



Satish Lele
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 91-9820277283

▶ Program of Drawing of Chemical Process Vessel is for sale:

Original Price US\$ 300 OR ₹ 20,000.

Special Price: US\$ 250 OR ₹ 15,000.

▶ I offer drawing services for Process Vessels. Charges for Single Drawing of Chemical Process Vessel : US\$ 60 OR ₹ 4,000.

Drawing of Pressure Vessels, (Receivers, Feed Vessels), Vertical / Horizontal Storage Tanks

The drawing includes the following components:

- ORIENTATION PLAN:** Top view of the vessel showing nozzle locations and dimensions.
- ELEVATION:** Side view of the vessel showing height, diameter, and nozzle positions.
- NOZZLE SCHEDULE:** A table listing nozzle specifications.
- PARTS LIST:** A detailed list of components with descriptions, sizes, and quantities.

NOZZLE NO.	NOMINAL DIAMETER MM	SERVICE	LOCATION
N1	100	OUTLET	BOTTOM
N2	300 X 450	MANHOLE	TOP
N3	40	THEMOWELL	TOP
N4	25	THEMOWELL PIPE	TOP
N5	100	VIEW GLASS	TOP
N6	100	VIEW GLASS	TOP
N7	100	INLET	TOP
N8	20	SPARE	TOP
N9	80	JACKET OUTLET	SIDE
N10	80	JACKET INLET	BOTTOM

How to draw a Chemical Process Vessel using this program?

I offer a Drawing program which Draws a detailed drawing of Chemical Process Vessel, with user friendly dialog boxes, which is an add-on for any CAD program. It is for Developing GA drawing

for Chemical Process Vessel. The Program for Drawing of Chemical Process Vessel asks for some parameters and draws Chemical Process Vessel. Program for Drawing of Chemical Process Vessel draws the GA drawing and components. Program for Drawing of Agitator / Mixer gives all minor details (even weight of each component and total weight) at Quotation Stage itself and this helps to quote in most competitive manner.

To run the program, unzip vessel.zip and copy files in one folder on hard disk (and not on desk top), say vessel. While running CAD program, click on tools ->Options (or Preferences) -> Files -> + of Support File Search Path -> Add -> Browse -> Select the folder (vessel), and click on apply. The vessel.zip file contains ves.lsp, ves.dcl and ves.slb, other lsp files, vesal.dwg and vesal_det.dwg (Border drawing) and trial.dwg (dummy drawing).

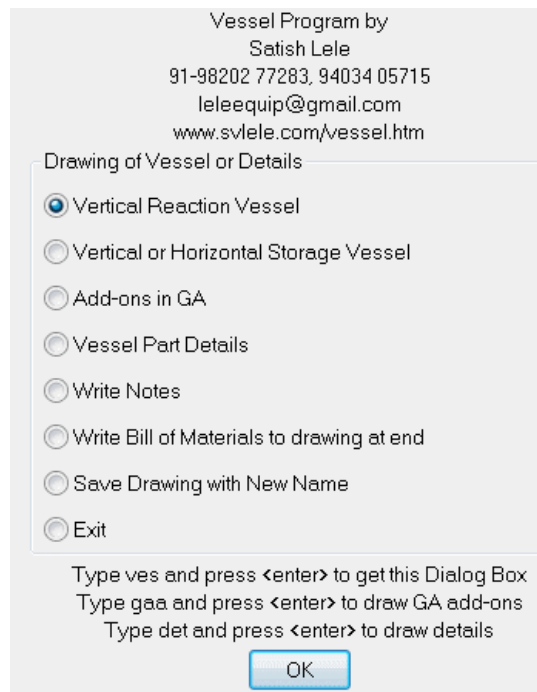
In a CAD Program, first open trial.dwg. It is a blank drawing. It is in the same folder where program files are located. It automatically defines the path (folder) to search the program files. At command prompt type (load "ves.lsp"). Chemical Process Vessel program will be loaded. Next type ves and press <enter>.

The total drawing program can be divided in two parts. In first part draw GA of the vessel. Then draw add-on items like Lugs or Legs on vessel drawing. You can then draw details of parts in second drawing. You should then write the nozzle table. When you do these, the bill of material is automatically calculated and written in a text file, which is the used to write BOM table in drawing. These should be done together to get complete Bill Of Materials. In most drawings, location of nozzles is not indicated initially and it can be added any time later. If no dialog box is shown, type ves and press <enter> to get first dialog box and continue.

You can draw either in Foot-Inch units or in Metric Units. In Metric system it asks for all values in millimeters and in Foot-inch systems it asks for all values in Foot-inch.

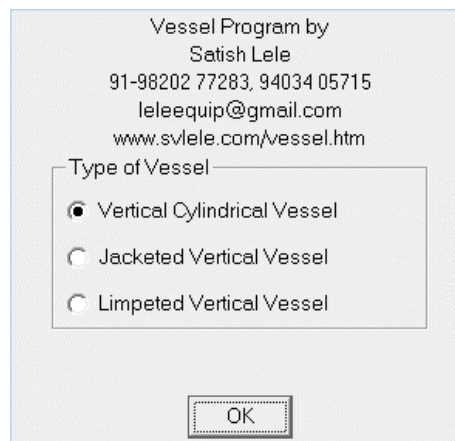


With the program you can draw either vertical vessels or horizontal vessels (mostly storage tanks). Select vessel type and continue. Other options are explained later.



With this program you can draw following Vertical Reaction Vessels.

1. Only vessel without any Jacket or Limpet. These can also be vertical storage tanks or receivers.
2. Vessel the external jacket.
3. Vessel with Limpet coil.



If you select any one of these options, next five dialog boxes will appear to get type of end connections, vessel sizes and material of construction.

Select Top End. It can be Dished End, Flat End, Conical End, Toriconical End or Open (none).

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Top End

- Dished End
- Flat End
- Conical End
- Toriconical End
- None

OK

Select Bottom End. It can be Dished End, Flat End, Conical End, Toriconical End or Open

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Bottom End

- Dished End
- Flat End
- Conical End
- Toriconical End
- None

OK

(none).

Select Bottom End. It can be Dished End, Flat End, Conical End, Toriconical End or Open (none).

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Vessel with Both Dished Ends

Shell Weld to Weld Length:	1000
Shell Inside Diameter:	500
Shell Thickness:	4
Dish End Thickness:	5
Dish straight length:	30

OK

Specify Weld to Weld (Tan to Tan) Shell Length, Shell Inside Diameter, Shell Thickness. Specify thickness of Dish or Flat or Cone or ToriCone. Specify straight length for Dish or Toricone.

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Material of Construction

All parts of Carbon Steel

All parts of Stainless Steel

OK

Select Material of construction for vessel. It can be Carbon Steel or Stainless Steel.

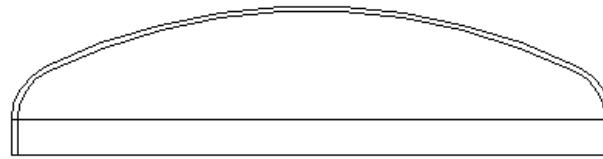
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Material of Construction and Specific Gravity of Parts

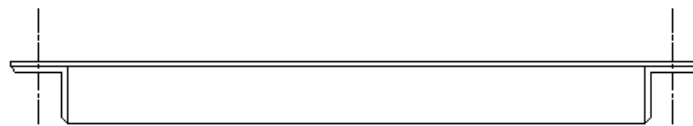
Shell:	SA 226 Cl. 4	7.85
Torispherical Top Dish:	SA 226 Cl. 4	7.85
Nozzle Neck:	SA 106 Gr. B	7.85
Nozzle Flange:	SA 105	7.85
Gasket for Nozzle Flange:	SS 304 Spiral	2.00
Reinforcing Pad:	SA 106 Gr. B	7.85
Supports:	IS 2062 Gr.B	7.85

OK

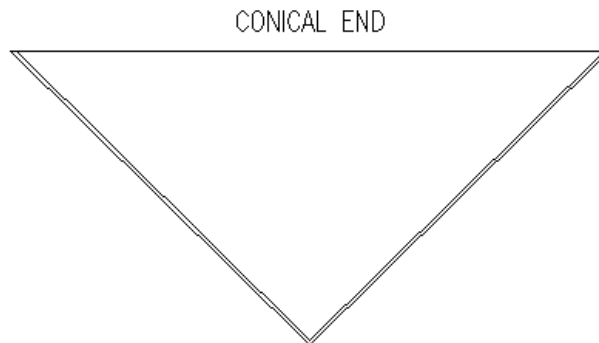
Select appropriate material standard and specific gravity.



DISHED END

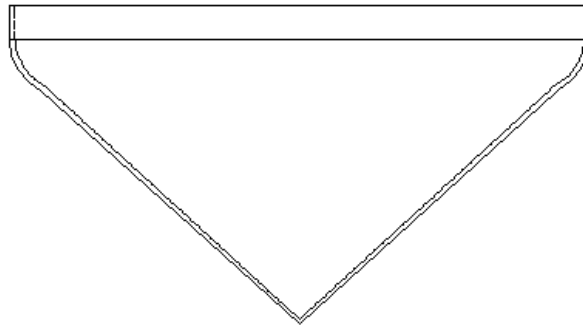


FLAT TOP END



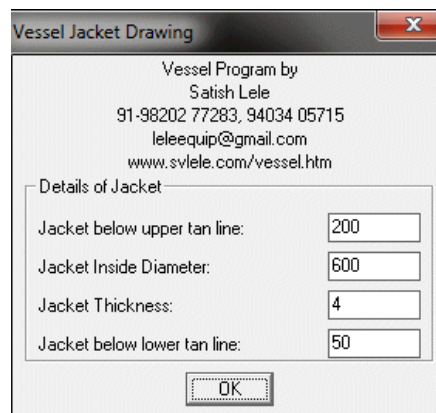
CONICAL END

TORICONICAL END



End Connections for Vertical Reaction Vessels

If you select Jacketed Vertical Vessels, five dialog boxes will appear to get type of end connections, vessel sizes and material of construction. (Same as in case of Vertical Reaction Vessels).

A screenshot of a software dialog box titled "Vessel Jacket Drawing". The dialog box contains the following text and input fields:

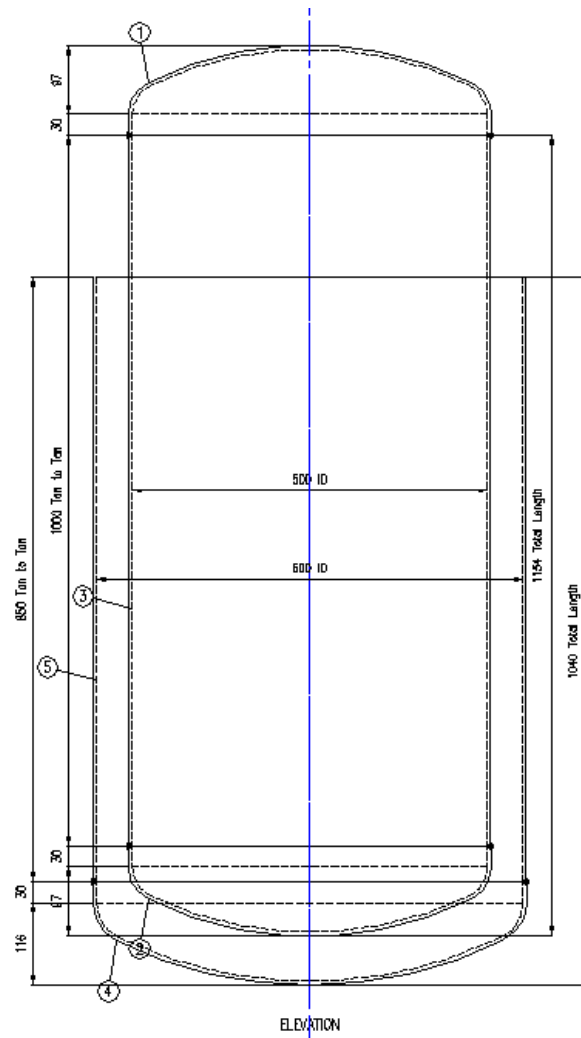
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Details of Jacket

Jacket below upper tan line:	<input type="text" value="200"/>
Jacket Inside Diameter:	<input type="text" value="600"/>
Jacket Thickness:	<input type="text" value="4"/>
Jacket below lower tan line:	<input type="text" value="50"/>

OK

Carefully enter distances of Jacket top and bottom line, from respective tan lines. Jacket inside diameter decides the gap between Shell and Jacket. Dialog boxes to select the MOC for Jacket will be shown. (MOC of Jacket can be different than that of Shell in case of SS vessels). Two dialog boxes to fill title block will be shown. When these are filled, two drawings will be set up with GA of vessel in first one.



