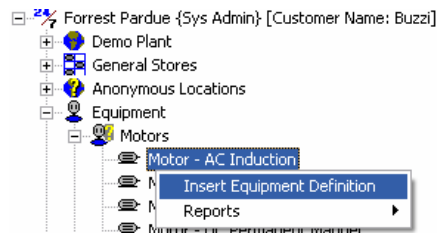


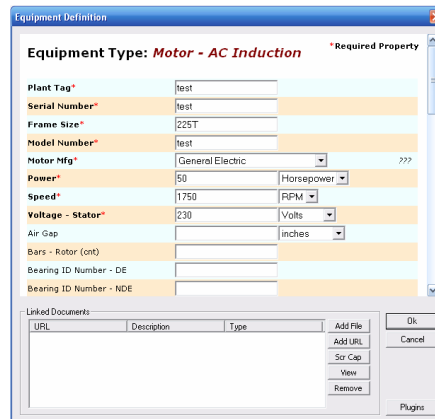
Equipment Management

1.0 Adding New Equipment

The Design Information for equipment is a list of the design features for a particular piece of equipment. When adding a piece of equipment to Tango the design information is entered. To add a piece of equipment, expand the tree below Equipment in the Location Tree. Then expand the tree below the piece of equipment that you want to add such a motor. Finally right click on the type of equipment that needs to be added, such as an AC Induction motor, and select Insert Equipment Definition.



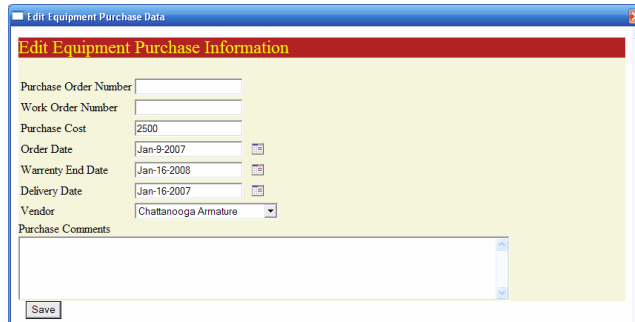
After selecting what type of equipment to add, a design information window will open. Here enter all known design features about the piece of equipment. Note all required fields (*) must have information entered. Linked Documents may also be added by selecting add and then selecting the file. Once all the information has been added select OK. A window containing the piece of equipment will open so the equipment may be installed in a location.



The 'Equipment Definition' dialog box is shown for a 'Motor - AC Induction'. It contains several input fields, some marked as required (*). The 'Linked Documents' section at the bottom has a table with columns for URL, Description, and Type, and buttons for 'Add File', 'Add URL', 'Set Cap', 'View', 'Remove', 'Ok', and 'Cancel'. A 'Plugins' button is also visible at the bottom right.

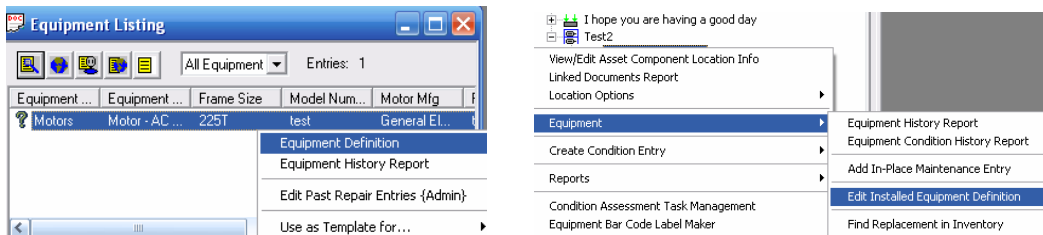
Field	Value	Notes
Plant Tag*	test	Required
Serial Number*	test	Required
Frame Size*	225T	Required
Model Number*	test	Required
Motor Mfg*	General Electric	Required, dropdown menu
Power*	50	Required, dropdown menu (Horsepower)
Speed*	1750	Required, dropdown menu (RPM)
Voltage - Stator*	230	Required, dropdown menu (Volts)
Air Gap		dropdown menu (inches)
Bars - Rotor (cont)		
Bearing ID Number - DE		
Bearing ID Number - NDE		

If adding equipment With Purchase Info was selected then the Equipment Purchase window will open after entering the design information. Here Purchase information such as cost, PO #, Work Order #, Order Date, Vendor, and Comments, may be entered for the motor. Linked Documents may also be added by selecting add and then the file. Once all information is completed select OK.



