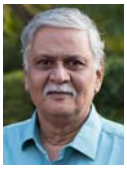


Satish Lele
leleequip@gmail.com
M:91-98202 77283

LISP Program for Jib Crane

This is a LISP based program for Drawing of Jib Crane, with user friendly dialog boxes, which is an add-on for any CAD for developing GA drawing as well as component wise drawings with Bill of Material and weights of all components for Top and Bottom Jib Crane. The program asks for all parameters and then automatically draws separate drawings for each component giving Bill of materials for that component as well as weight of each sub-component and also total weight. LISP Program for Jib Crane then draws GA Drawing with total weight of Jib Crane. The Package gives all minor details at Quotation Stage itself and this helps to quote in most competitive manner. LISP Program for Jib Crane can draw a Jib Crane up to a span of 6 meters, lift of 4 meters, and lifting load of 3 tons.

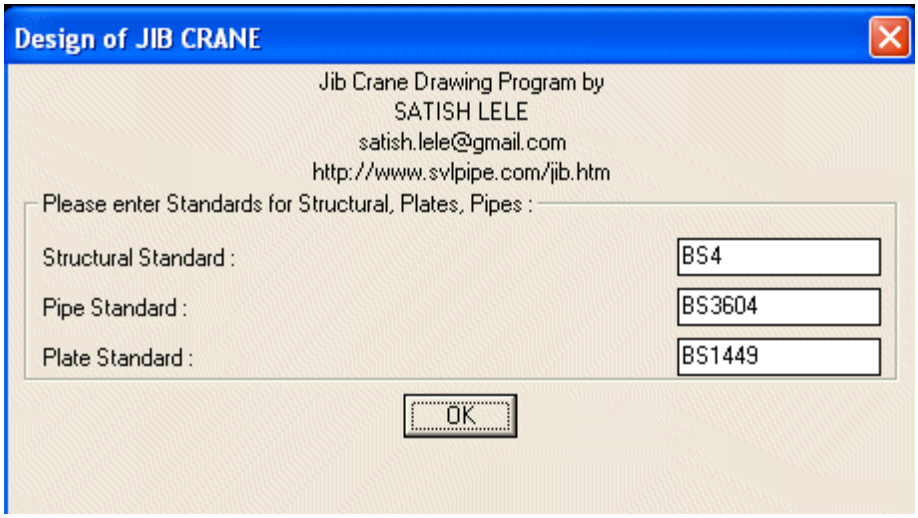
Jib Crane package Bought so far by 14 parties

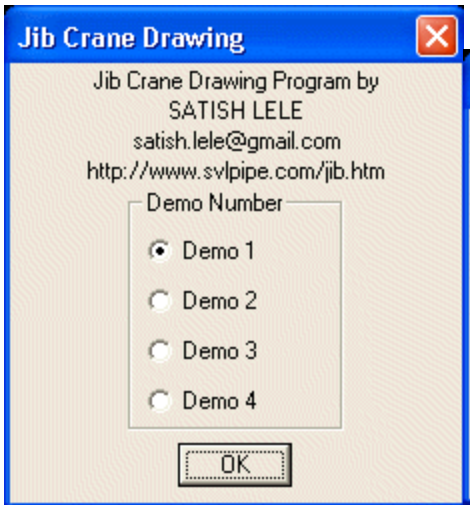
Three Structural members, such as Beams, Channels and Angles as well as Plates and Pipe are used to fabricate a jib crane. You can select American, British or Indian standard for sizes of these Structural members. The sizes of Structural members as per the standard are then shown in dialog boxes. You can even change these values. If you are choosing standard of your country, you can fill in sizes of structural members as per standards of your country.
If you select American Standard all values in dialog boxes will be shown in foot-inches and all drawings will be created in foot-inch dimensions. If you select British or Indian Standard all values in dialog boxes will be shown in metric system and all drawings will be created in millimeter dimensions.

I have prepared a Trial Program which shows 4 cases for the Top and Bottom beams. Ask us for free Demo. To run the demo copy jib_demo.zip file in acad support directory (or any other directory defined in CAD path settings) and unzip it. If you copy them to some other folder, in CAD, click on tools ->Options (or Preferences) -> Files -> + of Support File Search Path -> Add -> Browse -> Select the folder. All files from zip file should be in this folder. LISP Program for Jib Crane contains jib.lsp, jib.dcl program files and A1, A2, A3, A4 prototype drawings. Load jib.lsp by typing at command prompt (load "jib.lsp") and press <enter>. At command prompt type jib and press <enter> and program will start. This is a full program which runs for 4 options.

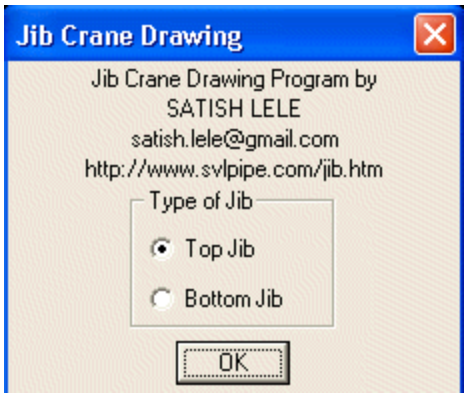
Programs asks for parameters in the following dialog boxes, and based on these values, LISP Program for Jib Crane draws the drawings.

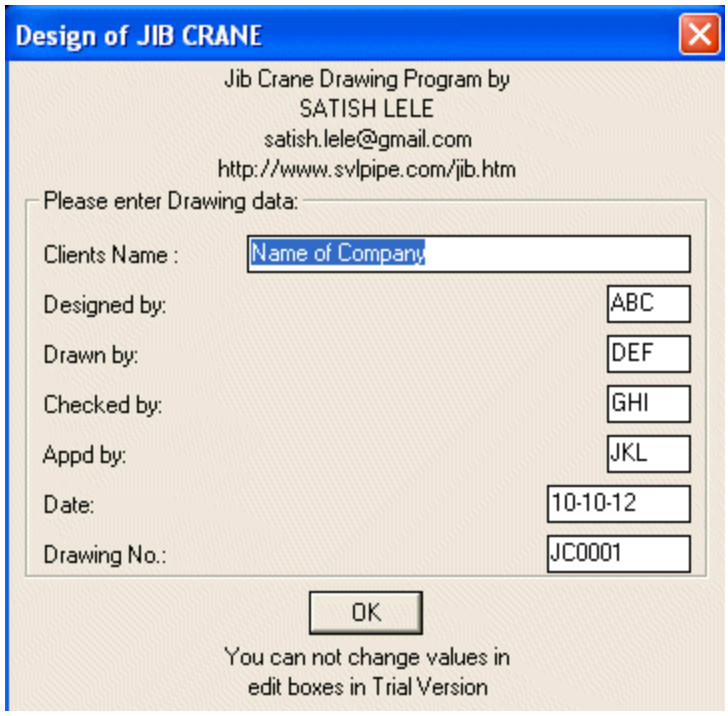

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Standard for Structural
United States
Indian
British
OK


Design of JIB CRANE
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Please enter Standards for Structural, Plates, Pipes :
Structural Standard :
BS4
Pipe Standard :
BS3604
Plate Standard :
BS1449
OK

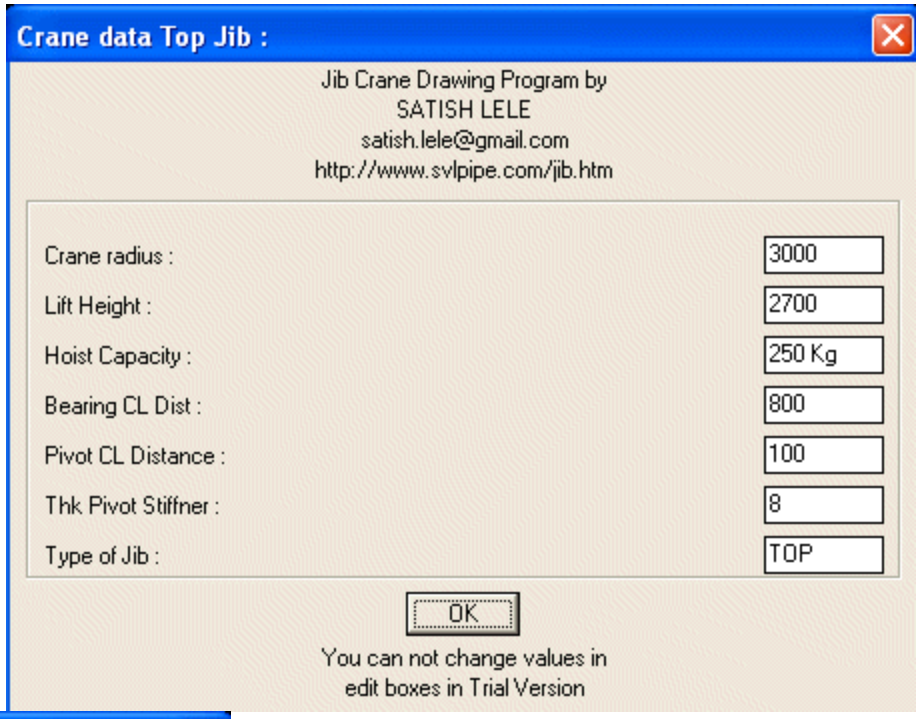

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Demo Number
Demo 1
Demo 2
Demo 3
Demo 4
OK

