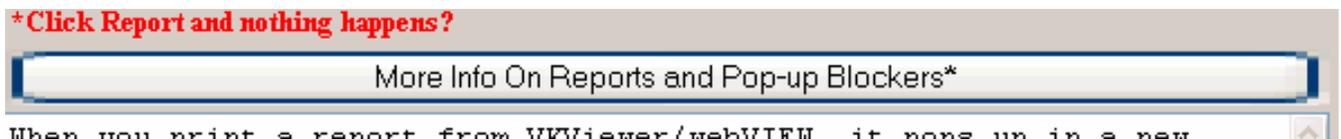
Reports:



There is a single click **Data Sheet** button that will generate the Data Sheet for the currently on repair (the Data Sheet report is selected by the operator of the VKViewer site during their configuration).

All Reports brings up the main report generation form.

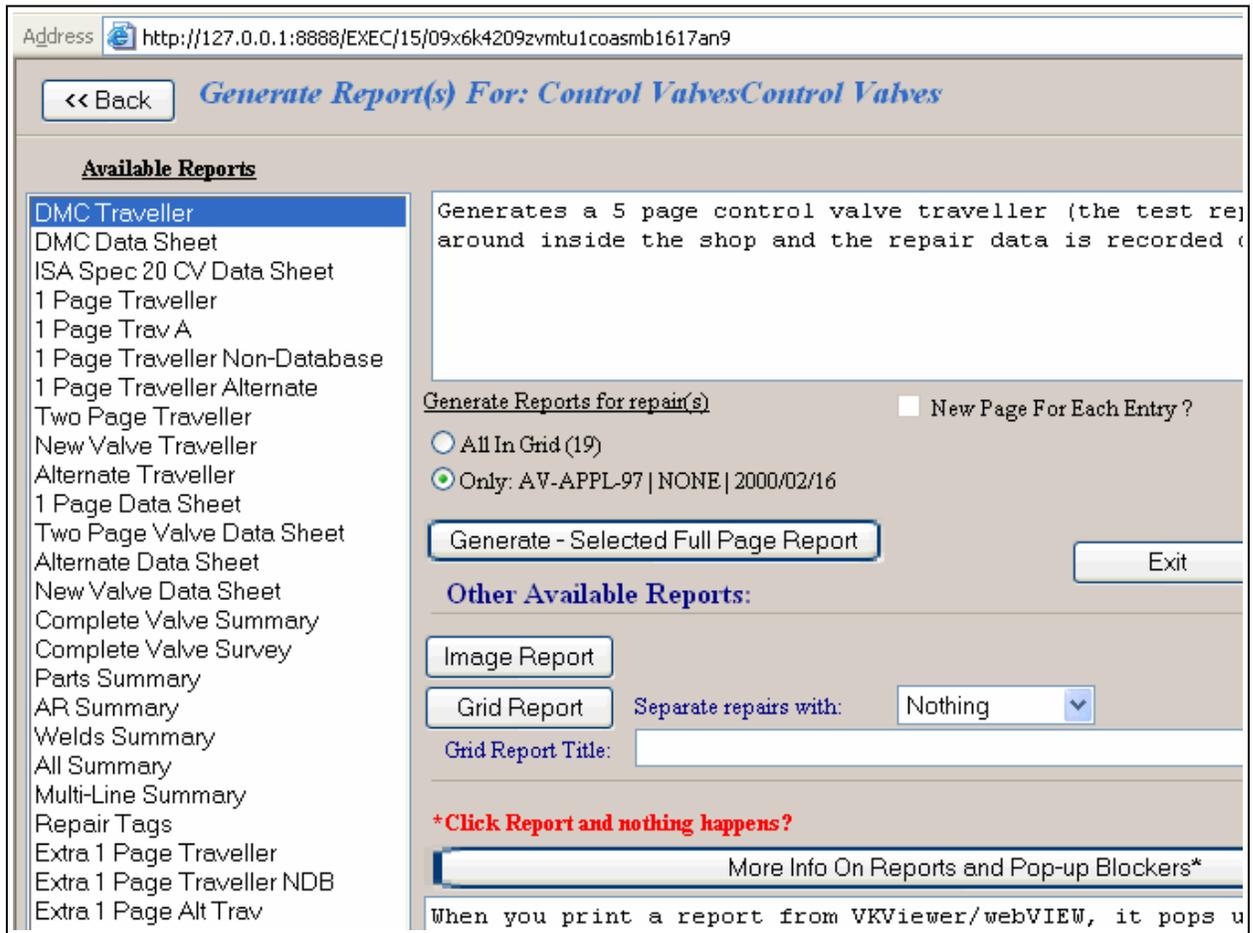
All reports are generated on the server as PDF files and sent down to the local PC where the browser is running. It's important to note that the PDF can be saved, printed or viewed from the local machine. VKViewer opens the PDF report in another browser window. This is commonly known as a "pop-up". Most Internet Explorer's and 3rd party toolbars (like Google's and Yahoo's) block pop-ups. This they are supposed to do as, generally, pop-ups are annoying ads in new windows. This is not the case here. You can always configure the toolbar or IE itself to "always allow pop-ups from this site". There is much more info on this on the **All Reports** page.