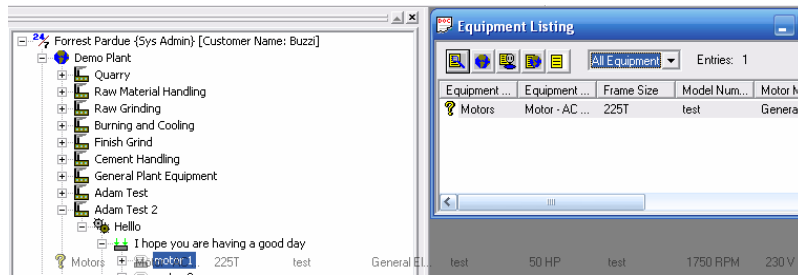
Finding Equipment

Design Information for an existing piece of equipment may be viewed by searching for the piece of equipment or by using the location tree. Once a piece of equipment has been found using the search method right click on the piece of equipment and select Equipment Definition, After a location has been found in the location tree right click on the asset component and then select Equipment, then Edit Installed Equipment Definition. In the Equipment Definition window the design information may be edited or viewed.

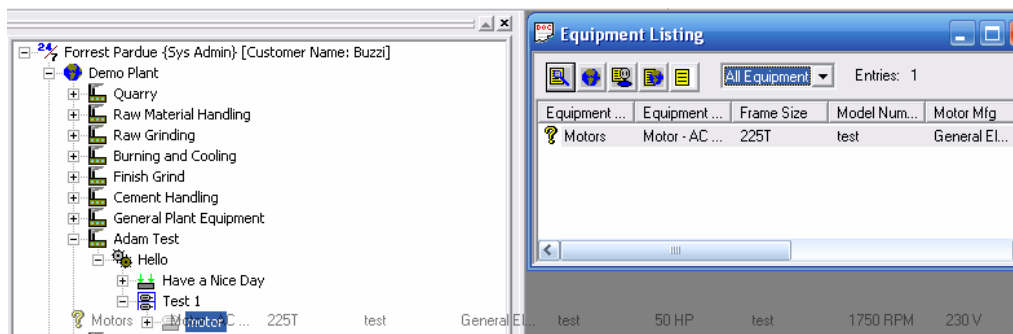


2.0 Assigning Equipment State

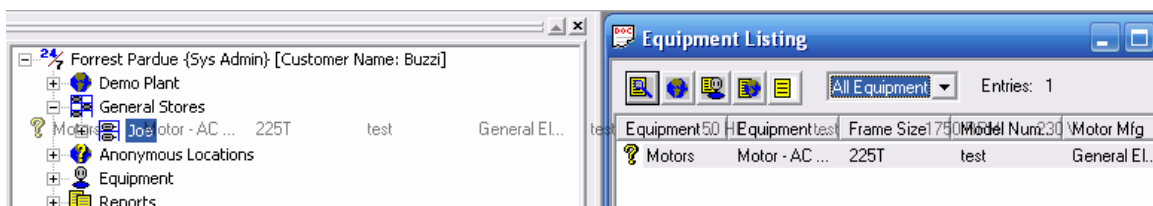
There are several different equipment states that maybe assigned to equipment in Tango. The first and most used is installing equipment in to a functional location. This represents a piece of equipment that is actually in operation. To install a piece of equipment into a functional location, the piece of equipment first needs to be found using the quick search or the Search for equipment button. The asset component where the equipment needs to be installed must also be located in the Location Tree. To install the equipment a drag and drop method is used. Click on the piece of equipment and then drag it to the asset component where the equipment is going to be installed. The Equipment Installation window will open, which is where the equipment installed date, work order number and comments maybe entered. Select OK after all information has been entered.



Installing equipment into a stores area follows the same procedure as installing equipment into a functional location. The equipment and location must both be found and the equipment is dragged and dropped into the stores location. The Equipment Installation window will open, which is where the equipment installed date, work order number and comments may be entered. Select OK after all information has been entered.



Some plants may have a set area of the plant used to store equipment. In Tango General Stores is used for this purpose. To install a piece of equipment into a General Stores Location first find the piece of equipment using the quick search or the find equipment button. Expand the tree to the General Store location, and then drag and drop the piece of equipment into the General Store location. The Equipment Installation window will open, which is where the equipment installed date, work order number and comments may be entered. Select OK after all information has been entered.



3.0 Send For Repairs

To Send a piece of equipment for Repairs find the piece of equipment using the Quick Search or Find equipment Button. Right click on the equipment and select Send for Repairs. In the Equipment Transfer Form the previous state of the equipment with details concerning installation is available for viewing or altering The *Removal Date* is located in this section of the Equipment Transfer Form.