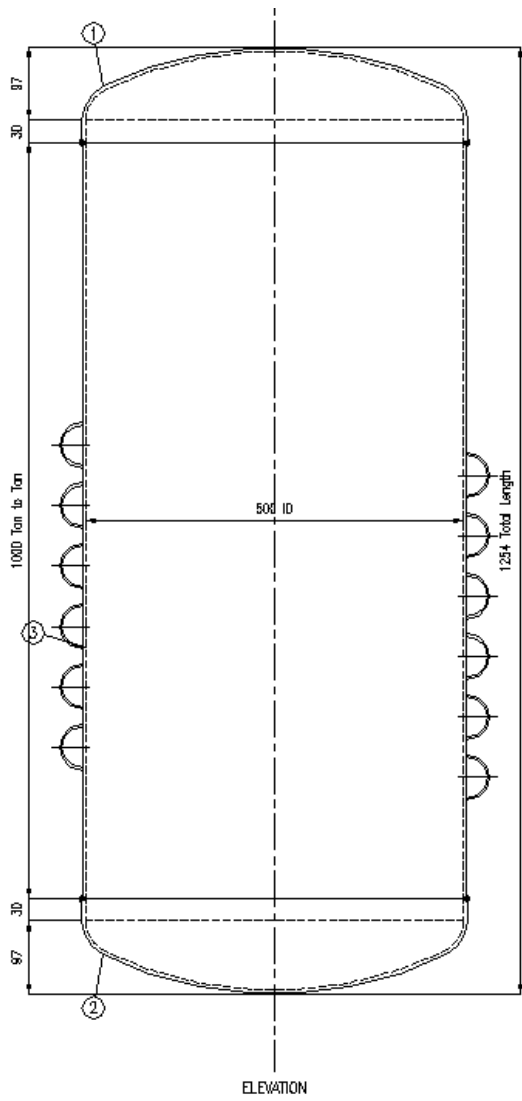
If you select Limpeted Vertical Vessels, five dialog boxes will appear to get type of end connections, vessel sizes and material of construction. (Same as in case of Vertical Reaction Vessels).

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Length and Diameter of Limpet

Total Length of Limpet:	<input style="width: 50px;" type="text" value="500"/>
Schedule of Pipe: 40 80 120 160	<input style="width: 50px;" type="text" value="40"/>
NB of Pipe of Limpet: 25 40 50 80 100	<input style="width: 50px;" type="text" value="50"/>
Distance Between two Limpet coils:	<input style="width: 50px;" type="text" value="80"/>
Distance of Top Limpet from top weld line:	<input style="width: 50px;" type="text" value="400"/>

Carefully enter distances of Limpet top and bottom line, from respective tan lines. Two dialog boxes to fill title block will be shown. When these are filled, two drawings will be set up with GA of vessel in first one.



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DESIGN CODE :	ASME SECT VIII DIV-1, ED-2019		
SEISMIC CODE (ZONE III) :	IS 1893 (PART 2 AND 4)-2015		
WIND CODE :	IS 875 (PART 3)-2015		
INSPECTION BY :	BY CLIENTS / TPI		
FLUID HANDLED :	LIQUID	INSULATION (BY OTHERS) mm :	40
DENSITY (Kg/cm ²) :	1050-1200	HYDROTEST PRESSURE (VERT) (Kg/cm ²)g :	4.5
DESIGN PRESSURE (INT / EXT) (Kg/cm ²)g :	3.5/FV	HYDROTEST TEMP deg C :	15-50
DESIGN TEMP deg C :	100	CORROSION ALLOWANCE mm :	2
OPERATING PRESSURE (INT / EXT) (Kg/cm ²)g :	ATM	CAPACITY (GROSS / OPERATING) M3 :	20/18
OPERATING TEMP (MIN/NOR/MAX) deg C :	35/65/85	EMPTY WEIGHT (Kg.) :	0
JOINT EFFICIENCY (SHELL / HEAD) % :	0.85/0.85	OPERATING WEIGHT (Kg.) :	0
RADIOGRAPHY (SHELL / HEAD) :	SPOT/SPOT	HYDROTEST WEIGHT (Kg.) :	0
<input type="button" value="OK"/>			

Select entries in Design Table of Drawing.

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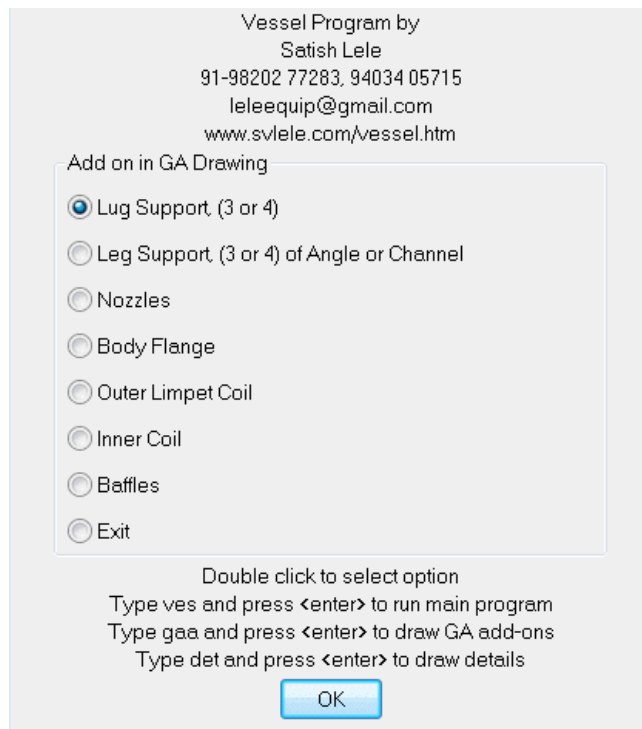
Please enter Drawing data:

Clients Name :	ABC ENGINEERS	Drawn by:	GSD
End User:	ABC ENGINEERS	Checked by:	AKK
Consultant:	ABC CONSULTANTS	Appd by:	HVR
Company Job No:	XYZ 001	Date:	05-06-2021
Project No:	PROJECT 123	Drawing No:	001
Equipment No:	EQUPT 123	Rev No:	0
Client's Purchase Order No:	VES-123	Sheet No:	1 OF 1
<input type="button" value="OK"/>			

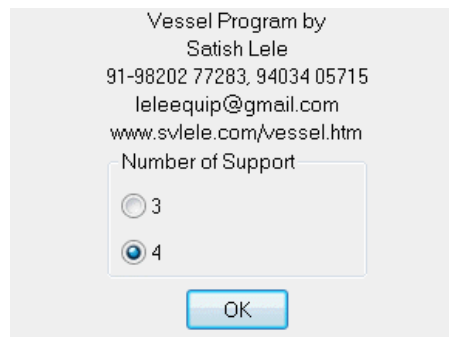
Select entries in Title Block of Drawing.

Two template drawings will be drawn. The GA will be drawn in first drawing. Second is for details.

Once basic drawing is done you can add some Accessories. Run vessel program again by typing ves and press <enter>. Select Add on GA option.



You can add these in GA Drawing one by one. Once you finished drawing one option, select exit. This dialog box will be shown again.

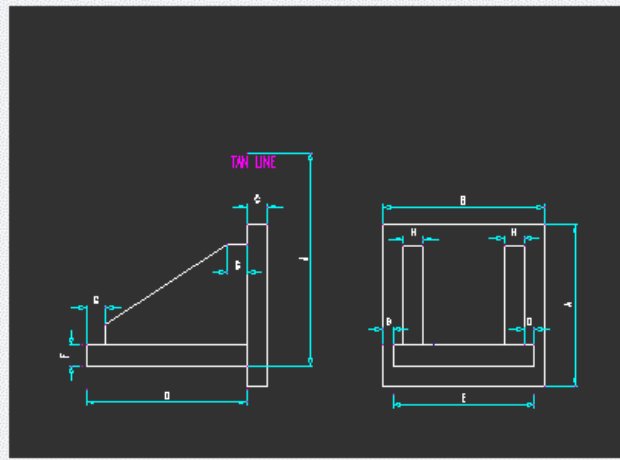


If you select Lug option, You will asked to select number of Lugs, 3 or 4.



You can Draw Elevation or Plan. Once options of Elevation are completed, this dialog box will be shown again. You can select plan option. Once options of plan are completed, this dialog box will be shown again. Select finish to return to add-on dialog box.

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A = Pad Plate Length :	<input type="text" value="130"/>
B = Pad Plate Width :	<input type="text" value="95"/>
C = Pad Plate Thickness :	<input type="text" value="4"/>
D = Base Plate Length :	<input type="text" value="65"/>
E = Base Plate Width :	<input type="text" value="85"/>
F = Base Plate Thickness :	<input type="text" value="15"/>
G = Side Gap :	<input type="text" value="10"/>
H = Rib Thickness :	<input type="text" value="5"/>
J = Lug Bottom Position from Top Weld Line :	<input type="text" value="250"/>

OK

Based on the weight to Vessel and its contents (as water) it will suggest sizes of different components. You can change the values, if you wish. Choose value J properly, which is distance of bottom of Lug from Top Weld Line. It will then asks you to pick up center point of top weld line GA. (Osnap mid is automatically set). Once you pick the point, lugs will be drawn, and its bill material is written to text file. old dialog box will appear, and you can select plan or finish option.

If you do the insertion of components, after some time, Program will reconfirm the size and material of construction.

