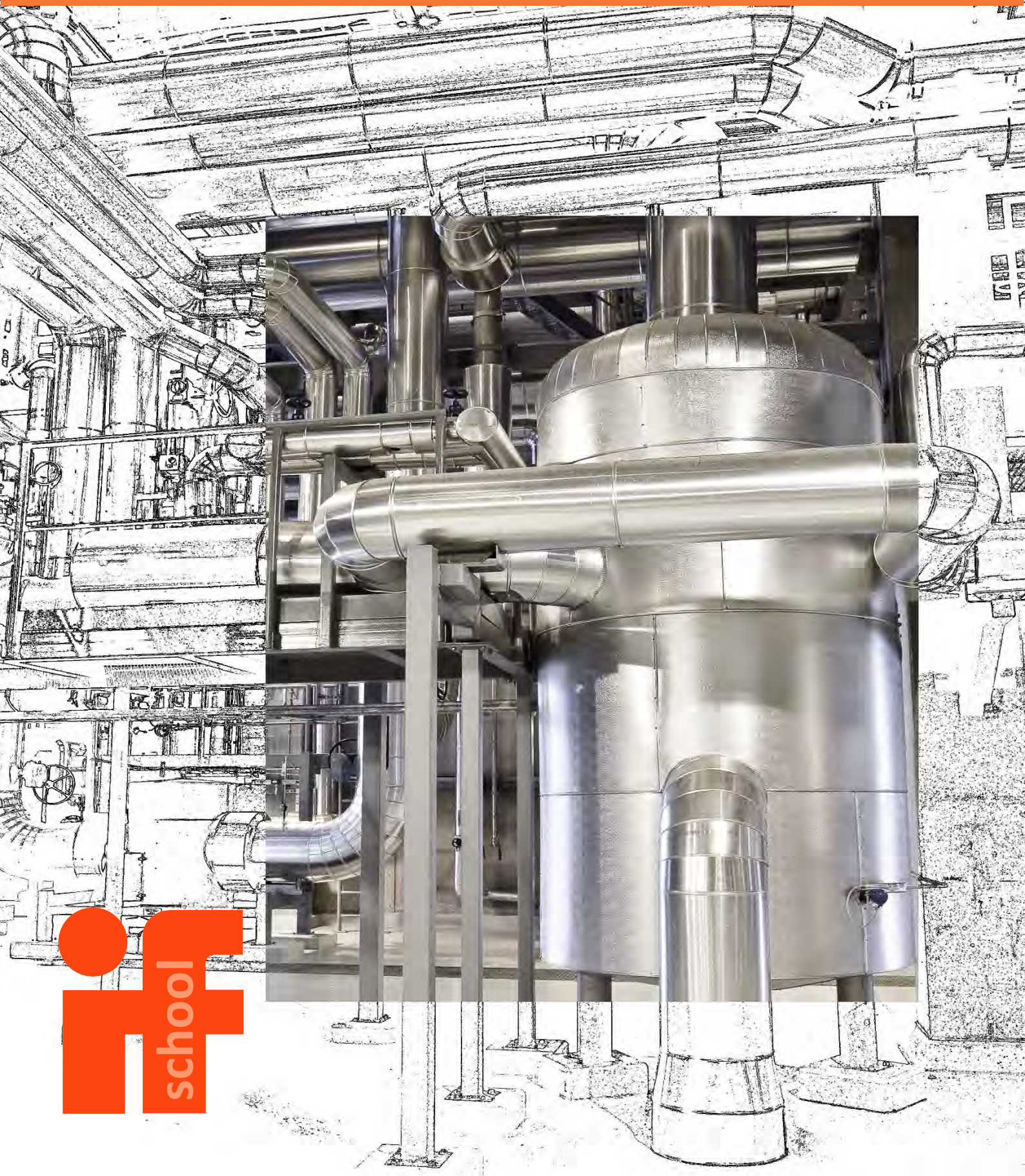
Sheet metal propagation for isoleringsplåtslagare



2018

Sheet metal propagation for insulation sheeters

The teaching material has been added in consultation between the Swedish Insulation Companies Association, IF and the Plumbing Industry Professional Board, VVSYN

The teaching material includes theoretical knowledge in sheet metal propagation technology

for **Insulation Plate Acters** and **Plumbing Insulators** within construction and the industrial sector.

Sheet metal propagation is intended for use by independent training providers

and for the plumbing and real estate program, output insulation fitter.

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Skolan

Innehållsförteckning

Byxrör:

Infällningar:

Domgavlar:

Other:

Linjestorlekar

Try using different line sizes when making spreads on paper.

Most often, all lines become the same. It will be difficult in hindsight to see, for example, the detail involved. It's mostly a "cobweb" of it all.

Below you will get some tips.

Draw the center line with dash, dot, dash.

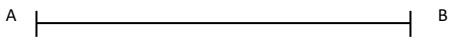
Generatories and measurements should be fine thin solid lines.

Contours on, for example, sticks you can draw a little more powerfully, then you can more easily see where you

A obscured line is something you don't really see, but you want to show that there is something behind the detail.

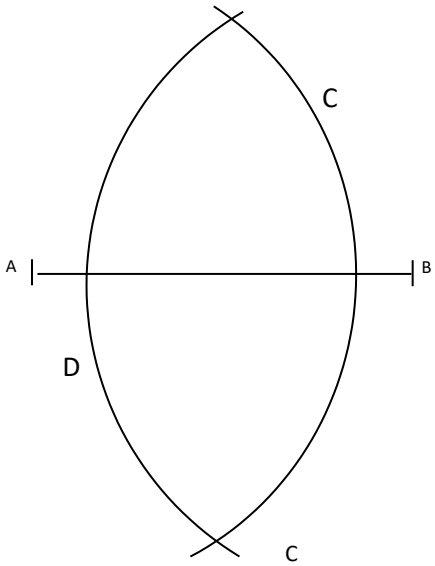
Sharing a given distance

Draw lines A - B, 50 mm arbitrarily, about 50mm.



Put the passer in A, pull out the passer more than half of the distance A - B, draw the circle arch C.

Use the same setting, move the fitr to B, draw the circle arc D.

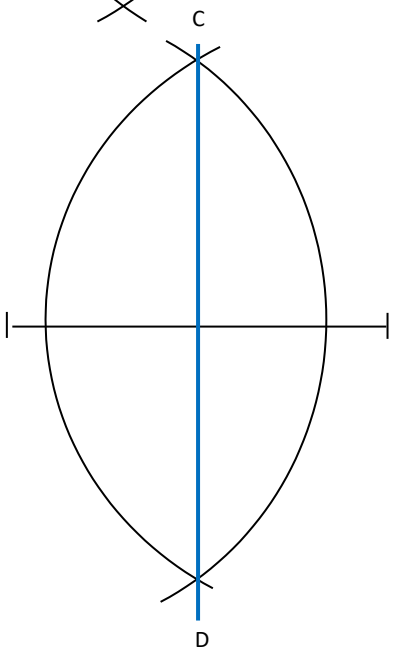


Draw a straight line from "cleaver" C

to D. You have now split the distance

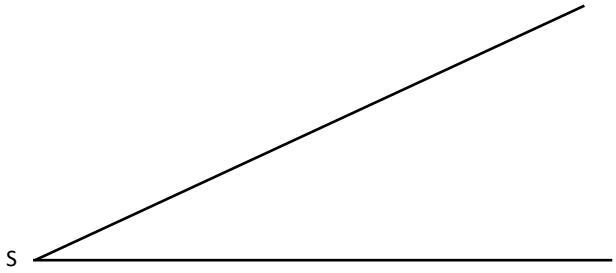
exactly in half.

Dividing a distance in half of this way happens a little now and then in distributions.

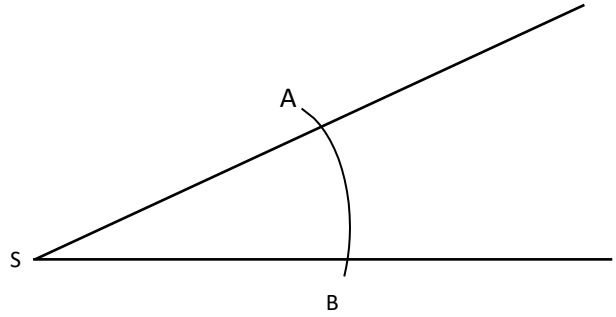


Splitting a given angle.

Draw the angle legs arbitrarily. Mark the tip with S.



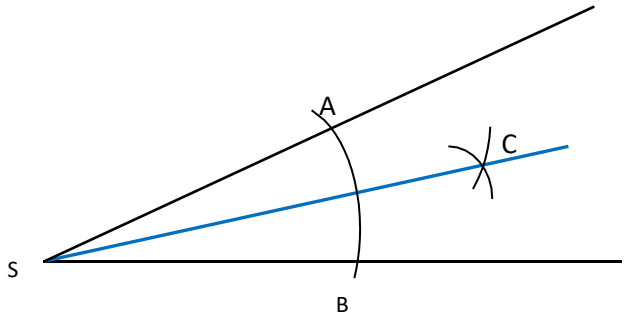
Put the passer in S, pull an arc arbitrarily A - B.



Divide the arc in half, put the fit in B, hit a small mark, over half of the arc slope, put out "cleath" in C.

With the same setting, put the fitt in A, hit a mark in C.

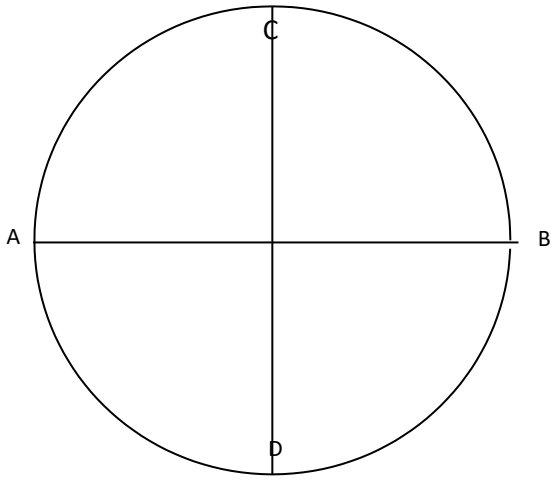
Now you can draw a line from the tip to C, in the middle of the "cleaver". The straight linedivides the angle into 2 equal angles.



Splitting the circle into 12

Draw distanceS A - B, 60 mm, and distance C - D at an angle.

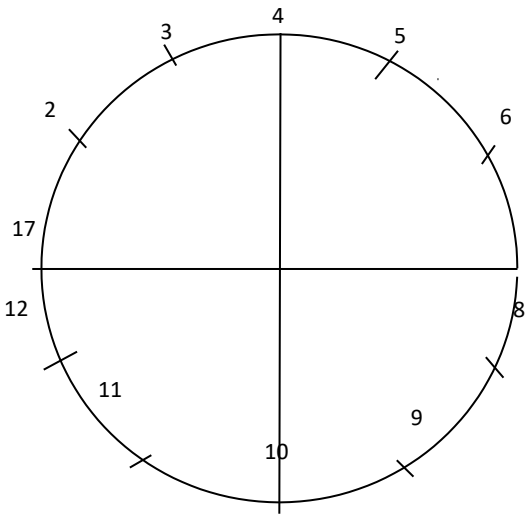
Draw the circle (diameter). Take the radius of the fiter 30 mm, put the fiter in the center, hit the circle.



Divide the circle into 12 equal parts.

Take the radius of the fiter, put the fit in 1, hit a mark 3 and 11 in the circle.

Put the passer in 4, hit a mark 2 and 6. Continue until you have 12 splits (spacing).



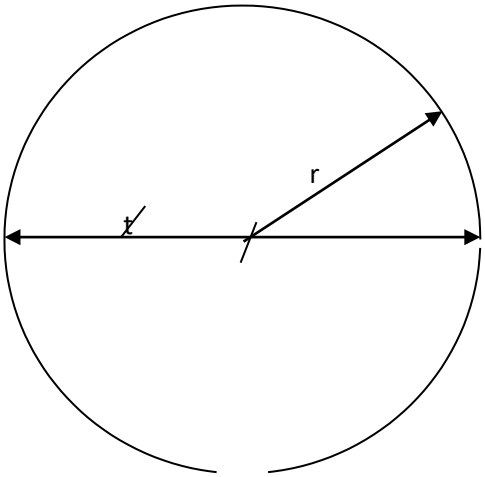
~~t~~he: Diameter

r : Radius, half diameter.

~~π~~ : Pi, 3.14

Omk : circumference. (circle around) Ex: dia x pi = omk.

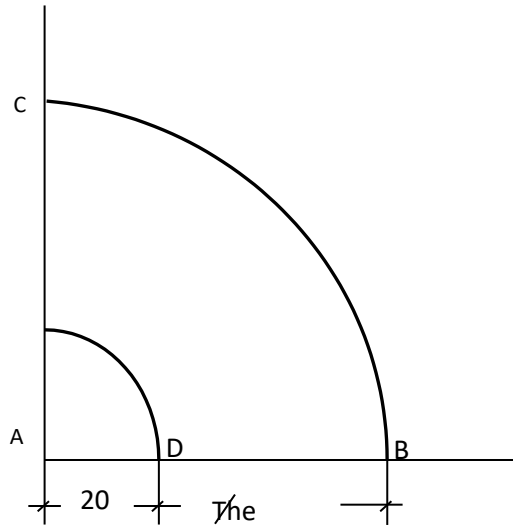
omk/ pi = him.



Segment segmentation of

Draw distanceS A - B 50 mm and distance A -C at 90 degrees.

