

USER GUIDE · PATTERN VIEWER

Pattern Viewer — User Guide

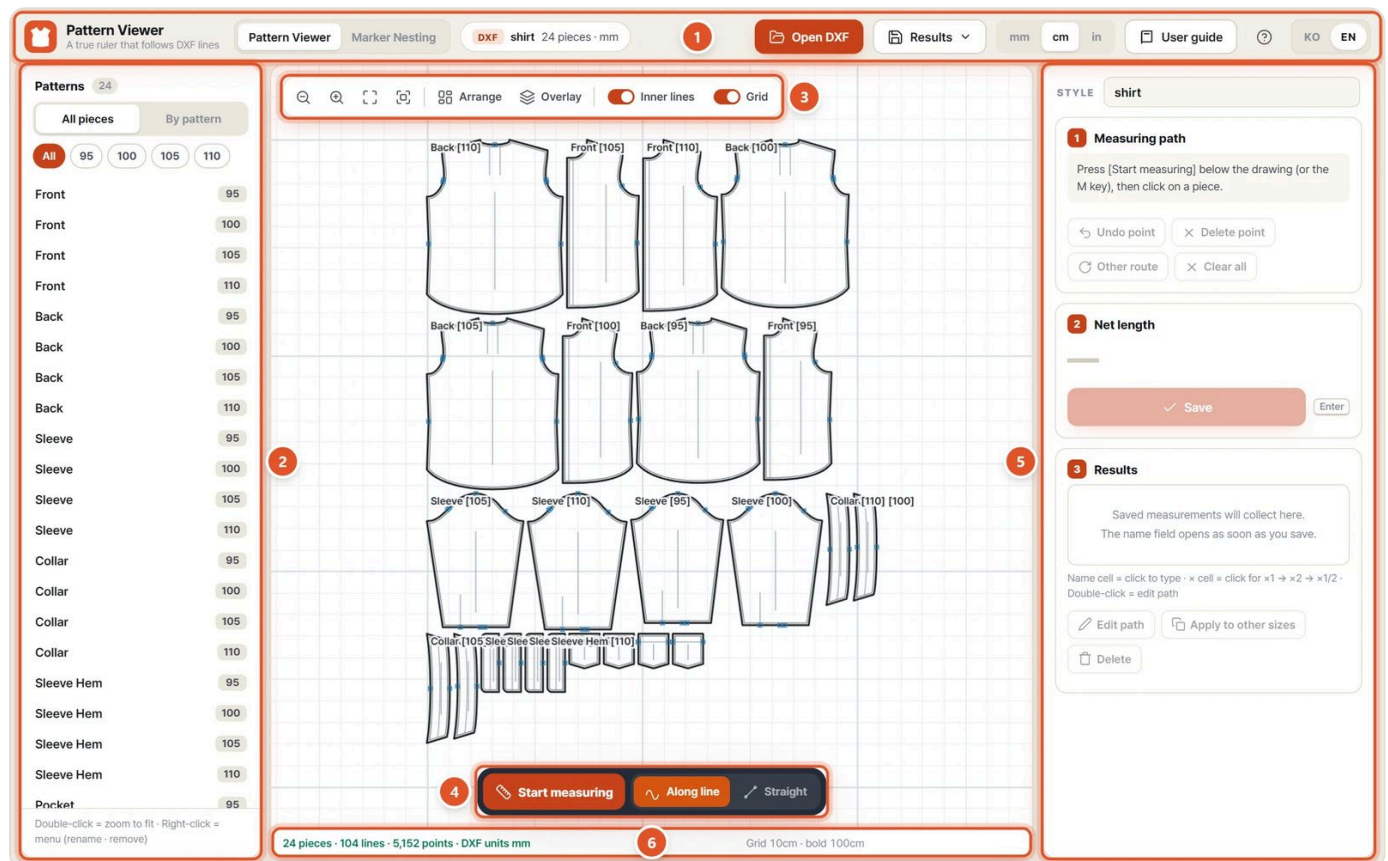
Open a DXF pattern, click a start and an end point, and the tool measures the true length along the pattern line (the net length). Use it for curves such as armholes and necklines, copy a measurement to every other size, and export the results to Excel.

Before you start

- ✓ A DXF file (.dxf) exported from your pattern CAD
- ✓ A PC with an up-to-date web browser (Chrome, Edge, etc.). A mouse with a scroll wheel makes it easier
- ✓ Nothing to install and no sign-up. Your files never leave the browser — nothing is uploaded

01 Screen layout

This is the screen after a DXF is open. There are six areas to know.



