

INSPECTION MANAGEMENT SYSTEM



IMS Users Manual

Inspection Management System Users Manual



© Xenon Computing & Technical Services, Inc.
719 Sawdust Road
Suite 332
The Woodlands, Texas, 77381
Fax Number: +1 (713) 264-8669
Phone (832) 295-1499
Web Site www.xenoncts.com

Table of Contents

Chapter 1: Introduction 4
Chapter 2: Accessing IMS 5
Chapter 3: Administration
Chapter 4: Libraries10
Chapter 5: Project Library16
Chapter 6: Technicians21
Chapter 7: Fabrication24
Chapter 8: Quality28
Chapter 9: System Turnover
Chapter 10: Preventative Maintenance41
Chapter 11: Conformances
Chapter 12: Window43
Chapter 13: Help44
Chapter 14: Flow Charts

Chapter 1: Introduction

Welcome to the Inspection Management System.



enon Computing and Technical Services, Inc is a software service company. We specialize in the quality assurance/quality control software that is used during construction.

Inspection Management System (IMS) is designed to support the management of all aspects of Project Inspection. A strong emphasis is placed on tracking the welding and non-destructive examination of fabricated piping systems as well as the Welders and Inspectors involved in Project fabrication. The Program is intended to follow design codes such as ANSI B31.1 and ANSI B31.3 as well as ASME Section IX.

IMS is pre-loaded with Welder and Inspector qualifications, Drawing Lists, Project Specifications, Line Classifications and Material Specifications. This "pre-loading" gives **IMS** the ability to cross reference fabrication information and NDE reports with known values and evaluate the data's validity. Data entry automation techniques are utilized anywhere possible to decrease the amount of data entry points and reduce the amount of data entry errors. Daily entry into the IMS system automatically builds the "Lots" for inspection and maintains the status of those Lots after random picking of inspection welds.

Data files are maintained and loaded for closeout packages including equipment, instruments and loop checks. Automatic checking of welding clearance for hydrostatic test packages allows IMS to instantly show compliance and readiness for Hydro's and closeout. Numerous reports designed to filter before or after the report are viewed. A single large report can be "Queried" with the click of the mouse to rebuild a smaller version of the same report with only the information chosen. From inception to closeout IMS is designed to maintain your inspection records and report on their results.

Chapter 2: Accessing IMS

Logging in to IMS

MS is a limited deployment software package. It is not installed on all computers. Users must submit a request following their company procedures to have the software installed. Once IMS is installed it can be accessed via the program menu. Clicking on start will provide you with access to this menu. The user can highlight the Xenon CTS group and then select the Inspection Management System (IMS) link.

When the application is launched, you will find that a connection screen comes up. During this process the application is checking for any updates. If updates are available, you will be notified. If you are notified of an available update, click OK to install that update.



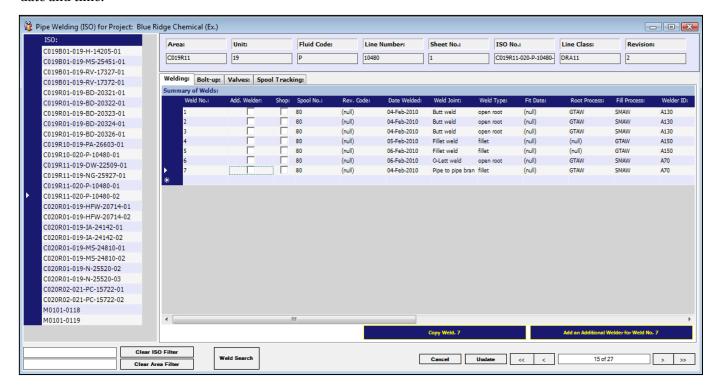


Once the update check has been performed and any update installed, you will see the login screen. Your login is provided to you by the local project administrator or super user. You will enter your user name and password into the corresponding boxes and then click the login button.



Navigating IMS

Once you have logged in you will see the main screen. There is a menu system located across the top of the application. From this menu you can access the various screens within IMS. You will also notice a bottom information bar. This information bar displays the user name, selected project, selected database, and the current date and time.



Pipe Welding Screen

Most IMS screens have the same basic layout. On the left hand side of that screen will be the main items. These items can be drawing/ISO numbers, inspector names or other information that needs to be broken down into detailed information. This detailed information is listed on the right hand side of the screen.

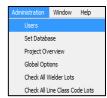
Notes:			

Chapter 3: Administration

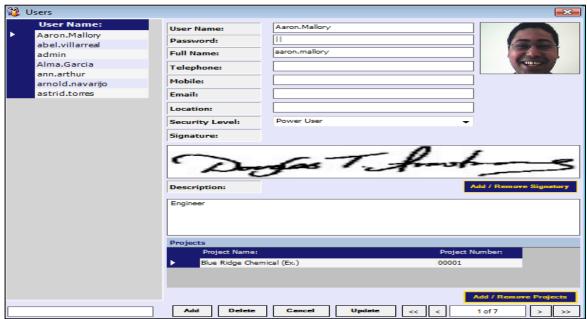


The administrative section of IMS is for the administrations of the software. To access the administration section, click on the option.

Creating Users



The first area in administration is Users. This allows for adding and deleting users in the program. Users will need their login name and password created before they can access the program. As previously discussed, on the left hand side you will see the list of users and on the right hand side you will see their detailed information. Clicking on a user will show only information for that user; this includes what projects they are assigned to.

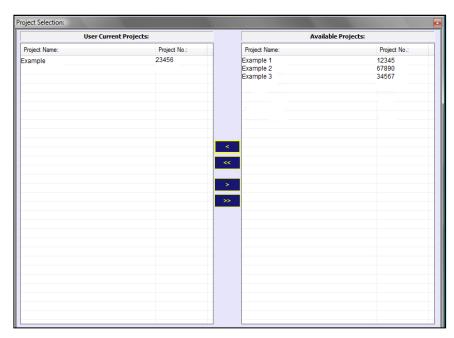


In the lower section of the screen, clicking Add will create a new user. If you look on the left hand side you will see it lists a user "(null)". This indicates you are about to start a record. Click in the user name box and input their user name. You can tab or click into the password button to set their password. When setting the password, it does not display. It is masked to protect the users. Notice how the full name fills in for you after you have completed the username box. You will go and edit this box as necessary after you have entered the password. Fill out the remaining boxes as necessary. The description box can be used for additional information, such as a person's job title or position. Next you will set the security level for the user. Different security levels can access different sections of the program. Administrators can see everything, Power users can see all but the Administration menu (during input, have them set themselves up as a user and log back in to see how this changes their view). The menu system does change based on a user's security level. Next click update.

After clicking update you will need to reselect the user you just created. Then click on Add/Remove Projects. On the left hand side is a list of assigned projects. On the right side is a list of available projects. To add a project, select the project on the right side, and then click the single arrow that points to the left. Once you have done so, you will see that the project is now listed on the left hand side. Clicking the double arrow will move all projects from the left, to the right. To remove a project or all projects from a user, highlight the project on the left hand side and click the arrow. Clicking the double right arrow will remove all projects from a user.

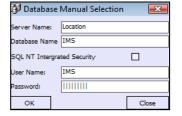
Important note:

In order for a user to be able to access IMS they must have both a security level and project assigned. The user will need to log out of IMS for new setting to be applied.



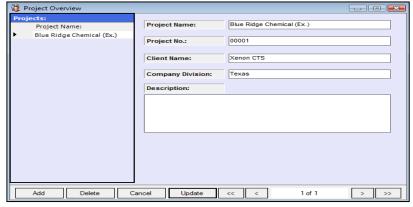
Set Database

Set database is a project administrator option. It is used in situations where there may be multiple databases accessible from a single location. The administrator will input the server and database information. Administrators should only use this function when instructed to do so by Xenon CTS personnel.



Creating a Project

To create a project, click on the Administration menu, and then select Projects Overview. Clicking the Add button will allow you to create a new project. Once you have done so you will fill in the Project Name, Project No., Client Name, Company Division and a brief Description. Clicking update will store that information in the database. Once you have created a project you will need to add the users to the project. Users will need to log out and then back into the system to see the new project assigned to them. (Have students assign themselves to a new project then log out and back into new project).



Global Options

Select Global Options under administration. Changes made in the Global Options affect all Welders, Lots, and Reporting in the system.



Check All Welder Lots / Check All Line Class Code Lots

These two options are used for building, rebuilding and updating lot information. IMS will automatically build and update lots throughout the day. These options force the system to do an update to the lots of the current project. They would normally be used when line classes have been updated in the system or information has been entered that needs to be passed into the lots in an urgent manner. It will take several minutes for the lots to be checked. No dialog will be displayed while the process is running, once it's finished you will receive a "Completed" notification.