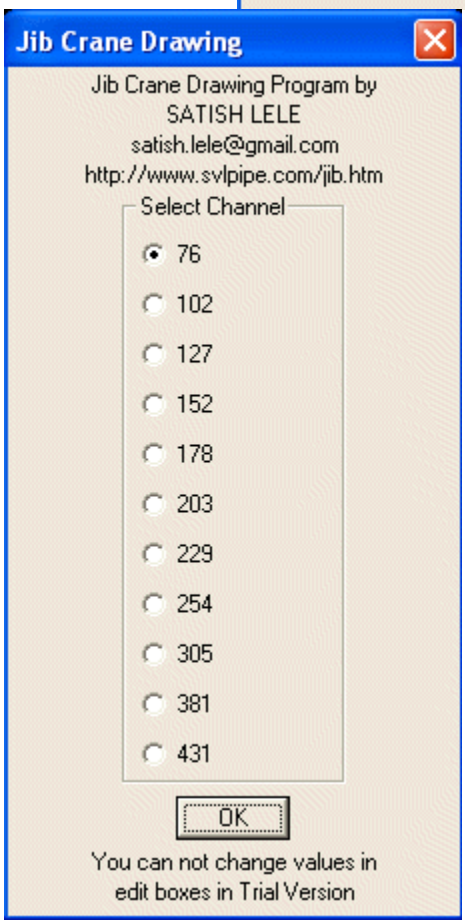

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Standard for Structural
United States
Indian
British
OK

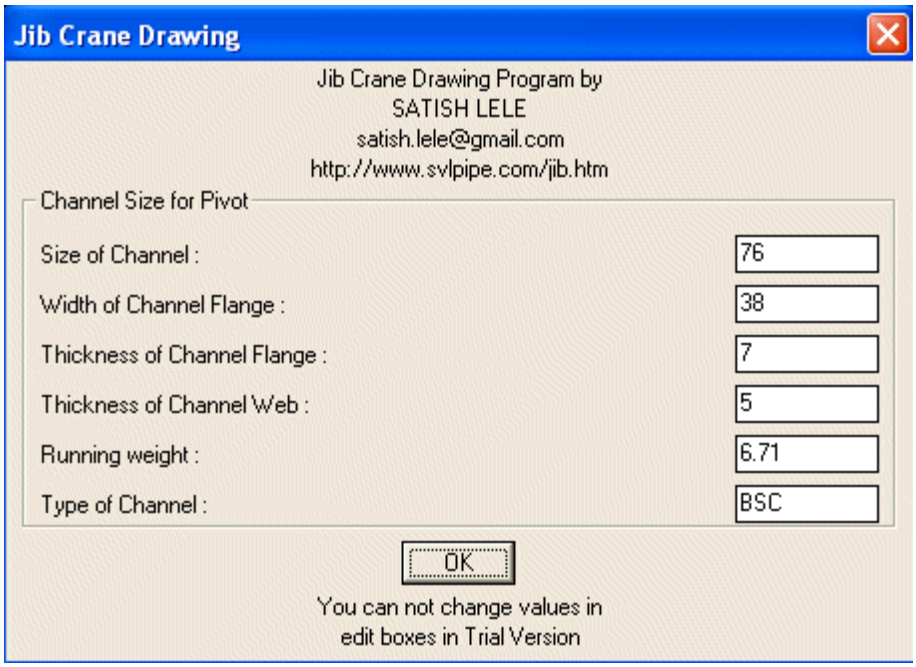

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Type of Jib
Top Jib
Bottom Jib
OK


Design of JIB CRANE
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Please enter Drawing data:
Clients Name :
Name of Company
Designed by:
ABC
Drawn by:
DEF
Checked by:
GHI
Appd by:
JKL
Date:
10-10-12
Drawing No.:
JC0001
OK
You can not change values in
edit boxes in Trial Version

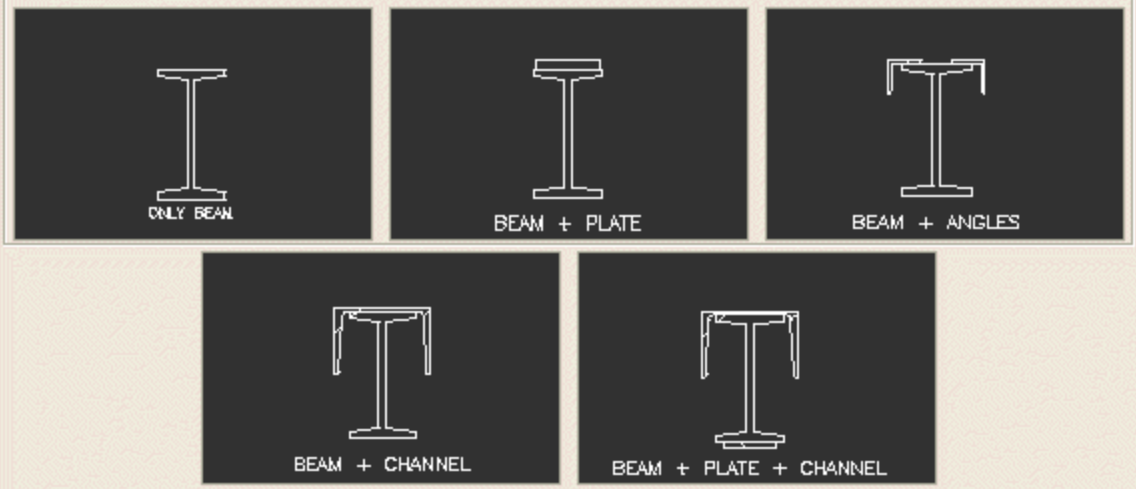

Choose Pillar Type
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Pipe
Fabricated
OK


Crane data Top Jib :
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Crane radius :
3000
Lift Height :
2700
Hoist Capacity :
250 Kg
Bearing CL Dist :
800
Pivot CL Distance :
100
Thk Pivot Stiffner :
8
Type of Jib :
TOP
OK
You can not change values in
edit boxes in Trial Version


Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Select Channel
76
102
127
152
178
203
229
254
305
381
431
OK
You can not change values in
edit boxes in Trial Version


Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Channel Size for Pivot
Size of Channel :
76
Width of Channel Flange :
38
Thickness of Channel Flange :
7
Thickness of Channel Web :
5
Running weight :
6.71
Type of Channel :
BSC
OK
You can not change values in
edit boxes in Trial Version

Jib Configuration :



OK

Jib Crane Drawing

Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm

Beam Size

Size of Beam :	102
Width of Beam Flange :	102
Thickness of Beam Flange :	10
Thickness of Beam Web :	10
Running weight of Beam :	23
Type of Beam :	BSB

OK

You can not change values in
edit boxes in Trial Version

Crane data Top Jib :