A screenshot of a web form titled "Other Available Reports:". The form has a light beige background and a blue border. It contains several elements: an "EXIT" button in the top right corner; a button labeled "Image Report"; a button labeled "Grid Report"; a label "Separate repairs with:" followed by a dropdown menu currently set to "Nothing"; and a text input field labeled "Grid Report Title:". The form is enclosed in a window-like frame.

There are a total of 3 kinds of reports available on the form. The above shows the center section of the form where you can access *Other Available Reports*. An **Image Report** is pretty straight forward...any attached images (to the valve itself OR the repair specifically) will be printed. The Image report allows you to configure a few more things like the number of images per page (1, 2 or 4), the columns for a title, etc.

The **Grid Report** is essentially a PDF of the grid on the main form. You can separate each line of the grid and add a title. If there is more then a set number of columns, it will rotate to landscape mode.

Reports continued: The main reports form is shown below:

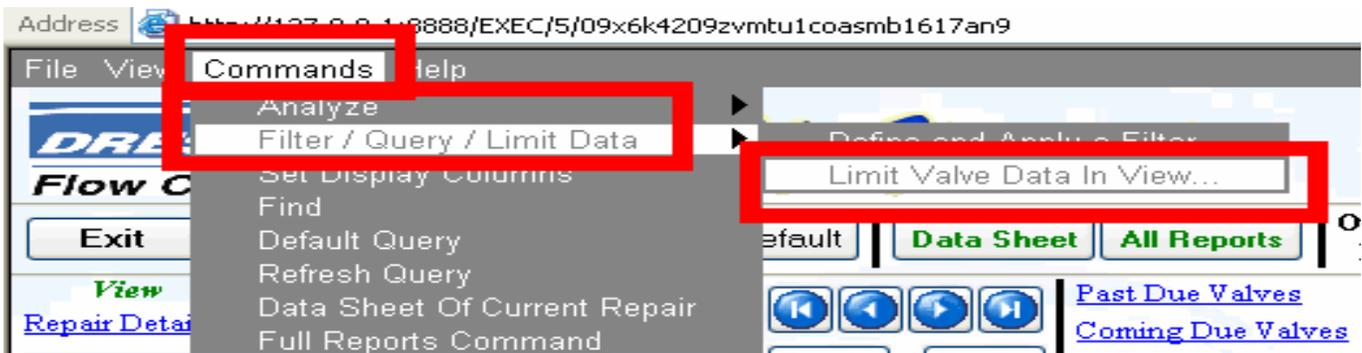


The list of available reports includes: Travellers (used only by the repair shop as an empty report onto which the technicians record the repair info); Data Sheets (the finished report that accompanies the valve after the repair and details the repair); Parts / AR / Welds / etc. Summary reports (a small amount of valve / repair data and the additional data of the report type) and **Complete Valve Summary OR Survey** reports (these are unique....they have some info about the valve that doesn't change repair to repair AND the last 10 repairs all on the same data sheet. These are very useful as historical snapshots of a valve).

