Leica 3D Disto

Pool Covers

- when it has to be **right**

Leica Geosystems

Step by step using the 3D Disto

What do you need to know?

Pool Covers:
The complete area for the pool cover – Width, length, area, curves, steps, cut outs

Current methods:
What has to be done is that measurements using a roller tape or a steel rule have to be carried out, in some cases where shapes are irregular a template has to be made and then taken back for fitting. The measurements have to be inputted in a CAD software to be designed. These then have to be taken back to the site for checking. A mistake with the measurement or a figure inputted wrong can be costly.

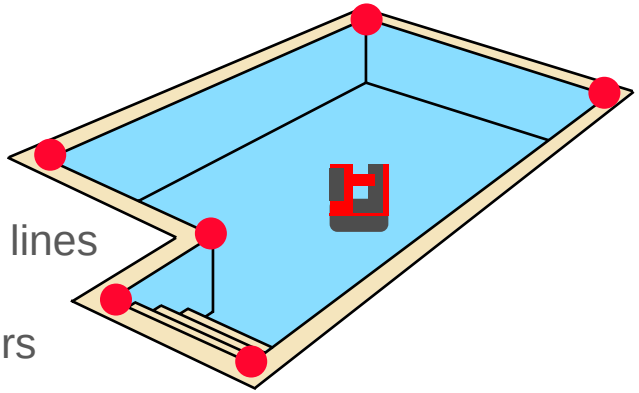
In this tutorial we will show you how the Leica 3D Disto will save you time and money and reduce the amount of workflow during the process.

Step by step using the 3D Disto

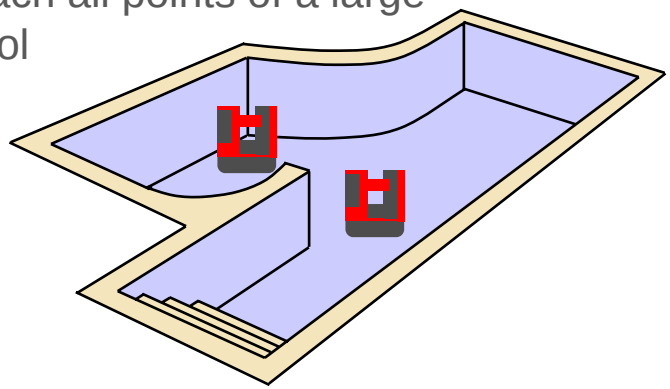
What kind of pool?

The tutorial handles different workflows, depending on the pool's geometry:

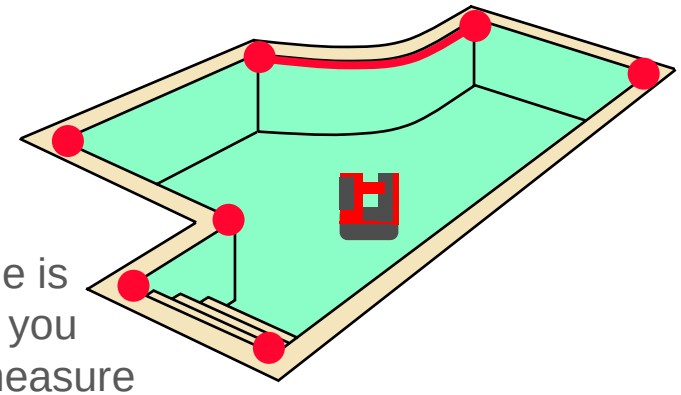
Straight:
The pool's outline consists of straight lines → you just need to measure the corners



Large:
You need to change the 3D Disto's position to reach all points of a large pool