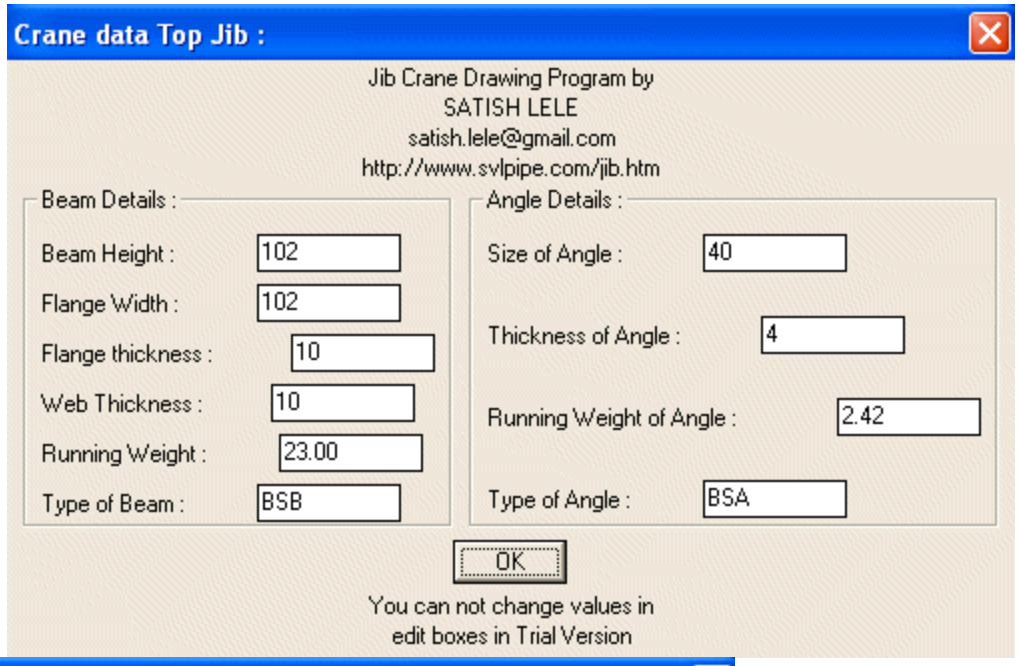
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm

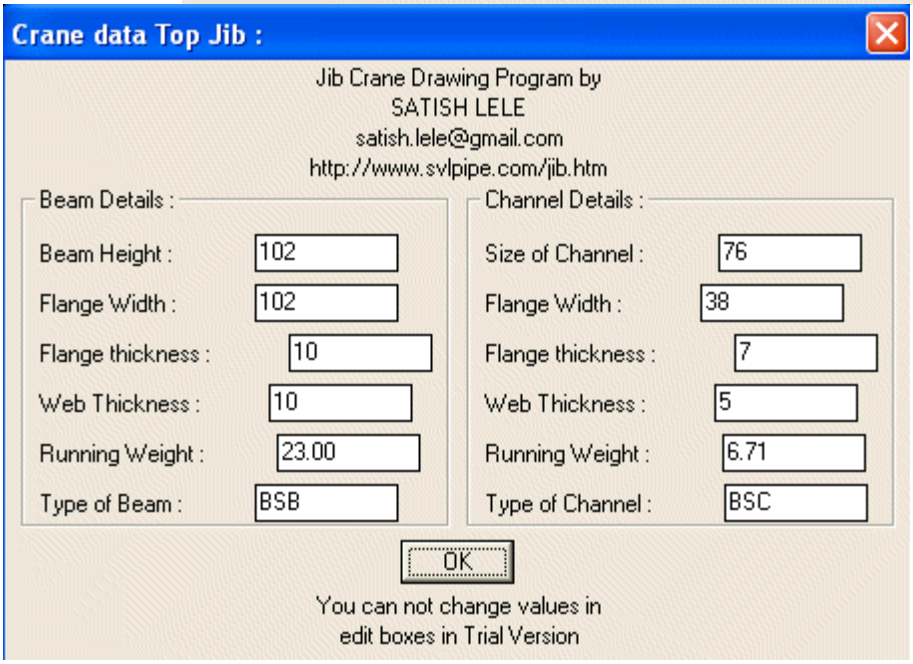
Beam Details :

Beam Height :	102	Plate Width :	50
Flange Width :	102		
Flange thickness :	10		
Web Thickness :	10		
Running Weight :	23.00		
Type of Beam :	BSB	Plate Thk :	6

OK

You can not change values in
edit boxes in Trial Version


Crane data Top Jib :
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Beam Details :
Beam Height : 102
Flange Width : 102
Flange thickness : 10
Web Thickness : 10
Running Weight : 23.00
Type of Beam : BSB
Angle Details :
Size of Angle : 40
Thickness of Angle : 4
Running Weight of Angle : 2.42
Type of Angle : BSA
OK
You can not change values in
edit boxes in Trial Version


Crane data Top Jib :
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Beam Details :
Beam Height : 102
Flange Width : 102
Flange thickness : 10
Web Thickness : 10
Running Weight : 23.00
Type of Beam : BSB
Channel Details :
Size of Channel : 76
Flange Width : 38
Flange thickness : 7
Web Thickness : 5
Running Weight : 6.71
Type of Channel : BSC
OK
You can not change values in
edit boxes in Trial Version

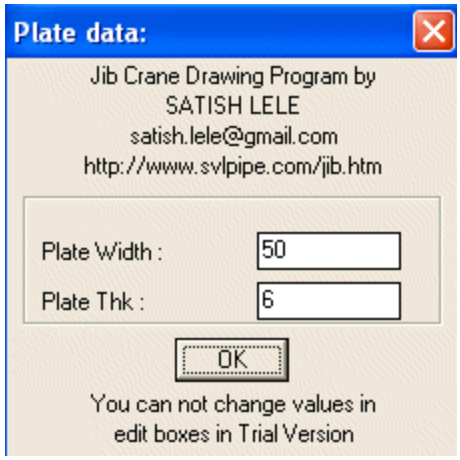
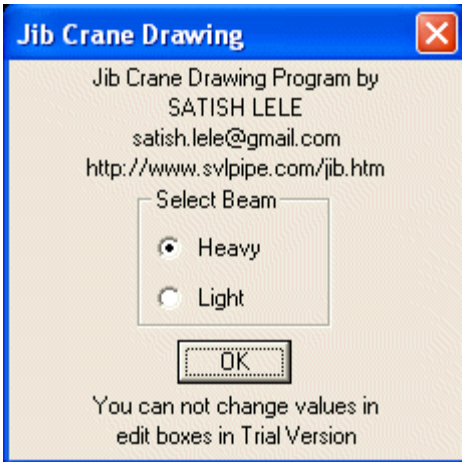
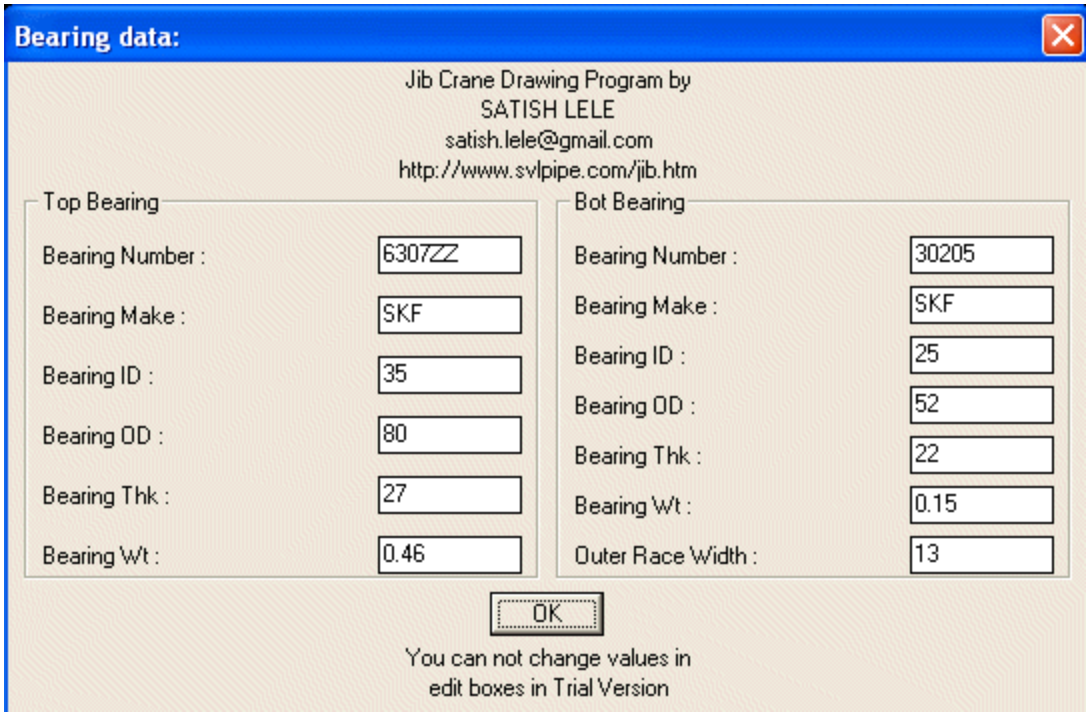
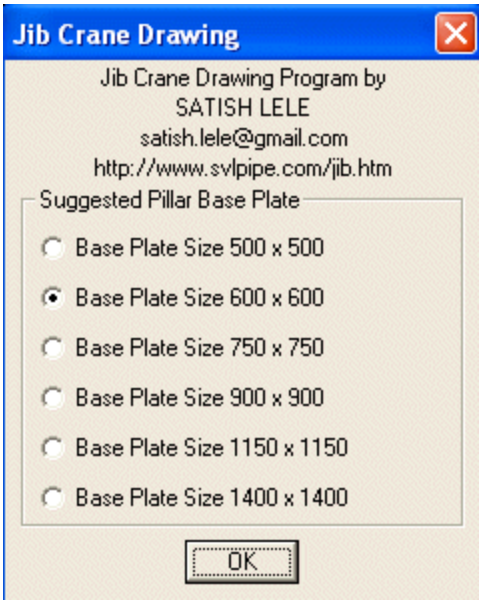