Notes:			
		 	· · · · · · · · · · · · · · · · · · ·

Chapter 4: Libraries

Chapter

Master Library

IMS contains multiple Libraries. These libraries store information for many purposes. Some of the information is used to help speed data entry, other information is used make sure the data is meeting the project specifications. There are 2 library categories in IMS. The first is the Master Library and the second is the Project Library

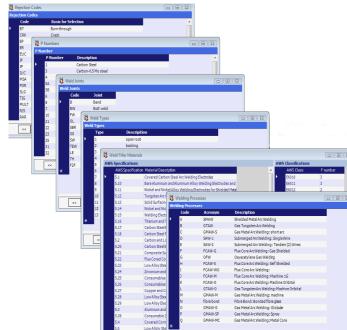
The master library is your main repository of data. Some information stored here applies to all the projects inside IMS. Other information is stored here for easy importation into the various projects.

The master library dropdown has four sections in its menu. The first section is used to fill in various options and dropdowns. The second section helps populate project specific options. The third section is related to system turnover options. The final section is for-specific options.

Dropdowns

The first section helps populate general dropdown in many places throughout the program. (open up multiple of these and the tile them with the command under "window") Here you can set your Design Codes, Fluid Codes, Material Shapes, NDE Methods, NDE Rejections Codes, P Numbers, Weld Types, Weld Joint, Weld Filler Material, and Welding Processes. These options help increase the speed and accuracy at which users can enter data. This cuts down on them repeatedly typing information and ensures that information goes in with the same format across all projects.

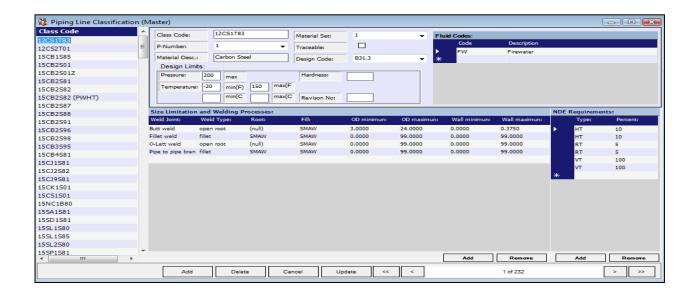




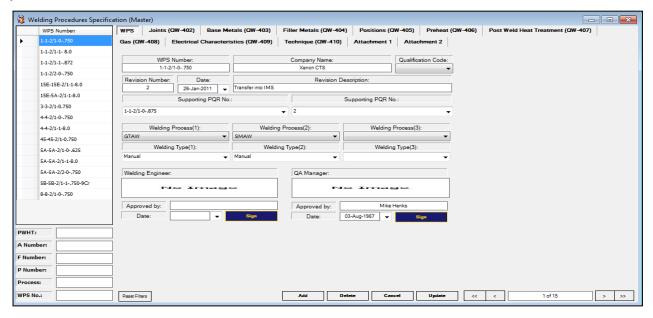
Items Imported into Projects for Customization

Pipe Line Class: The next section is options that you will adjust for individual projects later on. They are your piping line class, welding procedure information and material information.

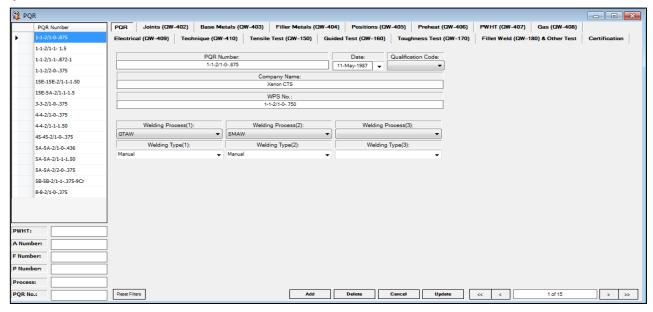
The piping line class information can be first input into the master library. This is generally done when you have line classes that will apply to multiple projects. Later on we will show you how this saves time setting up project specific line class information.



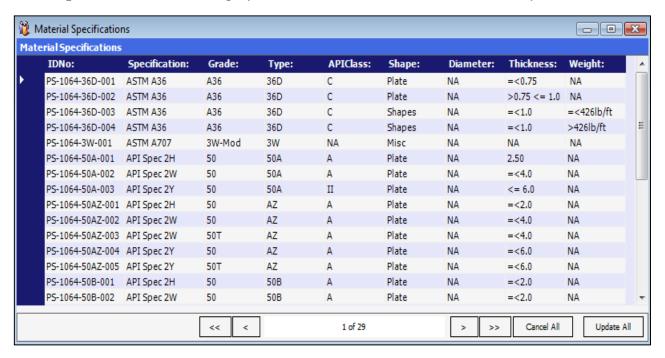
Welding Procedures: are generally the same throughout a company or job site and then just applied to a project. This allows you to setup a master list of all welding procedures. These procedures can then be adjusted within each project.



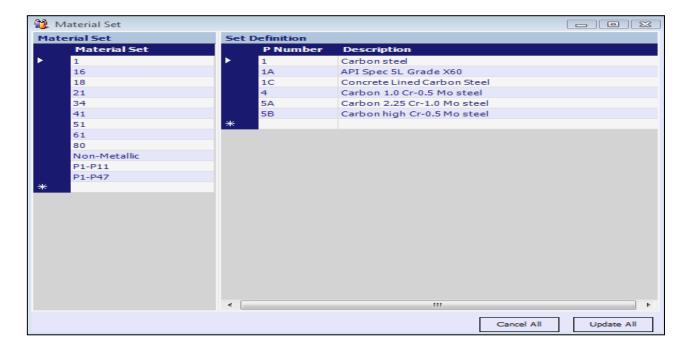
Procedure Qualifications (PQR): are generally the same throughout a company or job site and then just applied to a project. This allows you to setup a master list of all PQR's. These procedures can then be adjusted within each project.



Material Specification: is where company can set the ASME material standards within the system.



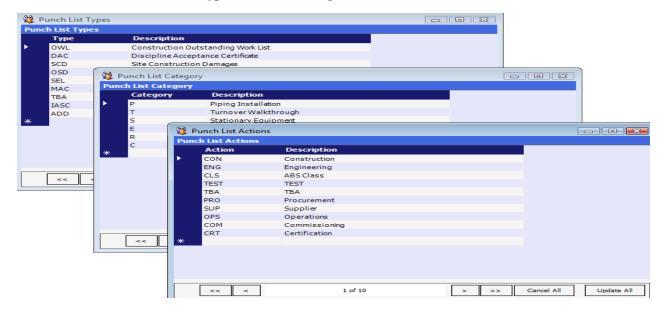
Material Set: a company can set and change the material set by P number to meet the standard code in ASME.



System Turn over and Conformance

The third section of the master library is for Punch List, Test Package types, Insulation Types, and Non-Conformance. This section is used to populate the dropdown in just those areas. This also contains the text that will populate the non-conformance reports.

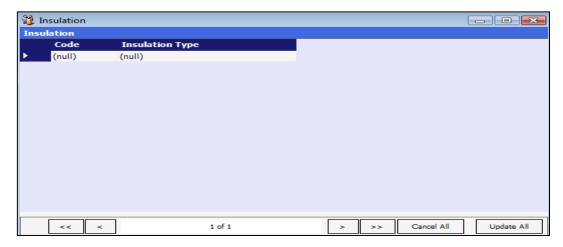
Punch List: Consists of Punch List Types, Punch List Categories, and Punch List Action which is viewable below.



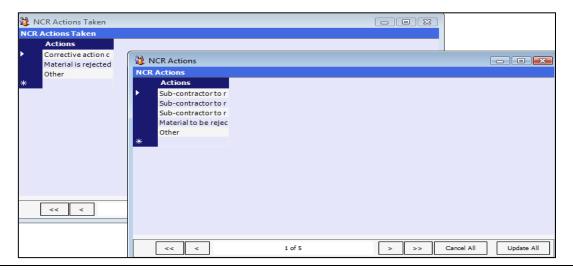
Test Package Types: a company can set the Test Package type to populate drop down types for Test Packages.



Insulation Types: a company can set the Insulation Codes and Types to populate drop downs for Insulation.