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Length and Diameter of Vessel

Weld to Weld Length:	<input type="text" value="1000"/>
Inside Diameter:	<input type="text" value="500"/>
Shell Thickness:	<input type="text" value="4"/>

OK

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Material of Construction

Carbon Steel
 Carbon / Stainless Steel
 Stainless Steel

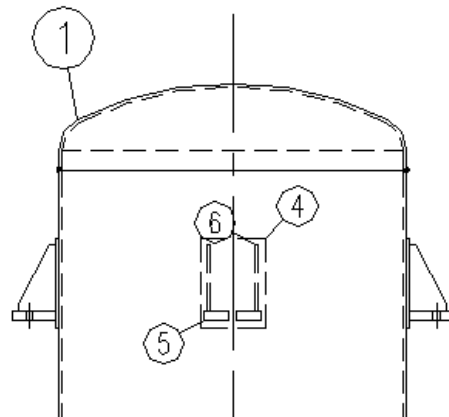
OK

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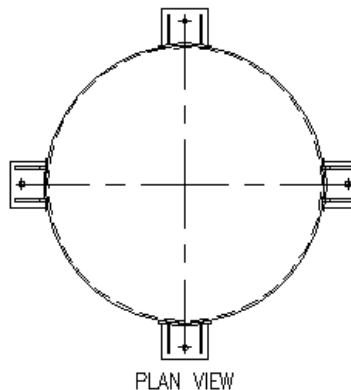
Material of Construction and Specific Gravity of Supports

Pad Plate		Other Parts	
Pad Plate Material:	IS 2062 Gr.B	Support Material:	IS 2062 Gr.B
Pad Plate Sp Gr:	7.85	Support Material Sp Gr:	7.85

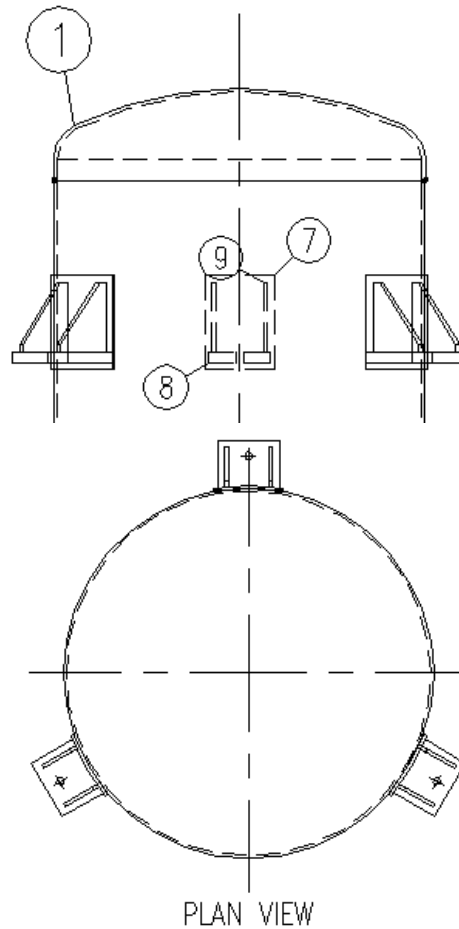
OK



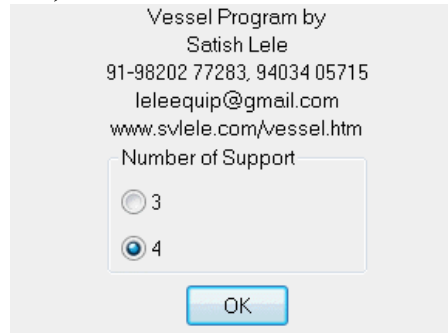
If you select plan option, it will again confirm size of vessel, material and its Specific Gravity, lug size and will ask you to select center point of vessel in plan drawing. Click on Finish to end drawing of Lugs.



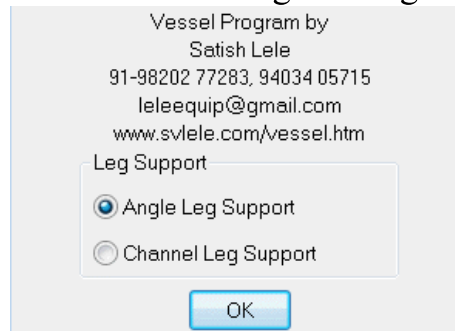
If you select 3 lugs, it will draw lugs like this.



If you select Leg option, You will asked to select number of Legs, 3 or 4



You will be asked to select Legs of Angles or Channels



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Elevation / Plan

Elevation
 Plan
 Finish

OK

You can Draw Elevation or Plan.
If you select elevation or plan, it will confirm the size of the vessel.

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Length and Diameter of Vessel

Weld to Weld Length:
Inside Diameter:
Shell Thickness:

OK

It will confirm Material of construction for Lug. It can be CS for SS Vessel.

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Material of Construction

Carbon Steel
 Carbon / Stainless Steel
 Stainless Steel

OK

You can change material and its Specific Gravity as per your requirements.

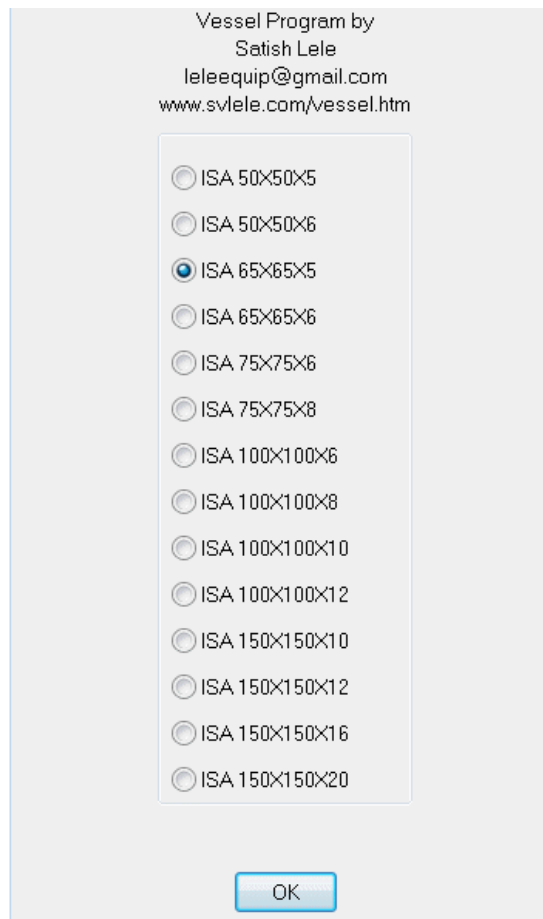
Vessel Program by
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Material of Construction and Specific Gravity of Supports

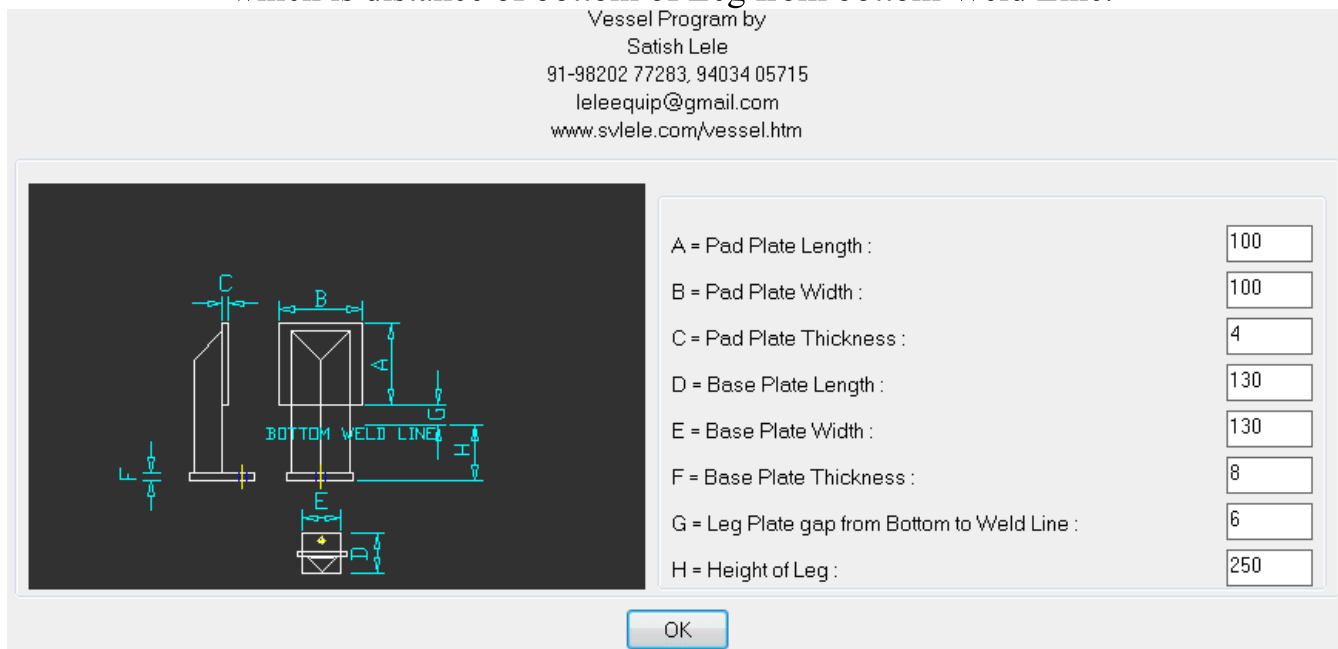
Pad Plate		Other Parts	
Pad Plate Material:	<input type="text" value="IS 2062 Gr.B"/>	Support Material:	<input type="text" value="IS 2062 Gr.B"/>
Pad Plate Sp Gr:	<input type="text" value="7.85"/>	Support Material Sp Gr:	<input type="text" value="7.85"/>

OK

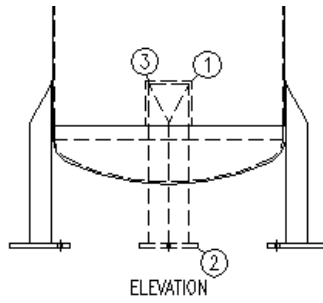
As per the weight of vessel and its content (assumed as water), it will recommend size of Angle.



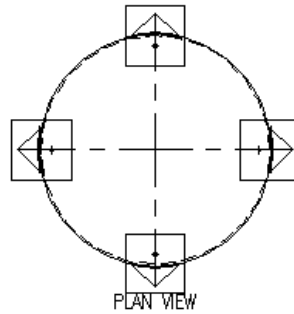
It will show Leg Dimensions. However, you can change any value. Choose value H properly, which is distance of bottom of Leg from bottom Weld Line.



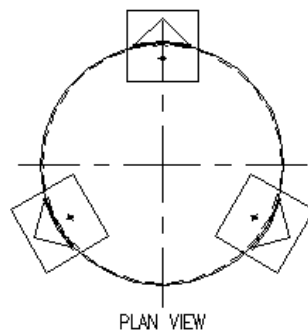
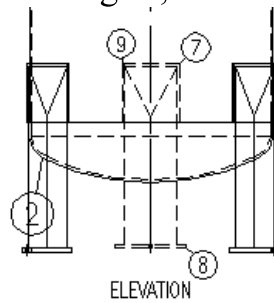
If you have selected to draw Elevation, it will ask you to select bottom weld line in GA drawing. It will draw legs accordingly. If you have selected 4 legs, it will draw 4 legs. It will also draw tags, with sequential number, which will be reflected in Bill of Material.