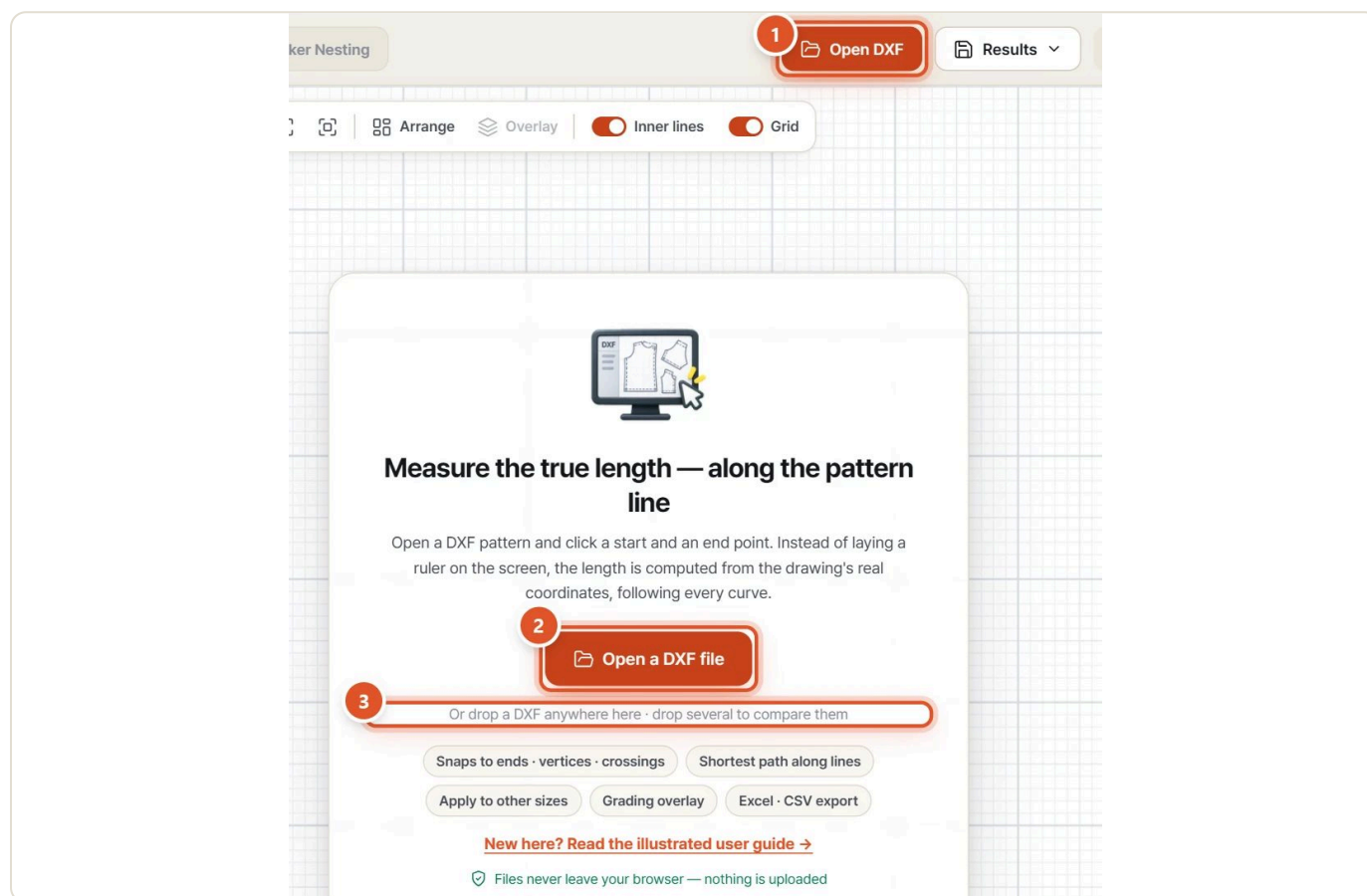
The Pattern Viewer with a shirt DXF (24 pieces) open

- 1 **Top bar** — **Open DXF**, the **Results** menu, length units (mm · cm · in), the question-mark (help) button and the **KO · EN** language switch.
- 2 **Patterns** — every piece and size in the open file. Pick the pieces you want to see here.
- 3 **Drawing and toolbar** — the drawing is in the middle. The toolbar zooms, fits, **Arrange**s and **Overlay**s pieces, and turns **Inner lines** and the **Grid** on or off.