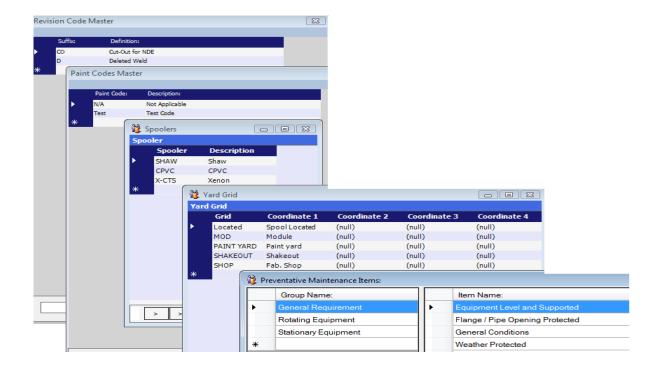


NCR: a company can set the NCR Actions Taken and Actions to populate drop downs in NCR's under the Conformances Menu.



Options

The last section of the Master Library holds specific items. The Revision Codes are used for the Pipe Welding screen to setup the revision that has been performed on Welds. CO and D are already hard coded in IMS for Cut out and Deleted welds. The Spooler and Weld Suffix options are used to populate drops downs in the Spool Tracking and the Pipe Welding screens. Paint Codes contains the general Paint code information. The yard grid is for use with the handhelds and inventory location. The Preventative Maintenance is where the Group Names and Items Names can be setup to copy over to the Project Preventative Maintenance form.



Notes:			

Chapter 5: Project Library

Project Library / Settings

Project options allow you to set basic variables for your project. To set them, click on Project, and then select Project Options from the list.

IMS is capable of tracking multiple projects at the same time. To do so, the projects must be setup within the program. Administration and Project are the two main menus that you will use when setting up individual projects.

The first option is the Project Units. This is a drop down to select between English and International (metric) units for the project.

Next there is a group of 3 options. These options all refer to the welder qualifications. If the project wants to check that welders are qualified for the welds they are making they will check off Enable Welder Checks. When entering welding information on piping, i.e. - root type, WPS, etc., the program cross references the welder qualification to ensure they are qualified to make those welds under the conditions given. Expiration Checks sets the automated checking of Welder expiration dates. Welder Socket Qualification if checked off IMS will allow the welders to weld a Socket Weld without a specific socket weld Qualification.

Welder Lots turns the automatic welder lot builder on and off. The program will group welds that are alike in material and NDE type for welders so that "lots" can be formed and a specimen sample such as 1 out of every 20 welds can actually be tested in order to clear all 20 welds in a 5% testing scenario. Lot Count sets the amount of welds that will make up a lot as with the example to the right (1 out of every 20 welds). But you can make a lot of 25 or even 100 by changing this number.



You may also use Progressive Lots, which allows for varying lots sizes. You will select progressive lots and then click the details button. On the details screen you may set the NDE percentage and Lot count for each declared NDE percentage. Any NDE percentage not declared will use the lot count size set on the main Project Options screen.

Production Welds sets the automatic weld request for the first two production welds performed by a welder without any manual input. If this option is turned off, a manual check of the welder's welds will have to be done in order to choose which two welds will be that welder's production welds to be tested. Production Days sets the number of days that can elapse between NDE examinations on a welder before he is no longer qualified. Some Clients require a Welder to be tested every so often to ensure their performance is up to standards. If the number is set to "o" the automatic function will be disabled.

Auto Weld Numbering will automatically set welds numbers in system in numeric order if checked on.



Spool Progress is used to calculate the progress value by spool on completion reports. Value can range from 0 to 100, but the total must always equal 100%.

The final option allows you to select a company or project logo for the Project. This logo will then be used on all the reports.

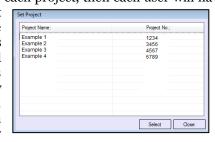


A.

Project Option

Set Project

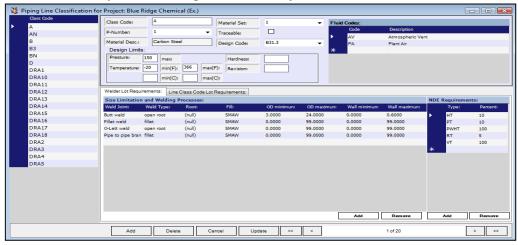
Once you have setup the project and added users for each project, then each user will have the capability to switch between multiple projects. To do so select Project menu, and in the dropdown you will see Set Project. Once Project, the program will display a list of all projects user. Highlight the appropriate project from the list and Select button. Afterwards all reports you run and screens show the data from the Project you chose. You can at any this screen and choose a different project to view and update. screens within the **IMS** program you can determine which viewing by looking at the Title Bar at the top of the form or information display bar.



from the main vou click on Set available for each then click the open will you time return to When opening Project vou are the bottom

Piping Line Classifications (Project)

The Piping Line Classifications for a specific Project is setup by choosing the associated text from the Project drop down menu as shown on the left. When the Piping Line Classification screen comes up, be sure to read the Title Bar at the top of the screen to ensure you are viewing the correct Project.



By clicking on the "Add" button at the very bottom left of the screen you will get an identical Piping Line Classification screen to appear but in the Title Bar it will read "(MASTER)". Highlight the desired "Class Code" then click on the "Add" button at the bottom left of the (MASTER) screen. This will populate the Line Class from the Master Library PLC to the Project PLC, after the line class has been added be sure to click update to save the changes to the Project PLC.



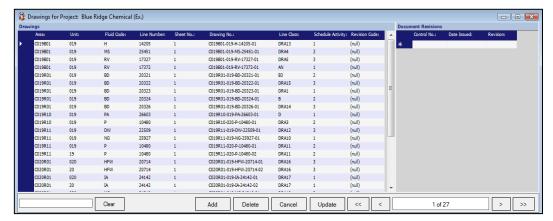
After the Class Codes are added to the Project screen, modifications can be performed to meet the specific Project needs without fear of changing the "Master" data. By Clicking the smaller "Add" button inside the Size Limitation

and Welding Processes section or the NDE Requirement section the add buttons will bring up the associated "Master File List" for you to select items to add to the Project List.



Drawings

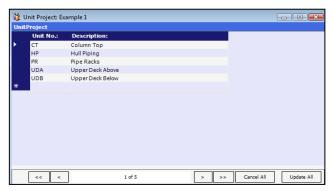
The Drawings screen is a spreadsheet of the drawing information for the selected project that can be preloaded or manually loaded. Associating the area, line numbers, fluid codes, etc. to the drawing number helps the **IMS** program cross reference items during inspection to ensure the correct specifications are observed.



On the right hand side are the Document Revisions. This will allows you to track the drawing (ISO) revisions and control numbers through the project.

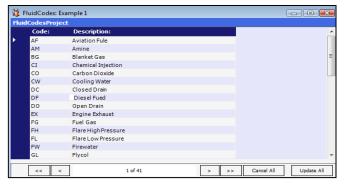
Units

The Units screen allows for defining locations or large areas within a Project. This helps with the location hierarchy on some large projects as well as Plant facilities.



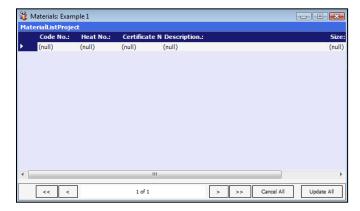
Fluid Codes

The Fluid Codes Screen allows for the definitions of a Code Number and Description. These codes are used elsewhere in the program as drop down options.



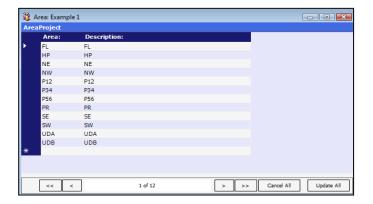
Materials / Components

The Materials screen is available in order to track and maintain information associated with the materials used on the project.



Area

The Areas screen from the Project drop down menu allows for a more comprehensive way to add to the location hierarchy into the program. Along with the Units screen you are able to identify areas of locations within the project for a point of interest.



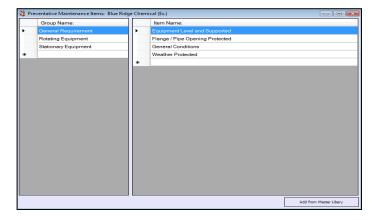
Revision Code

The Revision Code screen from the Project drop down menu allows for more defined revisions throughout the project. The information can be typed into the menu or the Add from Master Library button can be used to pull the records with the corresponding data from the Master file.



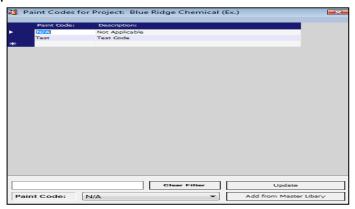
Preventative Maintenance Items

Preventative Maintenance Items are the list of items that can use in the project chosen. By clicking the Add from Master Library button, items can be added to Project Preventative Maintenance.