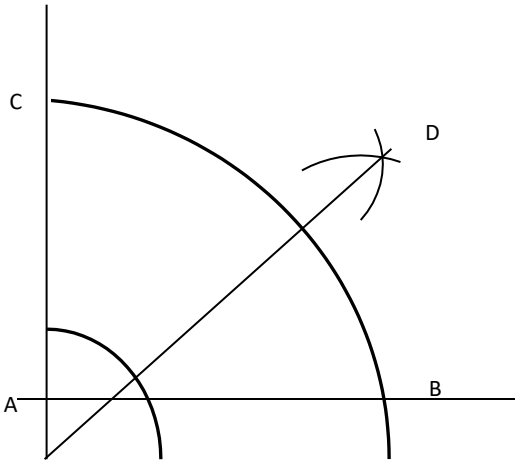
Put the passer in A to D, hit the arc circle.
Do the same with A- B.



Start by splitting the outer arc circle in half. Put the fit in B, pull out over half the arc, make the mark, see D.

Do the same from C.

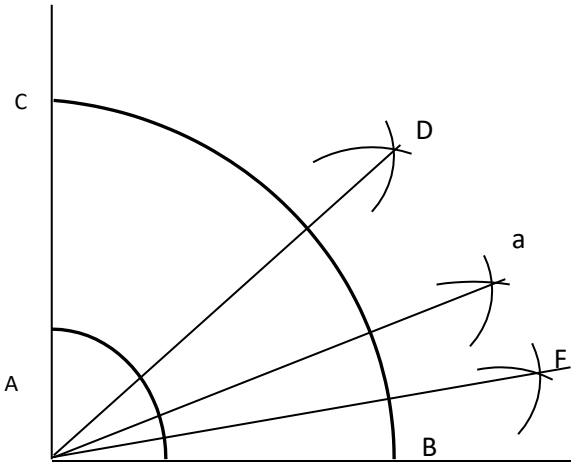
Draw line A - D. The bend is split in half.



Now continue to share E and F in the same way.

Put the passer in B, pull out over half of the arc towards D, set off a mark. Continue with D in the same way down to B.

This way can be used when dividing a bend into several segments.



573 rules.

Construct an angle without a degree disc.

Drag the center line, mark the start with X, where the angular tip begins.

Fig. 1

Take 57.3mm in the passer, hit a circle arch according to. Fig. 2.

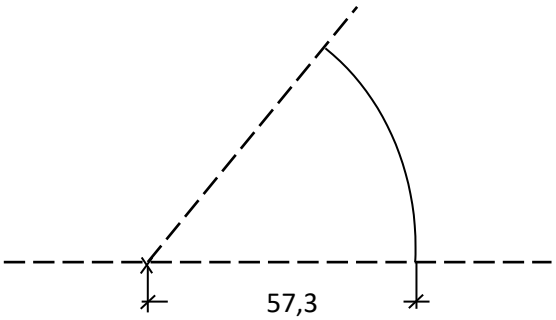


Fig. 2

1 mm after the arc is 1 degree.

Construct an angle of 60 degrees.

Set the fiter to 10 mm. 10 mm is the same as 10 degrees.

Fit 6 times after the arc circle, draw a line from the S-point through the 6th mark. The angle is now 60 degrees.

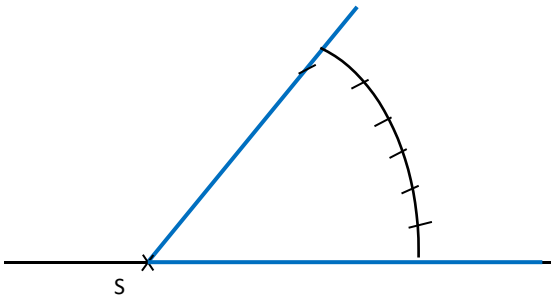


Fig. 3

If you want bigger angles, you can talk inches.

Thus, the arc can be struck 57.3 cm, then 1 cm after the arc circle becomes 1 degree.

Division of generators on cylinder tubes.

Start by dragging the center line, horizontally, Fig. 1.

Draw the cylinder (pipe). Next, draw the circle under the tube, to indicate that the pipe is around, the circle is seen from above.

Also drag center line A - A

Center lines are always drawn with dotted lines.

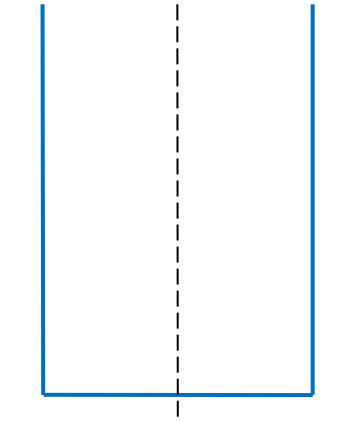


Fig. 1

Now divide the circle into 12 equal splits, Fig. 2.

Take the radius of the fiter (from the circle), put the fit in 1, hit arcs 3 and 11.

Continue with the passer in 4, hitting arcs 2 and 6. Continue with the same system until you have 12 splits(spacing). Draw all the embarrassed rice according to. Fig. 2

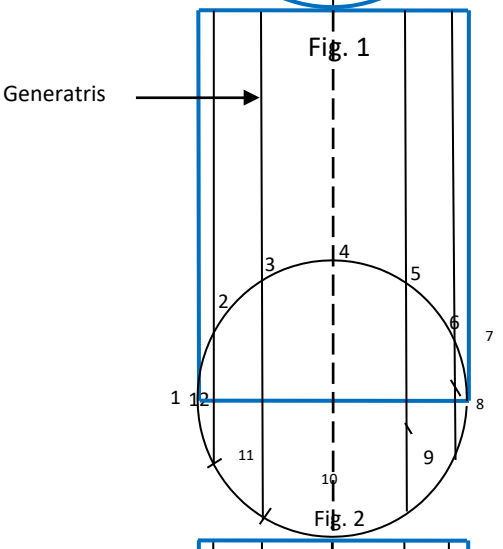


Fig. 2

In the future, we only draw the semicircle in distributions.

Keep in mind that the circle indicates that the pipe is around. Baseline according to. Fig.. 3 is therefore round, therefore "lower the circle."

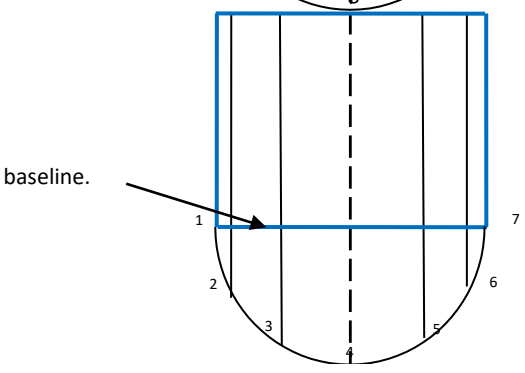


Fig. 3

Distribution of 90 degree squats.

Start by drawing the squats, follow the dimensions.

You get the cut line A-B automatically, (where we can then zigzag the two segments together.)

Lower the semicircle, Fig. 2, it shows a semi-cylindrical tube (seen from above). Divide the circle into 6 equal parts(spacing). Next, pull up the generatrises towards the cutting line, mark the generatrises by numbers 1 to 7.

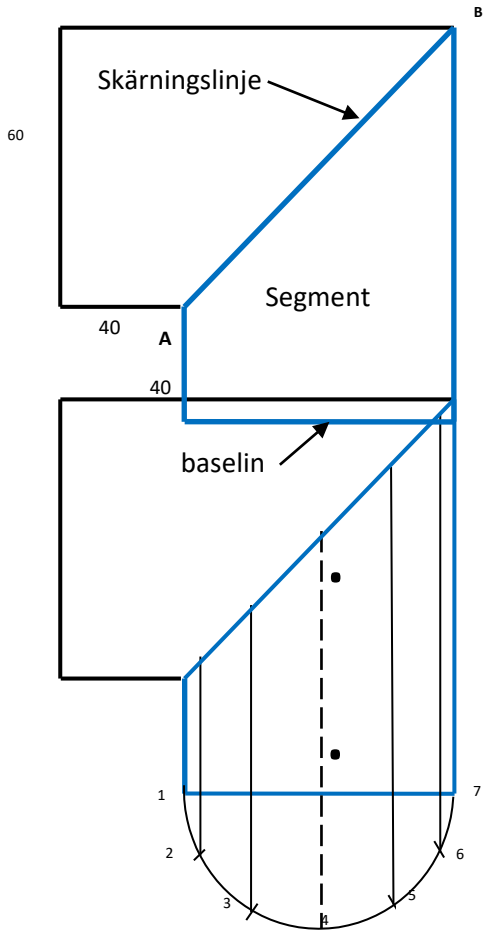


Fig. 2.

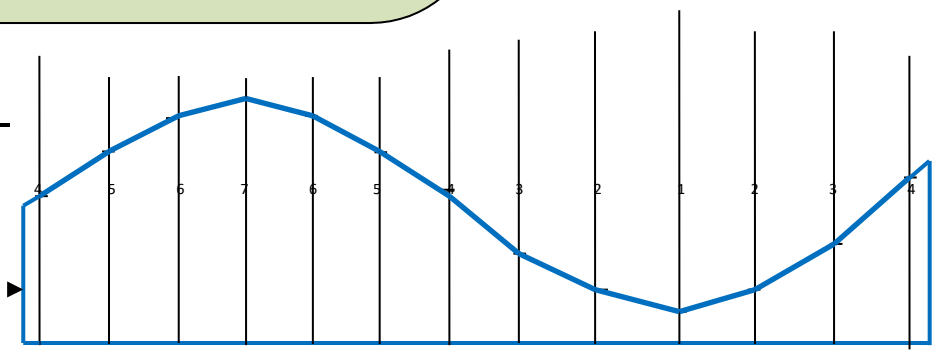
template. Figure out the perimeter of pSong suckle. x pi = 60 x 3.14, divide the circumference by 12 and you will get the split length. Start by knitting off the template from the left, knit off 6 times, then take from the right 6 times, possibly errors in the middle you can split in the middle.

Selection of numbers. Start with 4 at the ends of the template, (joint), see fig. 2. After that, take 5, 6, 7, 6, etc. until you arerupt to 4 again. Pull the embarrasses.

Then bring the passer generatris 5 from the baseline in Fig.2 up to the cutting line, insert 5 into the template. Continue with 6 in Fig.2 and so on until you are around and there until 4 again.

When you get off fig. 2, insert the fitr into the baseline, e.g. 4, take measurements up to the cutting line, turn off in 4 on the template.

Don't forget the overlap.



Inserts of the same diameter as head tubes.

Fig.1: This is how you can draw the stick.

I'd rather draw according to. Fig.. 2. See incision A - A, (seen from the left).

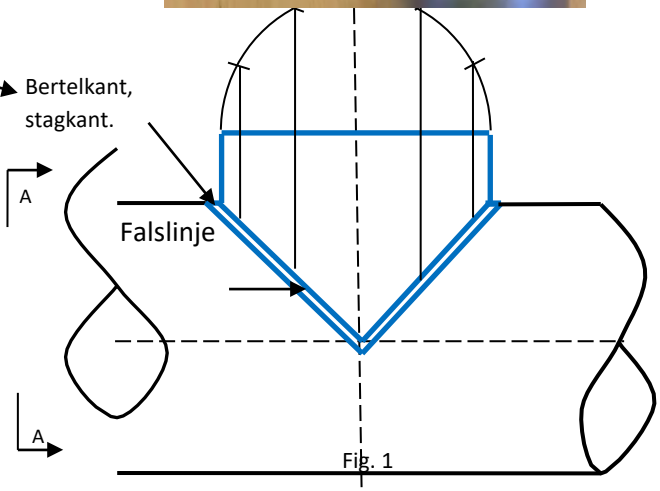


Fig. 1

This option is simpler, Fig. 2. Start with the center lines. Draw half the main tube.

Then, draw in the bag. Lower the circle to indicate that the on-the-stick is around, divide the circle as usual. Pull the generatrises down towards the main tube.

Set the numbers4 to 1, the left half is the same as the right one.

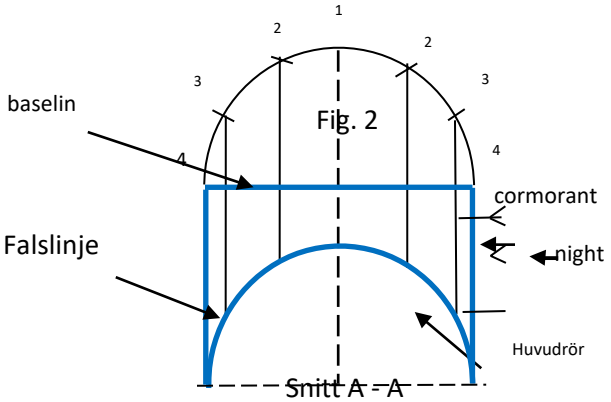


Fig. 2

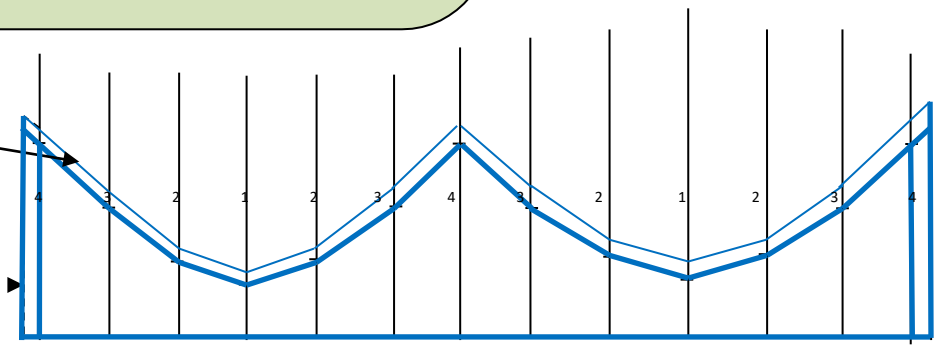
plate. Deploy
the dividing dimensions (gaps).
diameter x 3,14 = circumference.