Curves:
The outline is curved → you need to measure the shape



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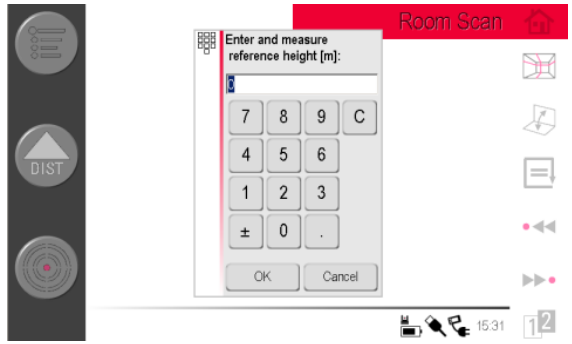
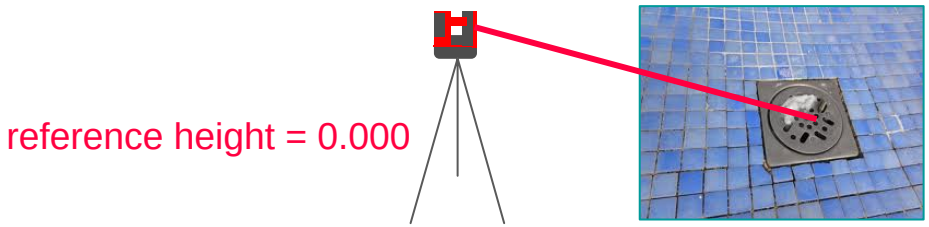
Reference height

Step 1 - Pool Covers:
Set your 3D Disto unit on a flat surface or a tripod. Try and ensure that you can see all of the surface that you need to measure.

Select “Menu” – “Application” - “Room Scan”



The 3D Disto prompts to measure a height reference. Measure any object, e. g. the floor drain as zero-level.



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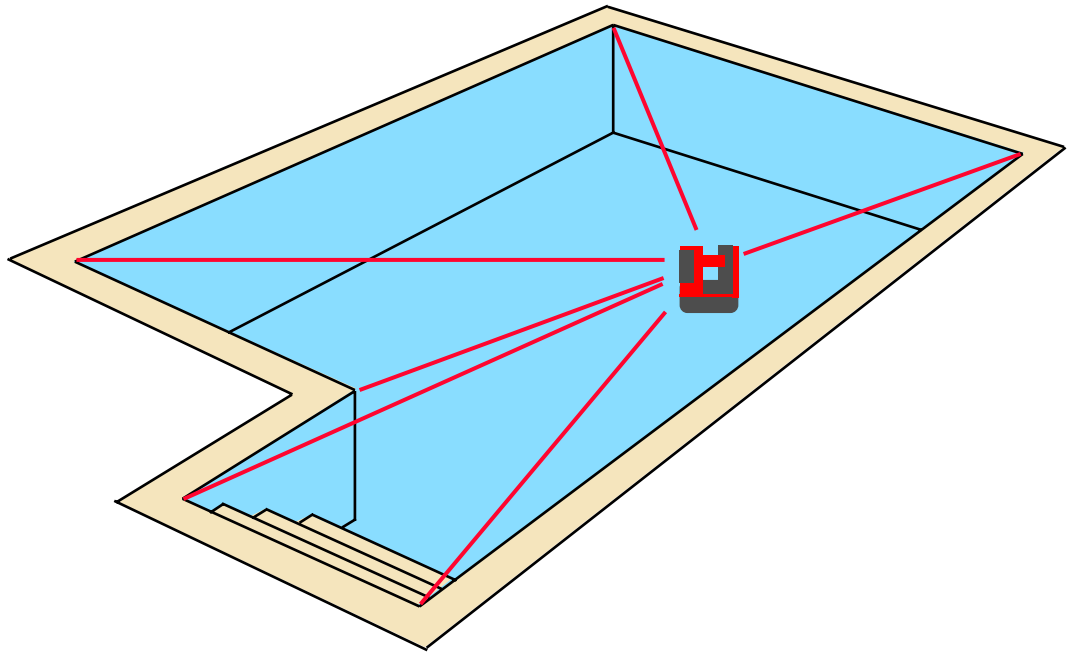
Measuring straight outlines

3 minutes

Step 2 - Pool Covers:
Measure corners and other points of interest. Use the live-cam-viewfinder to target. All data is stored three-dimensional.



Ready?
Save the measurement, plug USB stick and press the File Manager's EXPORT key to generate a 1:1 DXF file. It will fit to your preferred CAD system.