Paint Codes

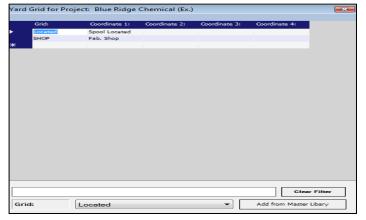
The Paint codes contain the paint specification codes that can be set for a project. The information can be typed into the menu or the Add from Master Library button can be used to pull the records with the corresponding data from the Master file.



Yard Grid

The Yard Grid Menu area is list of areas that are project specific. This menu is use to set Lay Down Yard Drop Downs for Spool Tracking which found in Pipe Welding under the Fabrication tab. The information can be typed into the menu or the Add from Master Library button can be used to pull the records with the corresponding file.

data from the Master

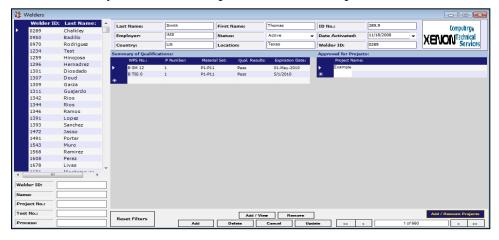


Chapter 6: Technicians

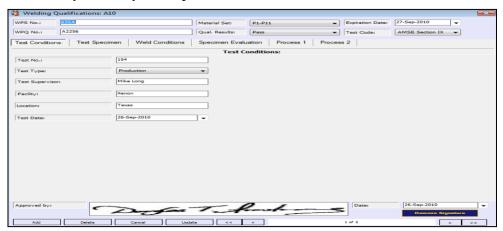
Technician Tab is a list of all qualification record for both the Welders and NDE Technicians.

Welders

The Welders screen is accessed from the Technicians drop down menu. Clicking the Welder Id on the left hand side of the Welders Screen will show the associated data for that welder on the right. By double-clicking on the image box in the upper right corner of the screen you can choose the photo or image you wish to associate with the current record. The Welder information including date activated, status, what projects the welder is approved for and a summary of qualifications allows you to review all aspects of the welder's qualifications.



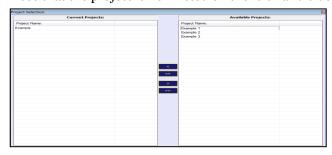
Adding a Qualification Record



Adding a Welder to Additional Projects

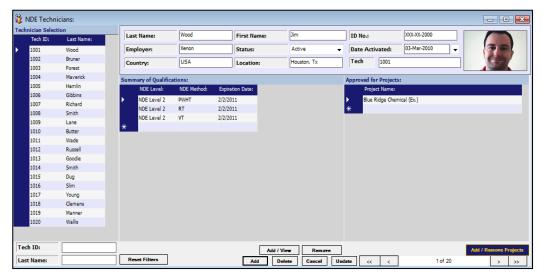
The "Add/Remove Projects" portion of the Welder screen allows you to choose the associated Welder for multiple projects. Click on the Add/Remove Projects button to enter the project selection screen. This is a similar selection screen to the one used for adding users to projects. On the left hand side is a list of assigned projects. On the right side is a list of available projects. To add a project, select the project on the right side, and then click the single arrow that points to the left. Once you have done so, you will see that the project is now listed on the left hand side.

Clicking the double arrow will move all projects from the left, to the right. To remove a project or all projects from a user, highlight the project on the left hand side and click the arrow. Clicking the double right arrow will remove all projects from a welder. If you don't see the Project you want in the list contact your administrator and have them update your Projects in the Administration screen. Welders may only be added to projects for which you are a member of.



NDE Technicians

The NDE Technicians screen is accessed from the Technicians drop down menu and allows you to monitor and evaluate the NDE technicians that are working on your project. Clicking the Tech Id on the left hand side of the NDE Technicians Screen will show the associated data for that Tech on the right. By double-clicking on the image box in the upper right corner of the screen you can choose the photo or image you wish to associate with the current record.



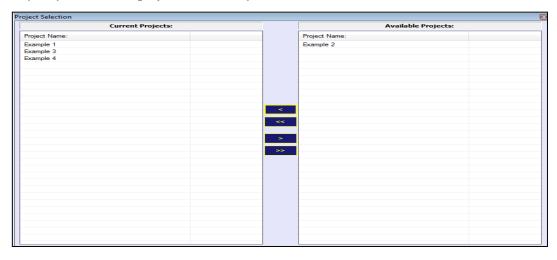
Adding a Qualification Record



By clicking on the Add/View button at the bottom of the screen will bring up the NDE Qualification screen also shown in Figure. You can add as many Qualification Records as you want. The arrow buttons at the bottom of the Qualifications screen lets you scroll through additional records for review. The program will reference these records when a Technician is placed in the Welding information data base to ensure that the Tech is qualified to conduct the test.

Adding a NDE Technician to Additional Projects

The "Add/Remove Projects" portion of the NDE Technicians screen allows you to choose the associated Technician for multiple projects. Click on the Add/Remove Projects button to enter the project selection screen. On the left hand side is a list of assigned projects. On the right side is a list of available projects. To add a project, select the project on the right side, and then click the single arrow that points to the left. Once you have done so, you will see that the project is now listed on the left hand side. Clicking the double arrow will move all projects from the left, to the right. To remove a project or all projects from a user, highlight the project on the left hand side and click the arrow. Clicking the double right arrow will remove all projects from a Technician. If you don't see the Project you want in the list contact your administrator and have them update your Projects in the Administration screen. NDE Technicians may only be added to projects for which you are a member of.



Notes:			
	_	_	
	·	·	

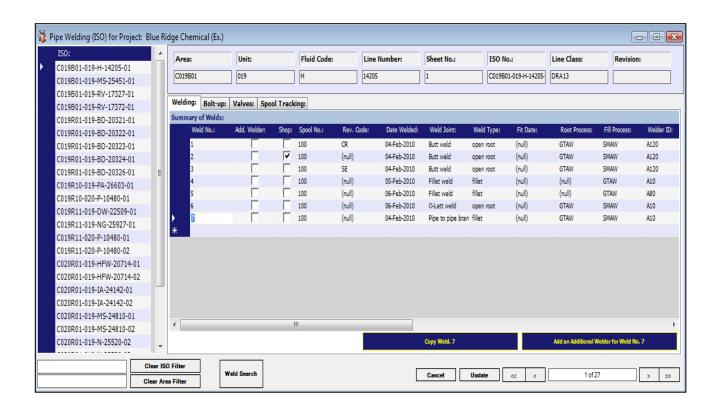
Chapter 7: Fabrication



The fabrication menu is used to track the fabrication of the piping systems. Within this area users will track both the welding and NDE.

Pipe Welding (ISO)

To access the Pipe Welding by ISO screen, click on the fabrication menu. The pipe welding by ISO screen has three different tabs on it. These tabs are to help for navigation of welding (shop or field), bolt-ups and valves. There is an ISO filter in the lower left hand corner.

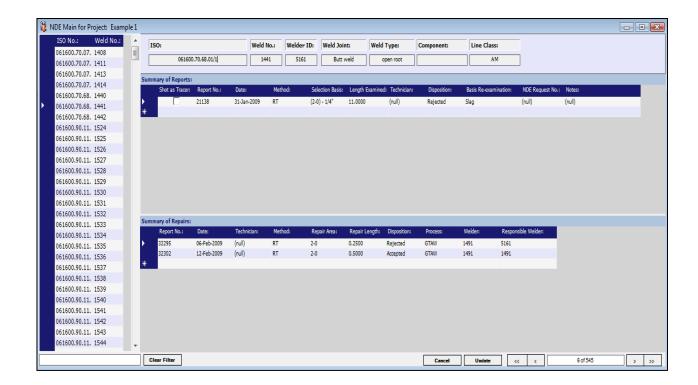


The pipe welding by ISO screen shows a list of the ISO drawings on the left hand side. By clicking on the drawing number to the left you will be able to load, update or modify its corresponding data to the right. This applies to all three tabs. The little red circles with the exclamation mark in it () will show when information is entered incorrectly or doesn't meet the criteria or requires (Welders Quals or Line Class) for the data that has been entered into that fields. In the bottom right corner are two tabs, the first tab is to just copy the weld the second is to copy a weld that will used as an additional welder weld. To use these buttons, just highlight the weld that will be copied and press one of the two buttons. Within the screen, you will also see 2 sub-sections, the first is for Additional or Buddy Welders and the second is for Spool Tracking information for any spools associated with the ISO.

NDE

NDE can be accessed by three different ways. The primary way of accessing and adding NDE information is through the Pipe welding screen or Lot screen. Once a user is in that screen they will select the appropriate ISO to see the list of welds. Double clicking on the weld will open the NDE screen. By entering the screen this way, it will only display information for the weld you have selected.