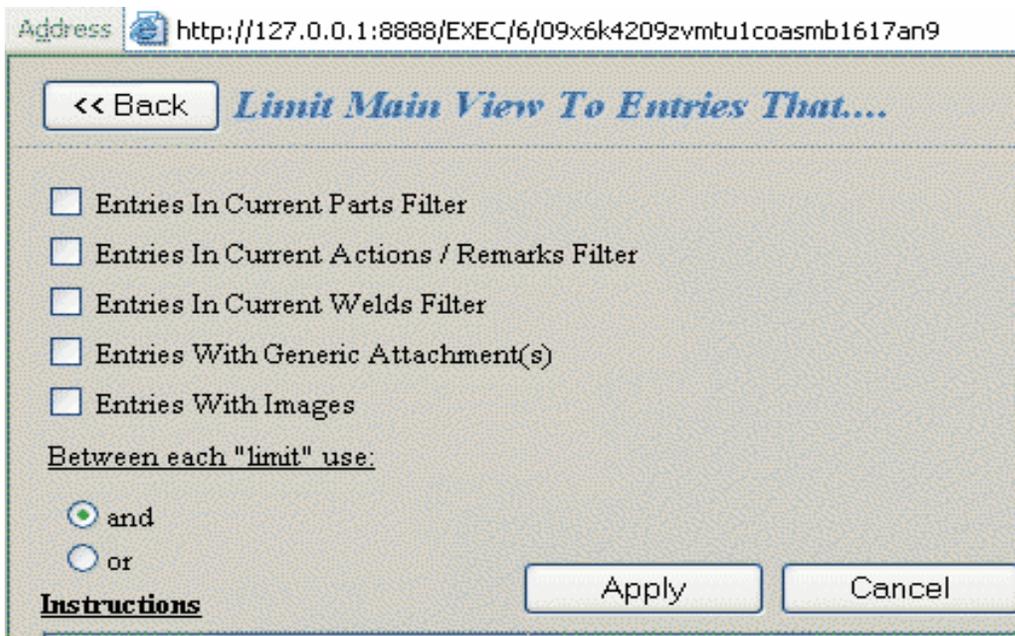
The **Generate Reports for repair(s)** selection allows you to create a report for only the repair you're currently on (bottom selection) OR all the repairs in the grid. IF you select "All in grid" be aware it may be a large report and may take several minutes to generate and send to your local PC. Please be patient when creating these.

The **New Page For Each Entry** check box will have each new repair for the Parts, AR, Welds, All and Multi-line Summary reports begin on their own page.

The **Commands, Filter / Query / Limit Data, Limit Valve Data In View** command is very powerful.



From here, you can have the repair grid limit (filter) based upon one of the other data items. For example, let's suppose you wanted to see only the repairs that had Parts Replaced. Or that had an Image attached. Or an "Action" item. Or a part that was broken. Once you have setup any filter required in the other data item (Ie. Parts: Work Performed = Replaced) you would through the above menu option see this form:

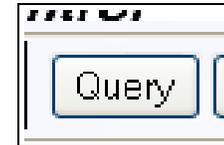


Here, you check which other data item(s) you want the limit (filter) based upon (there can be more than one....for example: repairs with images AND parts that were replaced, resulting in a grid of repairs with pictures of the replaced parts) AND apply it.

It's likely a command you won't use often BUT when you do, it's going to be of great importance as it allows you to distill a large number of repairs down to exactly what you need to see quickly.

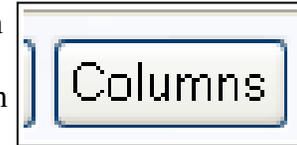
Filter:

There are two methods of filtering: [Easy Filter](#) & Query



Easy Filter is simple enough. You click the link, select the field, how and what you want to filter.

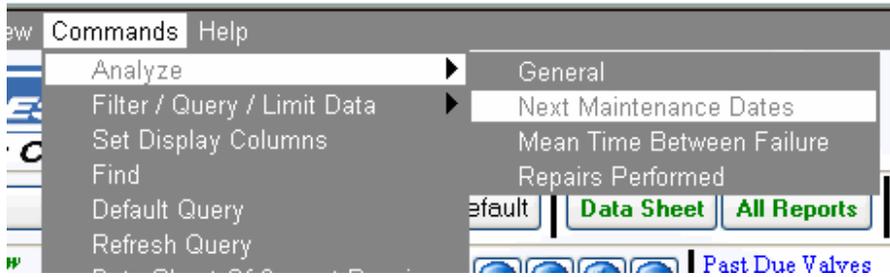
The Query command is a bit more involved BUT it allows a much greater level of filtering. First and foremost, the field(s) you want to filter MUST be in the grid. So, make sure you've selected them FIRST via the columns command.

A screenshot of a web browser window showing the "Filter Of: Control Valves" page. The browser address bar shows "http://127.0.0.1:8888/EXEC/10/09x6k4209zvmtu1coasmb1617an9". The page has a navigation bar with "<< Back" and "Filter Of: Control Valves". The main content area is divided into several sections: "How To Filter:" with radio buttons for "and (all conditions must be met)" (selected) and "or (any of the conditions met)"; "Column To Filter:" with a dropdown menu showing "Manufacturer"; "How To Find:" with a dropdown menu showing "Equal"; "What To Find*:" with a text input field containing "Consolidated" and a "* Case Sensitive" note; "OR Date Filter As Setup Below" with a dropdown menu showing "- No Selection -" and two date input fields with "Lookup" buttons; and "Filter Definition" with a text area containing "Manufacturer = 'Consolidated' and". At the bottom, there are five buttons: "Add Above Filter Item", "Cancel", "Apply Filter", "Clear Current Filter Item", and "Clear Entire Filter".