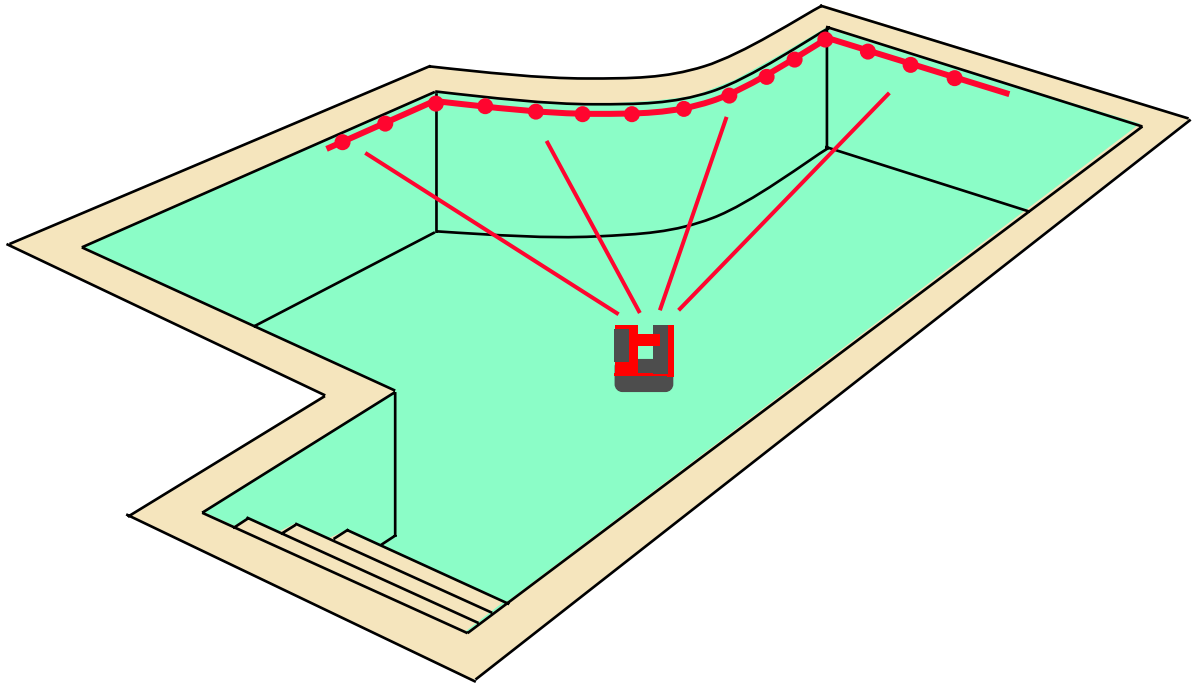
Not yet! I want to scan!
Then go on with step 3 before you export the measurements.

Step by step using the 3D Disto

Measuring a curved outline

If the pool has a curved outline you can easily measure the shape using the scan functions. The 3D Disto automatically measures points on a constant level with a fix spacing.

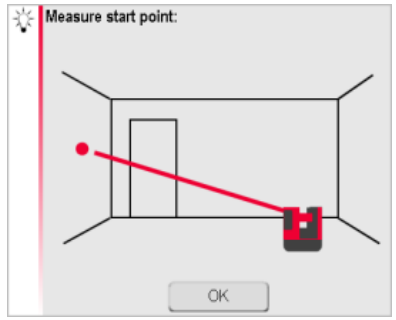
Scanning is also possible at straight pools. It takes a longer time and you get much more data than necessary but you can do other work meanwhile.



Step by step using the 3D Disto

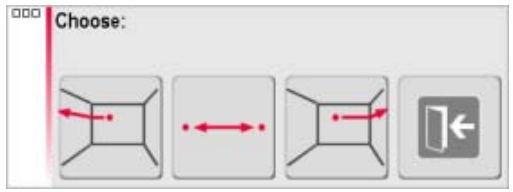
Measuring a curved outline

You want to measure around an inch below the top of the pool line. Follow this procedure:



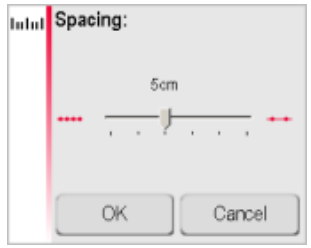
Step 3 - Pool Covers:
Choose a horizontal scan.

Measure your start point, choose scan direction left or right.