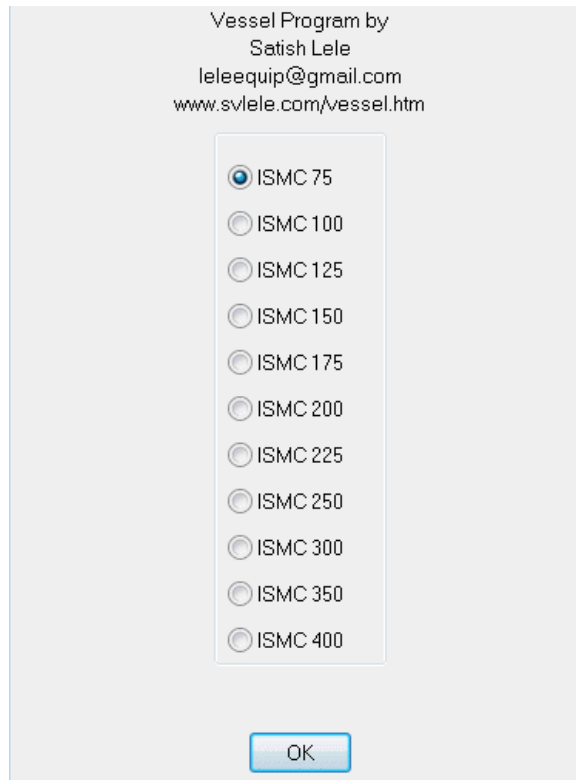
If you select plan option, it will again confirm size of vessel, material and its Specific Gravity, lug size and will ask you to select center point of vessel in plan drawing. Click on Finish to end drawing of Lugs.



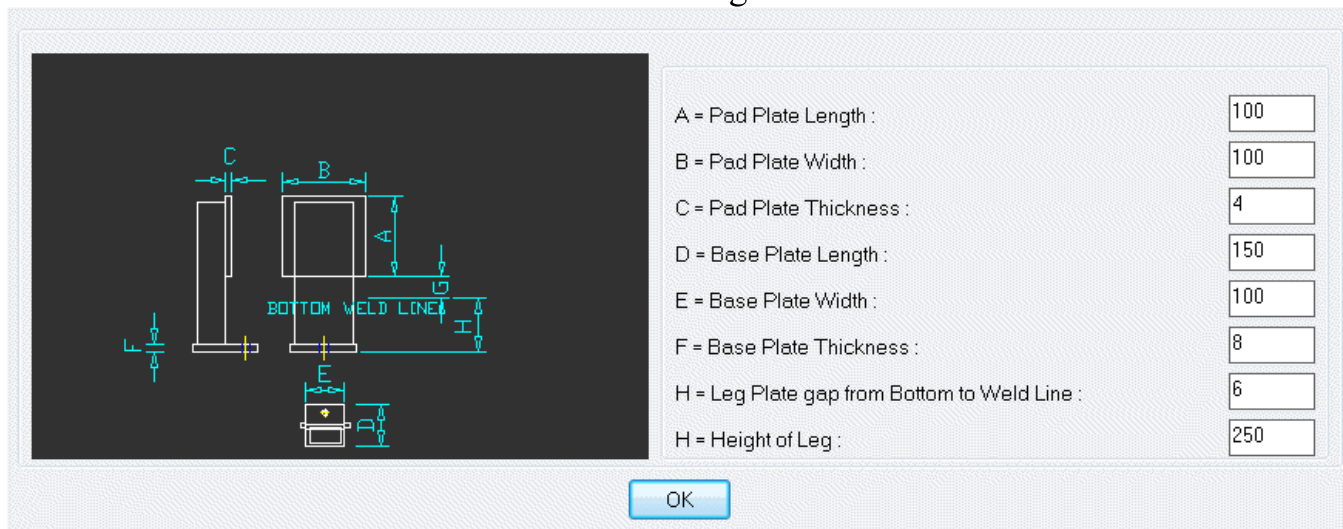
If you select 3 legs of Angles, it will draw legs like this.



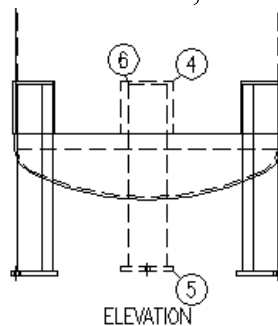
As per the weight of vessel and its content (assumed as water), it will recommend size of Channel.

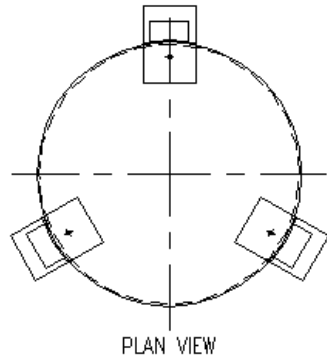


It will show Leg Dimensions. However, you can change any value. Choose value H properly, which is distance of bottom of Leg from bottom Weld Line.

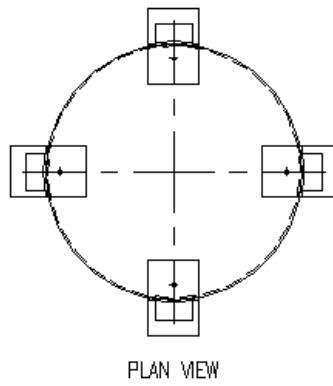
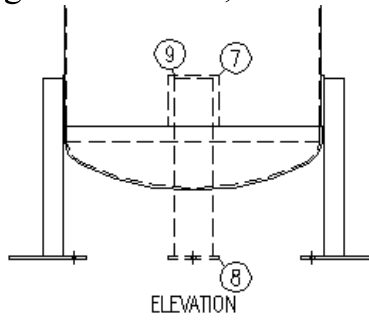


If you select 3 legs of Channels, it will draw legs like this.

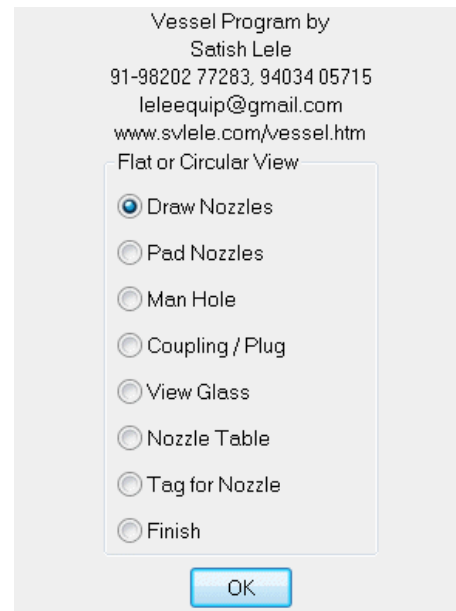
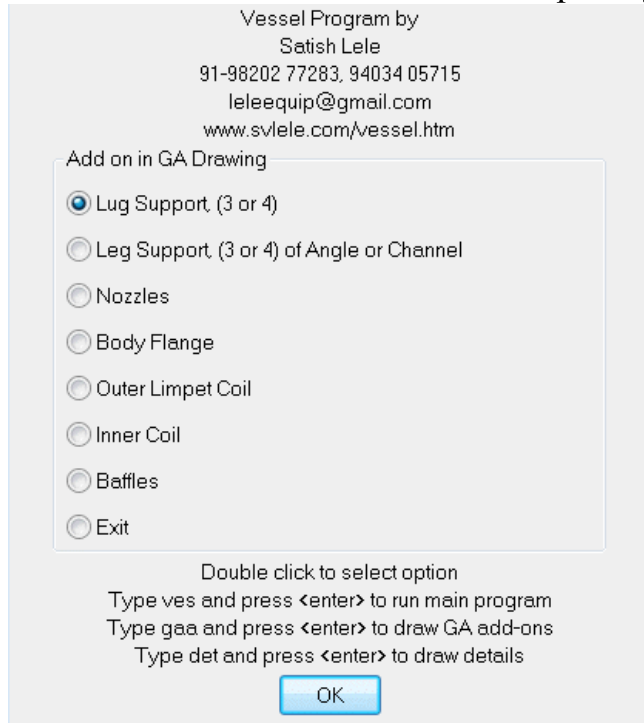




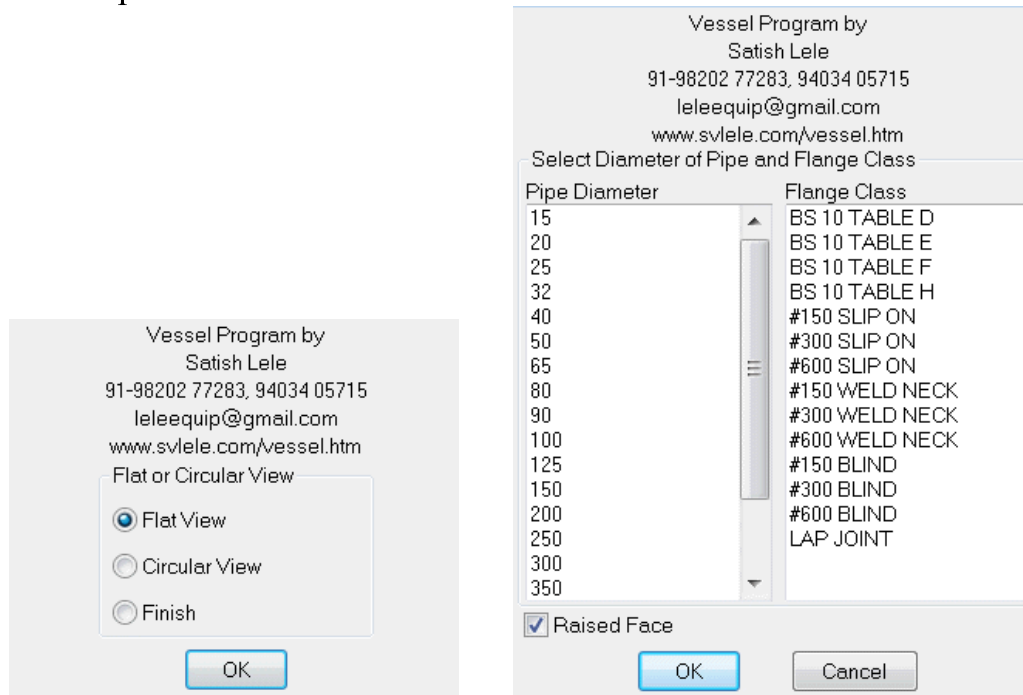
If you select 4 legs of Channels, it will draw legs like this.



With Draw Nozzles option you can draw these



If You select Draw Nozzles option, you can draw Flat View or Circular View.
To draw nozzles locate the point of insertion by a line from that point (for flat or circular view).
For circular view in plan draw PCD circle and centerlines of nozzle to locate intersection point.



Select Pipe NB and Flange Class. You can have raised face or flat face.

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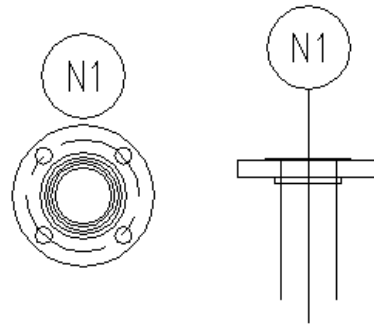
Please enter Nozzle data:

Nozzle Number :

Side Angle :

0
30
45
60
90
120
135

Nozzle Length :



Please indicate Nozzle Number, Length of nozzle and angle. For horizontal nozzle angle is 0, 90 for vertical etc. Select insertion point on shell, or dish for flat and circular nozzles. Nozzles and flanges will be drawn to scale as per size, class and type (Raised or Flat face). When done, click on Finish to exit.

With draw Man Hole Option, you can draw either Oval or Circular Manhole.