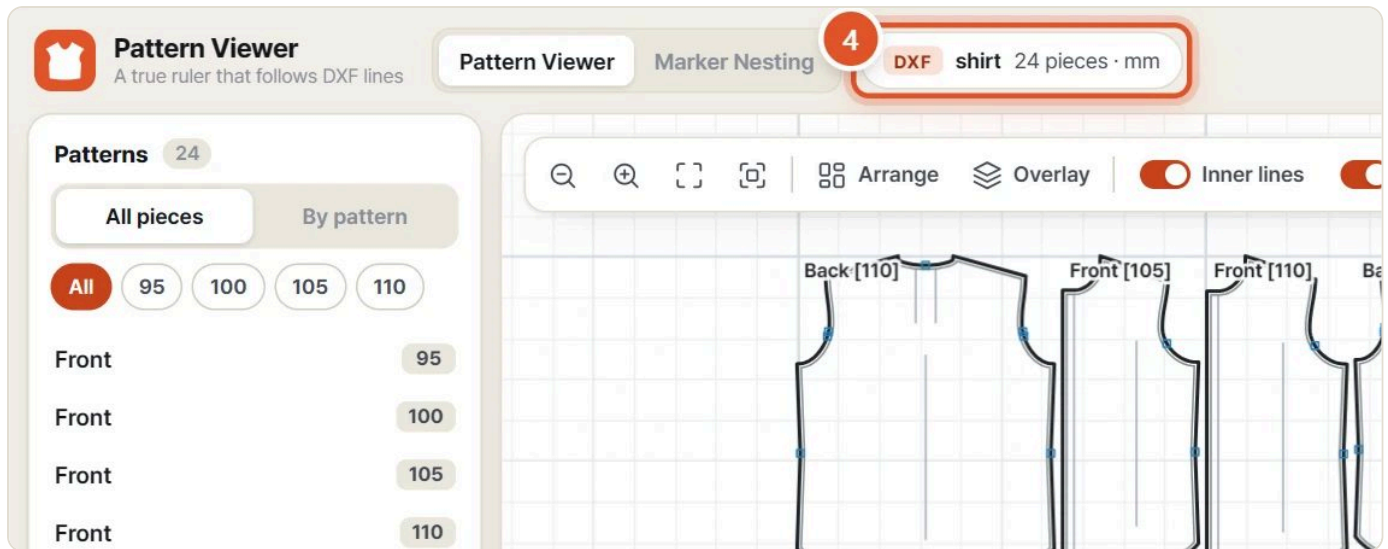
- 4 **Measuring bar** — **Start measuring** and **Along line** · **Straight** below the drawing. While you measure it also shows **Undo point** , **Other route** and **Save** .
- 5 **Measure panel** — read it top to bottom: ① **Measuring path** (your points) → ② **Net length** (the result) → ③ **Results** (saved measurements).
- 6 **Status bar** — what to do next, warnings, where the cursor snapped, the grid size and the coordinates. When you are stuck, look here first.

02 Open a DXF file

Load your pattern file. It is read inside your browser only and is never uploaded.



Start screen — open with the top button, the centre button, or drag and drop



The open file with its piece count and units

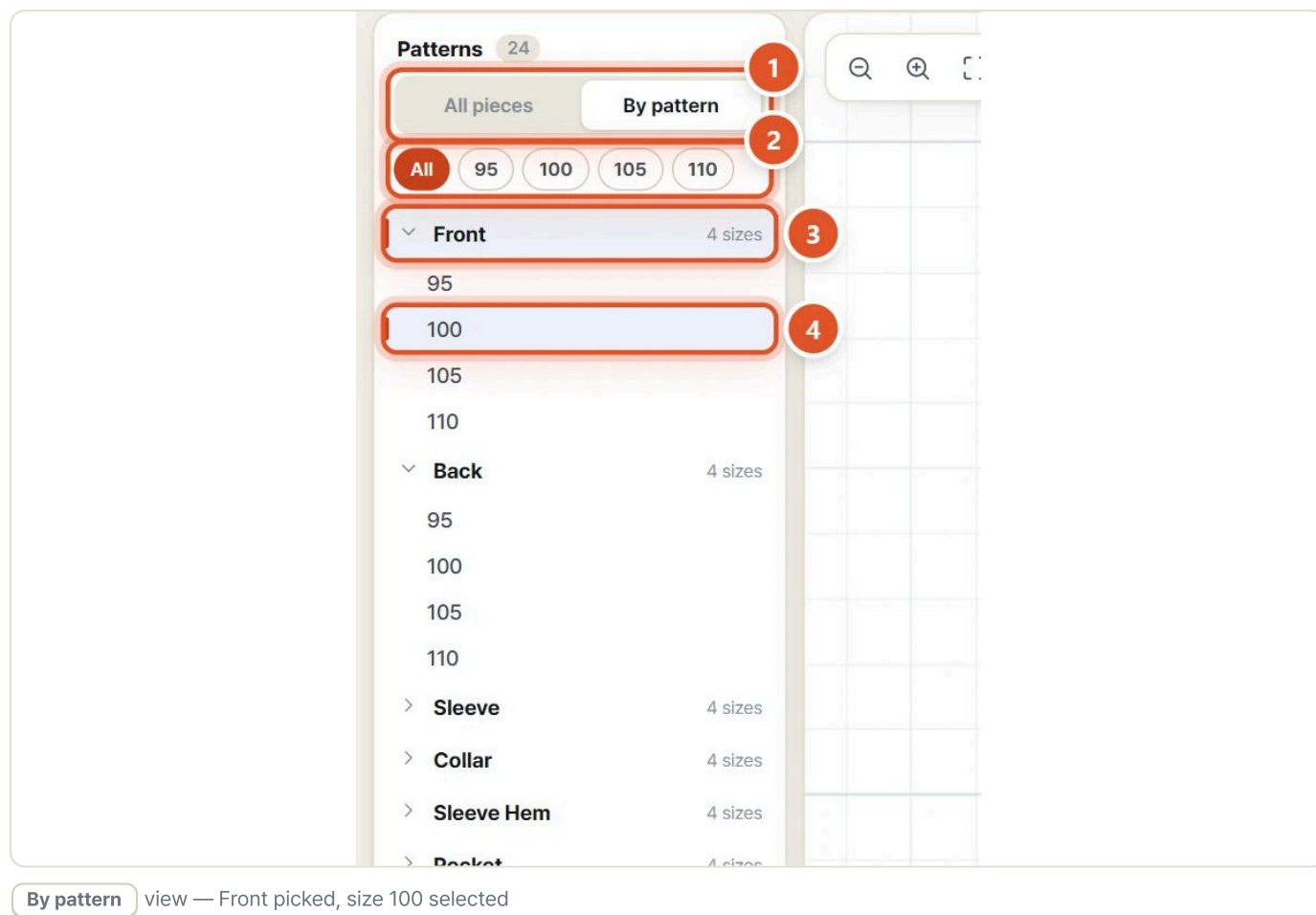
- 1 Click **Open DXF** at the top right (or press **Ctrl + O**).
- 2 On the start screen you can also click **Open a DXF file** in the middle.
- 3 Choose a .dxf file in the file window — or simply drag the file onto the page. Drop several files to open them side by side for comparison.
- 4 Once it opens, the file name, piece count and units appear at the top (e.g. shirt · 24 pieces · mm) and the pieces are laid out on the drawing.

