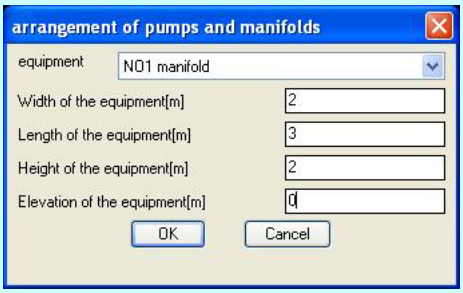
FIRE MARSHAL Hose Module V2.0

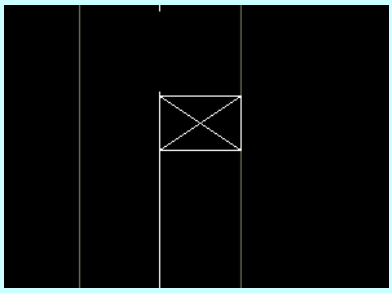
Hose Module program operation procedures

1.Allocation of fire water pumps, manifolds

1) Open 3D graphic layout and click the icon for allocation of pumps, manifolds.
2) Select a pump or manifold from a pull down menu and then input their sizes and allocation height.

*By pressing the icon (obtaining a allocation height), the ground height for installation of the manifold (Z-value) can be obtained.





3) Point the cursor at the location of the manifolds to be allocated and left click.
4) A line from a point indicated at 3) to the cursor is a direction of the shorter side of the manifold and by this line, direction of the manifold must be decided. And then the manifold(2D) is allocated.

Obtaining the allocation height

To obtain the up most Z-value of the 3D graphic layout.

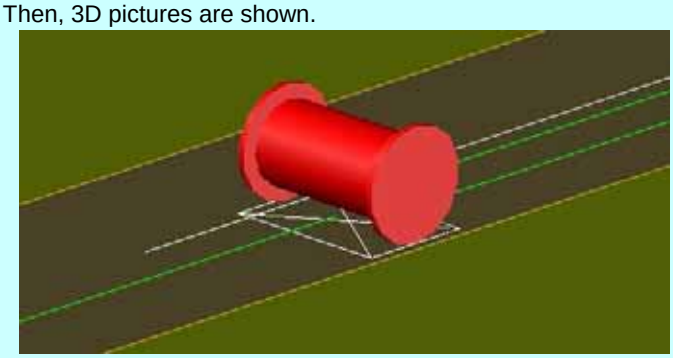
1) Select an area by dragging a mouse with left click and press Enter Key.
2) Point the cursor within the selected are at the location of the pump or manifolds to be allocated and left click.

2.Preparation of 3D pictures for pumps, manifolds

1)Click the icon (manifold 3D)

Select 2D pictures of a pump or manifold and press Enter Key.

Then, 3D pictures are shown.



Deletion of 3D pictures

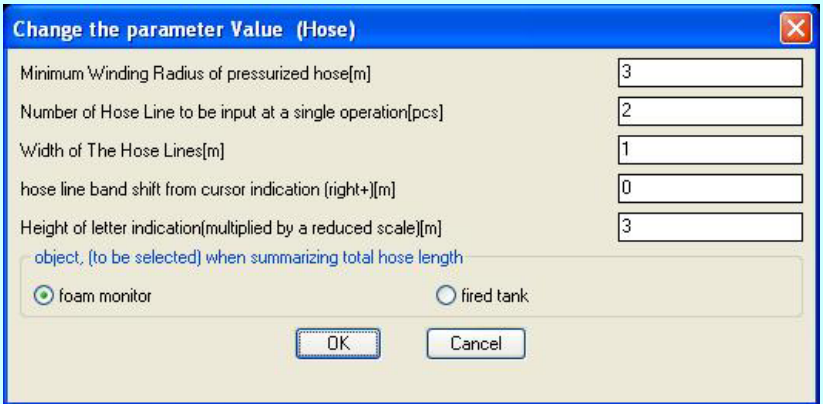
To delete the 3D pictures. 3D pictures, which can be deleted by this iron, are ones having been prepared by Fire Marshal, such as cubes, oil dike, manifold, pump, hoses etc,.

Even if the other 3D pictures are selected, it is ignored and the pictures are not deleted.

3.Option(Hose)

1) Click the icon [option (Hose)]

Default value related to the simulation can be changed for the hose layout.