If you wish to see all NDE information for a project, click on the Fabrication menu and then click on NDE. On the left hand side there will be a list of the ISO's on the project and weld numbers associated with the ISO. The left hand list is populated on which welds have had NDE information entered for them.



Once a user has entered the NDE screen, the corresponding information will be entered. The top section will include all the initial NDE reports on the weld. As you enter this information, you will see that some of them are drop downs. These drop downs are populated with information from the Master Library.

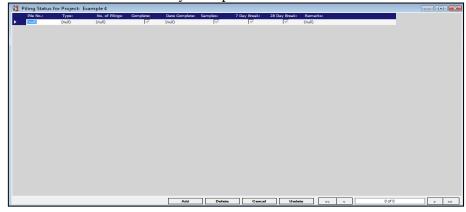
The bottom section of the NDE screen is the Summary of Repairs and here a user will input repair information. This includes the NDE performed and the welder clearance information. The Length Examined and the Repair Length must be entered for each weld.

Note: *NDE* can only be entered after a weld is completed in IMS.

Piling Status Register

The Piling Status Register option from the Fabrication Dropdown Menu will bring you into the Piling Status Register screen. This screen allows you to view, update and evaluate the data of that register of information.

The Piling Status Register is a built in spreadsheet of information listing the "Piling" items that are being fabricated during the project. You can track all of these items including the Pile No., Type, completion dates, whether a 7/28 day break was performed and the remarks or details that may be important for later review.



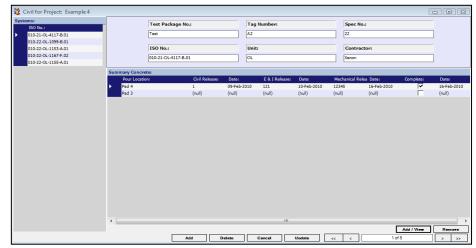
Add / Delete a Piling Status Item

To add a Piling Status item simply click on the Add button at the bottom of the screen and the program will automatically place the cursor in a new record for entry. To delete a Piling Status item, click on the record you wish to remove and then click the Delete button.

Civil Inspection

The Civil Inspection option from the Fabrication Dropdown Menu will bring you into the Civil Inspection screen to view, update and evaluate the data.

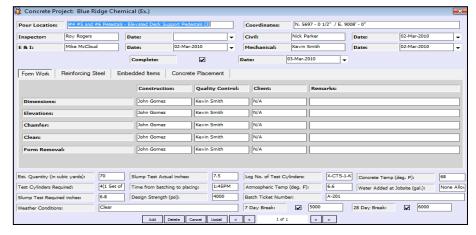
Choosing the Drawing or System Number on the left of the screen will bring up the corresponding information of the right of the screen. The area above the "Summary Concrete" section will be the identifying fields. The "Summary Concrete" section will maintain the data containing all of the concrete pour cards and their pertinent information.



Add / View Pour Card Data to a Record

Choose the record you wish to review by clicking on the left side of the concrete project window. In the lower right corner of the screen you will click on the "Add / View" button. The form will pop up allowing you to Add new pour

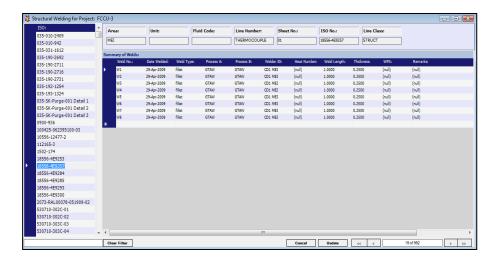
card information.



Once data exists for pour cards in the database you can review that data by clicking on the pour card information you wish to review in the "Summary Concrete," then clicking the "Add /View" at the lower right of the screen.

Structural Welding

This form is a simple register for Structural Welding.



N	^	+,	10	
TA	v	u	-5	۰

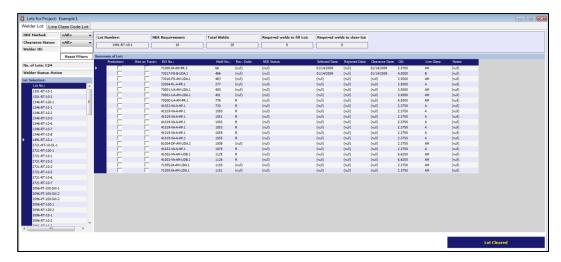
Chapter 8: Quality



Lots

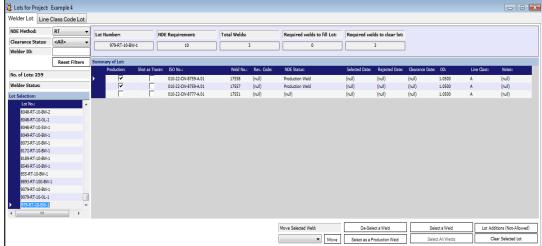
The Lots option will bring you into the Lot screen to view, update and evaluate the data needed to meet the sample testing criteria of your Project. The lots screen has two tabs on it. The first tab is for Welder lots, and the second tab is for Line Class lots. On the upper left are filters for NDE Method, Clearance Status. There is a filter for either Welder ID or Line Class depending on which tab you are currently using. You will also see a total lot count on the screen.

Once you have selected a lot, you will see detailed information on the right hand side. Across the top you can see the Lot Number, NDE Requirement (%), Total Welds, Required Welds to Fill the Lot, and Required welds to clear the lot. Below, you will see the welds that are included in the lot.



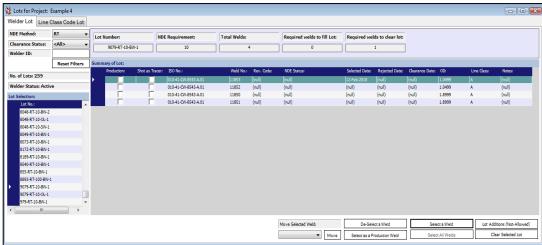
Production Welds

Depending on the options set in Project Options, the system will automatically select the first 2 welds from each welder as their Production Welds. You can select a Production Weld manually by clicking on the ISO No. or Weld No. you want to use and then click on the "Select as a Production weld" button. You will see the NDE Status filled in as 1st or 2nd Production Weld and the Date Selected field will be filled in with the current date. To remove the selected weld as a Production weld, click on the Weld No. or ISO No. field of the weld chosen and then click "De-Select a Weld".



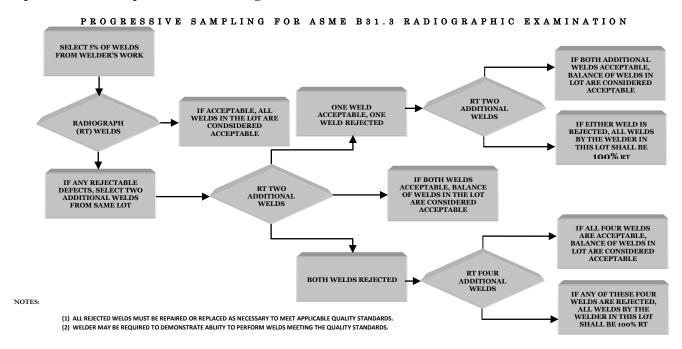
Selecting Welds for NDE

Welds should be selected in the lots screen for NDE. To select a weld for NDE, users may highlight the weld by clicking in the blue field and then click Select a Weld. Once the weld has been selected on this screen, they will then show on the Selected NDE report which should be provided as a shot list to NDE Technicians. Welds in 100 percent lots will all be selected automatically by the system. If the lot has met all NDE criteria, the system will prompt a user that all NDE criteria have been met.



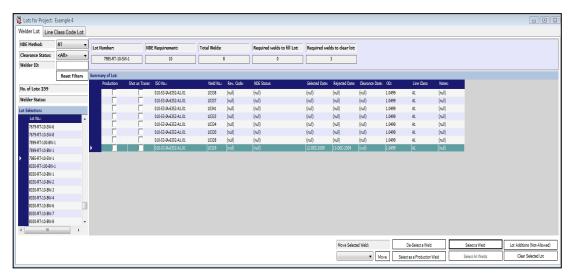
Repairs and Tracers

When using Lot criteria, failed RT welds require tracers to be shot for them. The system works according to established stands. UT can be substituted for RT depending on the production weld type selected in the Project Options. Below is a process flow chart regard tracers.