Choose the units that you wish to scan in. On the longer straighter lengths then 50 cm is ideal. Switch to smaller intervals for details.

Via BREAK key you can change the scan interval at any time to measure intricate parts of the pool area.



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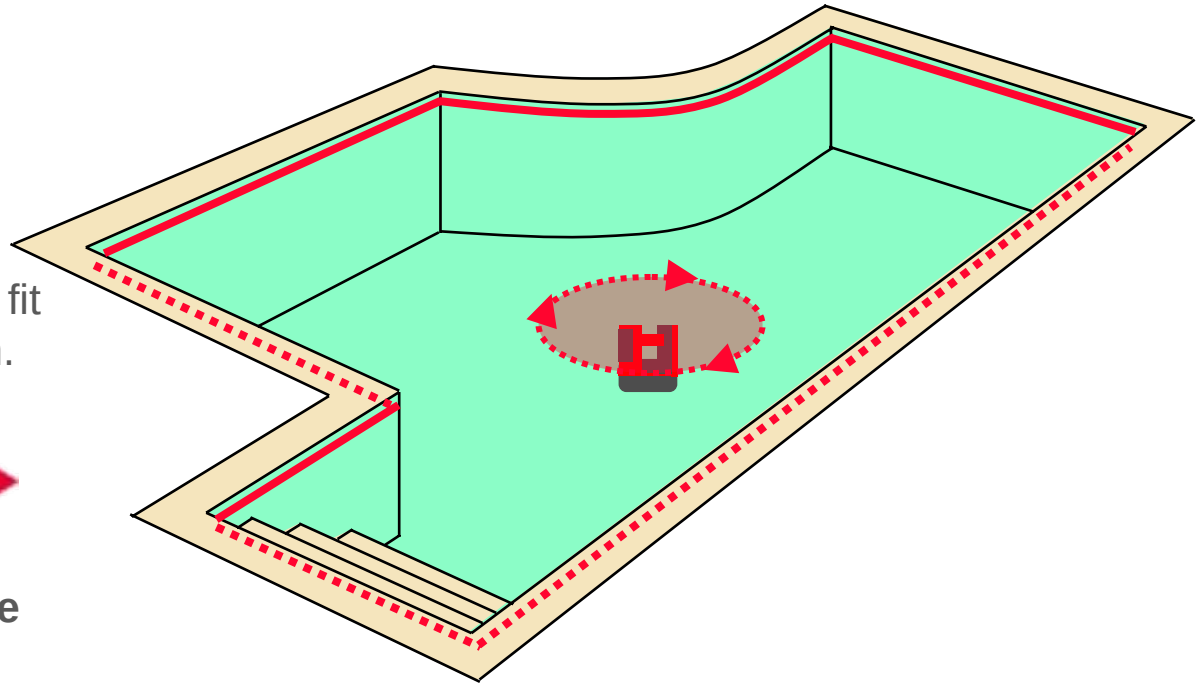
Measuring a curved outline

The 3D Disto now makes a 360° scan unless you stop it. Make as much scans as necessary, use the Viewfinder to measure singular points.