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Flat or Circular View

Draw Nozzles
 Pad Nozzles
 Man Hole
 Coupling / Plug
 View Glass
 Nozzle Table
 Tag for Nozzle
 Finish

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Oval or Circular Manhole

Oval Manhole
 Circular Manhole
 Finish

Oval Manhole

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Sizes for Oval Manhole:

Manhole Number :

Major OD :

Minor OD :

Flange Thickness :

Liner Thickness :

Gasket Thickness :

Select Manhole Number and all Dimensions. Also select

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 www.svlele.com/vessel.htm

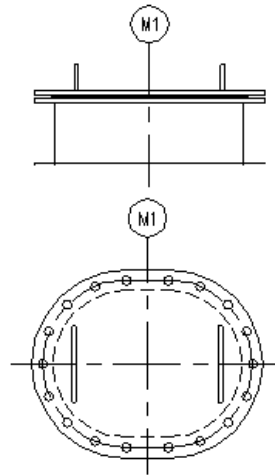
Elevation / Plan

Elevation

Plan

Finish

Then select center point of man hole in elevation and plan.



Circular Manhole

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Manhole Size
50
65
80
90
100
125
150
200

Manhole Number : N1

Flange Thickness : 10

Liner Thickness : 3

Gasket Thickness : 3

OK

Select Manhole Number and all Dimensions. Also select

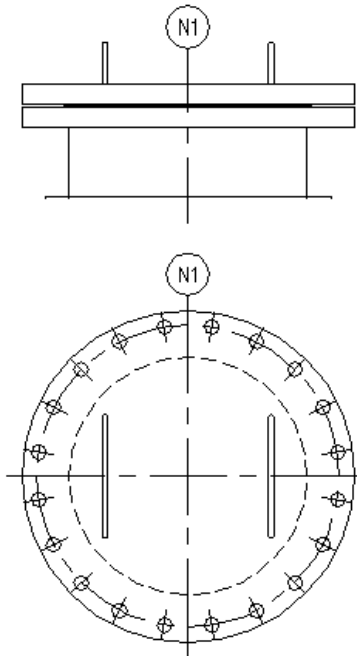
Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Elevation / Plan

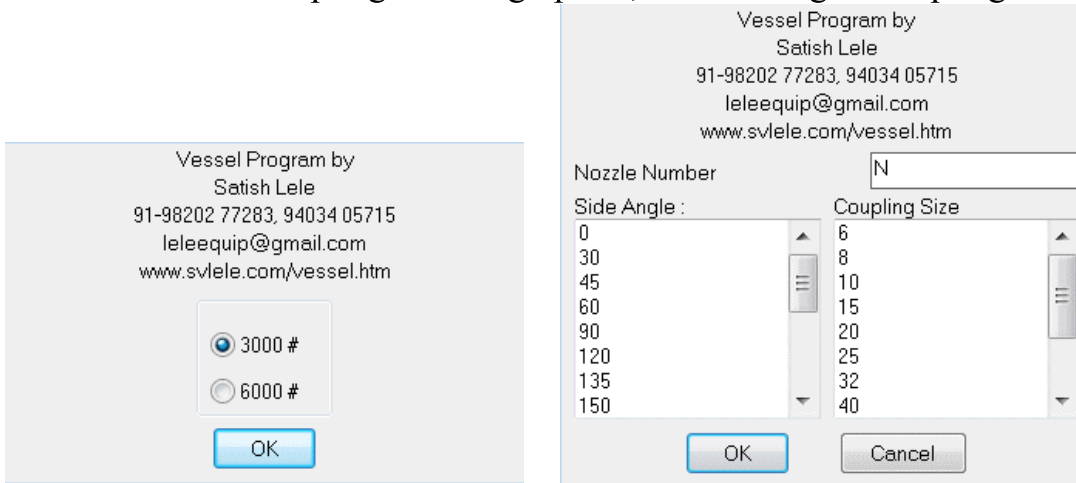
Elevation
 Plan
 Finish

OK

Then select center point of man hole in elevation and plan.



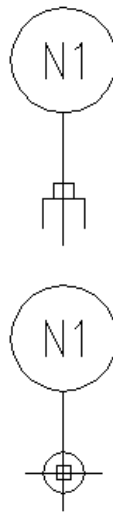
With draw Coupling and Plug option, select rating of coupling



Select Coupling Number, angle and Coupling size. Also select



Then select center point of Coupling in elevation and plan.



With draw View Glass option

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

View / Sight Glass Number

Side Angle :

0	40
30	50
45	65
60	80
90	100
120	125
135	150
150	200

View / Sight Glass Size

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Glass View sizes are of 150# Flange

Glass View size	<input type="text" value="116"/>	Glass OD	<input type="text" value="169"/>
Flange OD	<input type="text" value="228"/>	Glass Thickness	<input type="text" value="11"/>
Flange PCD	<input type="text" value="190"/>	Gasket OD	<input type="text" value="171"/>
Flange Thickness	<input type="text" value="22"/>	Gasket ID	<input type="text" value="116"/>
Number of Bolt Holes / Bolts	<input type="text" value="8"/>	Gasket Thickness	<input type="text" value="3"/>
Bolt Hole Dia	<input type="text" value="19"/>	Liner OD	<input type="text" value="171"/>
Nut / Bolt Dia	<input type="text" value="15"/>	Liner Thickness	<input type="text" value="3"/>
Nut / Bolt Length	<input type="text" value="88"/>		

Select View Glass Number, angle and View Glass size. Also select

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

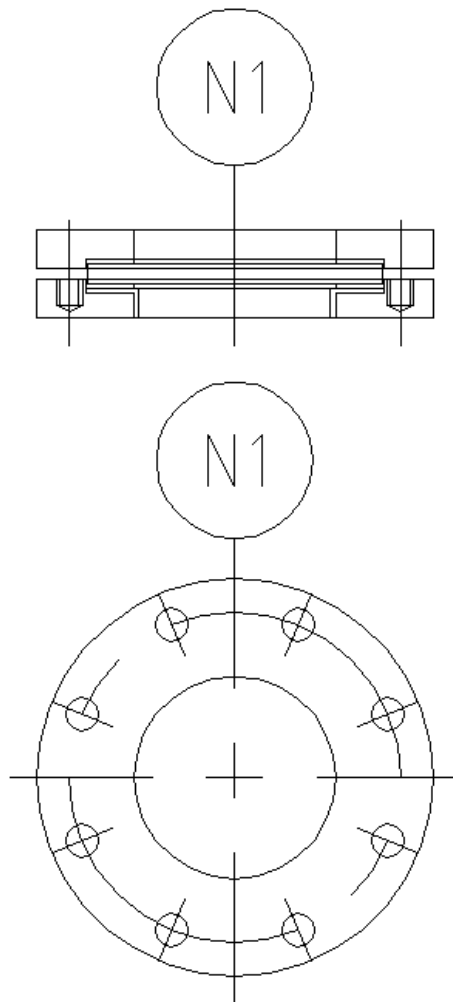
Elevation / Plan

Elevation

Plan

Finish

Then select center point of View Glass in elevation and plan.



With draw Pad Flange option

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Pad Nozzle Number

Side Angle :	Pad Nozzle Size
0	40
30	50
45	65
60	80
90	100
120	125
135	150
150	200

Vessel Program by
 Satish Lele
 91-98202 77283, 94034 05715
 leleequip@gmail.com
 www.svlele.com/vessel.htm

Glass View sizes are of 150# Flange

Bore size	<input type="text" value="116"/>	Gasket OD	<input type="text" value="171"/>
Flange OD	<input type="text" value="228"/>	Gasket ID	<input type="text" value="116"/>
Flange PCD	<input type="text" value="190"/>	Gasket Thickness	<input type="text" value="3"/>
Flange Thickness	<input type="text" value="22"/>	Liner OD	<input type="text" value="171"/>
Number of Bolt Holes / Bolts	<input type="text" value="8"/>	Liner Thickness	<input type="text" value="3"/>
Bolt Hole Dia	<input type="text" value="19"/>		
Nut / Bolt Dia	<input type="text" value="15"/>		
Nut / Bolt Length	<input type="text" value="88"/>		

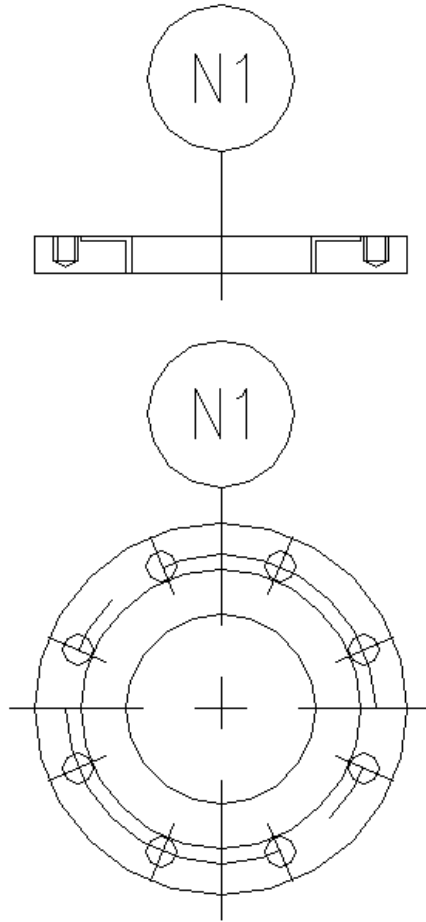
Select Pad Flange Number, angle and Pad Flange size. Also select flange dimensions

Vessel Program by
 Satish Lele
 91-98202 77283, 94034 05715
 leleequip@gmail.com
 www.svlele.com/vessel.htm

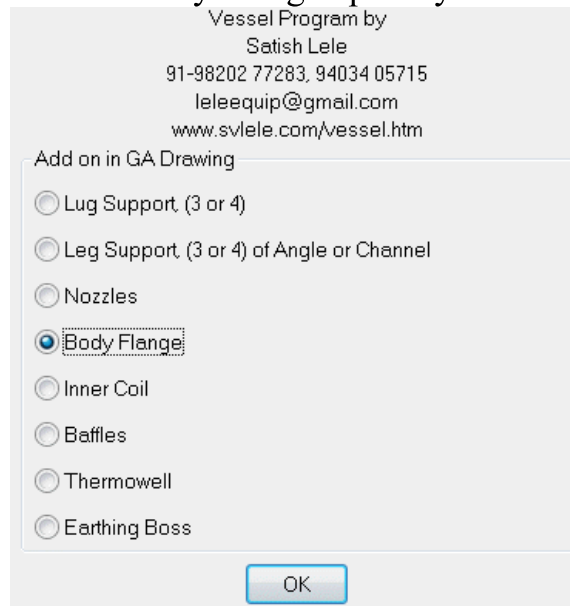
Elevation / Plan

Elevation
 Plan
 Finish

Then select center point of Pad Flange in elevation and plan.



With Draw Body Flange option you can draw



With respect to the diameter of vessel, it will show dimensions and details of Body Flange. You can change Flange Thickness, Nut/Bolt diameter and length, gasket thickness and Bolt hole diameter. All other dimensions are as per flange standards.