In the longest distance of the push, Fig. 2, usually we lay the joint.

When you protrude the generatrises from fig. 2, set the fitr in the baseline. Ex: 3, take the measure from the baseline to the fold line with the fitr, set in 3 on mallen.

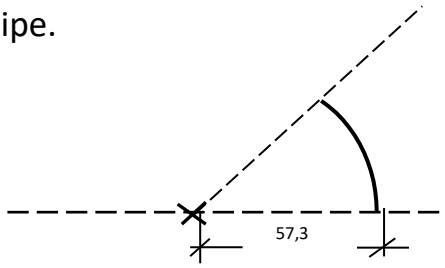
Bertelkant, do additions in the

Don't forget

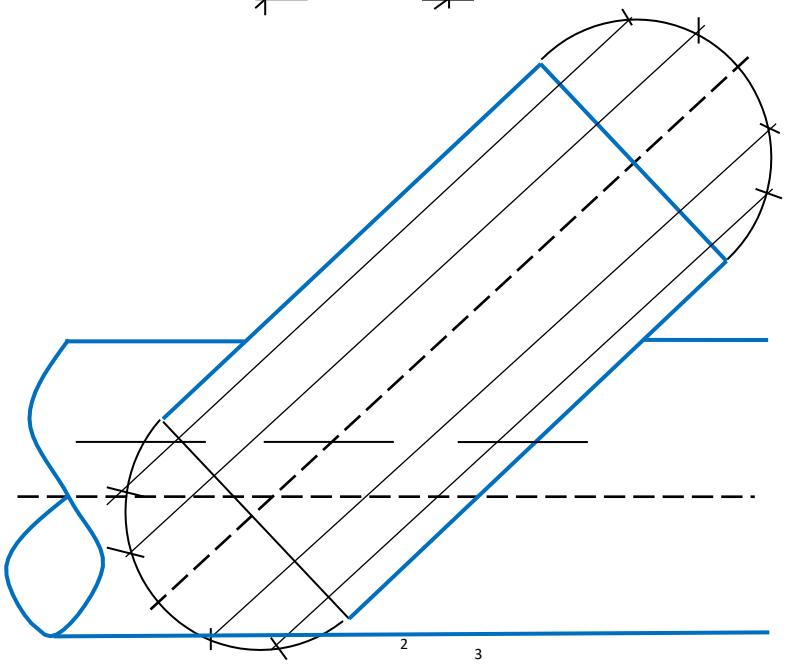


Oblique stick in the same dia as the main pipe.

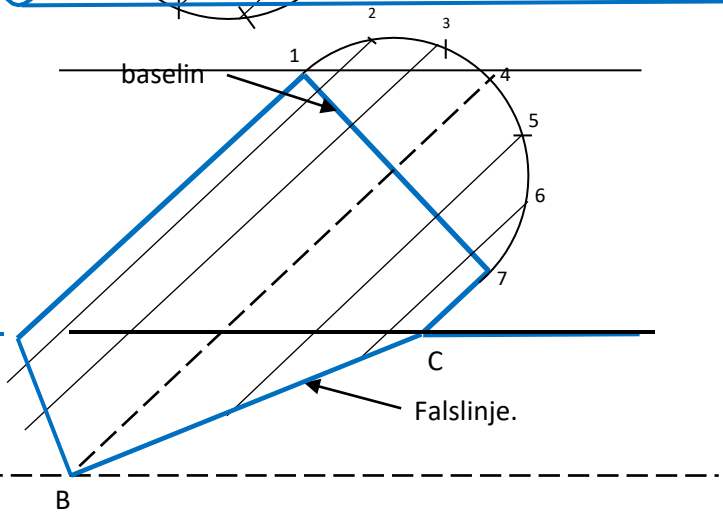
Start with the angle of 60 degrees. Use the 573 rule.



Draw the stick. Start from the center lines. Lower the semicircles, do the split on the circles as usual. The lower circle is a help circle to get the generatrises parallel.

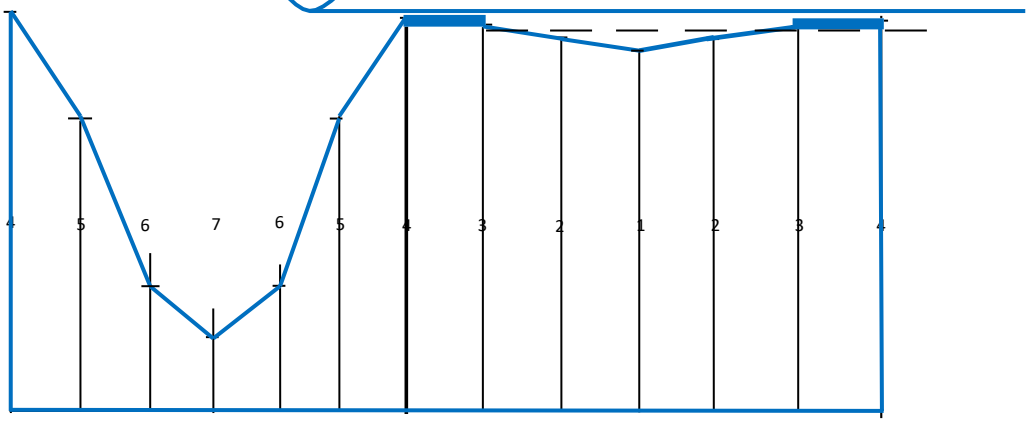


The insert has the same diameter as the main tube. The fold line on the pusher arrives automatically. See A, B and C.



Mallen.
When you knit off the embarrassments from the stick, start with 4, (the joint), take

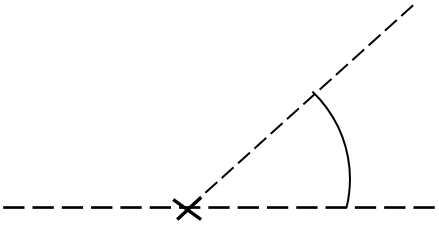
Then go to 5 from baseline, etc.



Make the template as
usually. Start with 4,

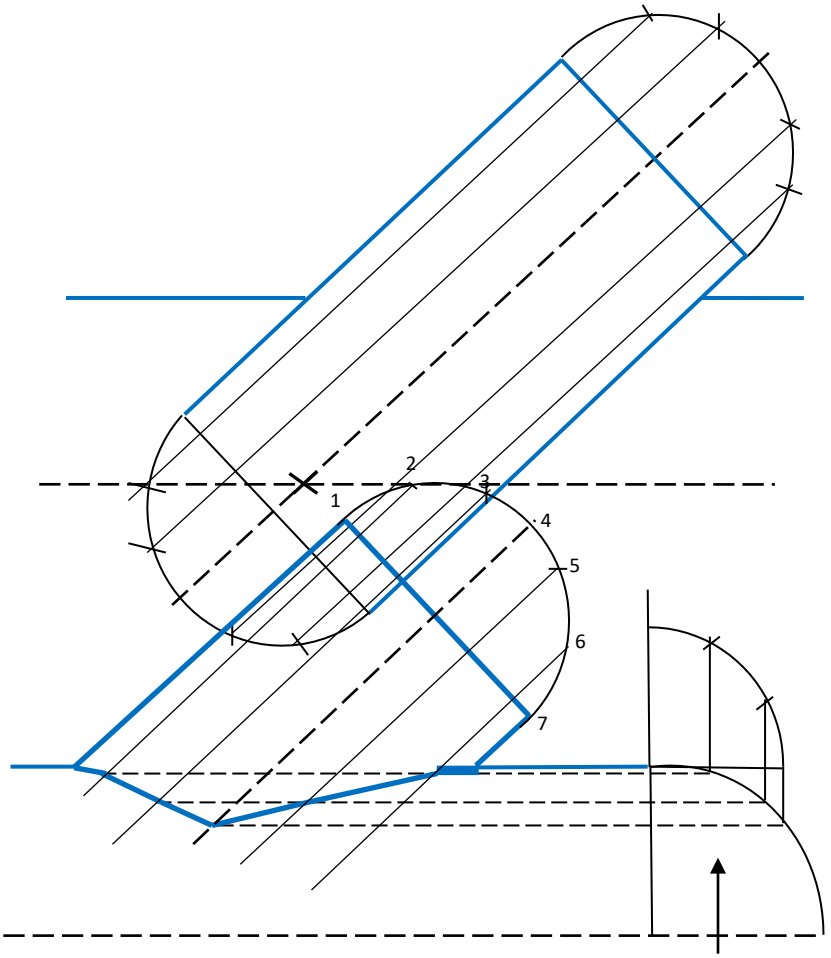
Onstick at an oblique angle, onstick smaller than head tube.

Put out the 573 rule. 45 degrees.
Bagstick dia: 60
Huvudrör day: 110



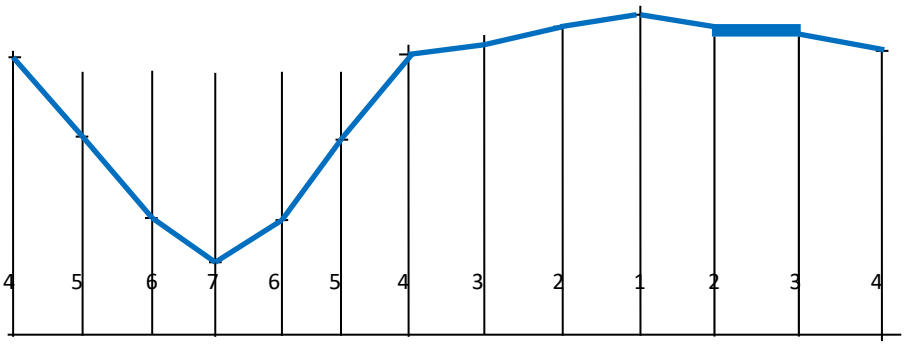
Draw the stick. Start from the center lines. Lower the semicircles, do the split on the circles as usual.

The plug has less diameter than the main tube, that is, the plug does not go down to the center of the main pipe, therefore we need a help view,view left. Draw the onstick in view left, to the right of the onstick. Draw the 1/4 circle, divide, drag the n ed generatrisestowards the large 1/4 circle. Transfer the generatrises from the view-left to the on-the-stick. Where the generatrises "cut" each other, you can draw the fold line. To the folding line,cut off from the base of the stick.



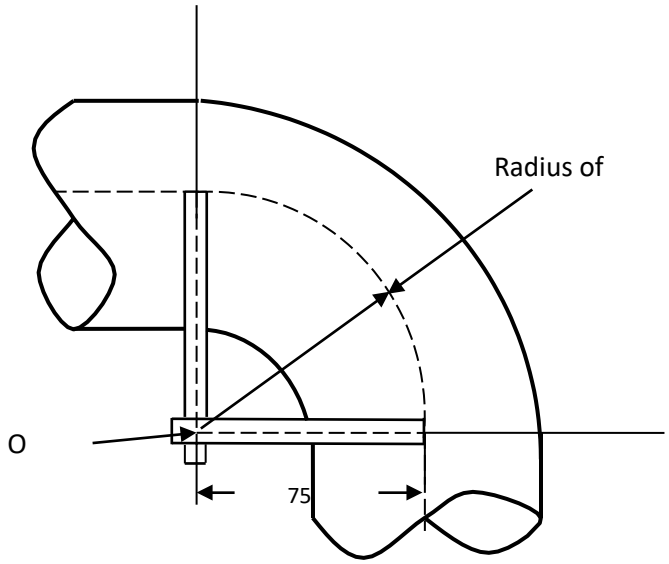
The stick as seen from the side, view left

Make the template as usually. Start with 4,Joint.



Practical measurement of crestedradius of

Böjdia: 60
Radius: 75
Segment: 3+2

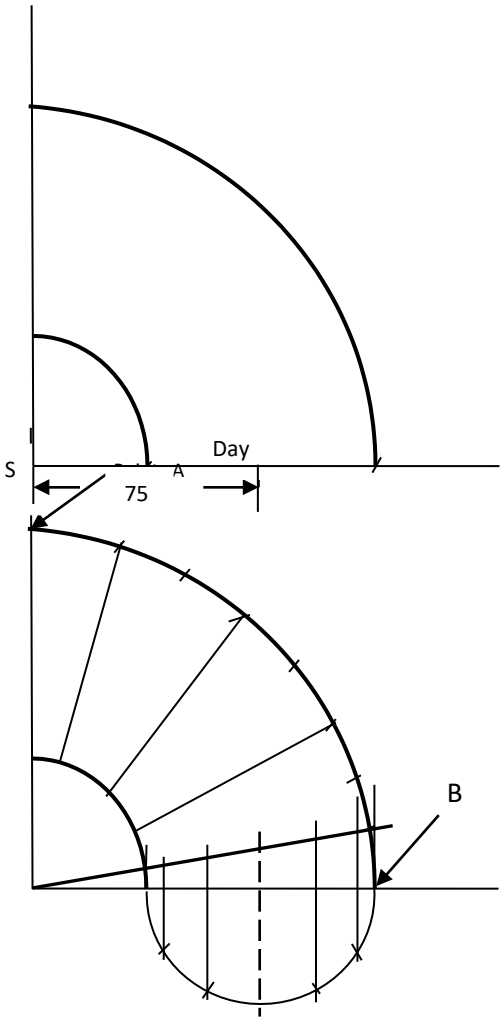


Bends have a long or short radius of curvature. We usually call it the radius of the bend. Place the thumbstock in the middle of the welding hub on the pipe. When you have the same dimensions of thumbstock donates seen from the "zero", you have found the radius of curvature of the bend. In this example, radiuse 75 mm.