10 minutes



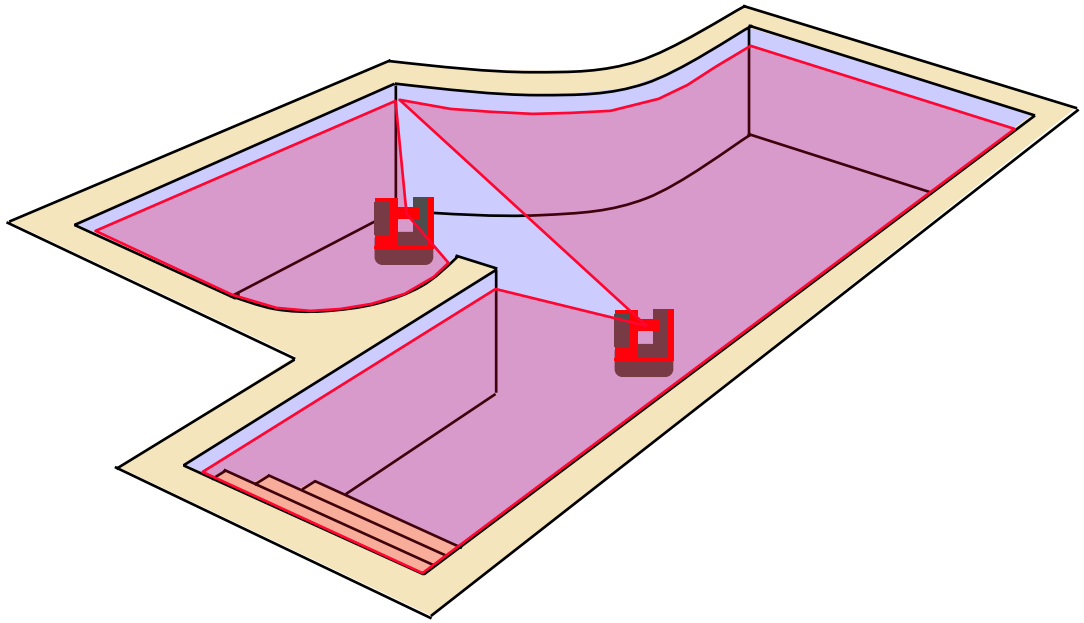
Ready?
Save the measurement, plug USB stick and press the File Manager's EXPORT key to generate a 1:1 DXF file. It will fit to your preferred CAD system.

Not yet! I want to change the 3D Disto's position!
Then go on with step 4 before you export the measurements.

Step by step using the 3D Disto

Relocation

With complex shapes you will need to secure your location and relocate to measure all of the pool area.



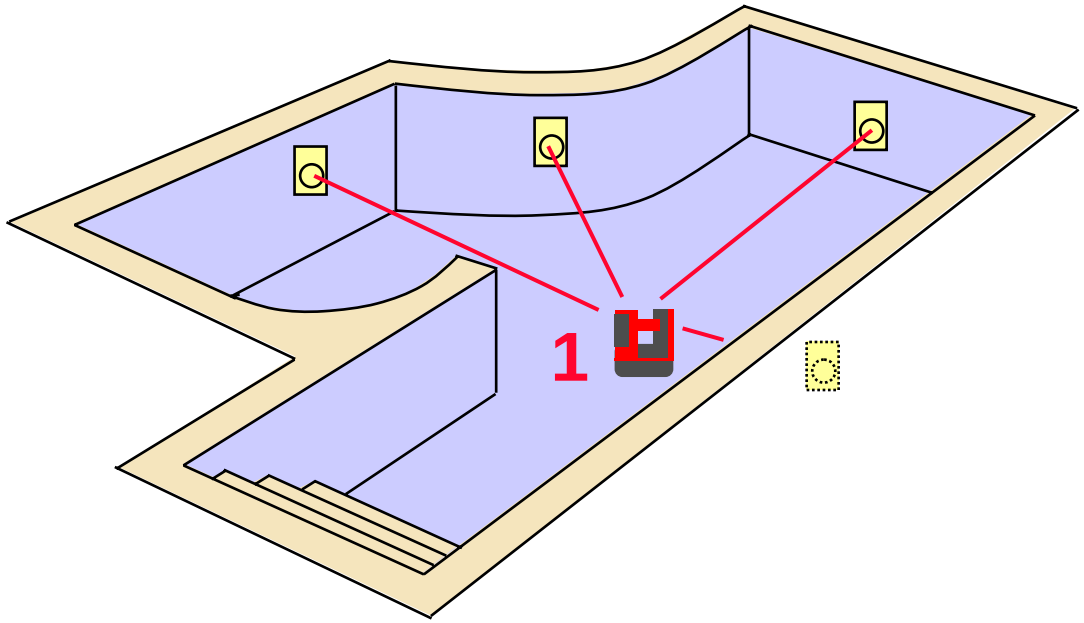
Step by step using the 3D Disto

Relocation

You have measured all accessible points and you want to change the 3D Disto's position to continue. Follow this procedure:

Step 4 - Pool Covers:
Select "Menu" – "Application" – "Location" - "Secure Location"

Mark and measure 3-5 points. These should be objects that will not move, alternatively you can use the target stickers provided in the box.



Step by step using the 3D Disto

Relocation

Now change the 3D Disto's position.