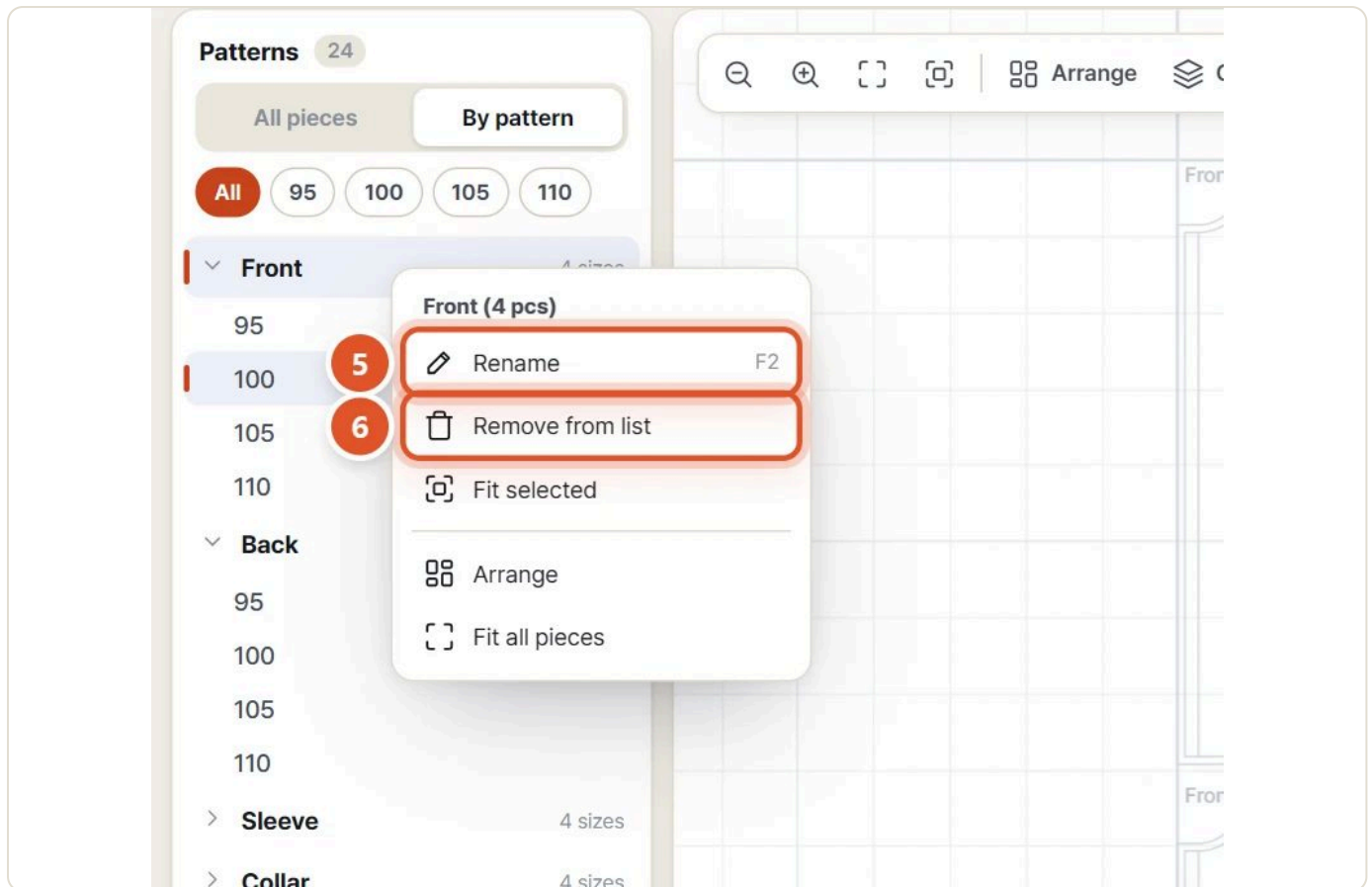
i Tip If you open another file while one is open, you are asked to choose **Open instead** or **Add to compare**. With **Add to compare** each file gets its own colour (A · B · C).

! Note **Open instead** clears the current measurements. Save them first from the **Results** menu.