Distribution of 90 degree bend.

Draw two lines at 90 degrees. Insert the radius of the bend, 75 mm, from the S-point. Then, insert the diameter of the bend, 60 mm. Pull the arc lines.

nto 6



Think like this: The bend consists of 3 full segments and 2 half segments. Each full segment consists of 2 half segments. I mean, 3 whole plus 2 halves is 8 halves.

Set the passer to what you think 8 steps in the outer arc hits point A, start the pass in B. Usually three passes are enough.

Now you can drag the cutting line from the tip to the first selection in the large arc.

NB! You do not need to draw out the other segments, the cutting height is sufficient.

Distribution of 90

Select the embarrassed rice 1 - 7. Put out the sick supplement, see below,"Calculation of sick supplement". Right now, take the supplement arbitrarily.

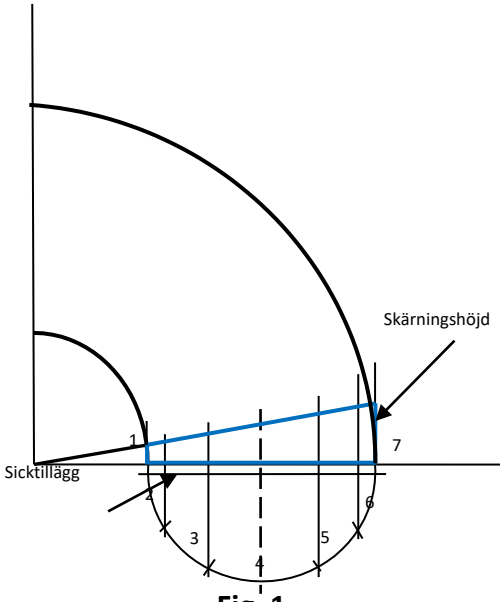
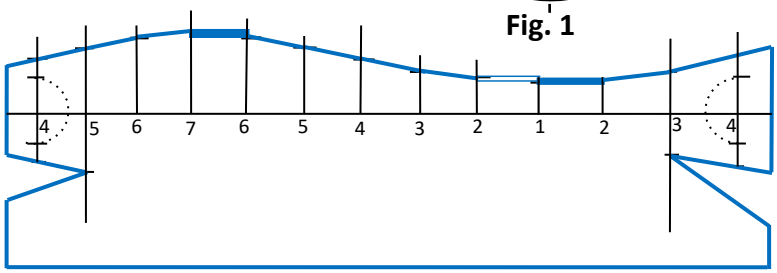


Fig. 1



Knit off the embarrassments from the sickle in Fig. 1 up to the cutting line.

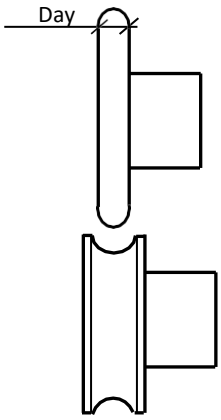
Place the joint 4 at the ends of the template.

When marking the holes in the template, use fitrs from the center line, hit a semicircle, punch the holes.

Choice of sicktrissa.

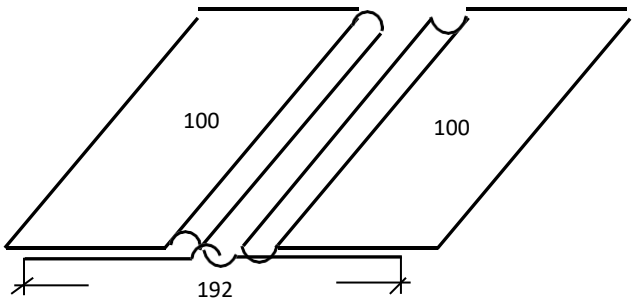
For example: You need a suitable size of threes for E.g.. pipe sweep day 200 mm, which pulley to take?

Think like this: If the over-triss is 4 mm wide in dia, the radius will be 2 mm. If the pulley is 6 mm, it fits the pipe diameter 300 mm.



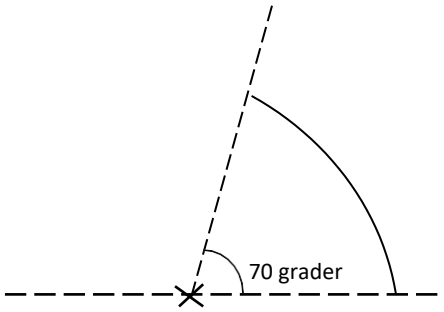
Calculation of sick supplements.
Cut into two pieces of sheet metal 100 x 200. Run an oversick at one end and undersick at the other end.

Fit together and measure the total width. If the width is 192 mm, 8 mm has "disappeared", i.e. 4 mm on each piece of sheet metal. The sickening supplement in the distribution (Fig. 1,) set off 4 mm.

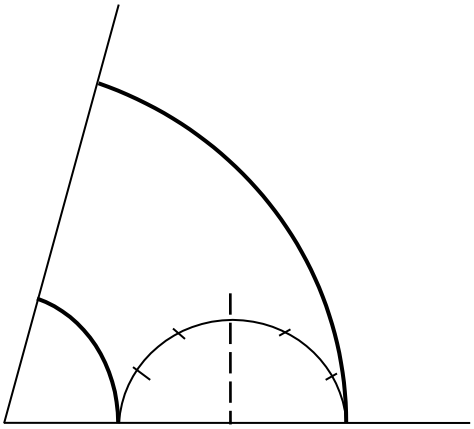


Distribution of bend 70

Radius of curvature: 65
Bend: Dia 75
Segment: 2+2



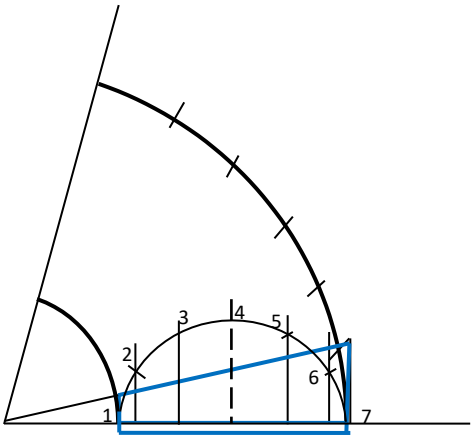
Put out the 573 rule. Select a 70 degree angle.



The approach is the same as for bending 90 degrees.

Select curvature radius 65, pull up the center line. Take the radius of the curved diameter in the fitter, draw out the half diameter.

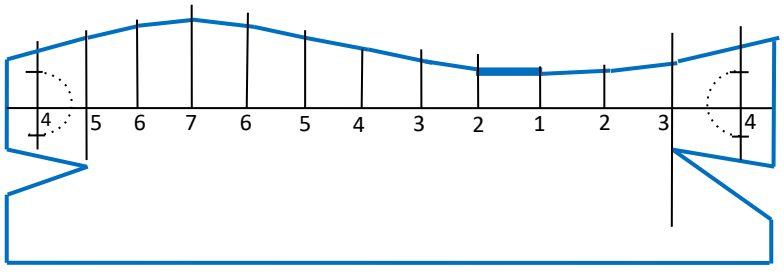
Hit the semicircle up. (Usually we beat the circle upwards in the distribution.) Set the splits as usual.



Put out the embarrasses.

Set the cutting height in the same way as for bending 90 degrees. Keep in mind that you have 2+2 bend here.

Turn the hole punching hole around when punching the holes.



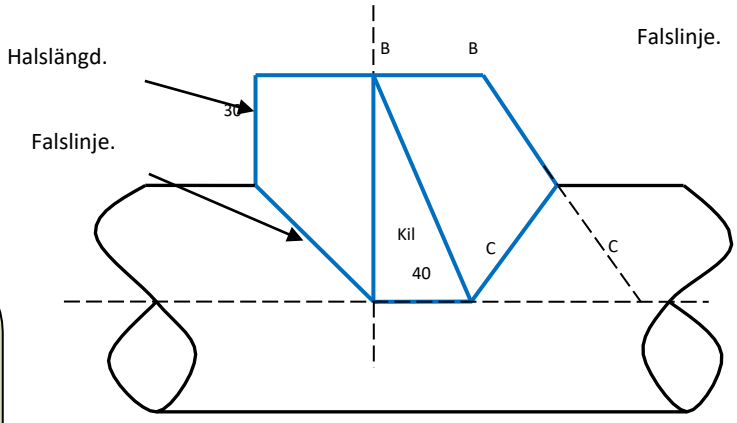
Uddeholmspåstick.

sho
Påstick: The 60 Huvudrör/The 60.

Start with the center lines. Draw out the main tube and the stick with neck lengthd 30.

The fold lines are given when the sticks and main pipes have the same diameter.

Select the wedge width 40. Take the measure B - B, insert at the center line C - C, this to make the lines tilt the same.



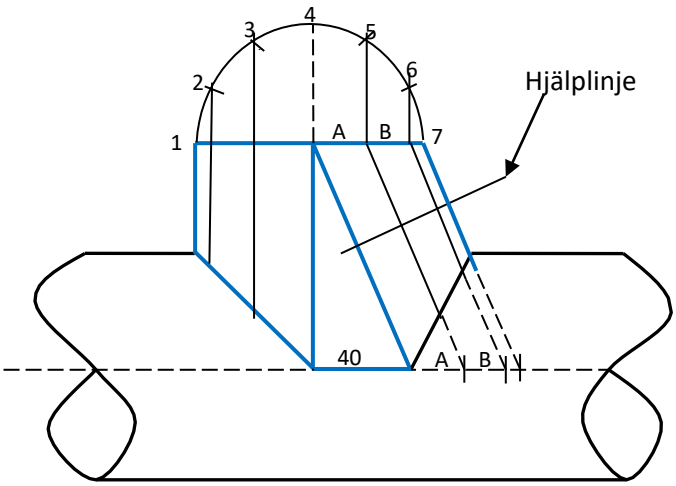


Fig. 1

Lower the semicircle, divide. Pull down the generatrises 1 - 4 to the fold line. To get the 5, 6 and 7 generatrises parallel, do the following:

Take the A-measure, between generatris 4-5, turn off on the center line, then take the B-measure between 5-6, turn off on the center linen
etc. Pull down the generatriserna.

You also need a helpline to knit off to the template. It doesn't have to be in the middle, but at 90 degrees against the generatrises.

Paketböj 1.

Bend: Dia 60
R: 65
Rakdel: 40
3+2 segment

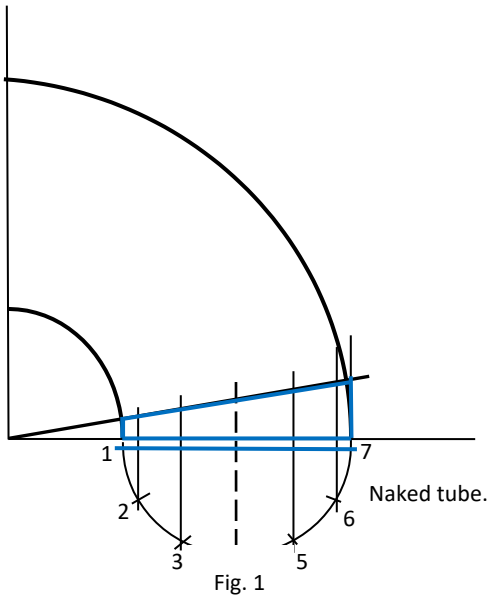


Fig. 1

Fig.. 1. Make a spread on a regular bend.

Fig.. 2. Draw the bend as seen from above. Place the straight parts between the semicircles. Divide as usual. You don't have to draw this view once you've got an understanding of what "thought" is like, but now it's good to follow along.

Put the joint on the 4, walk the lap around. 7A and 7B are like the same line, the line is split in half and pulled out.

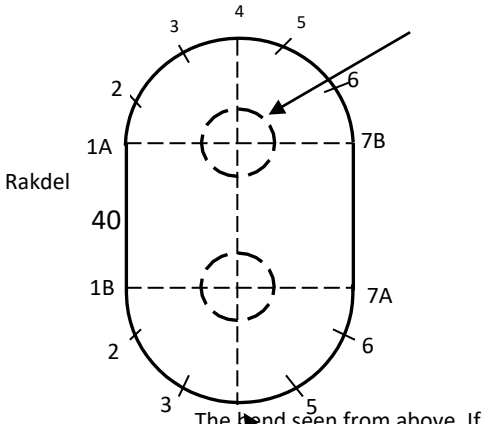
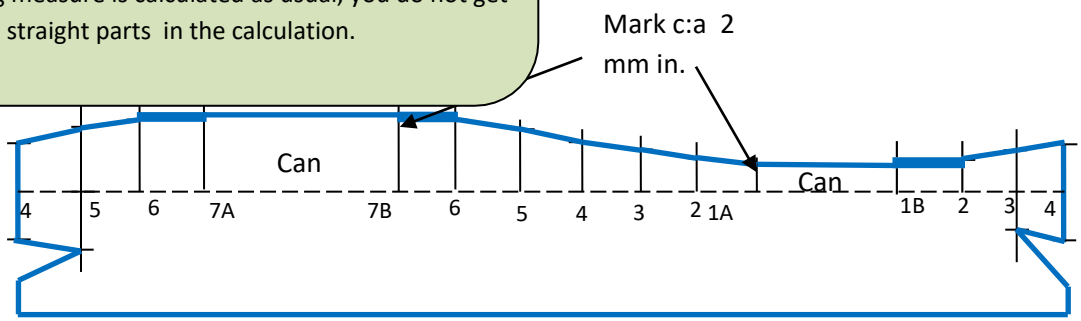


Fig. 2

The bend seen from above. If you turn up the bend, the joint ends up here.