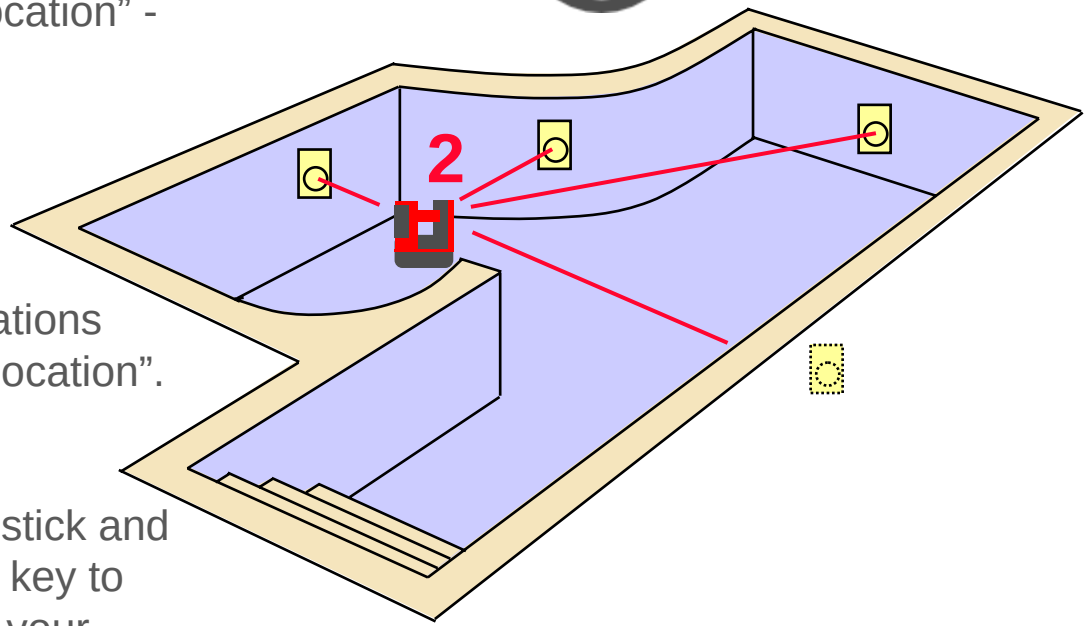
Select "Menu" – "Application" – "Location" - "Relocate"

Measure the same points again.

Continue your measurements or start more scans. For further relocations move the 3D Disto and repeat "Relocation".

Ready!
Save the measurement, plug USB stick and press the File Manager's EXPORT key to generate a 1:1 DXF file. It will fit to your preferred CAD system.

15 minutes



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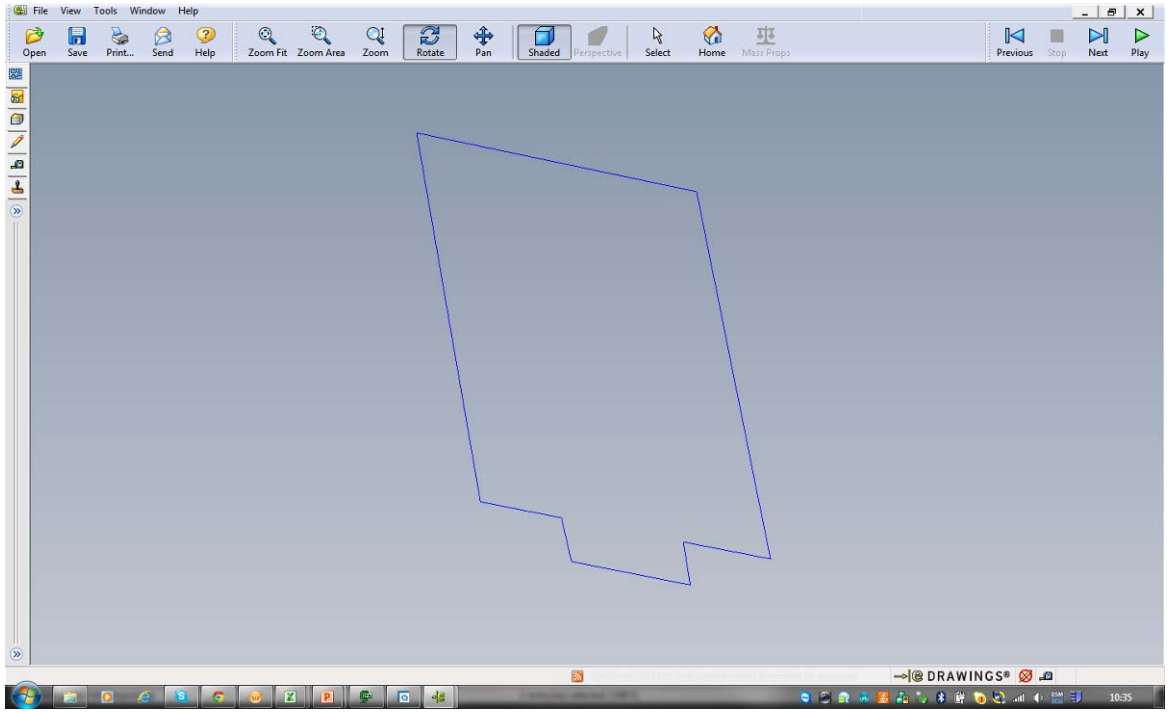
Post Processing