To select tracers, users should enter the Lot Screen and select the appropriate lot that the failed weld is in. Tracers must be in the same lots as the weld that failed. Highlight the failed weld, and then click Select a Weld, the system will prompt you to select the tracers. Tracers must be selected before their NDE information is entered in to the

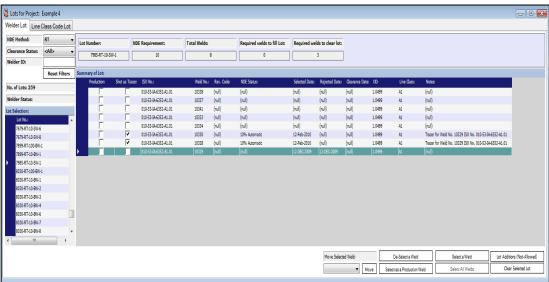
system.



Next will be informational box saying that you must select the first round tracers before other items can be selected. Press OK and the Item Selection Box will appear, highlight two of the welds available for tracers in the Lot, then select the blue Select button. The system will automatically mark the tracers in the Lot associate to the reject.

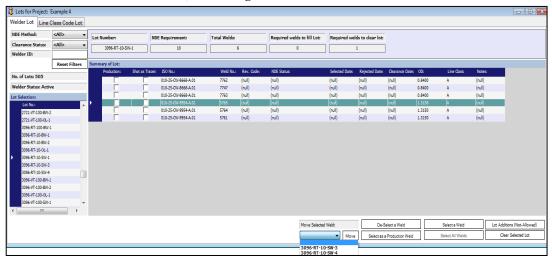






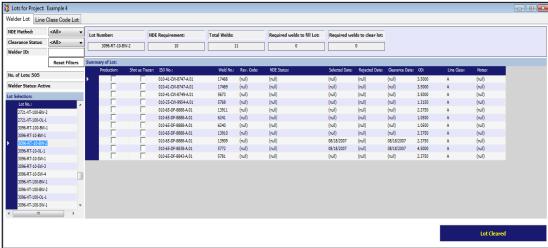
Moving a Weld from one Lot to another

Inevitably when you have automation processes you end up with some welds in places that they don't belong or moving them to another lot will help the process flow better. Click on an ISO No. or Weld No. in the Summary of Lots area of and then click the drop down option under "Move Selected Weld" at the bottom of the form to choose what lot you want to move it to. After the lot to move it to is selected, click the "Move" button next to the drop down. This will move your selected weld to the lot you chose. Be careful when doing this as it may cause side effects to the clearing process (i.e. - < 20 welds on a lot, not enough NDE on a lot).



Manually Clear a Lot

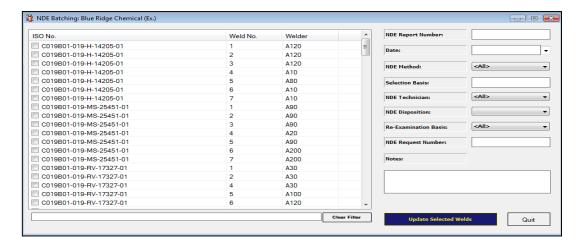
Clicking on the "Clear Selected Lot" button will prompt you that the clearance cannot be undone! Be sure you understand this before clearing a lot early. By clearing the lot early you may increase the overall NDE counts for your projects. Lots will grow until they reach the Lot Count number of the Project Options screen. Once the lot count is reached a new lot will automatically be formed. Selecting the "Clear Selected Lot" button prior to the lot count being reached will also automatically start a new lot for additional welds. You must click on the Lot Additions (Allowed) button before you can clear the lot. Once you have click on the button it will change to Lot Additions (Not Allowed). Lots should only be cleared early when absolutely necessary, as this may lead to excessive NDE.



Note: Lots will only be cleared if the criteria have been met.

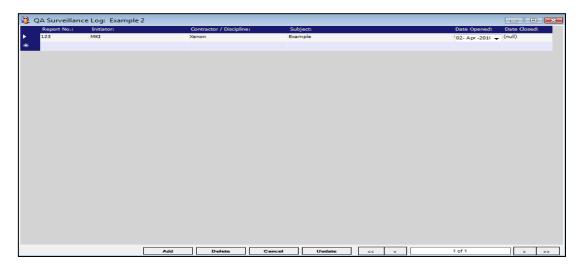
NDE Batching

NDE Batching is a form for adding multiple NDE at one time. The information will be added into the form as it would be enter into the NDE screen. Next will be choosing the ISO's the NDE has been performed on. Last the click the blue button called Update Selected Welds and all the ISO that were chosen will have NDE records in the NDE screen.



QA Surveillance Log

QA Surveillance Log is registered to track quality assurance items.



Notes:

Chapter 9: System Turnover



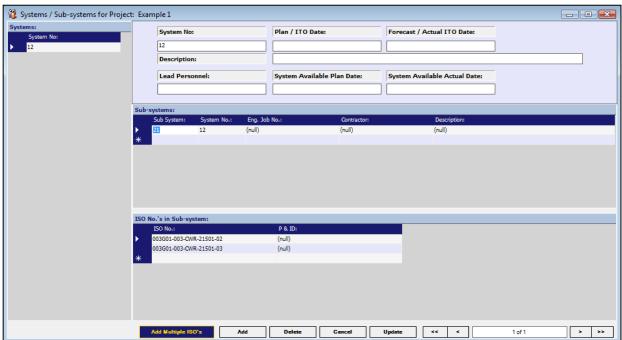
The Systems – Sub-systems option from the System Turnover drop down will bring you into the register form. By clicking on the System No. at the left side of the screen you can view all of the Sub System information for the selected system.

System – Sub-System

Clicking on a Sub-system will allow you to view each ISO and their P & ID that has been associated with the Sub-system. To add the ISO's associated Sub-system you should click on the Add Multiple ISO's

button. This will open the ISO selection screen. You may select multiple ISO's in this screen and clicking the Add Selected ISO's button will exit the selection screen and they will be listed under the previously selected sub system. A filter is located at the top of the ISO selection screen.





Test Package Status

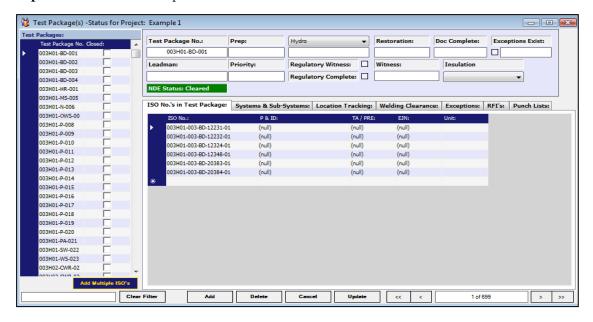
The Test Package Status Screen maintains status of the Test Packages. This screen has multiple tabs on it that contain the various information associated with a Test Package.

Across the top of the screen is where users may input the test package designator. They will also choose the test package type from the drop down. Lastly, they will also see the five areas of review.

Areas of Review

The five major areas of review for the test packages include:

- **Pre-Hydro** In preparation for testing, inspectors will walk down the line to review and inspect items to ensure they are ready. Once this is accomplished the Pre-Hydro check is done and the package is turned over for testing.
- Hydro Hydro static testing complete.
- **Post Walk Down** After testing is complete, inspectors will walk down the line to review and inspect items to ensure they are ready. Once this is accomplished the Post Walk Down check is done and the package is ready for document review.
- **Doc Complete** All documents have been reviewed and are acceptable for turnover.
- **Exceptions Exist** some exceptions still exists on items



The first tab lists all ISO's associated with the test package. Users will need to select the ISO's through the same process they used in the Systems / Sub-systems screen. Clicking the Add Multiple ISO's button will bring up the list of all available ISO's on the project. You will select the ISO's you wish to be associated and then click the Add Selected ISO's button.

The Systems & Sub-systems tab will list the System and Sub-System associated with the selected Test Package.

The third tab is the Location Tracking and it provides a central location to maintain the actual Package location information.



Test Package Status

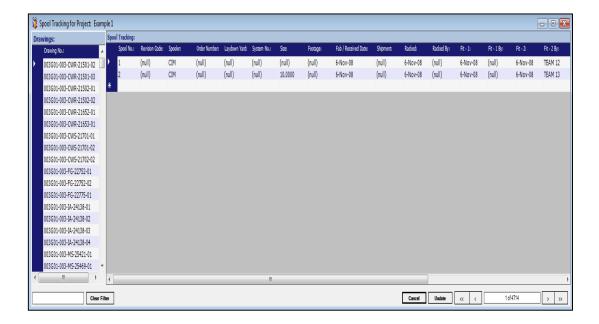
The Welding Clearance tab will give you a list of all welds that are associated with the package. You can get a quick look at what is complete and what is outstanding on the items that are within the package to determine if a Hydro can be accomplished or if Turnover can be accepted.

Clicking on the Exceptions tab will give you the exceptions that exist from the Exceptions Register that apply to the corresponding Test Package chosen on the left of the screen.