Template. Start by calculating the total circumference incl. the straight parts. Within this measure, everything should fit.

Start with the 4, the joint, walk the lap around fig. 2.
Stic a k from Fig. 1 to the template.
The sharing measure is calculated as usual, you do not get include the straight parts in the calculation.



When drawing the template on the plate, hit a mark a couple of mm in with the drawing needle in 7A, 7B, 1A and 1B. Easier to see where you have bocklinjerna.

Paketböj 2.

Bend: Dia 60
R: 1st Pipe,
45th. Straight
section: 40
Segment: 3+2

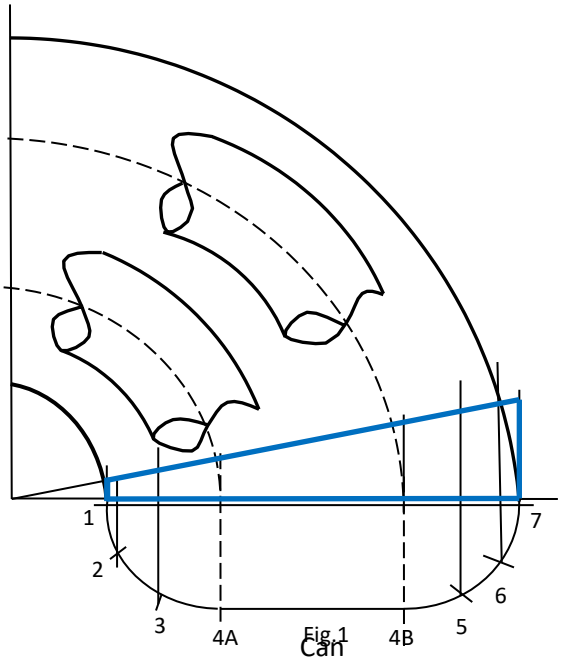
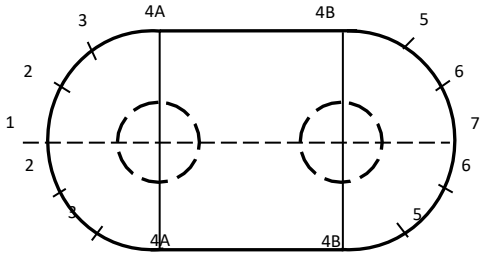


Fig 1

Deploy radius 45 to 1st tube. Draw the arc circle 1/4 part. Insert the shaving part,then draw the second 1/4 circle.

The cutting height is raised, as usual, from the outer arc circle.



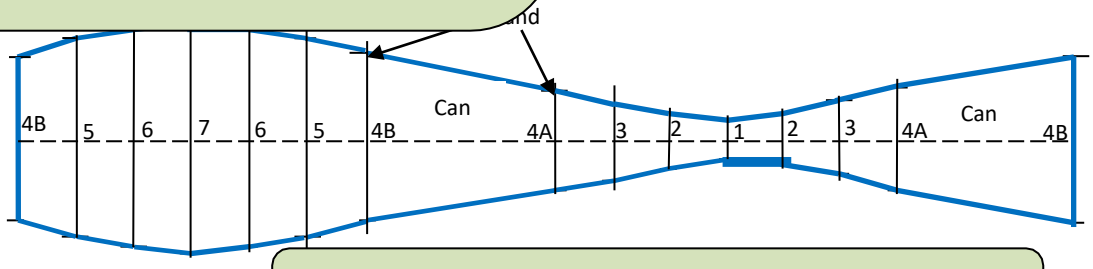
The bend seen from above.

Template. Calculate the total circumference including straight parts, this measure you should stay within.

Put the joint in 4B. When you move from Fig 1 to the template, you must select the top and bottom from the center line of the template.

You calculate the sharing measures as usual. NB! You must not use the shaving parts in the calculation.

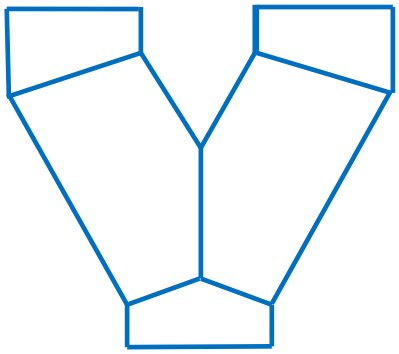
NB! You have to draw the whole segment, otherwise it won't work, much cutting.



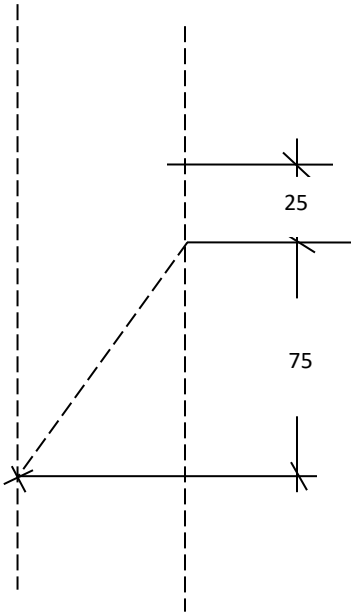
When drawing the template on the plate, hit a mark with the drawing needle

Byxrör liksidigt.

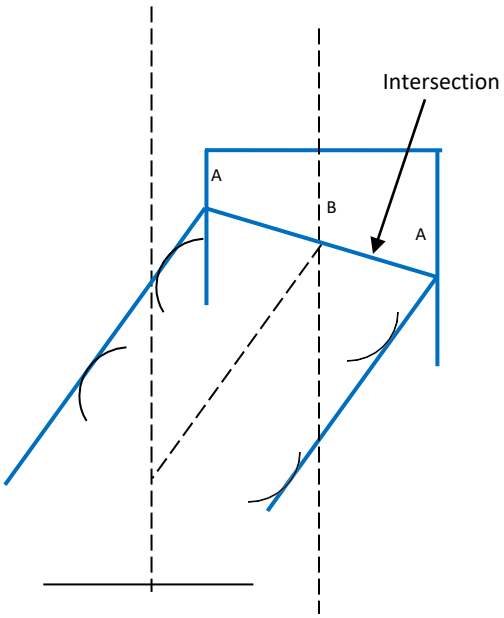
Rördiameter: 60.
Distance between pipes: 100



Start with a center line, select x for the start.
Then pull the center line of the right tube. It is enough to draw out a tube, in this e.g. the right. Follow the measurements and the oblique center line will come for free.

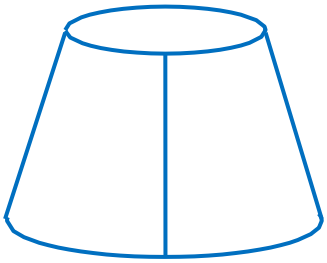


Now fill the pipe(cylinder) from the center lines. To get the oblique pipe parallel, you can use the passer, hit auxiliary arches.
The cut A-A becomes automatic after filling in the pipe from the center line. If you have drawn, the line should also be ported in the middle of centrumklykan B.



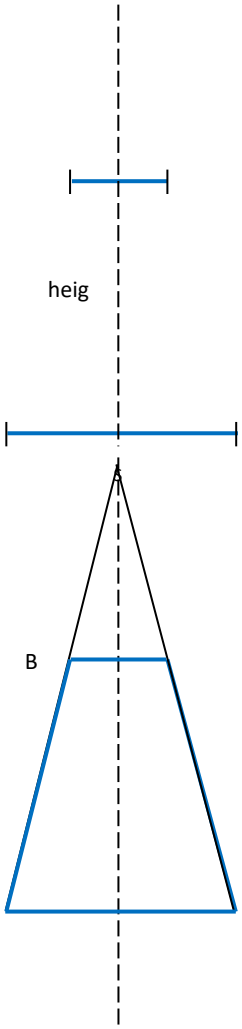
Distribution of straight mutilated

Lille day: 45
Large dia: 110
Height: 80



Start with the center line of the cone.

Drag the baseline (large dia,). Set out the height and small diameter.

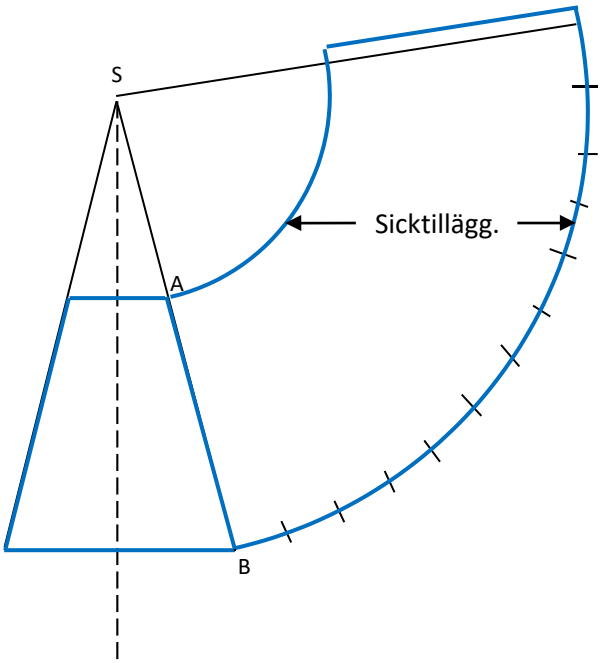


Draw line A - B against tip S. Do the same on the other side.
If you drew correctly, both lines should meet in S.

Template. Put the passer in S down to B, hit the circle arc. Do the same with S to A.

The length of the arc circle is calculated as other circumferences: Large dia x pi divided by 12 = the splitting measure.

Step 12 times after the Great Arc Circle.



NB! You do not need to draw out the semicircle.

Obliquely cut

Lille day: 40
Large dia: 110
Height: 80
Skärningsvinkel: 27 grader

Start by drawing a regular cone. Lower the circle and divide as usual.
Pull up the generatrises towards the baseline, then towards the tip.
Set the cutting angle, use the 573 rule.

Set real lengths.
The actual length can be found in the side of the cones, never in the middle, because the cone then leans away from you. Ex: Where the matrix 3 goes through the intersection line A, drag the line to the left. If you measure from the tip to the 3 at the edge, that line is significantly longer, i.e. theright length of the 3's generatris.

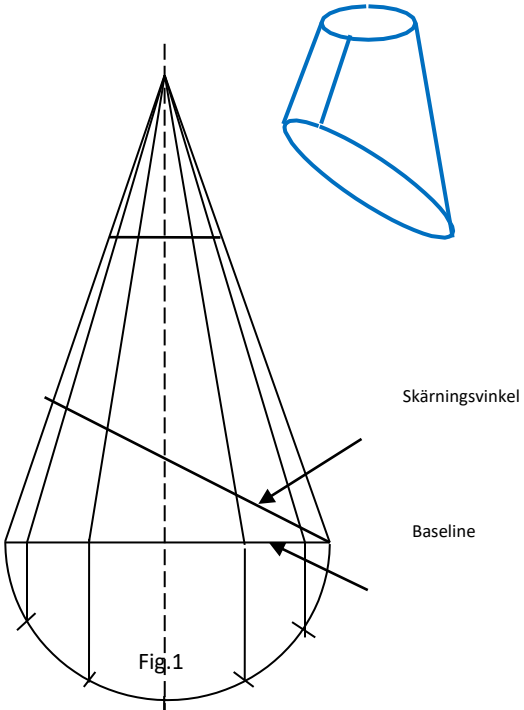


Fig.1

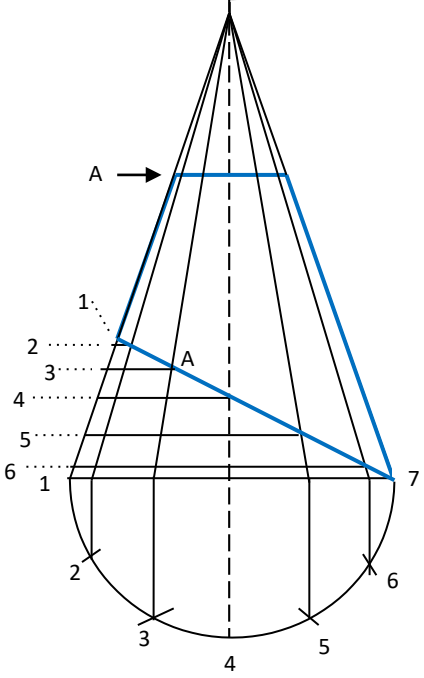
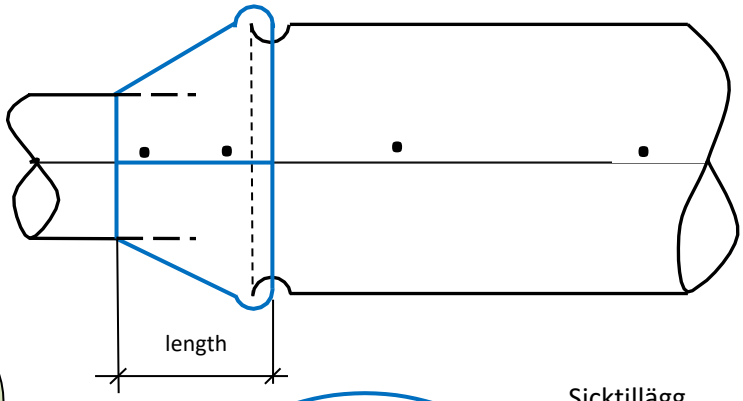