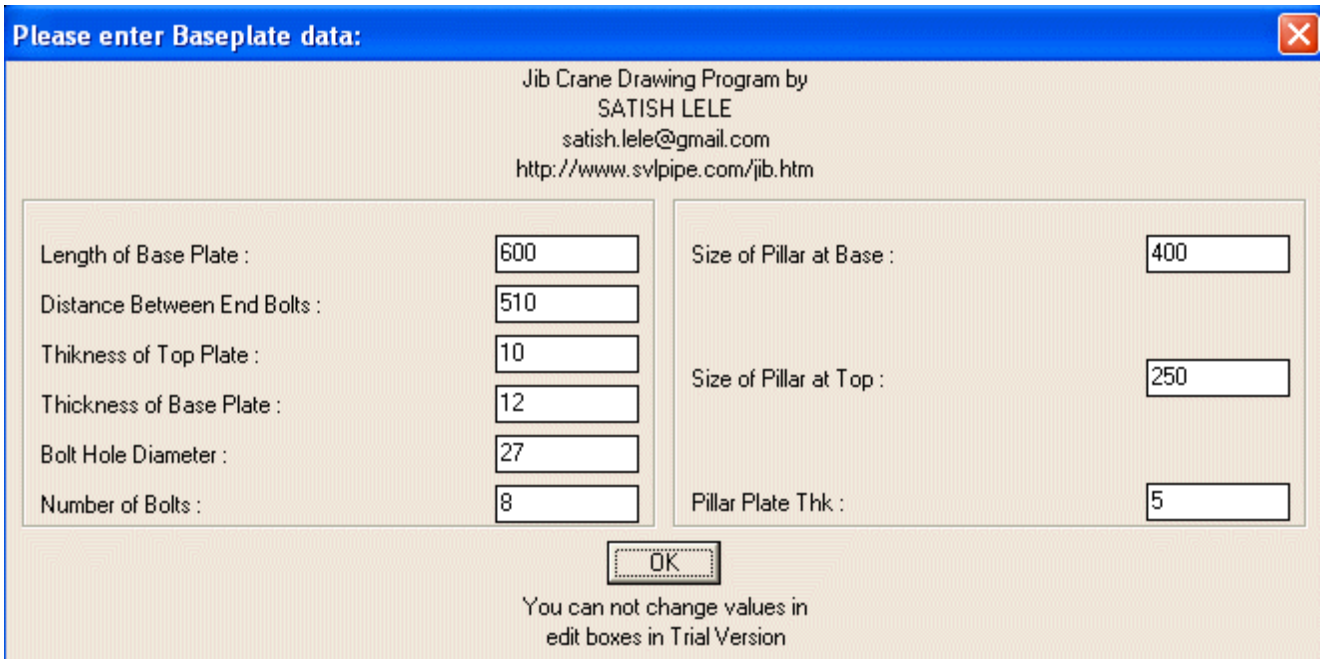
Plate data:
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Plate Width : 50
Plate Thk : 6
OK
You can not change values in
edit boxes in Trial Version

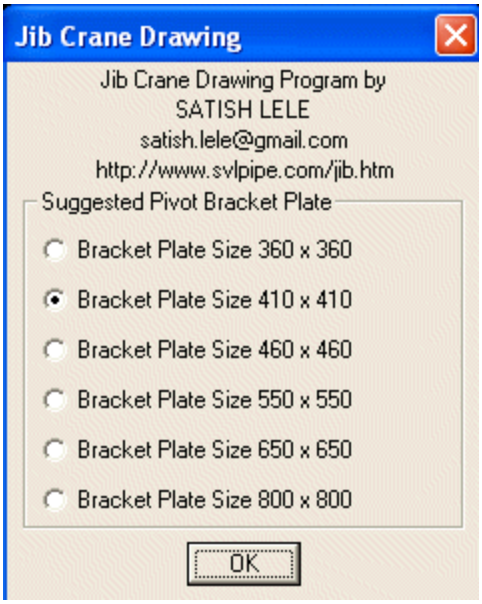

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Select Beam
76 mm
89 mm
102 mm
114 mm
127 mm
152 mm
178 mm
203 mm
254 mm
305 mm
356 mm
406 mm
457 mm
533 mm
OK
You can not change values in
edit boxes in Trial Version

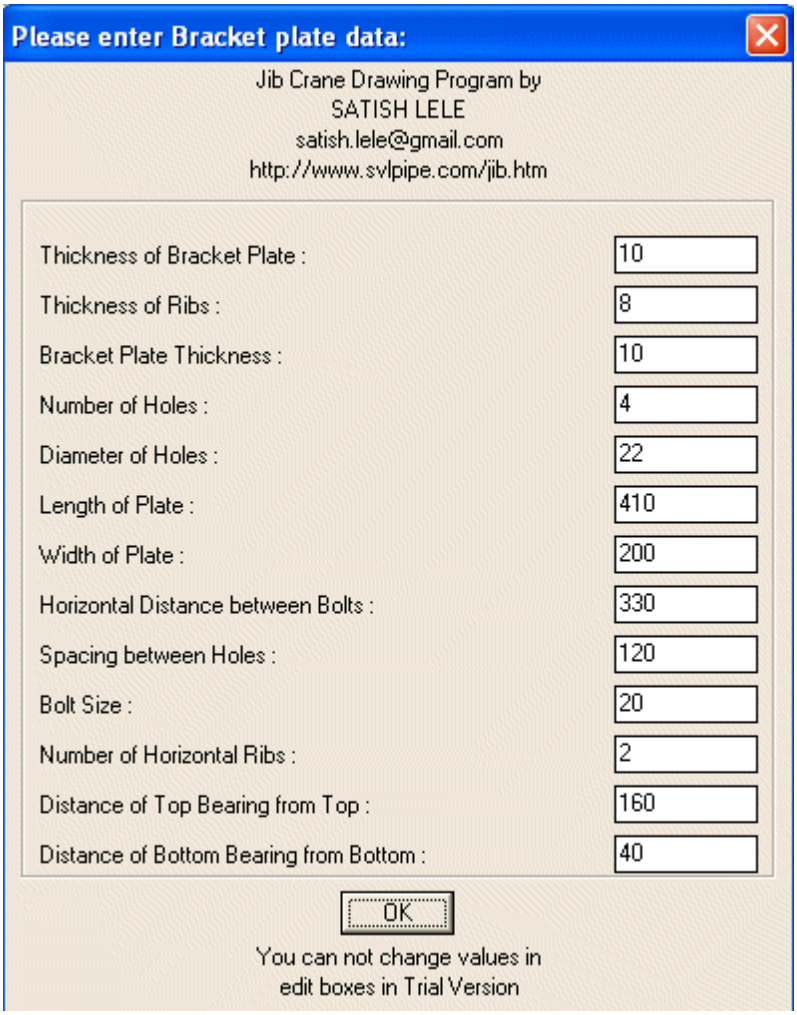

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Select Beam
Heavy
Light
OK
You can not change values in
edit boxes in Trial Version