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Body Flange sizes are of 150# Flange

Lower Body Flange ID	<input type="text" value="508"/>	Nut / Bolt Dia	<input type="text" value="28"/>
Upper Body Flange ID	<input type="text" value="510"/>	Nut / Bolt Length	<input type="text" value="158"/>
Flange OD	<input type="text" value="698"/>	Number of Bolt Holes / Bolts	<input type="text" value="20"/>
Flange PCD	<input type="text" value="635"/>	Gasket OD	<input type="text" value="607"/>
Bolt Hole Dia	<input type="text" value="31"/>	Gasket ID	<input type="text" value="508"/>
Flange Thickness	<input type="text" value="41"/>	Gasket Thickness	<input type="text" value="3"/>

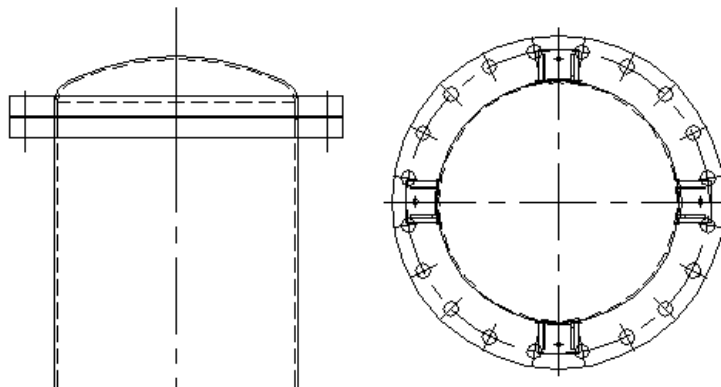
Select the view

Vessel Program by
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91-98202 77283, 94034 05715
leleequip@gmail.com
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Elevation / Plan

Elevation
 Plan
 Finish

Select mid point of top weld line in elevation and center point of vessel in plan



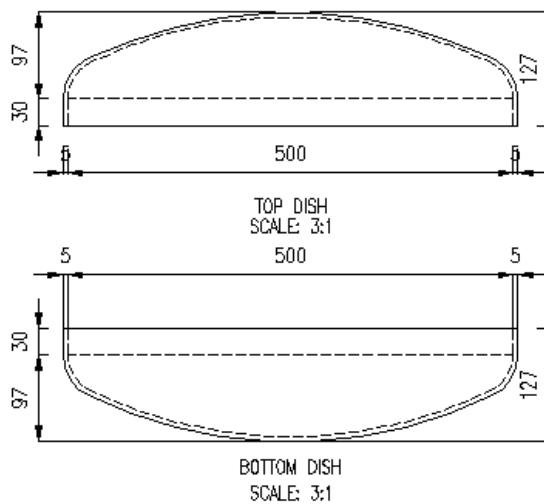
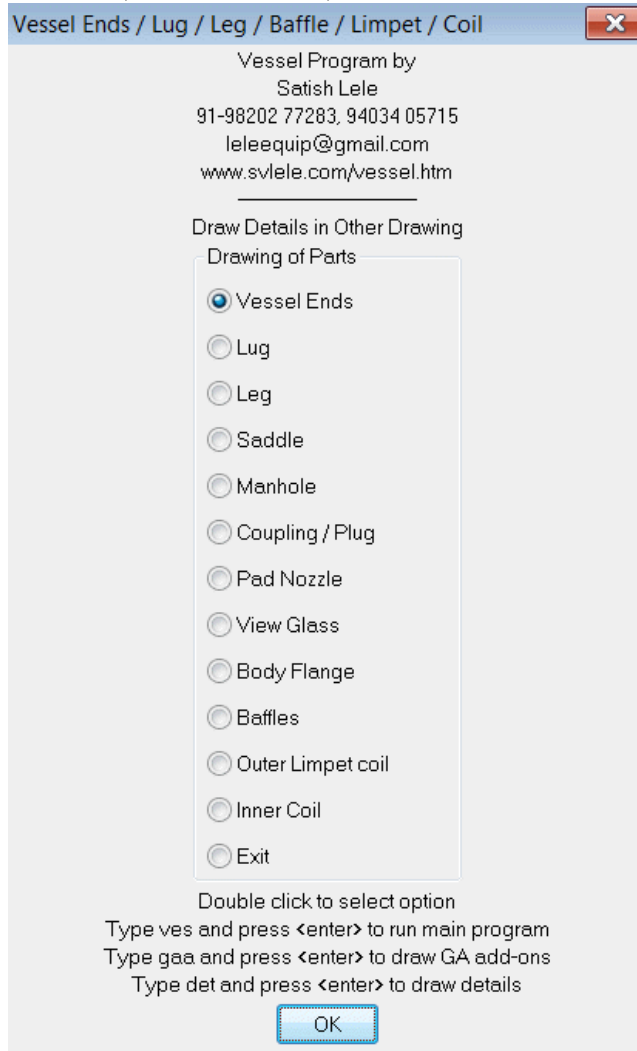
In GA Drawings dimensions are not shown. These are indicated in detail drawings. You can draw the details of, Normal size (1:1), Double (2:1) or Triple (3:1) scale as well.

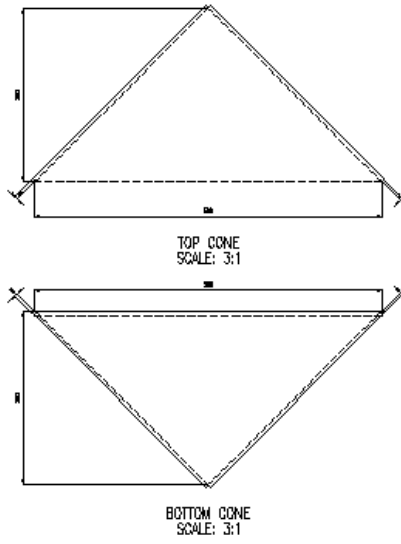
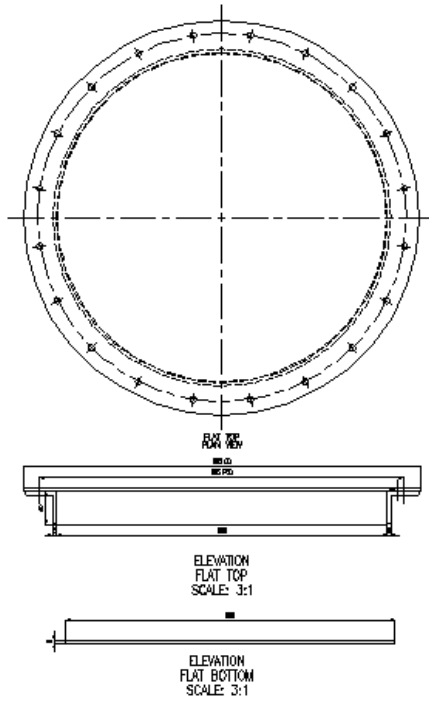
Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

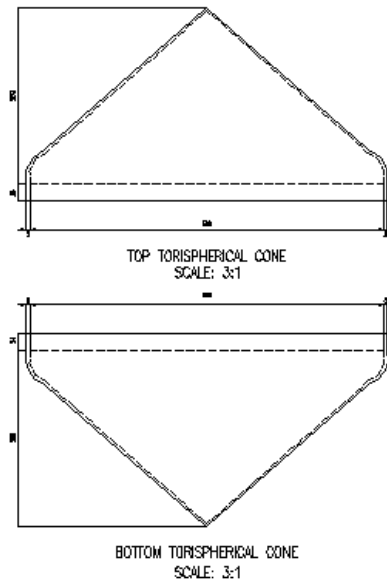
Detail Scale

Detail Scale 1:1
 Detail Scale 2:1
 Detail Scale 3:1

You can draw these in detail, where dimensions will be shown. These can be Dished End, Flat End, Conical End, Toriconical End.







Detail Drawings of End Connections for Vertical Reaction Vessels

You can draw Lugs in detail, where dimensions will be shown

Vessel Program by
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 91-98202 77283, 94034 05715
 leleequip@gmail.com
 www.svlele.com/vessel.htm

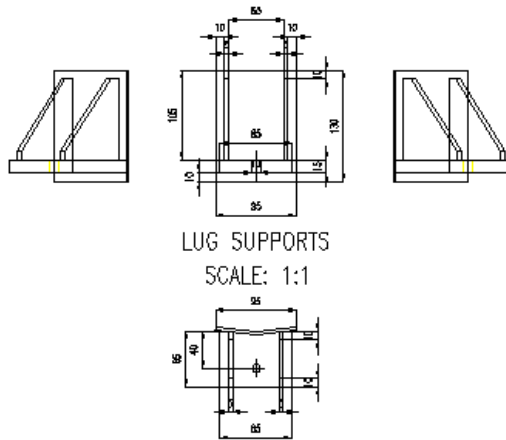
Draw Details in Other Drawing
 Drawing of Parts

- Vessel Ends
- Lug
- Leg
- Manhole
- Coupling / Plug
- Pad Nozzle
- View Glass
- Body Flange
- Baffles
- Outer Limpet coil
- Inner Coil
- Lifting Lug
- Earthing Boss
- Thermowell
- Exit

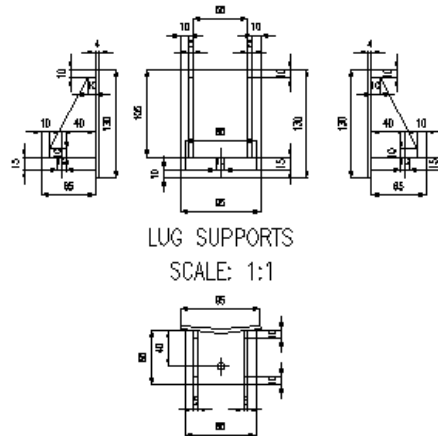
Type ves and press <enter> to run main program
 Type gaa and press <enter> to draw GA add-ons
 Type det and press <enter> to draw details

OK

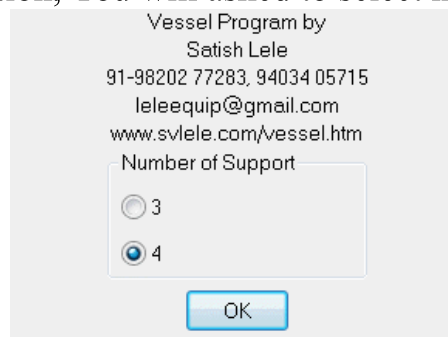
Select location for elevation and plan it will draw like this for 3 lugs.



It will draw like this for 4 lugs.



If you select Leg option, You will asked to select number of Legs, 3 or 4



You can Draw Elevation or Plan.

If you select elevation or plan, it will confirm the size of the vessel.

Vessel Program by
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leleequip@gmail.com
www.svlele.com/vessel.htm

Length and Diameter of Vessel

Weld to Weld Length:

Inside Diameter:

Shell Thickness:

It will confirm Material of construction for Leg. It can be CS for SS Vessel.

Vessel Program by
Satish Lele
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leleequip@gmail.com
www.svlele.com/vessel.htm

Material of Construction

Carbon Steel

Carbon / Stainless Steel

Stainless Steel

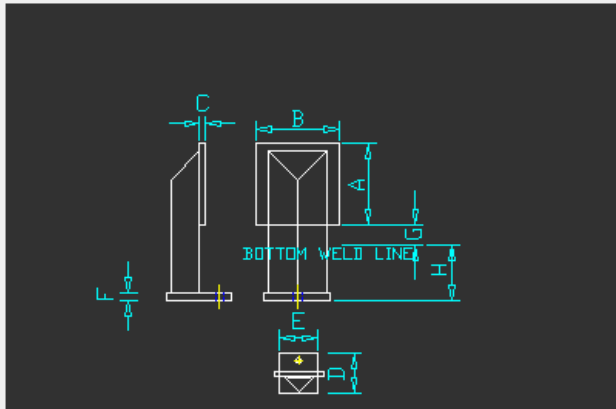
You can change material and its Specific Gravity as per your requirements.