Step 5 – Pool Covers:
Copy the measurements (DXF 2D or 3D) from the USB stick to your CAD system (drag & drop) and prepare the data like you are used to do.



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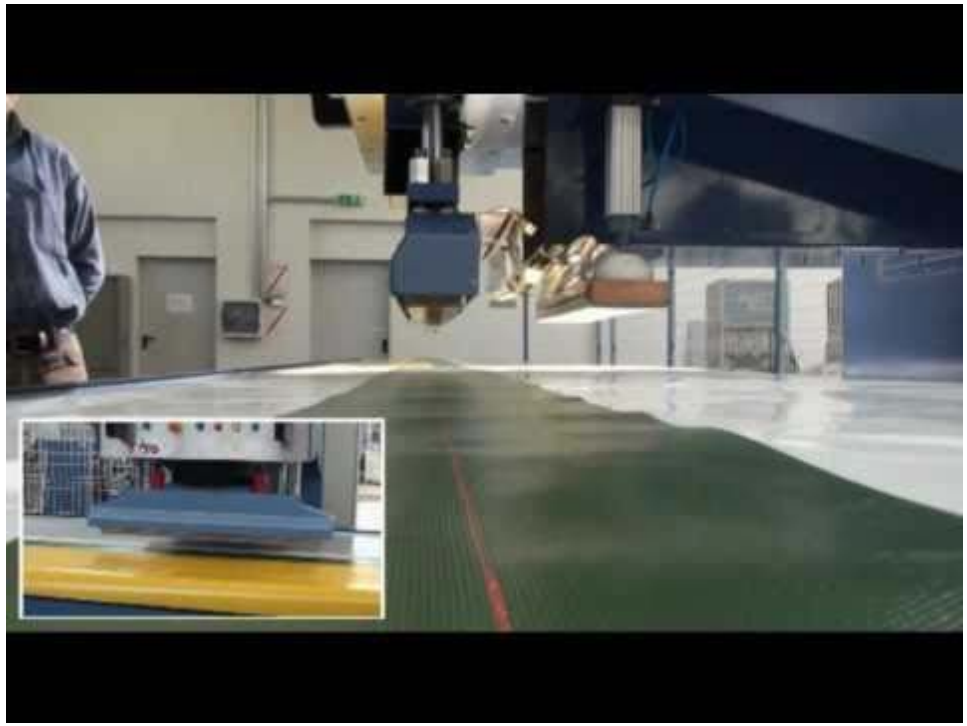
Manufacturing

Step 6 - Pool Covers:
You will then send your measurements to the manufacturer for cutting of the pool cover.

Once complete your pool cover can be fitted and will fit accurately 100% every time.

Four to six easy steps to saving time and money and cutting down the workflow enabling a faster and more efficient process.