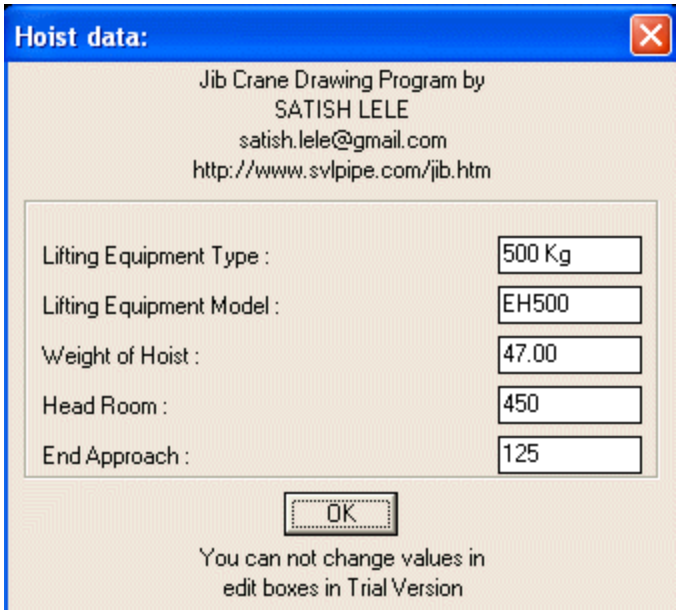

Bearing data:
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Top Bearing
Bearing Number : 6307ZZ
Bearing Make : SKF
Bearing ID : 35
Bearing OD : 80
Bearing Thk : 27
Bearing Wt : 0.46
Bot Bearing
Bearing Number : 30205
Bearing Make : SKF
Bearing ID : 25
Bearing OD : 52
Bearing Thk : 22
Bearing Wt : 0.15
Outer Race Width : 13
OK
You can not change values in
edit boxes in Trial Version

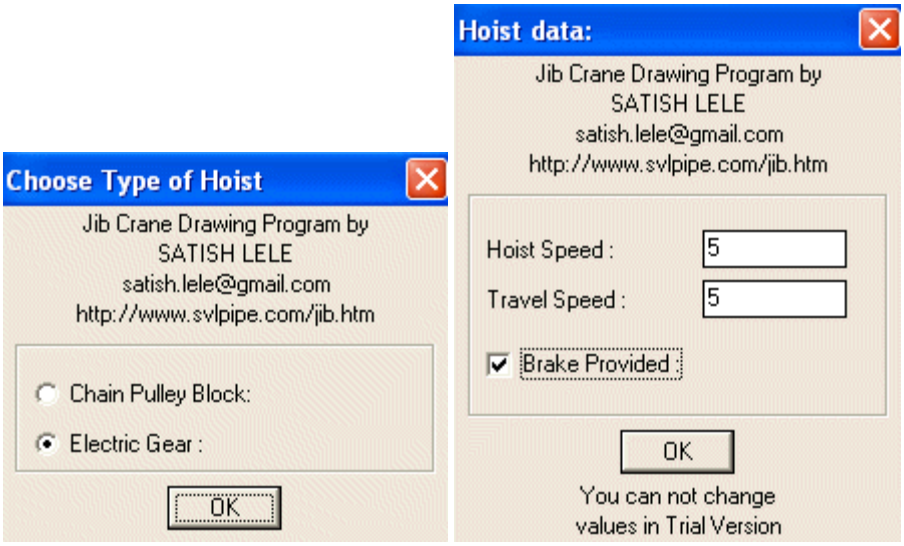

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Suggested Pillar Base Plate
Base Plate Size 500 x 500
Base Plate Size 600 x 600
Base Plate Size 750 x 750
Base Plate Size 900 x 900
Base Plate Size 1150 x 1150
Base Plate Size 1400 x 1400
OK


Please enter Baseplate data:
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Length of Base Plate : 600
Distance Between End Bolts : 510
Thikness of Top Plate : 10
Thickness of Base Plate : 12
Bolt Hole Diameter : 27
Number of Bolts : 8
Size of Pillar at Base : 400
Size of Pillar at Top : 250
Pillar Plate Thk : 5
OK
You can not change values in
edit boxes in Trial Version

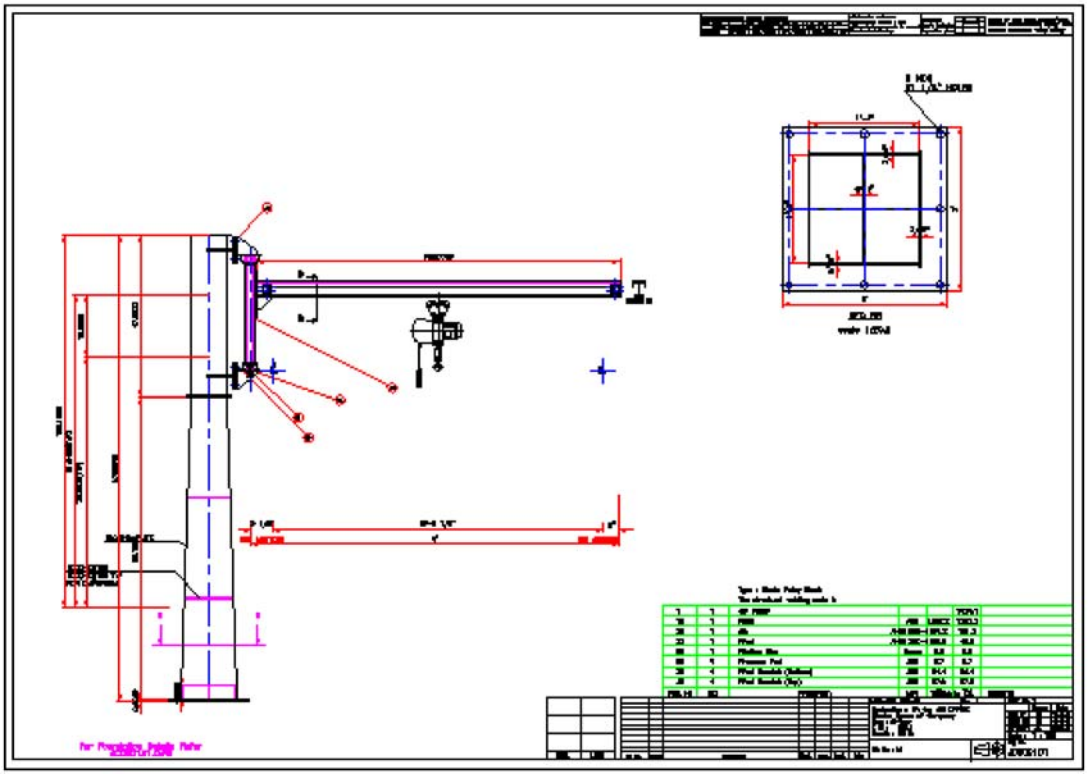

Jib Crane Drawing
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Suggested Pivot Bracket Plate
Bracket Plate Size 360 x 360
Bracket Plate Size 410 x 410
Bracket Plate Size 460 x 460
Bracket Plate Size 550 x 550
Bracket Plate Size 650 x 650
Bracket Plate Size 800 x 800
OK


Please enter Bracket plate data:
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Thickness of Bracket Plate : 10
Thickness of Ribs : 8
Bracket Plate Thickness : 10
Number of Holes : 4
Diameter of Holes : 22
Length of Plate : 410
Width of Plate : 200
Horizontal Distance between Bolts : 330
Spacing between Holes : 120
Bolt Size : 20
Number of Horizontal Ribs : 2
Distance of Top Bearing from Top : 160
Distance of Bottom Bearing from Bottom : 40
OK
You can not change values in
edit boxes in Trial Version