Minimum winding radius of pressurized hose
Input the minimum bending radius, which is depending on manufacturers model. Every turning of the hose layout will be prepared by using this bending radius.

Number of hose lines to be input at a single operation
When laying multiple hose line, input the number of hose line.
Width of the hose lines
When laying multiple hose line, input the overall width of hose lines.
hose lines band shift from cursor indication
Input the distance of the shift. When it is plus value, the center of the hose lines is shifted to right side or upper side.
Height of letter indication
Displayed letter height is decided by it.
Object ,(to be selected) when summarizing total hose length
All lengths of hoses related to the selected object are counted automatically.

4.Laying of hose line (single) (multiple)

1)Click one of the icons (Laying of hose line).
;These icons have a function of obtaining allocation height(Z-Value) automatically, that is the ground elevation +400mm)

2)Point a cursor at the start location and decide by left click (Fig.1)

3)Point a cursor at the second location and decide by left click (Fig.2)

4)Point a cursor at the third location and decide by left click (Fig.3)
Continue the above till end of the laying hoses.

5)After positioning the end of the hose line, press Enter Key and then the hose line is laid.

*In case of multiple hose lines, hose lines are not displayed during the works of positioning. When pressing Enter key after positioning the end of the lines, all hose lines are displayed.

*In case of multiple hose lines, input values at "**3.Option (Hose)**" are applied for number of hose lines, width of the hose lines, the shift etc,. These values must be changed as required.

Deletion of hose
Delete the hose lines having been laid.

Fine adjustment of terminal positions of the hose line
Adjust the hose terminal positions.


Fig.1

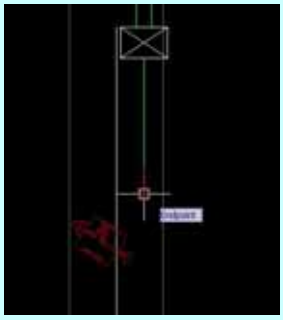


Fig.2

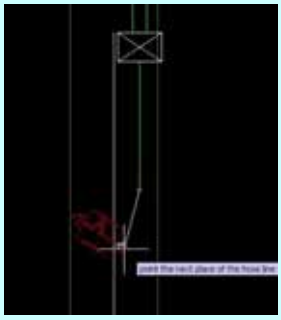


Fig.3

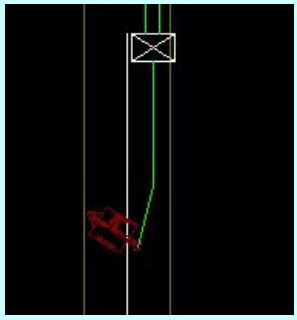


Fig.4

5.Round shape indication of hose lines

Every turning or corner of the hose line layout is prepared as round shape by using the minimum bending radius.

<Making round shape line by line>

1) Click the icon .
2) Select the hose line to be round shape at the turning by left click (Fig.1-1).
3) Select the second hose line to be round shape at the turning by left click (Fig.1-2).
4) Then at the turning points of the hose lines are changed to round shape (Fig.1-3).

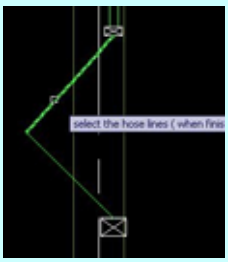


Fig.1-1

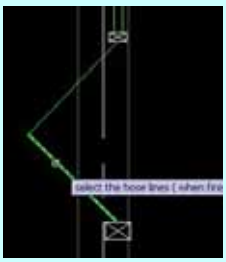


Fig.1-2

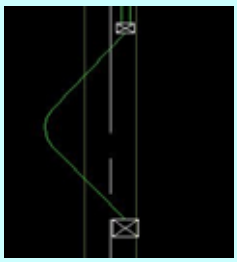


Fig.1-3

<Making round shapes for multiple hose lines at a time>

1) Click the icon .
2) Select the hose lines to be round shape at the turning by mouse drag from upper right side to lower left side while left click (Fig.2-1)
3) Press Enter key, then at the turning points of the hose lines are changed to round shape (Fig.2-2).
*it is mandatory hose lines must be continuous. If the hose lines are crossed or cut, round shapes are not made.