03 Patterns list — show only what you need

When a file has many pieces, use the list to narrow the drawing down to the piece and size you need.





The right-click menu in the list

- 1 **All pieces** lists every piece; **By pattern** groups the sizes of each pattern together.
- 2 Click a size chip (95 · 100 · 105 · 110) to keep only that size on the drawing. **All** shows every size again.
- 3 In **By pattern**, click a pattern name (e.g. Front) to show only its sizes. Click it again to show everything. The arrow on the left folds the group.
- 4 Click a row to select that piece — the others fade. Double-click to zoom the drawing to it. Hold **Ctrl** and click to select several pieces.
- 5 Right-click a row → **Rename** (**F2**). Type the new name and press **Enter**. All sizes of that pattern are renamed at once.
- 6 **Remove from list** takes pieces you do not need off the list. Confirm with **Remove**. The DXF file itself is not changed.

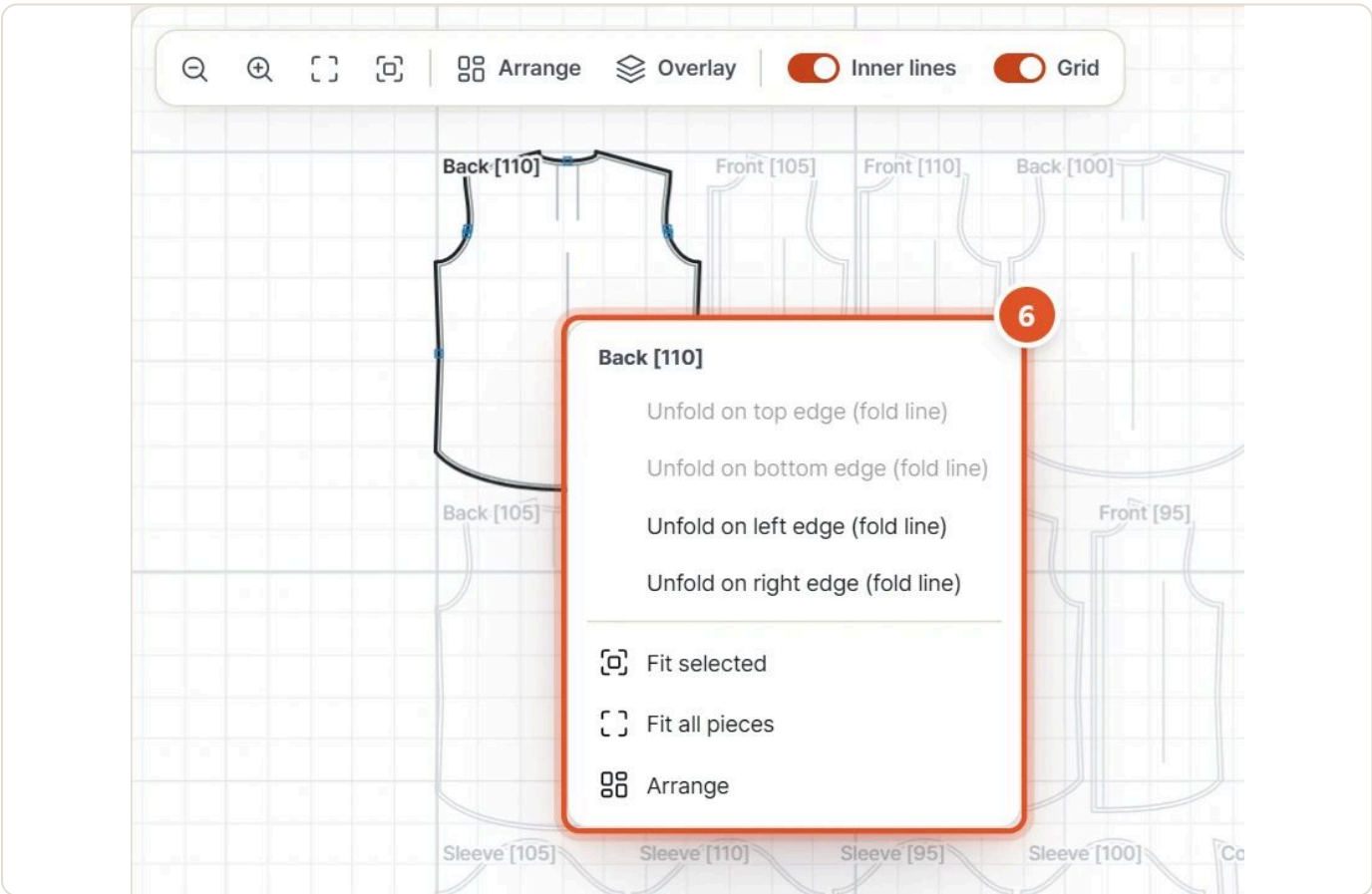
i Tip Piece names come from the part names written inside the DXF. In English mode, common Korean part names are shown in English (앞판 → Front).

04 Viewing the drawing — zoom, fit, arrange

The toolbar sits at the top left of the drawing. Hover over an icon to see its name.