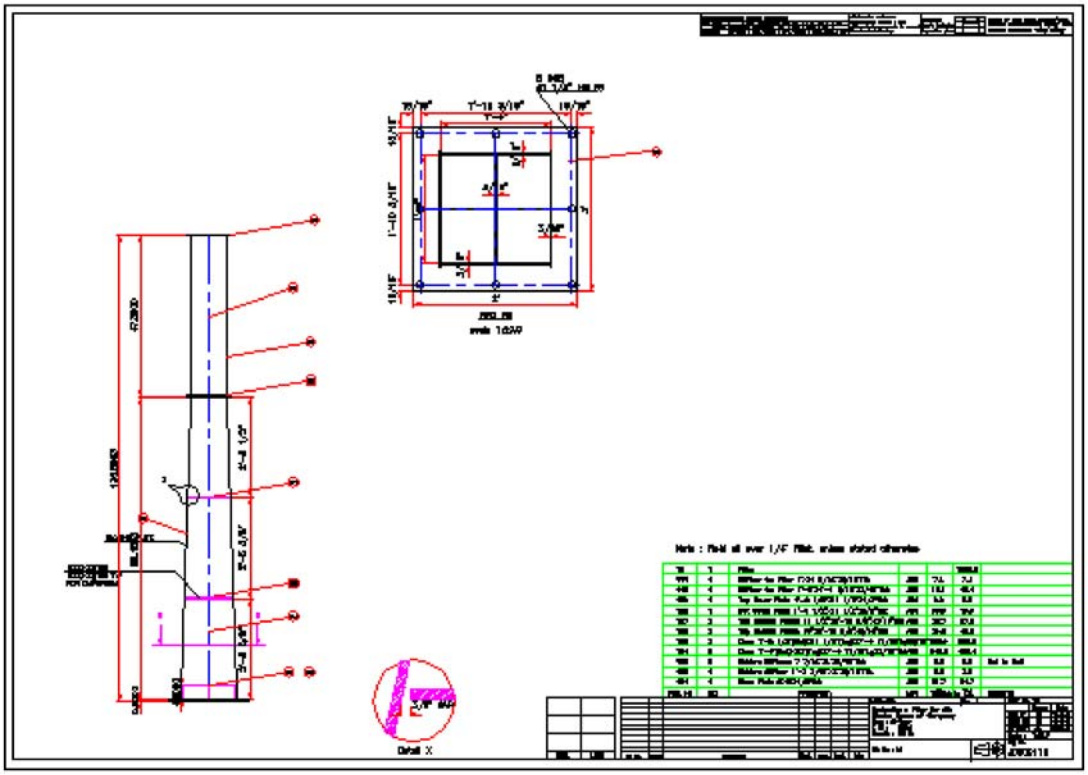

Hoist data:
Jib Crane Drawing Program by
SATISH LELE
satish.lele@gmail.com
http://www.svlpipe.com/jib.htm
Lifting Equipment Type : 500 Kg
Lifting Equipment Model : EH500
Weight of Hoist : 47.00
Head Room : 450
End Approach : 125
OK
You can not change values in
edit boxes in Trial Version



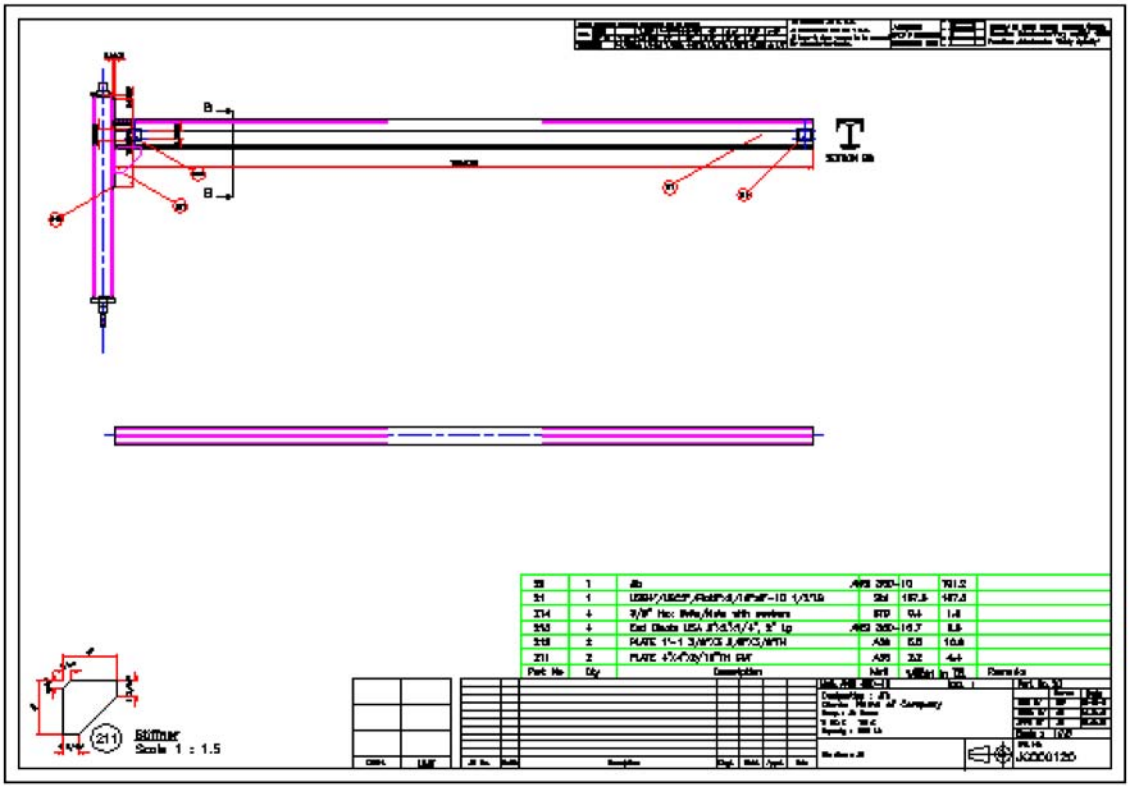
Drawings developed by my program are as follows :



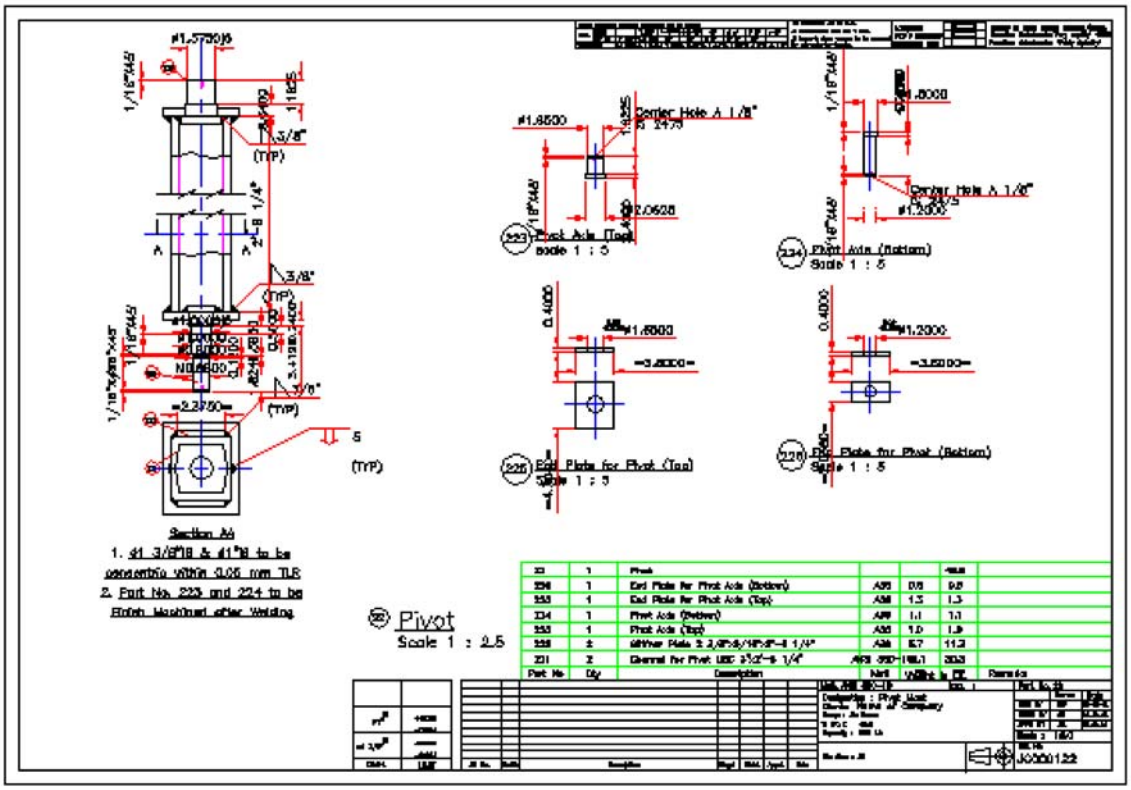
A Complete GA Drawing of Top Jib crane.