Clicking on the RFI's tab will give the RFI's that exist from the RFI register that apply to the corresponding Test Package chosen on the left of the screen.

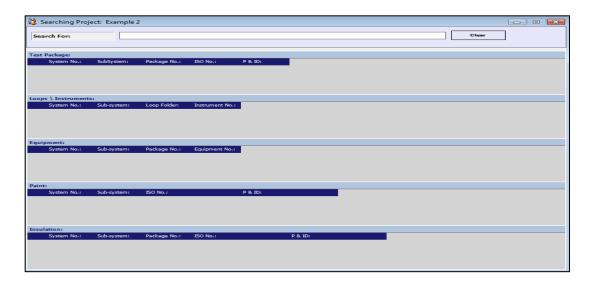
Spool Tracking

Users can access spool tracking through the System Turnover menu by selecting Spool Tracking from the list. Once you have done so, it will bring up a list of all project ISO's on the left hand side. Selecting the ISO will allow you to view information on each spool within the ISO. Users can enter several pieces of information on each spool. The Spooler drop down is populated according to information filled out in the master library. The Lay down Yard can be used in conjunction with the Yard Grid to determine where a spool has been stored. The racked and fit columns can be used in project determined way. Some projects will choose to use a date in that field; others may just use it as a yes/no field. This is done to allow flexibility. In addition to tracking when/if racks and fits were done, the system can also track the responsible lead man for reporting that these items were completed.



Turnover Search

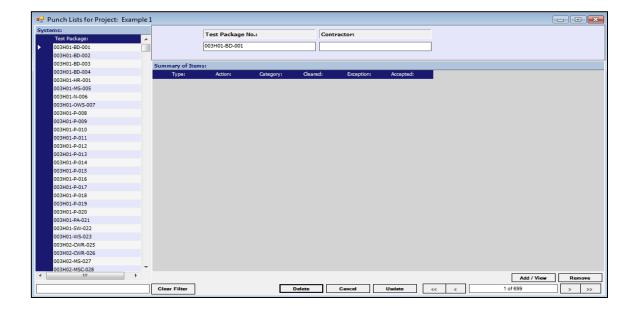
User can use this form to search for specific Test Packages, Loops, Equipment, Paint, and Insulation information in the IMS database.



Punch List

The Punch List option from the Fabrication Dropdown Menu will bring you into the Punch List screen to view, update and evaluate the data of that register of information.

The Punch List form is a built in spreadsheet of information listing the "Punch List" items identified during all phases of the fabrication and inspection processes. You can track all of these items including the completion dates, who actually signed off on it and the remarks or details that may be important for later review and closeout.

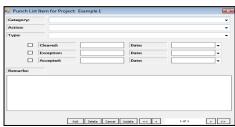


Add / View a Punch List Item

Choose the record you wish to review by clicking on the left side of the screen. In the lower right corner of the screen you will click on the "Add / View" button. The form will pop up allowing you to Add new punch list information.

Users will select the Category, Action, and Type from the Drop Downs provided.

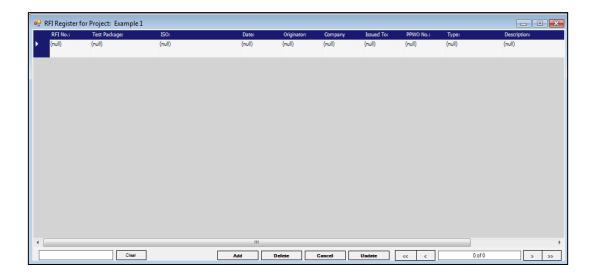
Once data exists for a punch list in the database you can review that data by clicking on the punch list item you wish to review in the "Summary of Items" section, then clicking the "Add /View" at the lower right of the screen.



RFI Register

The RFI Register option from Fabrication Dropdown Menu will bring you into the RFI Register screen to view, update and evaluate the data of that register of information.

The RFI Register is a built in spreadsheet of information listing the "Request for Information" items. You can track all of these items including the completion dates, who actually signed off on it and the remarks or details that may be important for later review.



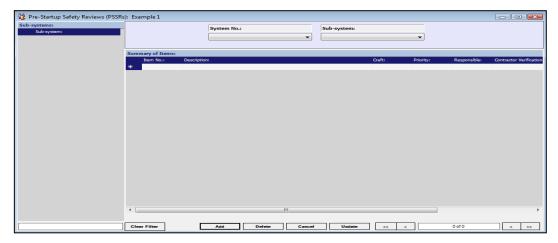
Add / Delete a Register Item

To add a register item simply click on the Add button at the bottom of the screen and the program will automatically place the cursor in a new record for entry. To delete a register item, click on the record you wish to remove and then click the Delete button

PSSR Punch List

By selecting the PSSR punch list from the System Turnover menu you can create Pre-Startup Safety Review. This can be used by field personnel Pre-Startup of the systems. Click the add button will let you add the system and sub-system information. You will then click update to save that information.

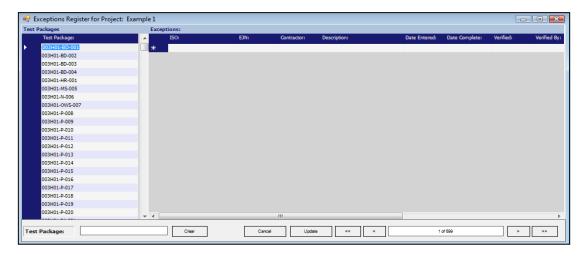
After you have clicked updated, you may fill out the information in the bottom section of the list.



Exceptions Register

The Exceptions Register option from the Fabrication Dropdown Menu will bring you into the Exceptions Register screen to view, update and evaluate the data of that register of information.

The Exceptions Register is a built in spreadsheet of information listing the "Exception" items that were noted during different phases of the fabrication process. You can track all of these items including the completion dates, who actually signed off on it and the remarks or details that may be important for later review.

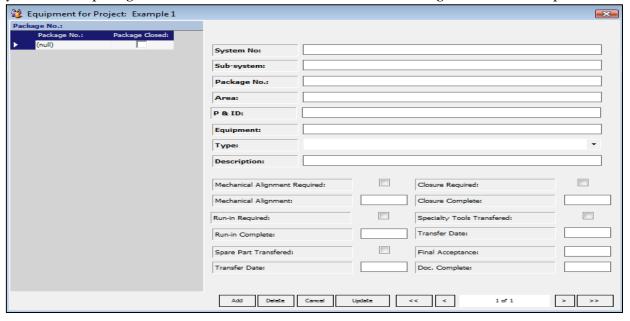


Add / Delete an Exceptions Item

To add an Exceptions item simply click on the Add button at the bottom of the screen and the program will automatically place the cursor in a new record for entry. To delete an Exceptions item, click on the record you wish to remove and then click the Delete button.

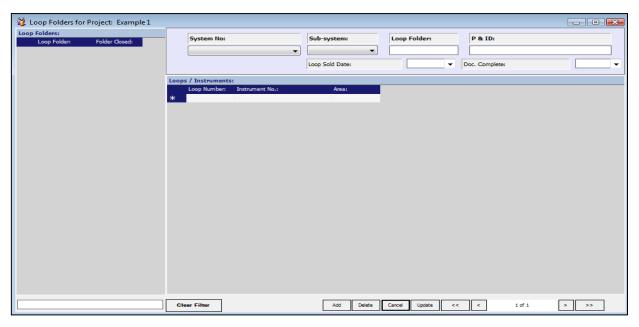
Equipment

The equipment section allows you to track any equipment installed with the piping. The equipment is sorted by the package number on the left hand side. Clicking the add button will allow you to fill out the system no, sub-system and the package information. Check boxes are used to track the alignment and other options.



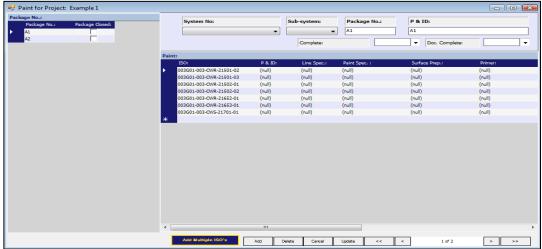
Loops

The Instrument Loops section you can track equipment loops within piping. The loops are sorted by the loop number on the left hand side. Clicking the add button will allow you to fill out the System No, Sub-system and the package information.



Paint

Paint can also be selected under the system turnover menu. This will allow you to track which Packages and ISO's have been completed and painted.