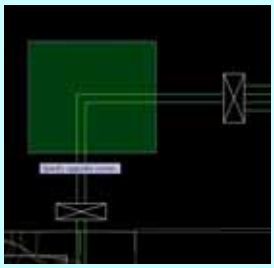


Fig.2-1

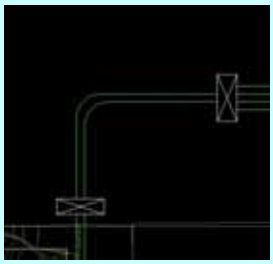


Fig.2-2

6.Change in installation height of hose lines

<Parallel shift >

1) Click the icon .
2) Input distance to be shifted.

3) Select hose lines to be shifted.
4) Press Enter Key, then hose installation height will be changed.

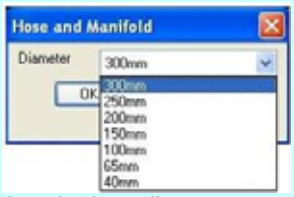
<Vicinity around the manifold >

Height of a terminal of the hose lines, which is connected to the manifold, monitor etc, is automatically changed so that the hoses are connected with the couplings at the manifold etc,.

1)Click the icon .
2)Select the manifold or monitor having been allocated.
3)Select the hose lines to be connected with the selected equipment at 2).
4)Press Enter Key, then height of the hose terminals are adjusted to connect the couplings.

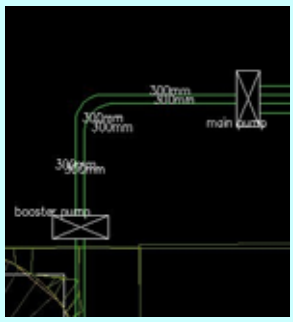
7.Input hose diameter

1) Click the icon .
2) Select a hose diameter from the pull down menu.



3) Select the hose line.
4) Press Enter Key, then the hose line is provided with data of the hose diameter.

5)Click the icon and then, hose diameters, and equipment name, such as manifold, are displayed.



Removing hose diameter

Hose diameters displayed in 3D layout is deleted by this icon. But data of the diameter itself still remain with the hose.
So the hose diameter will be displayed again by pressing the icon .

8.Counting total hose length

1) Click the icon .
2) Select the monitor connected with the concerned hose lines by left click and press Enter Key.
3) The table of the hose length appears.

4) Click[output file] at upper right of the table, then csv file named as [drawing name+"hose length] will be created in the folder of the drawing. Press [OK] to close.
5) If Excel has been installed, the table can be shown by double click of the csv file.

	A	B	C	D	
1	Hose length data				
2	fired tank		wind direction [deg.]	90	wind v
3	NO1 foam monitor water flo	30000	NO2foam monitor water flow r	0	
4	Item number of foam monito	hose line ;From	hose line ;To	nominal ho	overall
5	NO.01	water source	main pump	200A	
6	NO.01	water source	main pump	200A	
7	NO.01	water source	main pump	200A	
8	NO.01	water source	main pump	200A	
9	NO.01	main pump	booster pump	300A	
0	NO.01	main pump	booster pump	300A	
1	NO.01	booster pump	foam proportioner	300A	
2	NO.01	booster pump	foam proportioner	300A	
3	NO.01	foam proportioner	NO1 manifold	300A	
4	NO.01	foam proportioner	NO1 manifold	300A	

csv file

csv file is a text file, which includes letter strings separated by commas, space.
csv file can be read by Excel or other data base application programs.

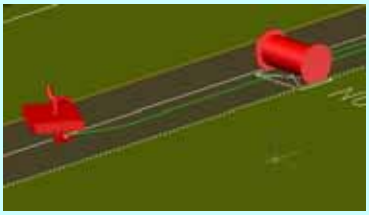
*The hoses having been counted are changed in color to red. If no change in color, the hose was not counted.

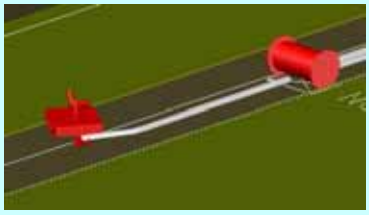
*If hoses are not connected with, or very closed to (including elevation) , the monitor, manifold, pump etc, these hoses will not been counted in summation of the hose lengths.

*When changing the hose diameter, hose lines must be through a manifold. If no manifold, these hoses of different diameter will not been counted.

9.3D pictures of hose lines

1) Click the icon
2) Select the hose line (2D), which has been provided with data of hose diameter.
3) Press Enter Key, then the hose line is changed to 3D picture.





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