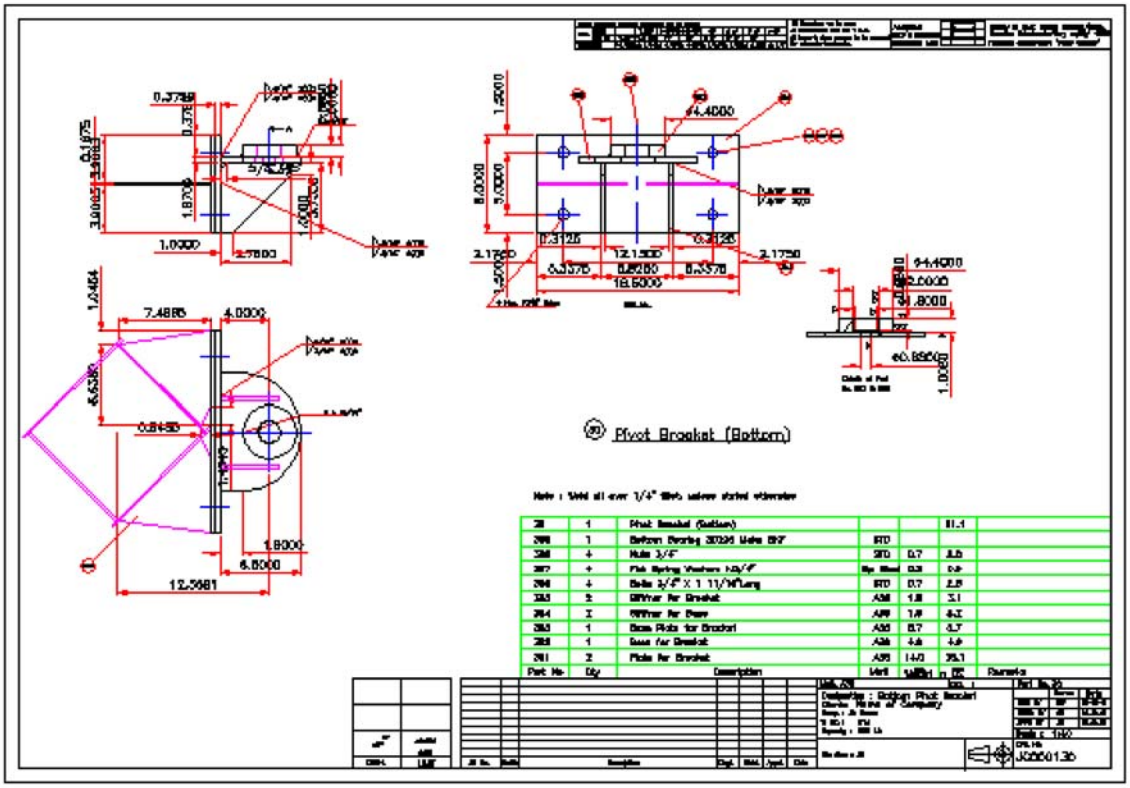
A Drawing of a Fabricated Pillar.



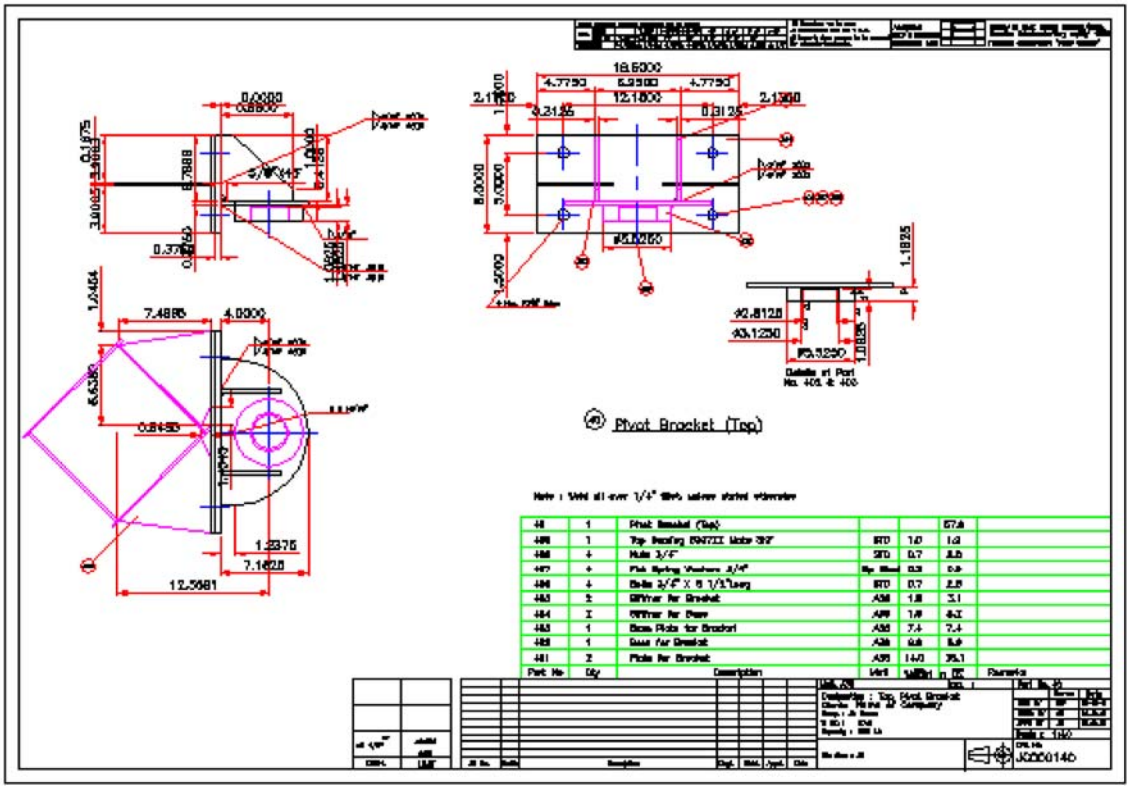
A Drawing of Top Jib.



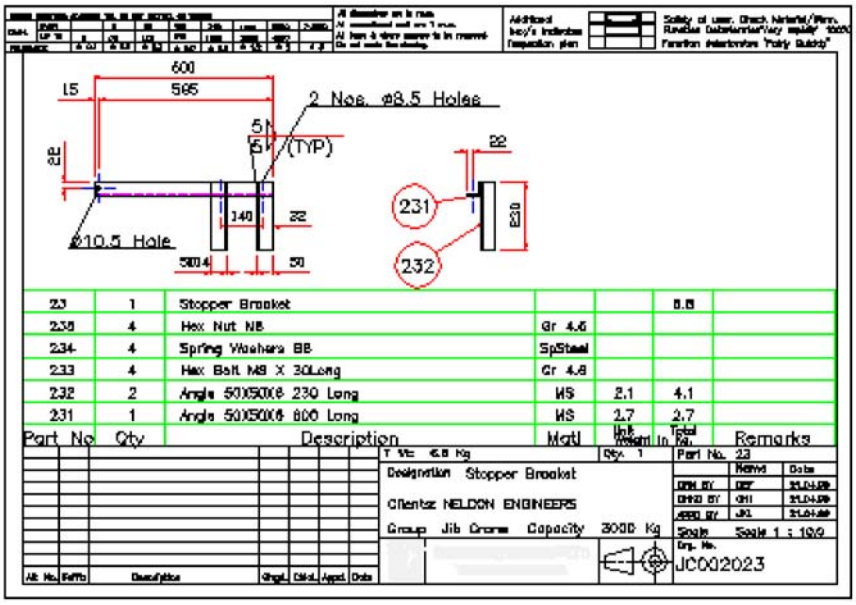
A Drawing of Pivot.