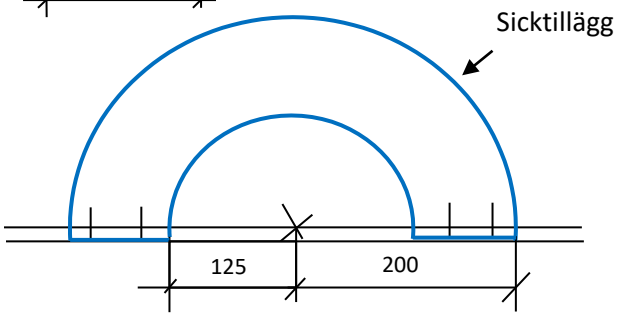
Fig. 2

Quick cones without given height or

Small tube: Dia 125
Large pipe: Dia 200

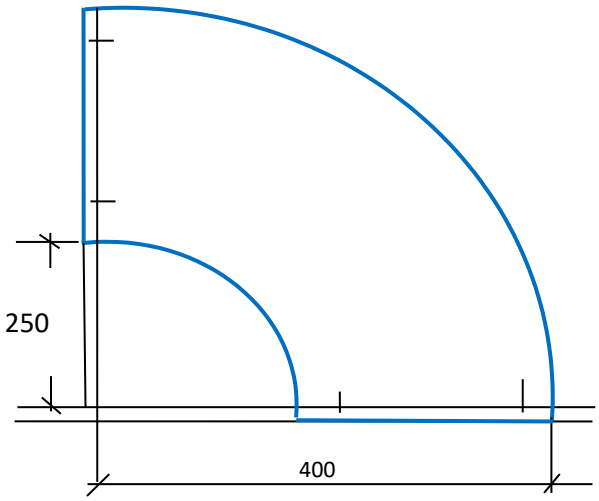


With this type of quick cone, the length, or the height, on the cone as it becomes, is unafable.
Rita överlappen.
Set the fitt to 200 mm, pull the large circle.
Set the fiter to 125 mm, pull the small circle.
Mark the punch holes with the passer. Make sick additions to the large circle, the same zigzagillägg that you use for pipes in day. 200 mm.



One x him. 180

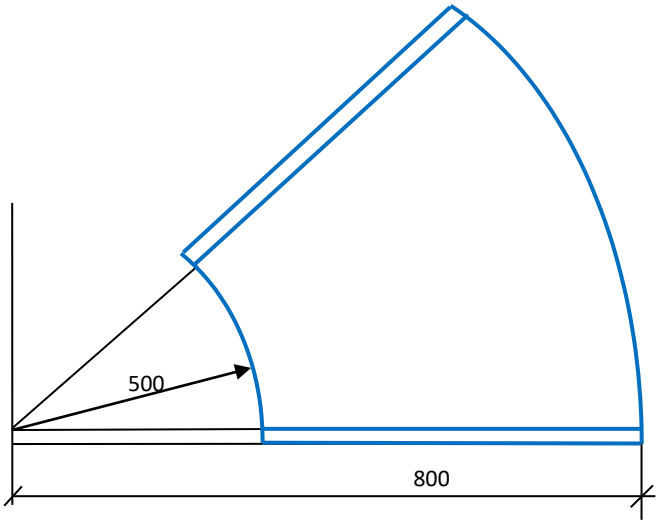
If you want a little longer cone, you can run with this variant.
Take 2 diameters in the fiter, i.e., hit the large circle by 400 mm and the small one by 250 mm.
Now you get to draw the circles at a 90 degree angle.



Two times him. 90 graders

If you want even longer the cow, run this variant.

Take 4 x dia, hit the big bow. Same with the small arch, 4 x dia.
However, at a 45 graders angle.



Four times him.

Transition round to square, centric.

Square: 100 x 100
Day: 60
Height: 80

Draw the transition from above.
Divide the circle into 12 parts.
Pull the embarrassments from the corners.

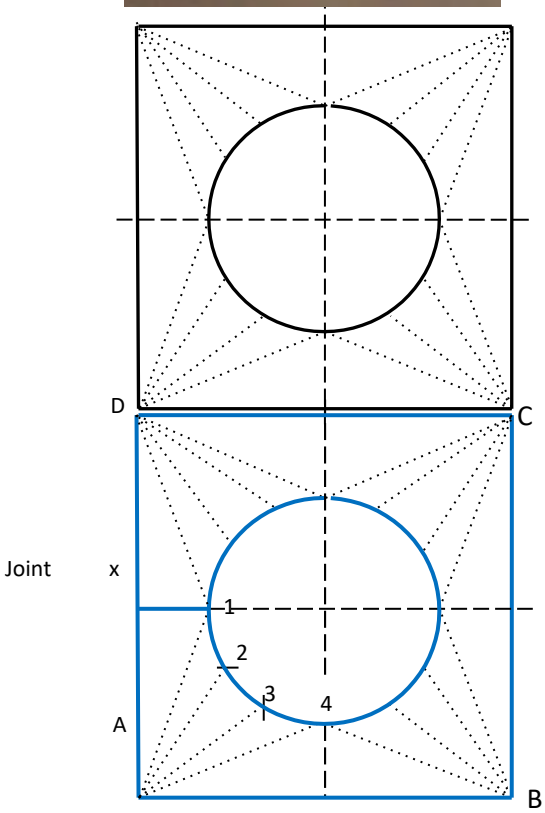


Fig. 1

Decide where to have the joint, select, x.

Select corners A - D.

Mark the embarrasses by 1 - 4. Each "quartz" is similar to the other, therefore it is enough to mark a quarter.

Actual lengths:

Ex: To get the right length from corner A up to 1st in the circle, we need a height chart.

Keep in mind that the circle is 80 mm higher than the square.

Draw a baseline and a line up to 90 degrees. Fig.. 1,take the passer in A up to the 1, turn off on the baseline, fig. 2, mark A1 and 4. Both 1 and 4 have the same length in Fig.1. Do the same with 2-3 and the joint x.

From A1-4 up to the tip you have real length.

The template is available on page 21 A.

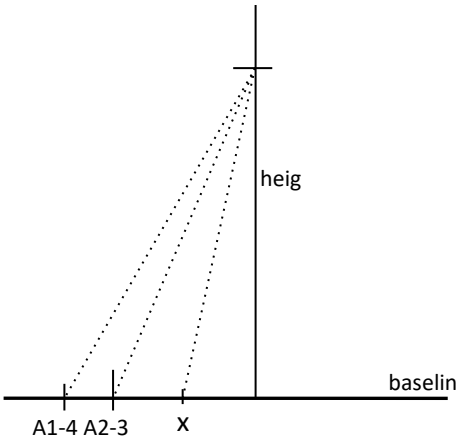
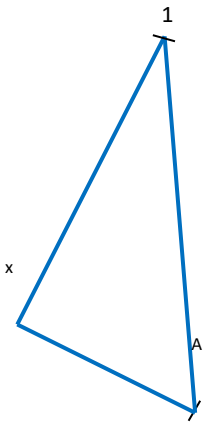


Fig. 2

T… …plate.

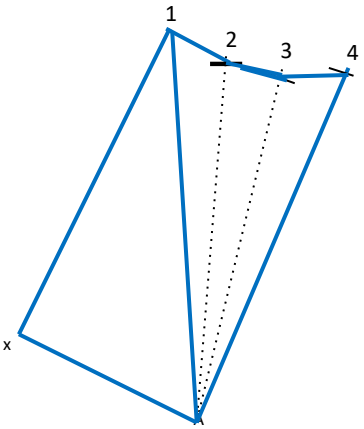
Deploy the joint x 1, get real length in the diagram, drag the line a little obliquely, the template will swing a little around to the right.
The length x - A is from Fig. 1, turn off from x to A in the template.
Now you can drag line A to 1



See Fig.2, touch the fit from 1 to 2 in the circle, set the template from 1 to 2 and hit a mark.

Take A2 in the chart, turn off the template from A up to 2, hit a selection.

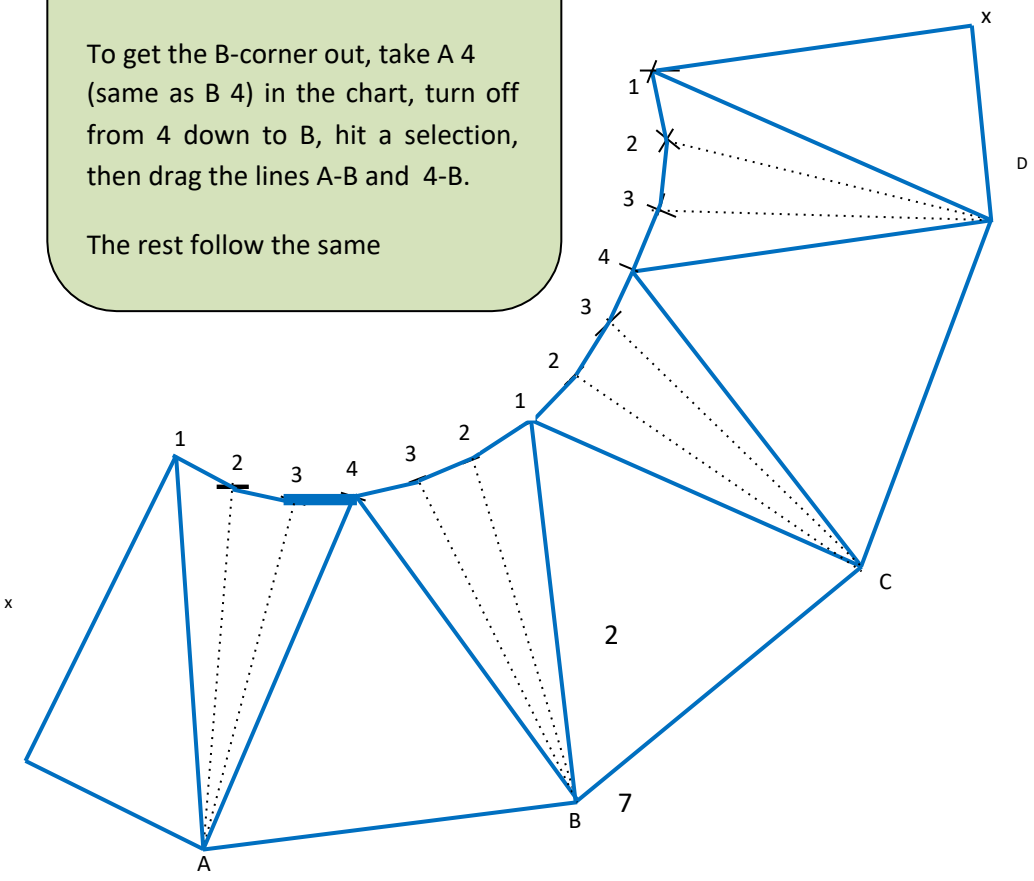
Then take A3 in the chart, (you'll see that 2 and 3 are the same length.) turn off the template from A up to 3, hit a selection



Now continue from A to B, hit a marking, take the

To get the B-corner out, take A 4 (same as B 4) in the chart, turn off from 4 down to B, hit a selection, then drag the lines A-B and 4-B.

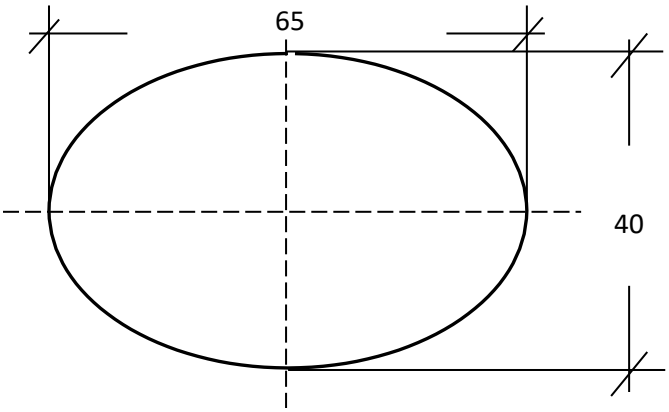
The rest follow the same



Oval Hole Clipping

Clippings of oval holes happen now and then.
For example, valve covers where the spindle breast is oval and you need to

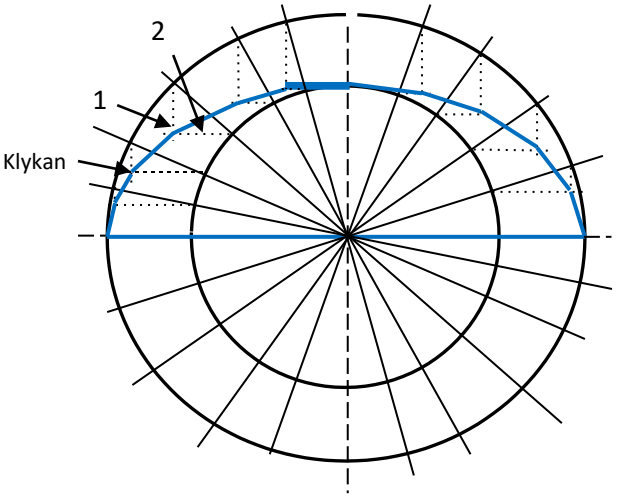
Measure the large width, dia, on the oval.
Then measure the small width,



Start with the center lines.
Draw up the big dia, and then the little one.