The toolbar — hovering over **Fit selected**



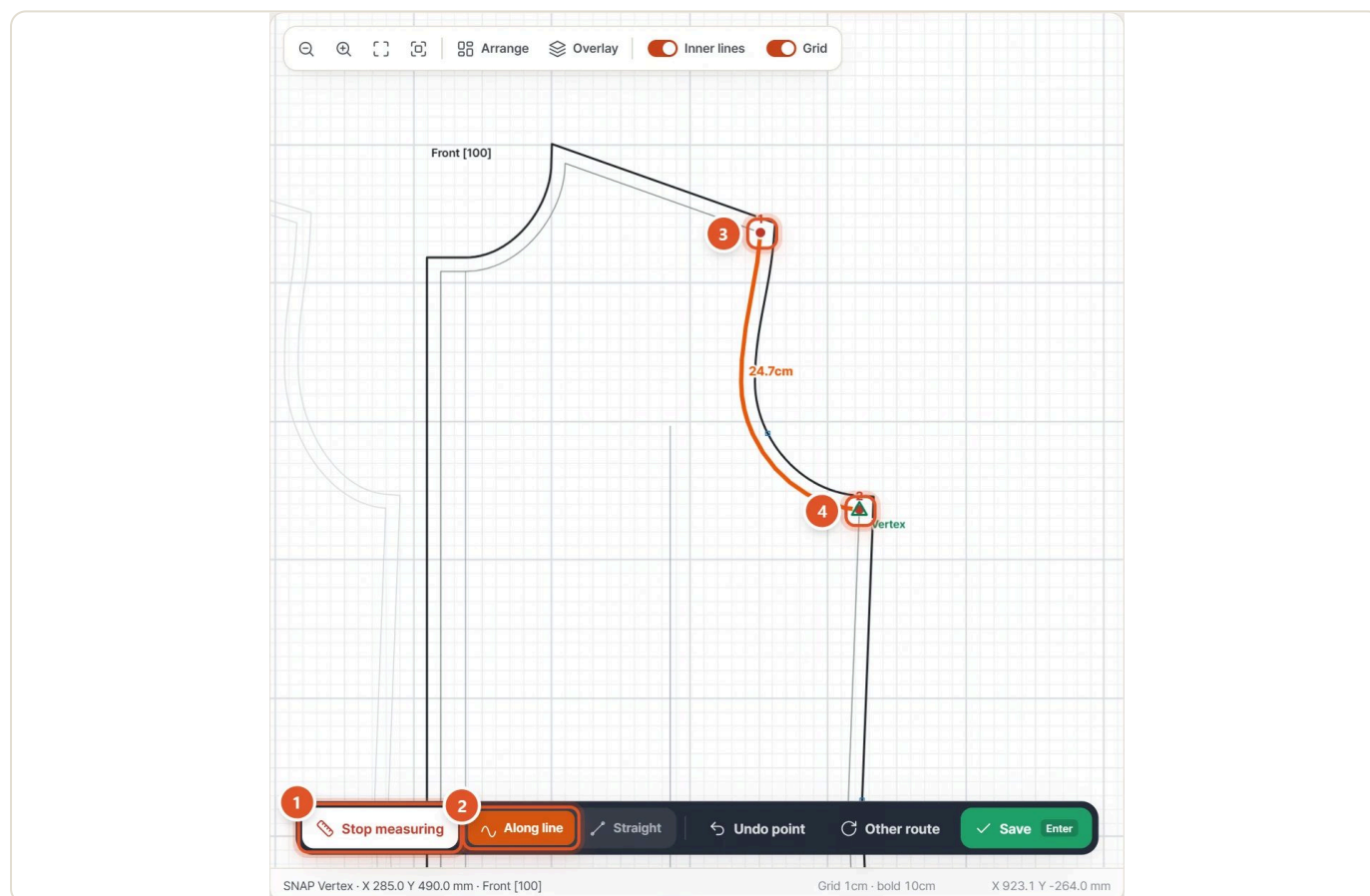
Right-click menu on a piece

- 1 Magnifiers: **Zoom out** · **Zoom in (Ctrl+wheel)** . With the mouse, **Ctrl** +wheel zooms around the cursor.
- 2 **Fit all pieces** fits everything visible on screen; **Fit selected** fills the screen with the selected piece(s).
- 3 You can drag pieces around with the mouse — lengths do not change. **Arrange** packs the visible pieces neatly again.
- 4 Turn **Inner lines** off to show only the cut line (thick black); sew lines, internal lines and notches are hidden.
- 5 **Grid** shows the drafting grid. Its size is shown on the right of the status bar (e.g. Grid 1cm · bold 10cm).
- 6 Right-click a piece for **Fit selected** · **Fit all pieces** · **Arrange** . A half (fold) piece can be mirrored with items such as **Unfold on left edge (fold line)** — only straight edges that can be a fold line are enabled. Undo it with **Turn unfold off (half piece)** .

i Tip To pan: drag an empty area, or drag with the middle button or while holding **Space** . The wheel scrolls up and down, **Shift** +wheel left and right. Double-click a piece to zoom to it.

05 Measure along a line (armhole example)

Here we measure the armhole of Front, size 100, on the sew line — from the shoulder point to the underarm. The length follows every curve.