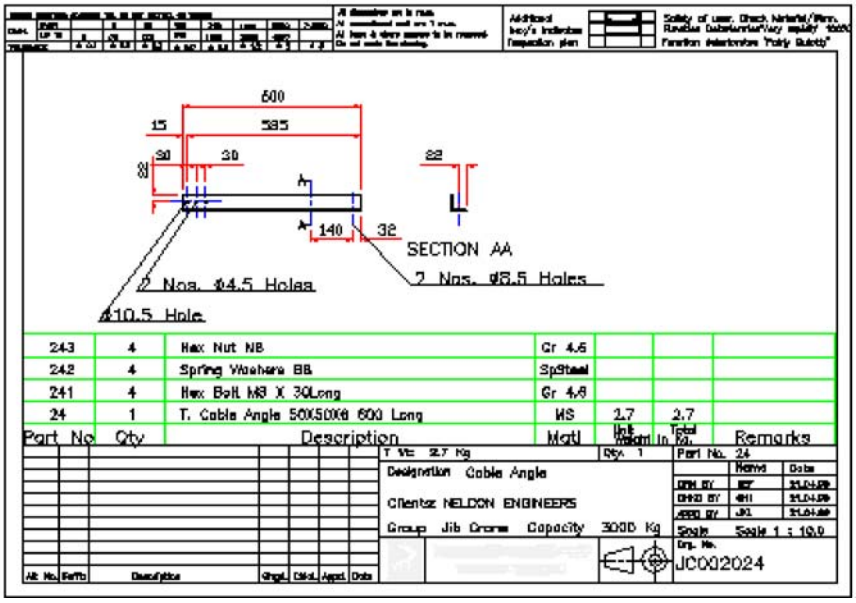
A Drawing of Bottom Bracket.



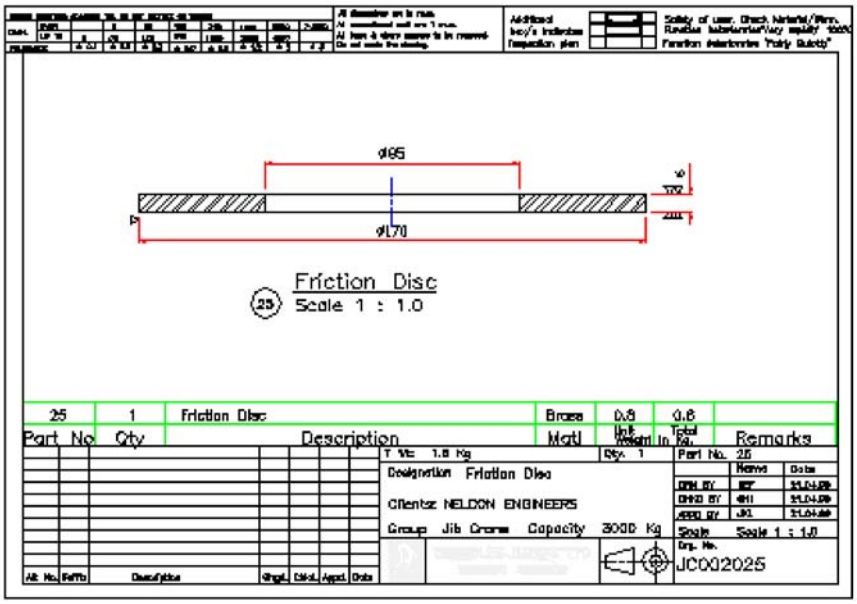
A Drawing of Top Bracket.



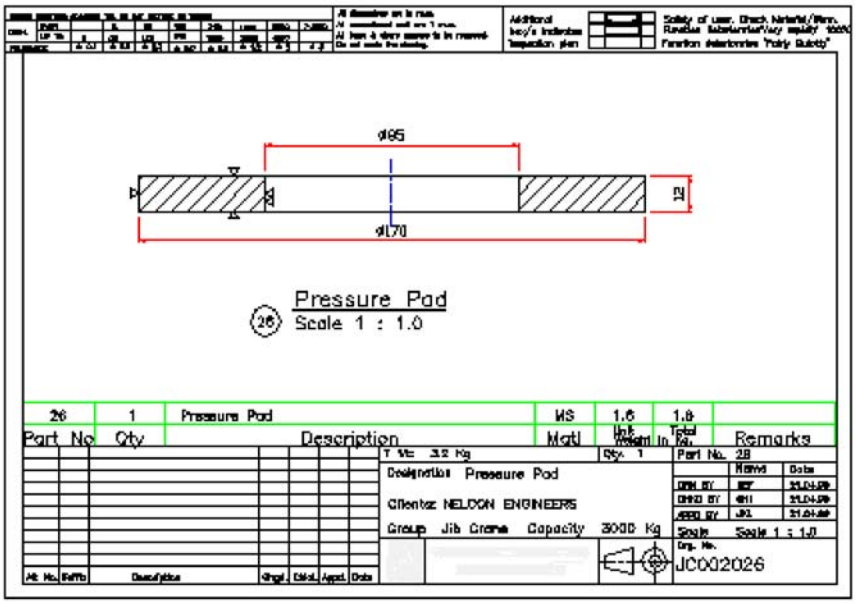
A Drawing of Stopper Bracket.



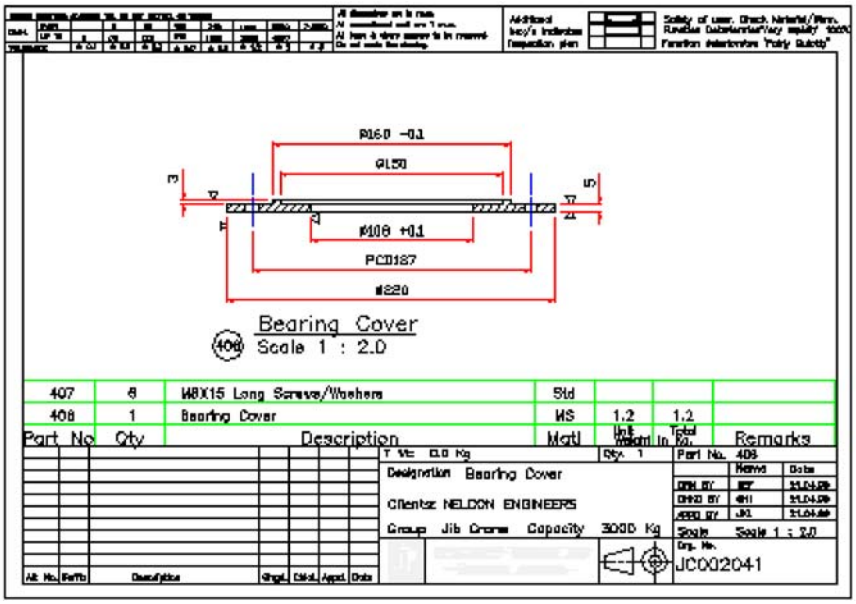
A Drawing of Cable Angle.



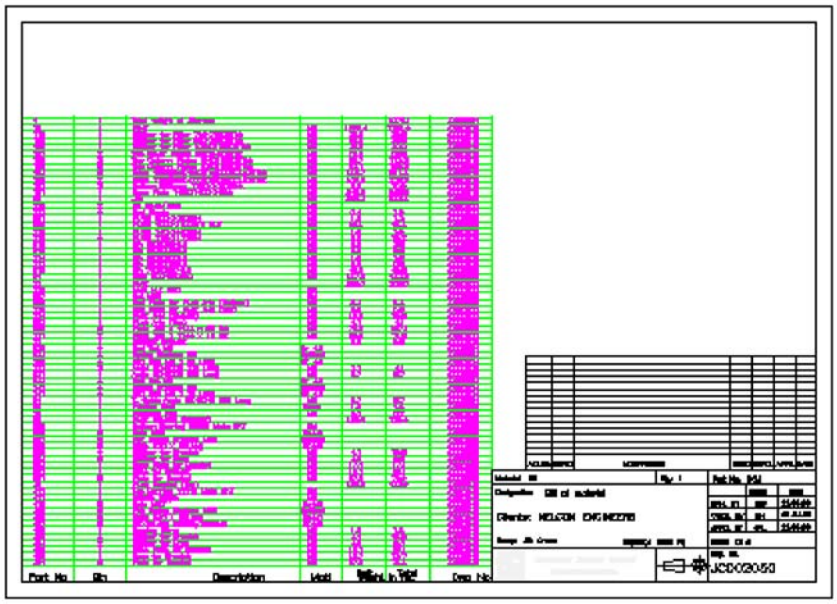
A Drawing of Friction Disc.



A Drawing of Pressure Pad.



A Drawing of Bearing Cover.



A Drawing of Bill of Materials.