Then draw several diagonal lines, the more dashes, the better the precision.

Drag the line 1 vertically and line 2 horizontally. Where they meet, (the cleaver) makes a point. Then draw a line, blue, towards all the points.



Transition, oval to

Draw the oval. (See page 27).
This distribution then follows the same system as square to round, (see page 23).

Divide the outer oval A,B,C,D, pull the generatrises to the center of the circle, then you will get the "free" split on the circle.

Keep in mind that the circle is significantly higher than the oval.

It is enough to divide a 1/4 part, the more splits the better the precision.

Now we have to add the "diagonals" (red marked). From A to 2, B to 3, etc. Dash the diagonals, it's easier to keep track of the lines when you make the template.

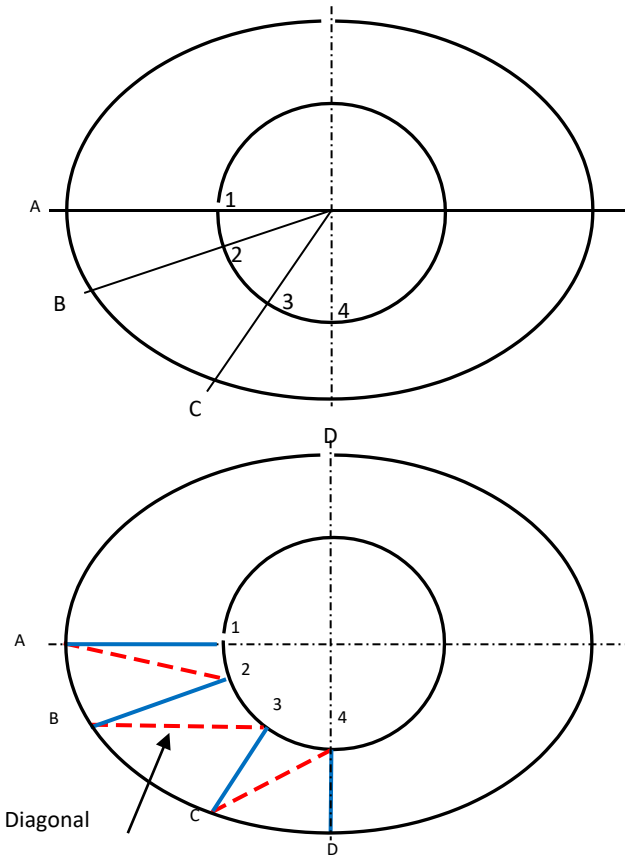


Fig. 1

Height chart, same as page. 25.

Take A1 in Fig.1, turn off to the right of the chart, make a selection, type A1. Real length is now from A1 up to the tip. Now do the same with B2, C3, etc.

The dashed diagonals are set to the left in Fig.2

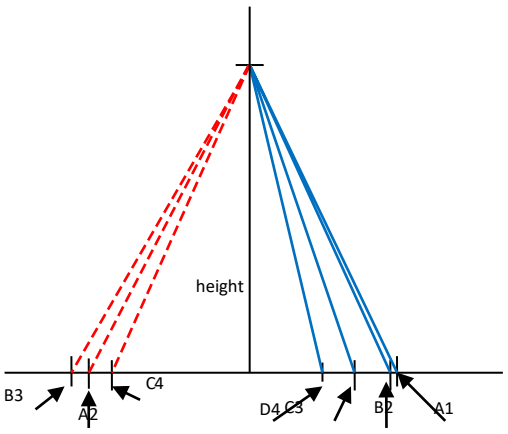


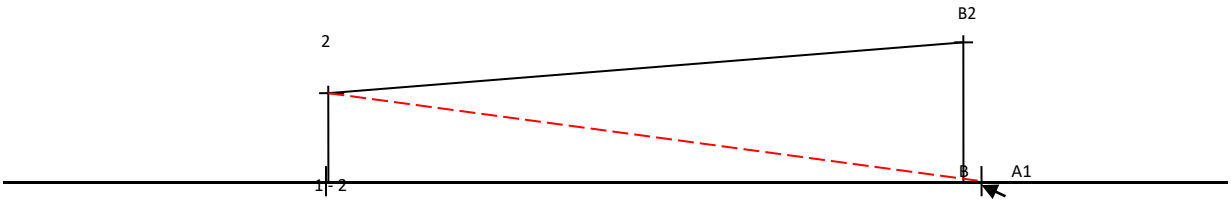
Fig. 2

Parallel obliquely cut cone, diagram.

Fig.1, Go from 2 down to B, deploy on the baseline.

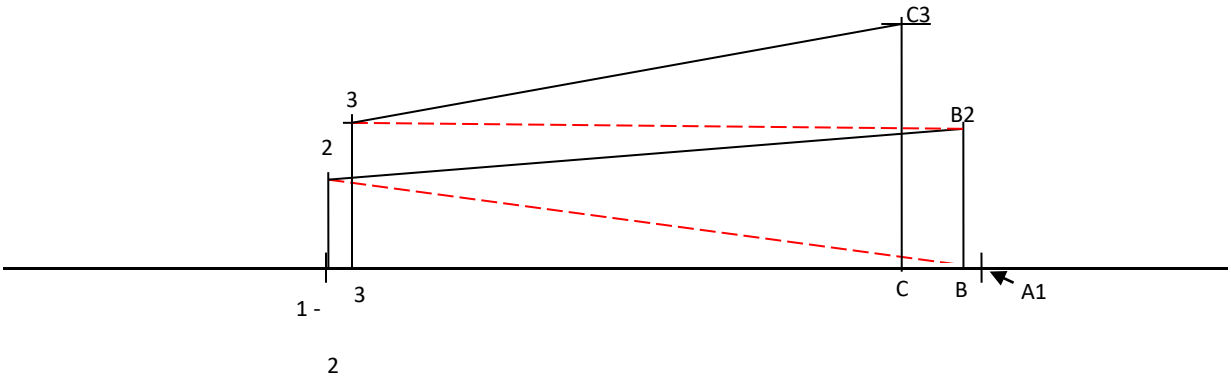
Take height B down to B2 in Fig.1, pull up the line from the baseline, mark by B2.

Now drag a line in the chart, from 2 over to B2, actual length.



Go from B up to 3 Fig.1, diagonal, turn off on baseline, from B, mark on the left, 3rd.
Draw a line from 3 in the chart. Take the height in a small circle from 3 to 3, mark off the 3.
Drag the diagonal from 3 to B2.
Now go from 3 in Fig.1 to C, fullstroke, mark off in baseline from 3 to C. Pull up the line from C in the diagram, take the height C-C3 in Fig.1, mark C3. Drag the actual length from 3 to C3.

See the next page, here's the entire bar chart drawn, as well as the template.



Infällning "öronlapp".

Start by drawing the circle, dia on the tube.
Set the recess depth.
Divide the circle as usual.

When to measure a recess, or incision, (as some call it). Get used to always drawing the circle first.
The recess can end up anywhere on the pipe. The same applies if you make a beamed recess on a pipe or in bend.

Start by drawing 2 lines, Fig.2.
Take measurements between 4 and 5, in Fig.1, deploy on the lower line.
Next, go from 5 to A in Fig. 1
Mark A on the line.
Then get out of A, Fig. 1, across to the next A, mark on the line, then select 5 and 4.

Length of inf.

Fig.. 3. Draw a line straight up from
A, even the next A.
Then continue with 5 and 4. Then

Take the radius of the circle from Fig. 1. Draw the circle from A to the next A.

Make an extra addition of 10-15 mm.

The recess will be firmer.

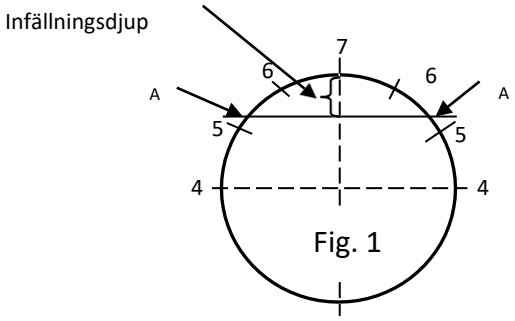
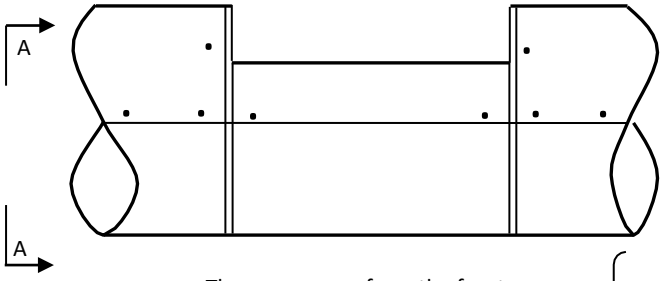


Fig. 1

cut

A - A

Recess a seen side



The recess seen from the front.

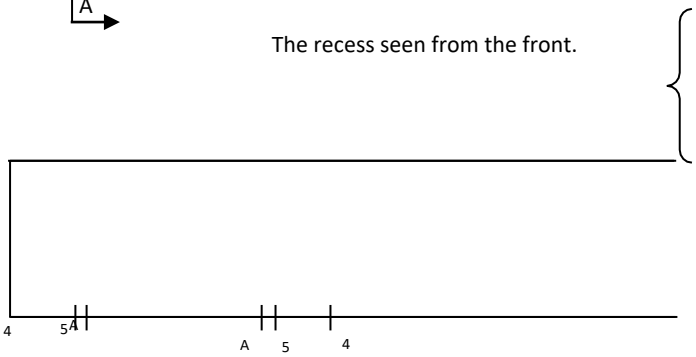


Fig. 2

Bocthat c:a 70 degrees, before rounding

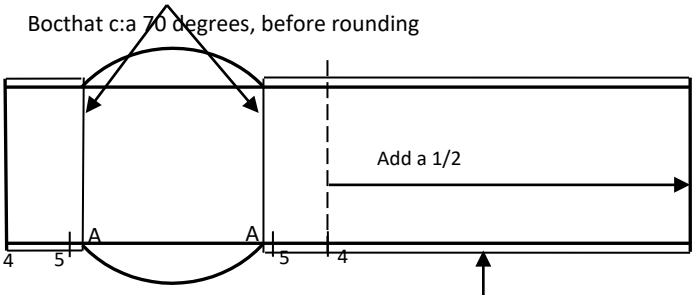


Fig. 3

Extra add-ons 10-15 mm

Recess, beamed on cylinder tube

Start by drawing the circle, dia on the tube.
Set the recess depth.
Divide the circle as usual.

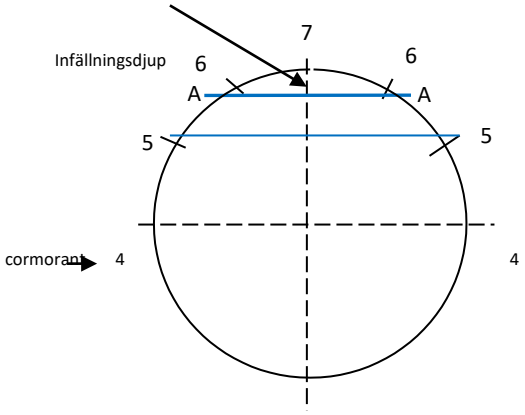


Fig. 1

Fig.2. Start from the centre line, insert 4, 5 and A from Fig. 1 on the center line.
Continue with 5, 6 and 7, lower line.
Then pull line A to 7.
Take the passer from 7 to A, hit a small arc to the right A. Take measurements from Fig.1 A to A. Deploy in Fig.2 with an arc that cuts the arc you just made in A.
Now you can drag the lines and get out a triangle.

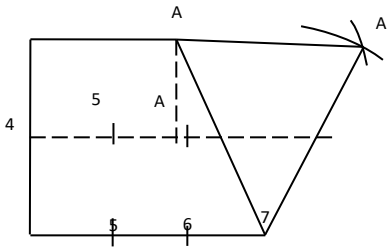


Fig. 2

Now you're going to bring out the new center line.

Start by dividing the A-A section into the triangle in half.

Hit the bow B.
blue mark.
Then drag the new center line from the new split line you made in the triangle in the center, and pass B, see red mark.

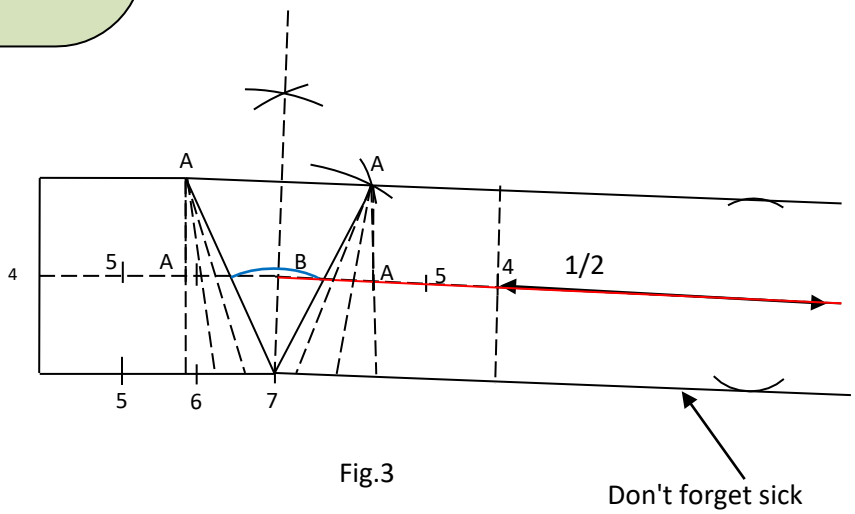


Fig.3

Recess in

Draw the circle to determine where the recess ends up, see A-A.