Vessel Program by
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Material of Construction and Specific Gravity of Supports

Pad Plate		Other Parts	
Pad Plate Material:	<input type="text" value="IS 2062 Gr.B"/>	Support Material:	<input type="text" value="IS 2062 Gr.B"/>
Pad Plate Sp Gr:	<input type="text" value="7.85"/>	Support Material Sp Gr:	<input type="text" value="7.85"/>

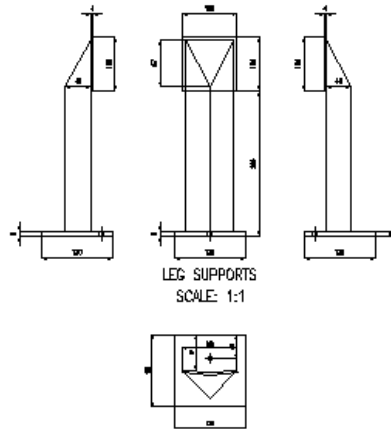
As per the weight of vessel and its content (assumed as water), it will show Leg Dimensions. However, you can change any value. Choose value J properly, which is distance of bottom of Leg from bottom Weld Line.



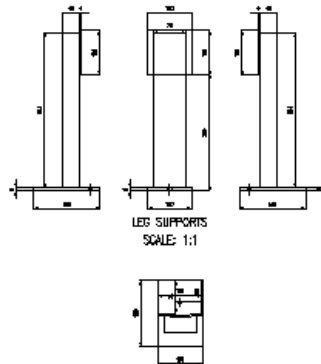
A = Pad Plate Length :	<input type="text" value="100"/>
B = Pad Plate Width :	<input type="text" value="100"/>
C = Pad Plate Thickness :	<input type="text" value="4"/>
D = Base Plate Length :	<input type="text" value="130"/>
E = Base Plate Width :	<input type="text" value="130"/>
F = Base Plate Thickness :	<input type="text" value="8"/>
G = Leg Plate gap from Bottom to Weld Line :	<input type="text" value="6"/>
H = Height of Leg :	<input type="text" value="250"/>

OK

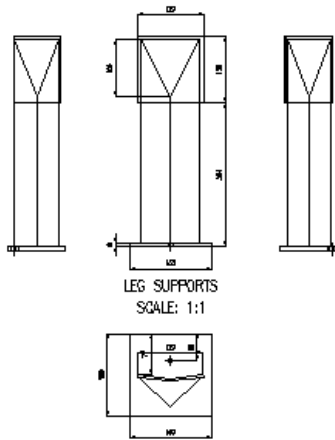
If you have selected to draw Elevation, it will ask you to select bottom weld line in GA drawing. It will draw legs accordingly. if you have selected 4 legs, it will draw 4 legs. You can select either Angle or Channel. It will also draw tags, with sequential number, which will be reflected in Bill of Material.



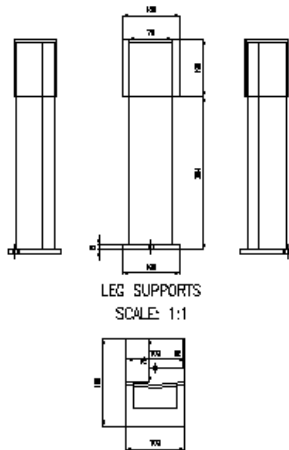
4 Legs with Angle as Structural Member.



4 Legs with Channel as Structural Member.



3 Legs with Angle as Structural Member.



3 Legs with Channel as Structural Member.

If you select Manhole option you can draw Oval or Circular Man Hole
Oval Manhole

Vessel Program by
 Satish Lele
 91-98202 77283, 94034 05715
 leleequip@gmail.com
 www.svlele.com/vessel.htm

Oval or Circular Manhole

Oval Manhole
 Circular Manhole
 Finish

OK

Vessel Program by
 Satish Lele
 91-98202 77283, 94034 05715
 leleequip@gmail.com
 www.svlele.com/vessel.htm

Detail Scale

Detail Scale 1:1
 Detail Scale 2:1
 Detail Scale 3:1

OK

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Sizes for Oval Manhole:

Manhole Number :

Major OD :

Minor OD :

Flange Thickness :

Liner Thickness :

Gasket Thickness :

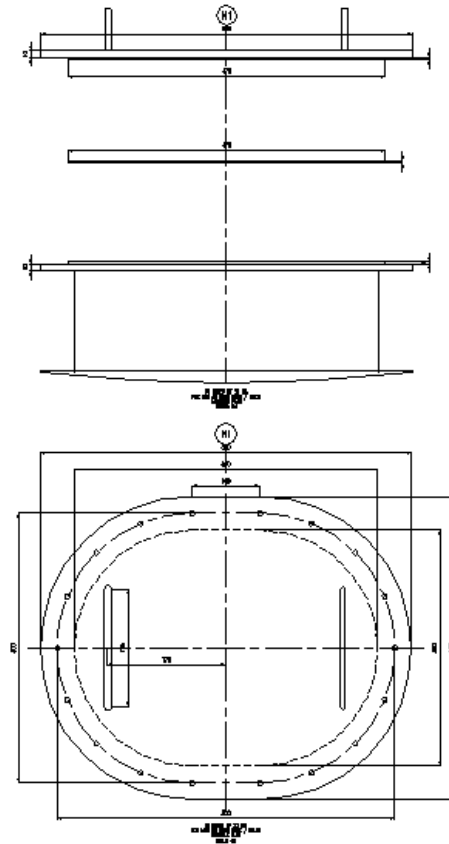
Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Elevation / Plan

Elevation

Plan

Finish



Circular Manhole

Vessel Program by
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leleequip@gmail.com
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Oval or Circular Manhole

Oval Manhole

Circular Manhole

Finish

Vessel Program by
Satish Lele
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leleequip@gmail.com
www.svlele.com/vessel.htm

Detail Scale

Detail Scale 1:1

Detail Scale 2:1

Detail Scale 3:1

Vessel Program by
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leleequip@gmail.com
www.svlele.com/vessel.htm

Manhole Size
50
65
80
90
100
125
150
200

Manhole Number :

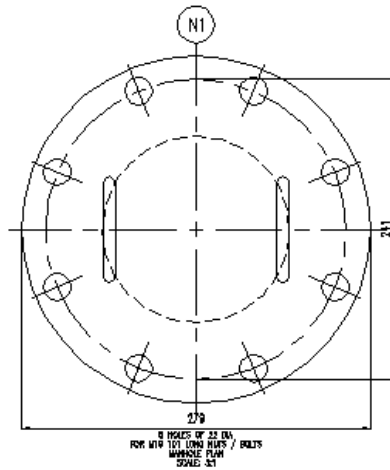
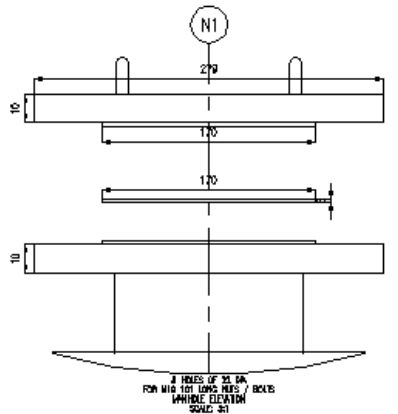
Flange Thickness :

Liner Thickness :

Gasket Thickness :

Vessel Program by
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leleequip@gmail.com
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Elevation / Plan
 Elevation
 Plan
 Finish



Nozzle Table

Vessel Program by
Satish Lele
91-98202 77283, 94034 05715
leleequip@gmail.com
www.svlele.com/vessel.htm

Length and Diameter of Vessel

Number of Nozzles:

Spare Entries:

To draw Nozzle Table indicate total nozzle entries. You can have some spare spaces in Nozzle Table.

Mark No. : Flange Facing :

Quantity No. :

Purpose : RF Pad Width :

Nozzle Size DN : RF Pad Thickness :

Nozzle Length : Weld Type :

Nozzle Schedule :
You can select 40, 80, 120, 160

Flange Type : Weld Thickness (Nozzle) :

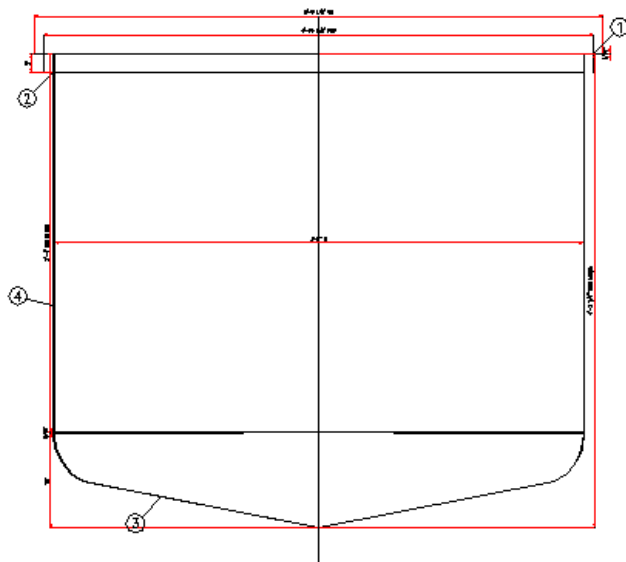
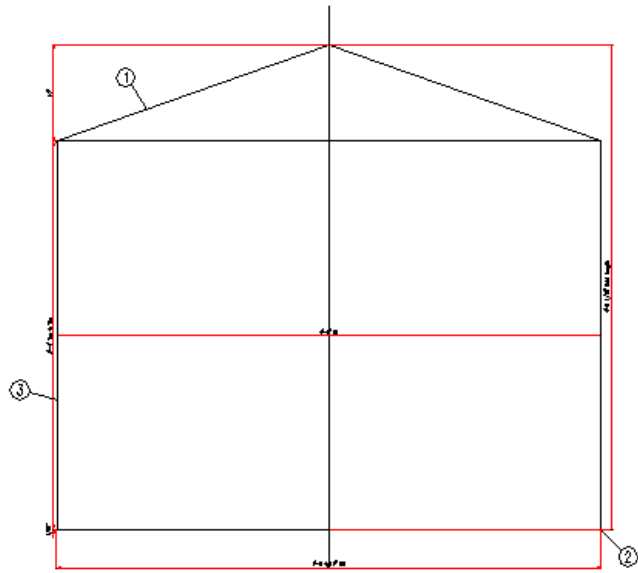
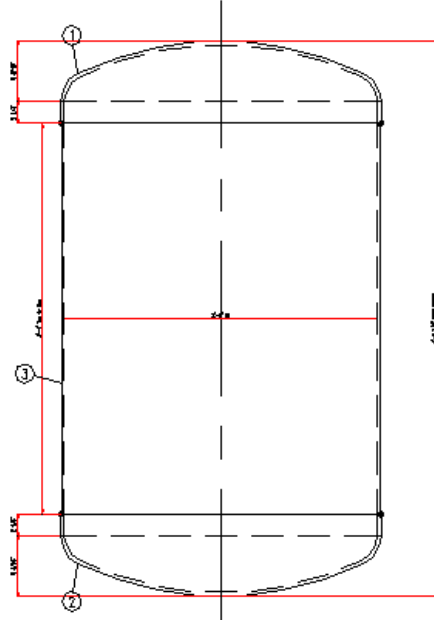
Flange Class :
You can select 150, 300 or 600 Weld Thickness (RF Pad) :