Measured along the line from shoulder point to underarm (24.7cm)

1 Measuring path Along line

Keep clicking to add segments. When done, press [Save] or Enter.

1 Start Vertex · Sew line X 213.4 Y 690.0

2 End Vertex · Sew line X 285.0 Y 490.0

↶ Undo point ✕ Delete point

↻ Other route ✕ Clear all

2 Net length

24.7 cm

247.2mm · 24.7cm · 9.73in

Straight distance **21.2cm**

Width 7.2cm · Height 20cm

✓ Save Enter

Your points under **Measuring path**, the result under **Net length**

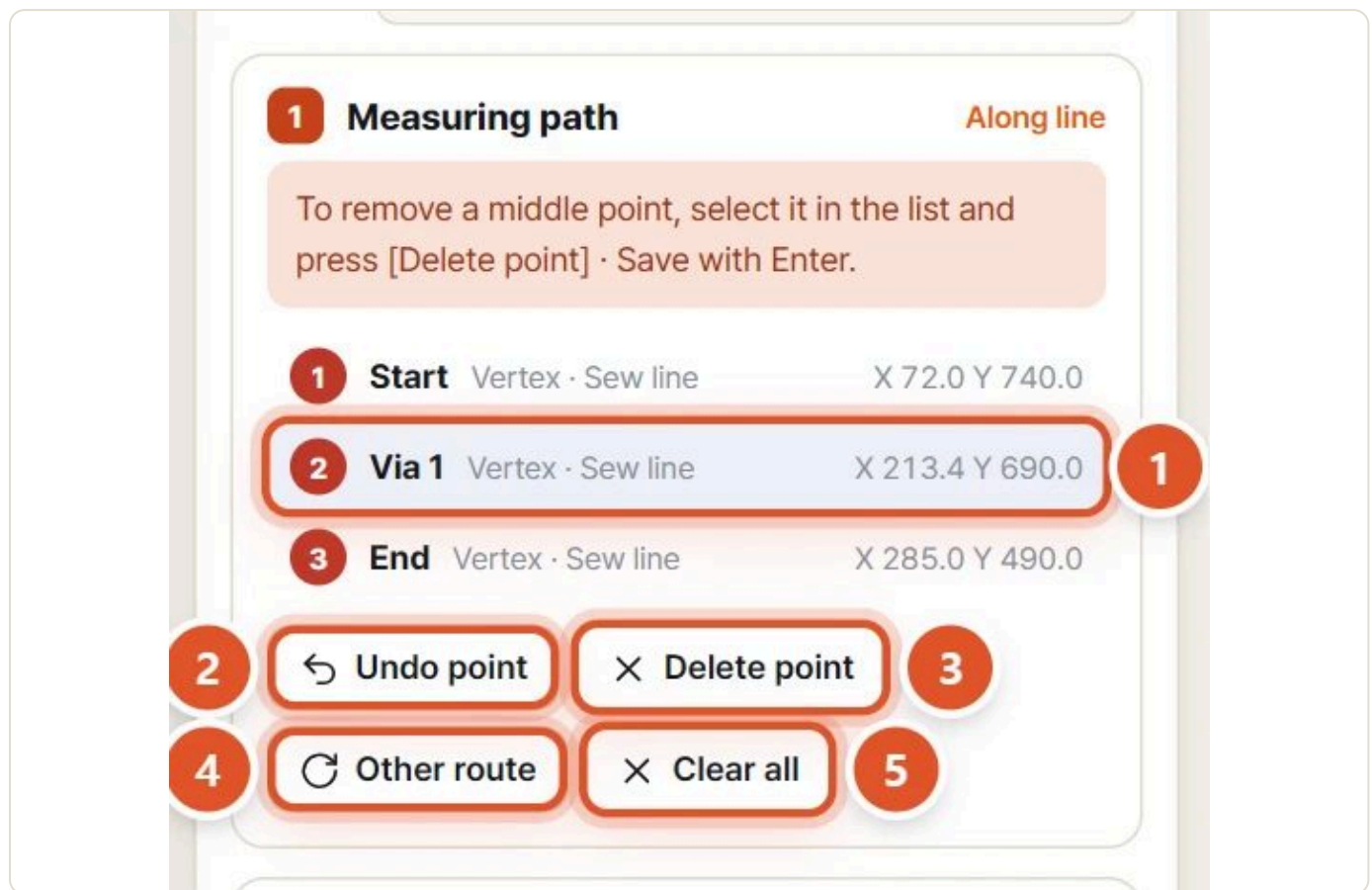
- 1** Click **Start measuring** below the drawing (or press **M**). While measuring, the button reads **Stop measuring**.
- 2** Check that **Along line** is on (it is by default).
- 3** Click the start point (shoulder point). Near a line the cursor snaps with a green marker: Endpoint (□), Vertex (△), Intersection (×) or On line (○). The thin grey line is the sew line; the thick black line is the cut line.
- 4** Click the end point (underarm). The path between the points follows the pattern line in orange, with its length written beside it.
- 5** The result appears large under **Net length**, with the mm · cm · inch values, the straight distance and the width/height difference below it.
- 6** Click **Save** or press **Enter**. A new row appears under **Results** with the name field already open. Type a name (e.g. Front armhole) and press **Enter**.

i Tip Lengths are always computed from the DXF's real coordinates — zoom level or where you dragged the piece make no difference. Click extra points between start and end to pass through them (via points).