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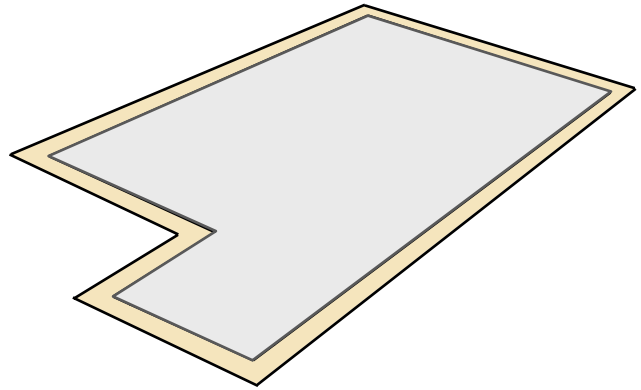
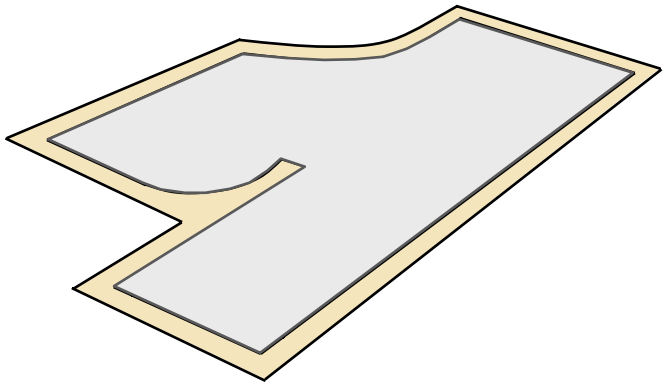
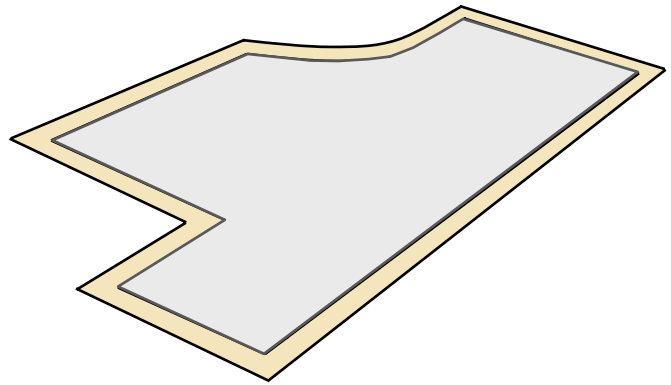
Finish



Step 7 – The finished product:

The pool cover is now installed and is a perfect fit.



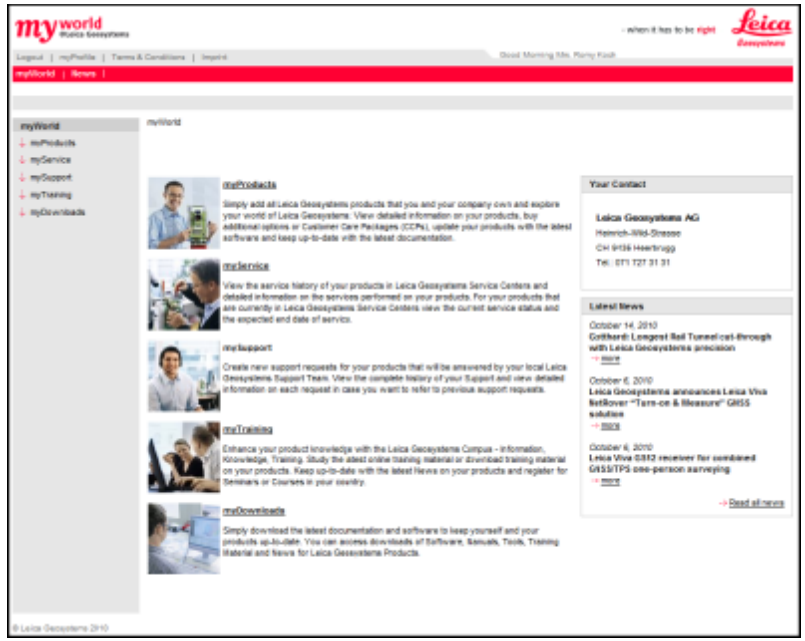


myworld

Further tutorials for download

If you register at myWorld@Leica Geosystems you will have access to a wide range of services, information and training material:

- warranty extension
- tutorials
- software updates
- support
- manuals
- …
- …



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