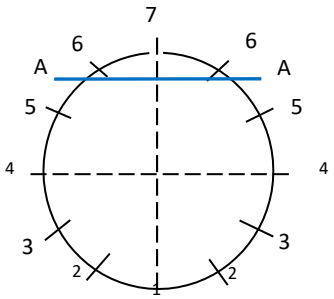


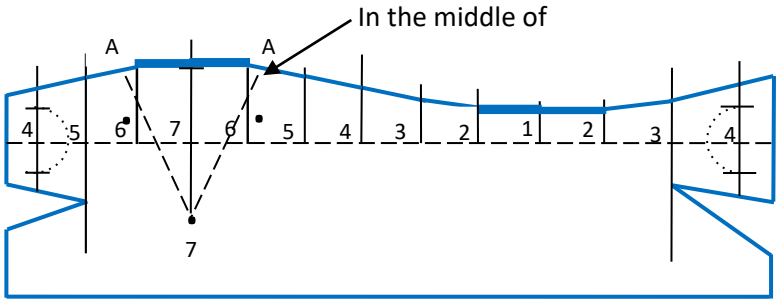
Fig. 1

You don't need to make a new template. Are you in the position of getting an "obstacle" in the bend. Bring out the bending template, mark up the triangle and "twist" the template.

The cormorant starts on the 4th. In Fig. 1, the inset A starts a little before the 6 and ends a little after the 6.

Hit a marke with the jam in the template a little before the 6, measure with a passer in fig.1, from 5 to A, the same on the other side. The template has sickening extensions, try to take in the middle of the sick extension. (Make an assessment.)

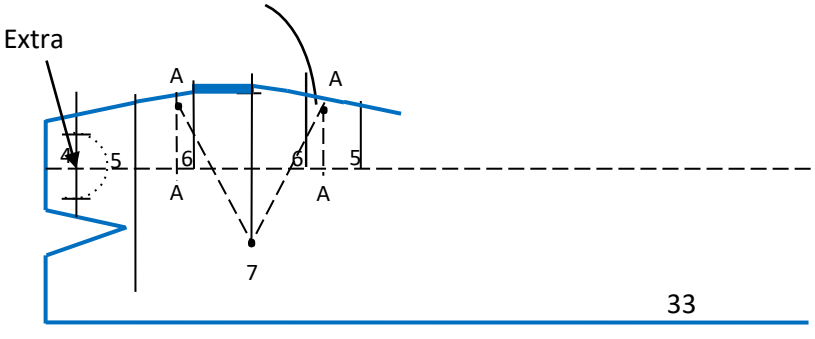
When you bring out the 7, put the passer in the center line of the 7th in the template. Then measure up to the 7, turn down to the new 7, hit a mark. You've now come up with a triangle. The next step is to "twist" the template.



an extra hole in the 4 on the center line of the template, do the same on the other side.

Center the template after the center line. Draw the template from 4 to A, hit a mark in A, even in the 7. Flip the template, draw from 4 to 7. (Don't forget to draw the holes.)

Before "twisting" the template, you must set off the recess length from fig. 1. Take the measure A-A with a fit, insert the passer into the template in the first A, (point), hit an arc on the plate, turn the template again, put the seer in the hole of the 7. Now you shouldride the template a little upwards until the punk A in the template meets the arc, hold and draw the top part of the template, then turn and draw off the lower section of the template. You have now come up with a middle piece.



Technical

Start with the center lines.
Put the height and radius of the jack.
Draw the line A-A.
Put the passer in B to A, hit the big arch upwards.

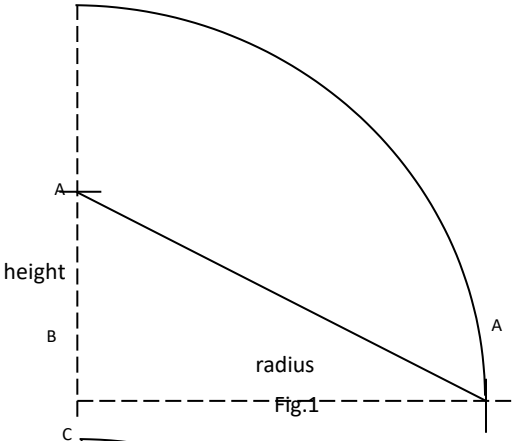


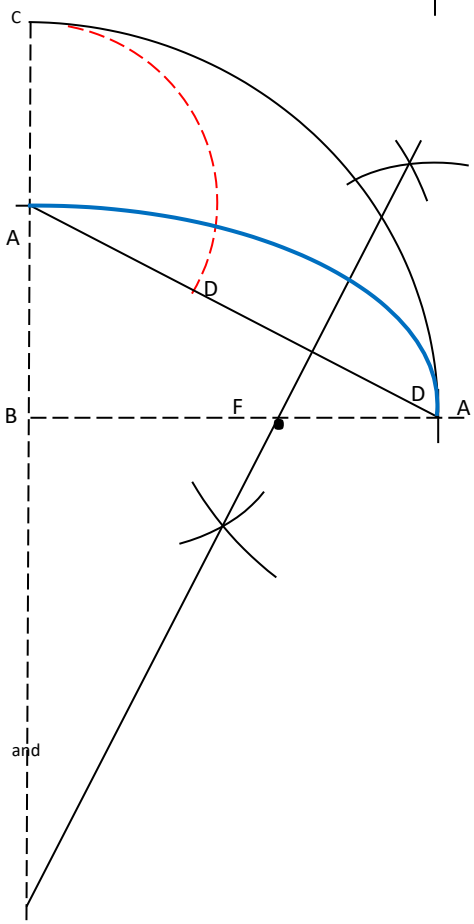
Fig.1

Now put the passer in A up to C, hit an arc to line A-A, red mark.

Divide the D-D section in half. Drag a center line through the "cleaths", extend the center line down to E.

Small radius blue: Put the passer in point F to A, hit the small arch.

Large radius blue: Put the passer in E up to A, after the center line, hit the large arch to the small arch. You've now produced half a sentence.



Draw up a cathedral, see "Technical Chapter"!

Radius: 100
Height: 50

Divide the arc into suitable splits, too far between splits will result in less precision, because tight between the markings will be most difficult.

In this case, there were 11 divisions. You don't have to "dot" the top of the gable.

Pull down the generatrises, distinguish 0-11. Fig.. 1 you see the verdict from the side, (vertically) Fig.2 semi-segment you see from above (horizontal)

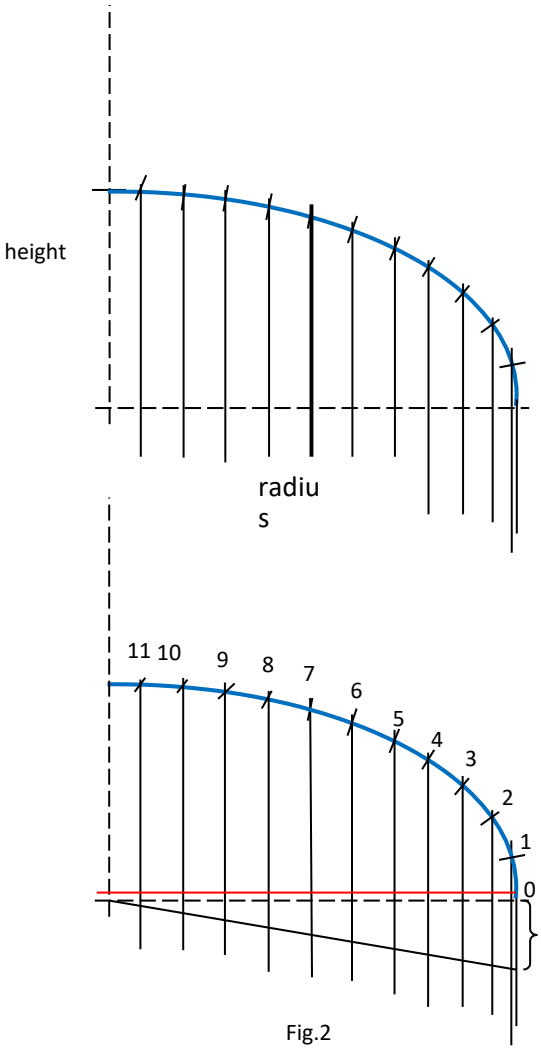


Fig.2

Calculation of the number of segments.

Think like this: A sentence with a diameter of 400 is 18 segments suitable. For every 100 mm that the sentence increases in diameter, add a tough one.

Ex: Dia of judgment. is 1200, then there will be 8 more segments, 18+8, tot 26 segments.

Calculation of the segment width.

Figure out the width of half a segment: Ex:
The diameter of the judgment is 1200mm.
Day x pi/26 segment =144.92/2 = 72.46

Before you start with the template, you need to bring out the sick extension, see the distribution of the bend.

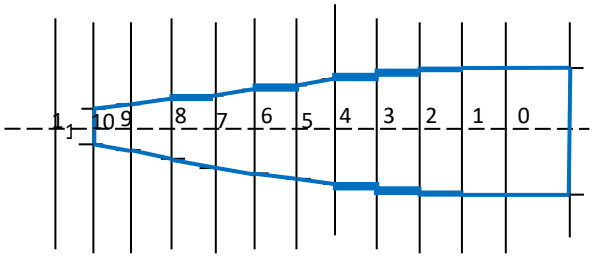
Add the zigzag, see red line.

Kupad domgavel, mall

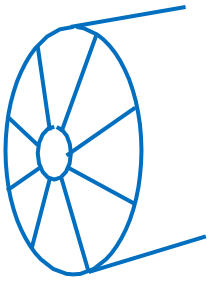
Start with a center line. Put out the overlap, you'll have to customize it.

See Fig.2, take the fitr dimensions between 0-1, step off on the center line 11 times. Pull the embarrasses. See Fig.2, take measurements from the sick extension down to the line for the half segment. Place a marker fromthecenter line in the template at the top and bottom. Do the same until 10:

You don't have to set off for the 11, usually it's the badge at the top of the verdict. Cut off the template where the tip is 35mm wide.



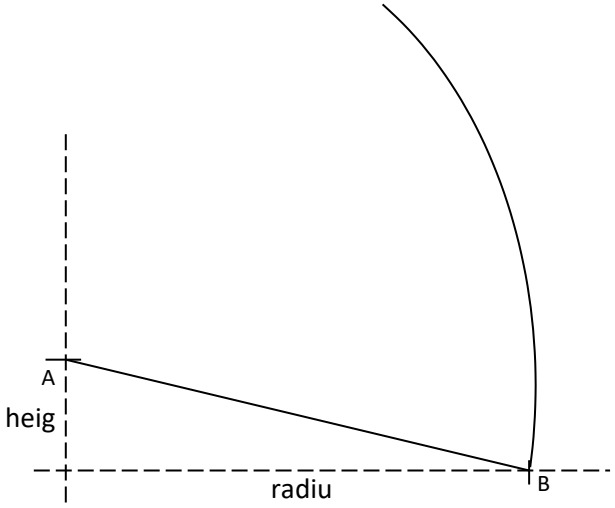
Conical



Start with the center lines.

Put the radius on the gable, then the height of the gable. Draw a line between A and B.

Put the passer in A to B, hit an arc.



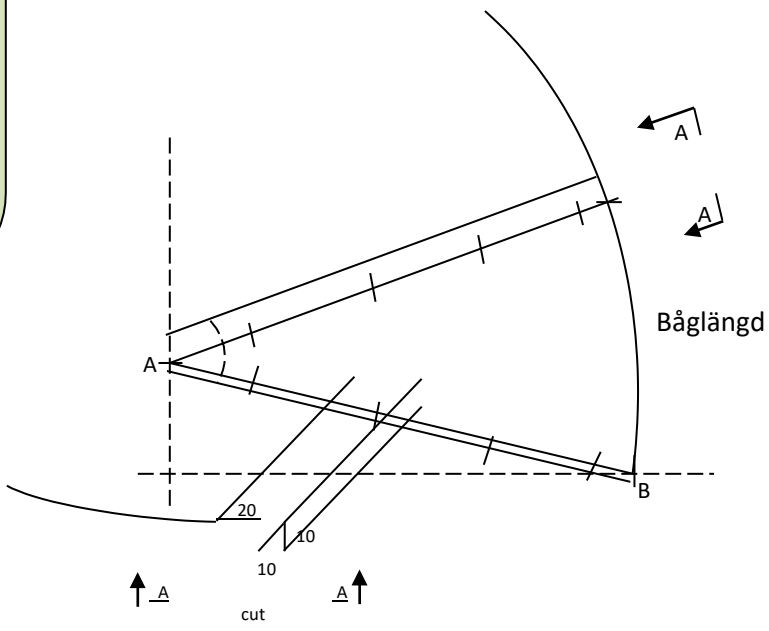
Calculation of "cake piece".

Diameter x pi / number of pieces = arc length of the "cake piece".

You can divide the arc length by E.g.. 10 and step out. You can lay out the thumbstock and mark off.

Make additions for overlap in this position, including extra additions for the stag edge and highlight the holes.

Select and cut out the hole at the top. In any case, you should make a sealing tray.



Round the plates slightly before bending the edge of the brace, otherwise it will be difficult to mount the last piece.

Bend a stag edge on each piece of cake for better stability when riveting the pieces.

notes

notes

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