Equipment Transfer Form

Equipment Information
 Equipment Type: Motor - AC Induction
 Equipment Class: Motors

Current Equipment State
Currently Installed
 Plant Location: Finish Grind » Finish Mill Grinding » LUBE SYSTEM - THRUST, FOR MILL - 67304 » Motor #1 (Installation Location)

Install Date: Jan-01-2006
 Removal Date: Sep-29-2006
 Removal Work Order:

Comments
 Installation Remarks

 Removal Remarks

Enter the *Sent Date*, *Due Date*, *Work Order*, *Purchase Order*, *Requisition Number*, *Shipping Number*, *Tracking Number* and the *Vendor* in the Send for Repairs Form. The Selection of Faults has changed. Select the Search Button next to *Faults* and then enter the type of Fault you are searching for. A list of Faults matching the description entered will open. To enter a fault select Add.

Repair Shop: The equipment is being sent for repair

Plant Information
 Work Order:
 Purchase Order:
 Requisition #:
 Shipping #:

Shop Info
 Shop:
 Tracking #:

Sent On: Sep-29-2006
 Due Back:

Comments
 Send For Repair Comments

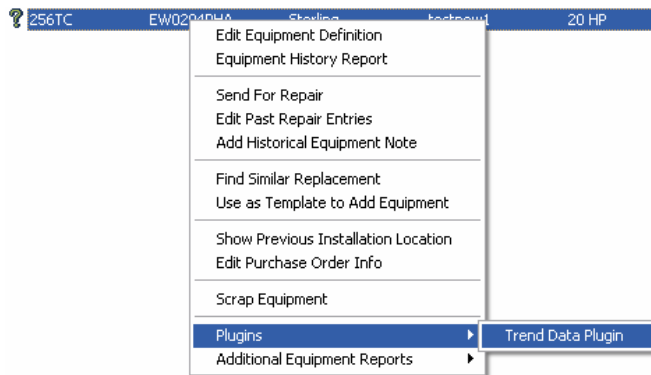
Fault	Fault Group	Status	Comments	Problem Level	
Bearing failure NDE	Mechanical	<input type="text"/>	<input type="text"/>	Primary Failure	Remove

Suspected Faults Add Item Options [>> Search]


Fault	Fault Group
Add Bearing failure - late stage	Mechanical
Add Bearing failure DE	Mechanical
Add Bearing housing - Bad	Mechanical
Add Bearing journal - Bad	Mechanical
Add Early stage bearing	Mechanical
Add Opposite drive end bearing failure	Mechanical
Add Vibration/Bearings by NDT	Mechanical
Add Install New Bearings	Repair Shop Actions

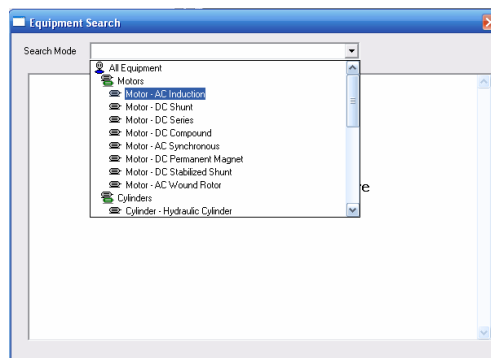
Equipment Plug-ins

Plug-in options for equipment are no longer available in the Equipment Definition. Find the equipment, then right click the equipment, and select Plug-ins. The Plug-ins available for the user will be listed.

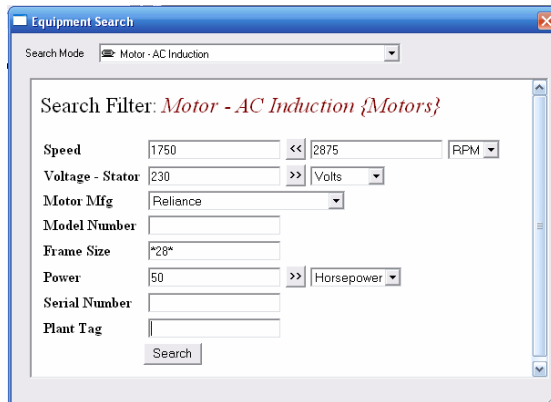


Search for Equipment Button

The Search for Equipment button is used to search for equipment using various equipment properties. Click on the  located in the upper left hand corner to search for equipment. This will open the equipment search window. Select which type of equipment that will be searched from the scroll down menu



This will open various equipment properties fields to search for. Enter known data about the equipment that is being searched for and select search. Some fields such as voltage for motors may search for using a range. To enter a range for voltage, click on the double arrow for the second field. A wildcard search maybe used by using an asterisk before and after the item being searched for (ex. 286T frame for a motor *28*).



A list of motors matching the criteria that was selected in the equipment search will open in a window. The list may be further filtered by selecting location status of the motor such as installed in a functional location. To change the location status, select the pull down menu in the top of the window