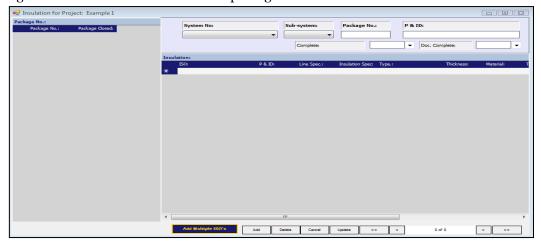


Clicking the Add Multiple ISO's button will bring up the list of all available ISO's on the project. You will select the ISO's you wish to be associated to the test package and then click the Add Selected ISO's button



Insulation

Insulation can also be selected under the system turnover menu. This will allow you to track which Packages which have been installed in the packages.



Clicking the Add Multiple ISO's button will bring up the list of all available ISO's on the project. You will select the ISO's you wish to be associated to the test package and then click the Add Selected ISO's button



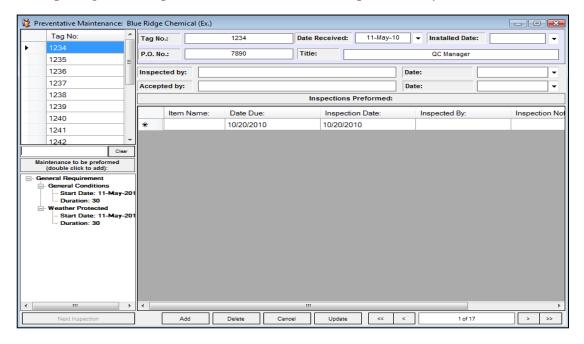
Chapter 10: Preventative Maintenance

Preventive Maintenance

Notes:

A Preventive Maintenance Module is built in to the IMS program to track all maintenance items and there periodic routines. A list of what items were checked, who inspected them and when the next check is to take place is maintained. Each piece of equipment that comes in can be maintained within this module to ensure all routine and preventive maintenance has been performed and help ensure manufacturer warranties stay intact.

The Inspections section at the lower part of the screen will keep a running documentary of the actual inspections that took place during the preventive maintenance period and will show the last time the item was inspected. These dates are used in the reporting section to printout items that need to be inspected weekly.

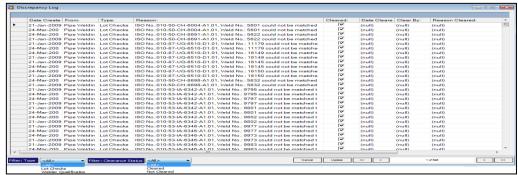


-				

Chapter 11: Conformances

Discrepancy Log

The Discrepancy Log option from the Conformances drop down will bring you into the register form. Whenever there is a discrepancy within the program usually reflected by a (), the IMS system automatically populates the Discrepancy Log. The Discrepancy Log can be maintained as is or the items within the Log can be converted to a Non Conformance at any time. Even if you don't convert the discrepancy to a Non Conformance you can still track it just like an NCR and clear the items on the list from here.

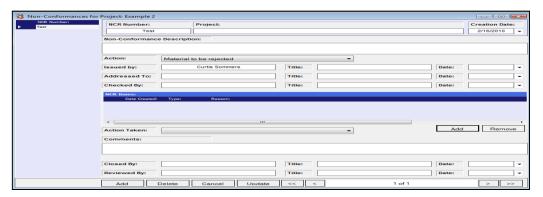


The Discrepancy

Log can be filtered for Discrepancy Type and Clearance Status. It is important to check the Discrepancy Log frequently. Items listed in the discrepancy log and not cleared will not form into lots until they have been cleared. To clear an item in the discrepancy log, users will first correct the information indicated in the reason, then mark Cleared, provide the date, cleared by Reason Cleared.

Non-Conformance Reports

The Non-Conformance option from the Conformances drop down will bring you into the NCR form. The Non-Conformance form allows you to view and update existing NCR's as well as adding new ones. Clicking on the NCR number at the left of the screen will bring up the associated information for that NCR on the right of the screen.



Adding a new Non-Conformance

Clicking on the Add button at the bottom of the screen will give you a blank NCR form. Fill in the NCR number field and a description then click the Update button. Now click the Add button on the middle right of the screen just under the NCR Items area. You will get a pop up screen of the items in the Discrepancy Log. Click on an item to highlight it and then click the Add Selected button at the lower left. To choose more than one item hold the CTRL key down while clicking more items then click the Add Selected button to insert.

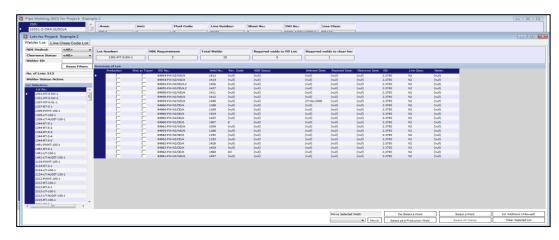


Chapter

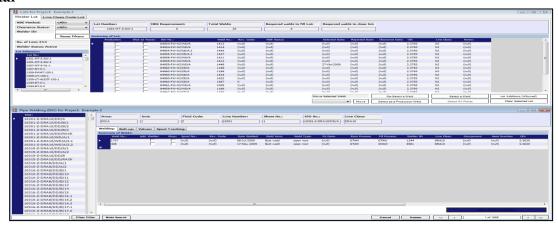
Chapter 12: Window

If there are multiple windows open in IMS there are three functions which can be used for visual purposes.

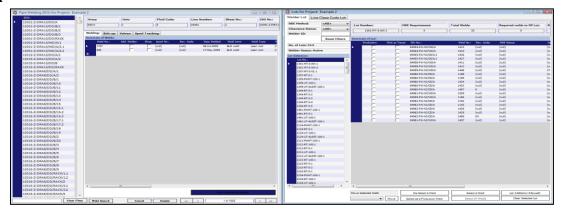
Cascade



Title Horizontal



Title Vertical



Chapter 3

Chapter 13: Help

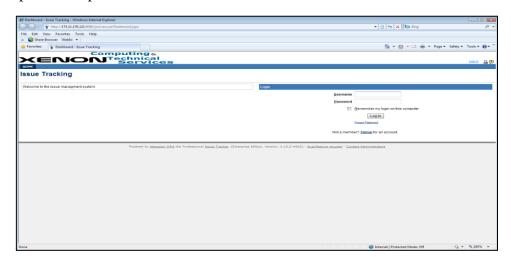
About

This function has the license, copy right, and the version of IMS running at the site.



Issue Tracking (Online)

This function is the web site that hosts Xenon Issue Tracking system for IMS. With this web site user's can summit update request and report issues?



User Manual (Online)

This links to a PDF version of the latest IMS manual.



Report Appendix (Online)

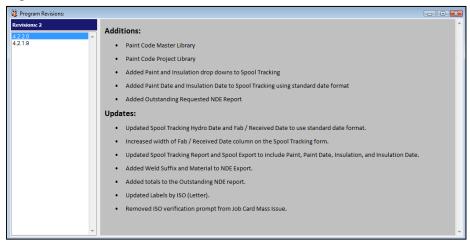
In order to better serve our customers, the reports have a separate stand alone appendix.

Please see the Reports Appendix for how to run reports, along with information and screen shots of all the reports available.



Program Revision

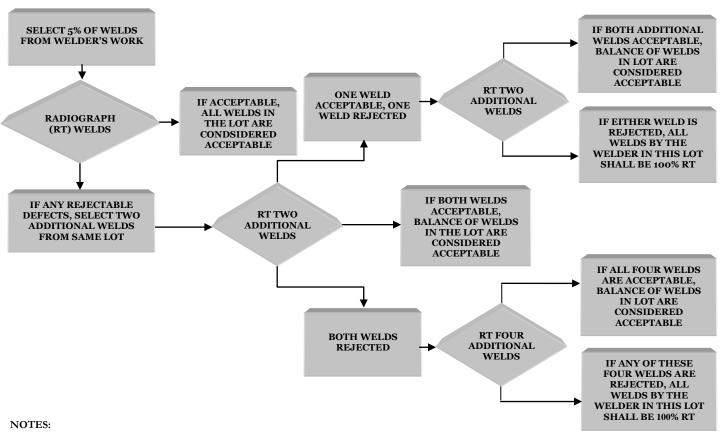
This function has all the latest Additions that have been added to the program and the latest Updates to the functions that are being used in IMS.



Chapter

Chapter 14: Flow Charts

PROGRESSIVE SAMPLING FOR ASME B31.3 RADIOGRAPHIC EXAMINATION



- (1) ALL REJECTED WELDS MUST BE REPAIRED OR REPLACED AS NECESSARY TO MEET APPLICABLE QUALITY STANDARDS.
- (2) WELDER MAY BE REQUIRED TO DEMONSTRATE ABLIITY TO PERFORM WELDS MEETING THE QUALITY STANDARDS.