The process is:

- 1) If you need more than 1 item (ie. Service = Steam and Set Pressure > 1500) then, you must select either "and" or "or" for the logical operator between each filter item. The meaning is pretty straight forward, just say the filter in English and if it needs an "and" for them, select it. If it needs an "or" (Unit = Unit11 or Unit = Unit 12) select it.
- 2) Select the Field, How to limit it and input what the limit is to be. OR, for dates, use the date filter section in the bottom left.
- 3) "Add" each filter item. You'll see the Filter Definition list them all.
- 4) Click "Apply Filter" to exit and apply it. "Clear" here OR "Default" from the main page will remove any filter. The grid will, in the bottom status bar of the repairs, show "Filtered" when one is applied.

Analyze – Next Maintenance Dates:



There is a more sophisticated analysis of the Next Maintenance Date available. We'll touch on it briefly here so you can explore some of the power of VKViewer.

After selecting the command and clicking **Analyze**, you'll see this form (the top of it):

There are some statistics (Analyzed, Past Due, etc.) and some sorting, filtering and result views.

The **Limit Grid To** and **Sort By** options are pretty self-explanatory.

The **View Results** options are more interesting.

By Valve shows a grid of the valves, the important facts relating to their repair dates and the ones past due in red.

By Calendar shows a calendar which you can scroll through. Any date that has a past due OR coming due valve is shown with BOTH the date and the count of valves on that day. Clicking it will open a grid of the facts of those valves.

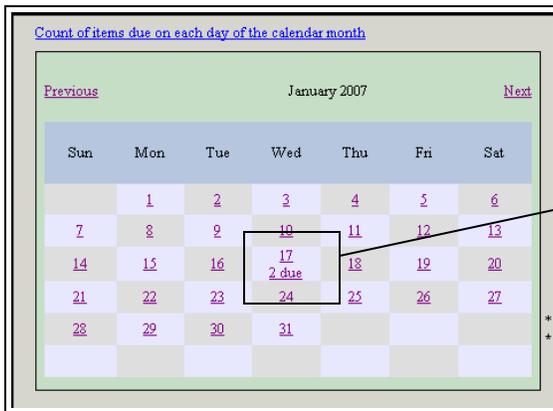
By Week / By Month show a list of weeks and months in the past and future (past ones are negative, future ones are positive numbers) and the number of valves in that period. You can multi-select weeks or months and then view a grid of the facts of those valves. We'll look at a couple of these on the next page.

Analyze – Next Maintenance Dates (continued):

The **By Valve** analysis. Past due valves are in red. Note the columns it creates.

Tag Number	Serial Number	Unit / Vessel	Date Tested	Next Maint Date	Days Past Due	Days Till Due	Days Since Repair	Week Due	Month Due
AV-STO-LV082			2006/01/17	2007/01/17		351	14	50	12
AV-11-LV003			2000/08/29	2001/08/29	1616		1981	-231	-53
AV-11-LV004	5028270		2001/02/22	2002/02/22	1439		1804	-206	-47
AV-11-LV001			2000/05/10	2001/05/10	1727		2092	-247	-56
AV-11-LV002			2000/05/10	2001/05/10	1727		2092	-247	-56
AV-11-LV001			2000/05/10	2001/05/10	1727		2092	-247	-56
AV-11-LV006			2006/01/17	2007/01/17		351	14	50	12
AV-11-LV007	F-40650			2001/10/10	1574			-225	-51
AV-11-LV008			2000/09/11	2001/09/11	1603		1968	-229	-52
AV-11-LV009			2000/09/11	2001/09/11	1810		2176	-259	-59

The **Calendar** view:



The 17th of Jan 2007 has 2 valves due on it. Clicking the date will bring up a grid (like the above) with those 2 valves in it.

The -59, for example, means 59 months in the past. That would be Feb. 2001 (based upon today's date of Jan. 22, 2006). +12 months means 12 months into the future which is Jan. 2007.

The **By Week/Month** views:

-59 has 1 due (month of February 2001)	Months from this month and count down
-56 has 3 due (month of May 2001)	
-53 has 1 due (month of August 2001)	
-52 has 1 due (month of September 2001)	
-51 has 1 due (month of October 2001)	
-47 has 1 due (month of February 2002)	
12 has 2 due (month of January 2007)	

* -ve months means in the past. ie. equipment is PAST DUE

* click month to see grid of repairs for that month

OR

* Multi select months by using Ctrl and clicking the required months THEN [view selected month\(s\) results](#)

You can multi-select the months (or weeks) and then, click the **view selected results** to see a grid of the valves in the time frame you require.

We strive to ensure all your needs are met. If you have any questions, suggestions or find any problems with the program, please don't hesitate in contacting us.

Regards, Product Development.

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VK-Viewer™