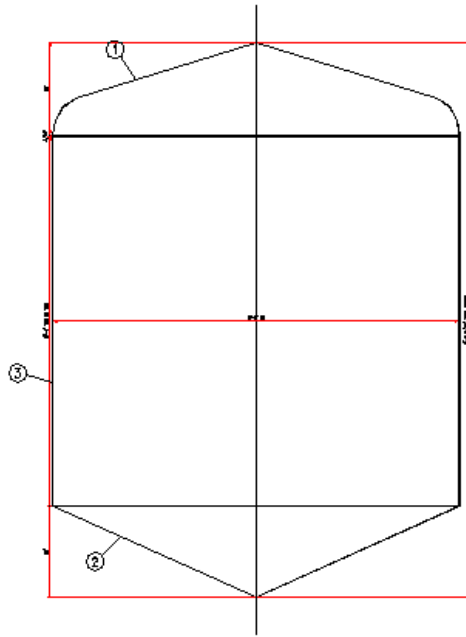
Select Proper data to be written in Nozzle Table for each nozzle

NOZZLE		NOZZLE			FLANGE			RF PAD		WELD DET (TYPE / THK)			
No	Qty	SERVICE	SIZE	SCH	TYPE	CLASS	FACE	OD	THK	LENGTH	TYPE	NOZZLE THK	RF PAD THK
N1	1	MANHOLE	500	40	ASME B16.5	150	WELD NECK	600	4	150	W2	4	4
N2	1	INLET	50	40	ASME B16.5	150	WELD NECK	100	4	150	W2	4	4
N3	1	OUTLET	50	40	ASME B16.5	150	WELD NECK	100	4	150	W2	4	4
N4	1	THERMOWELL	40	40	ASME B16.5	150	WELD NECK	100	4	150	W2	4	4
N5	1	PRESSURE GAUGE	15	40	ASME B16.5	150	WELD NECK	70	4	150	W2	4	4
N6	1	SOLID FEED	150	40	ASME B16.5	150	WELD NECK	250	4	150	W2	4	4
N7	1	SPARE	50	40	ASME B16.5	150	WELD NECK	100	4	150	W2	4	4
N8	1	VAPOUR	150	40	ASME B16.5	150	WELD NECK	250	4	150	W2	4	4
N9	1	STEAM INLET	50	40	ASME B16.5	150	WELD NECK	100	4	150	W2	4	4
N10	1	CONDENSATE OUTLET	25	40	ASME B16.5	150	WELD NECK	50	4	150	W2	4	4

Nozzle Table will be written like this.

Vertical Vessel





Program will draw Vertical Vessel like this.

Vessel Program by
Satish Lele
leleequip@gmail.com
www.svlele.com/vessel.htm

Dished Ends
 Flat Ends
 Hemispherical Ends

OK

Vessel Program by
Satish Lele
leleequip@gmail.com
www.svlele.com/vessel.htm

Horizontal Storage Tank with Dish Ends

Tan to Tan Length of Vessel:

Diameter of Vessel:

Shell Thickness:

Dish Thickness:

Width of Plate:

OK

You can not change values in trial mode

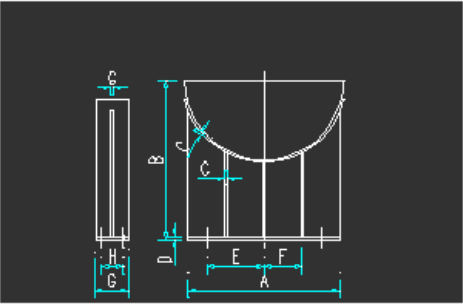
Vessel Program by
Satish Lele
leleequip@gmail.com
www.svlele.com/vessel.htm

Saddle Required

Steel Saddle
 No saddle

OK

Vessel Program by
Satish Lele
leleequip@gmail.com
www.svlele.com/vessel.htm



Dimension A :

Dimension B :

Dimension C :

Dimension D :

Dimension E :

Dimension F :

Dimension G :

Dimension H :

Bolt Dia :

No. of Bolts :

Weld Size :

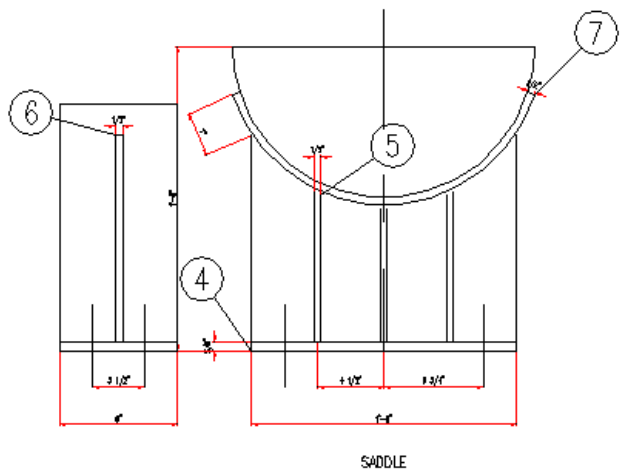
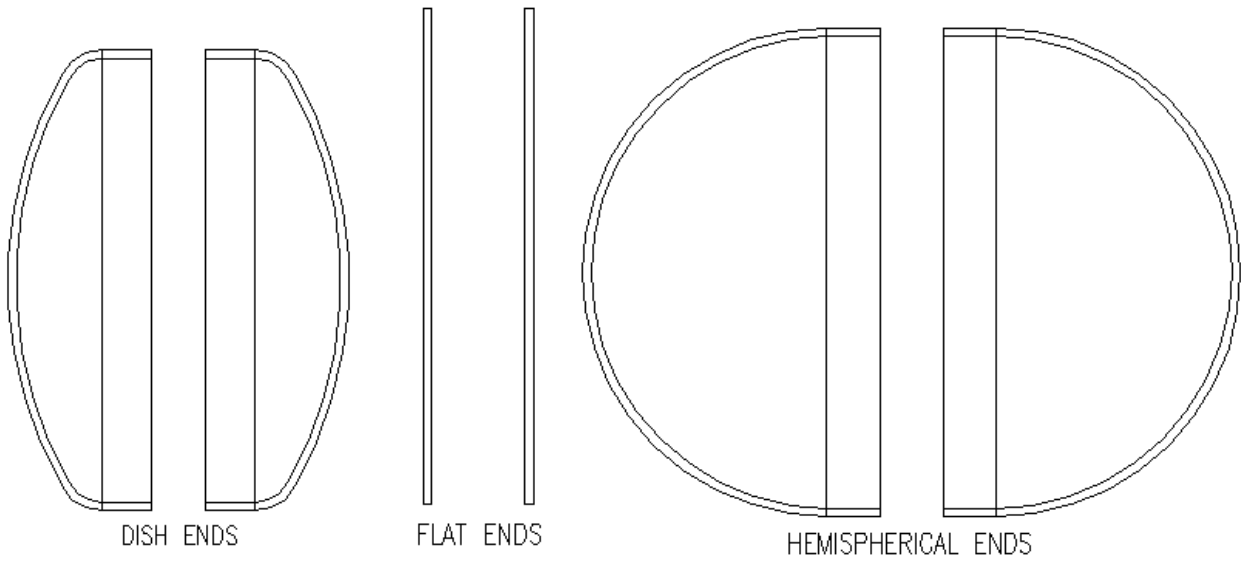
Rib Width :

Rib Thickness :

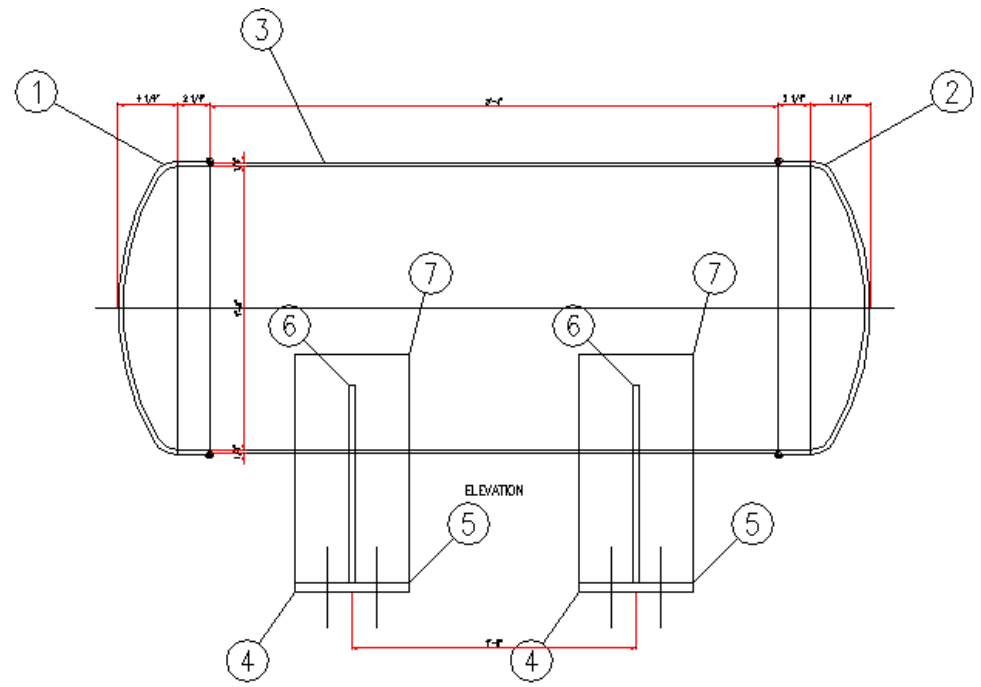
No of Ribs :

OK

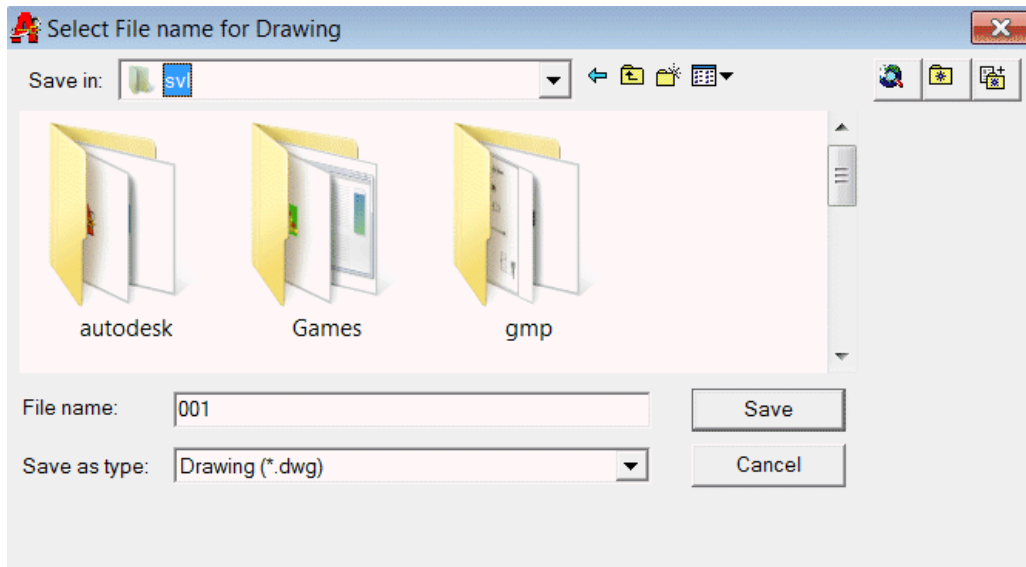
Dialog Boxes for Horizontal Storage Tank



End Connections for Horizontal Storage Tank



Program will draw Horizontal Vessel like this.



Select drawing name to be saved and its proper folder.