! Note One measurement stays inside one piece. To measure another piece, save first or press **Esc** to stop.

06 Fixing points and the path

Use these when a point is wrong or the path goes the wrong way. The picture shows three points — neck point → shoulder point → underarm — so the middle one is **Via 1**.



Measuring path — the point list and the fix buttons

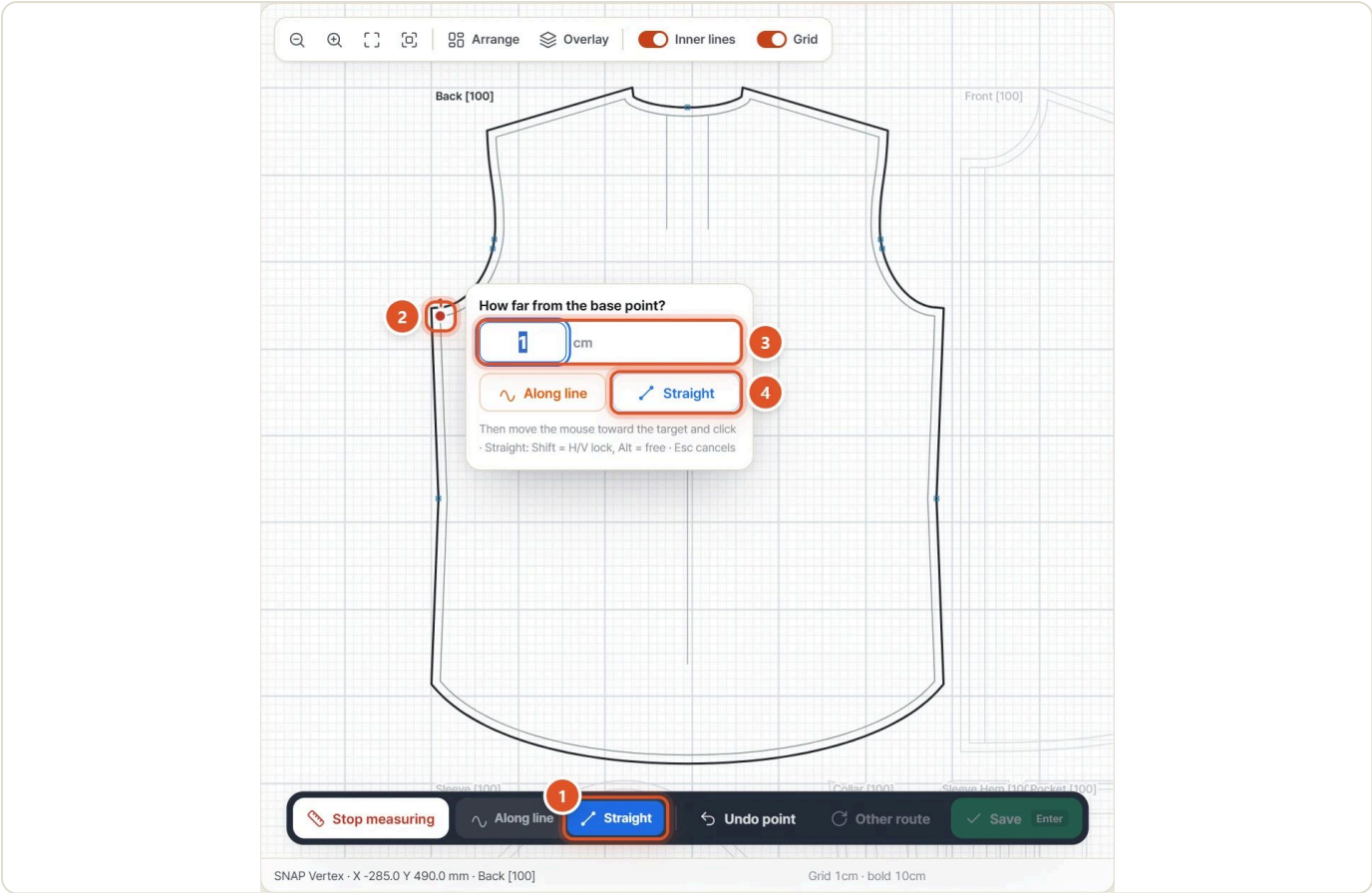
- 1 Click a row in the **Measuring path** list to select that point (its red dot on the drawing turns darker).
- 2 **Undo point** removes the last point you clicked (**Ctrl** + **Z**).
- 3 **Delete point** removes the selected point — or the last one if nothing is selected.
- 4 **Other route** switches the last segment to the other way round the piece. Each click tries the next possible route (Along line only).
- 5 **Clear all** (**Esc**) removes every point and stops measuring.

i Tip If the path is much longer than the straight distance, the status bar warns you. Press **Other route** or click one more via point on the route you want. **Undo point** and **Other route** are also on the measuring bar below the drawing.

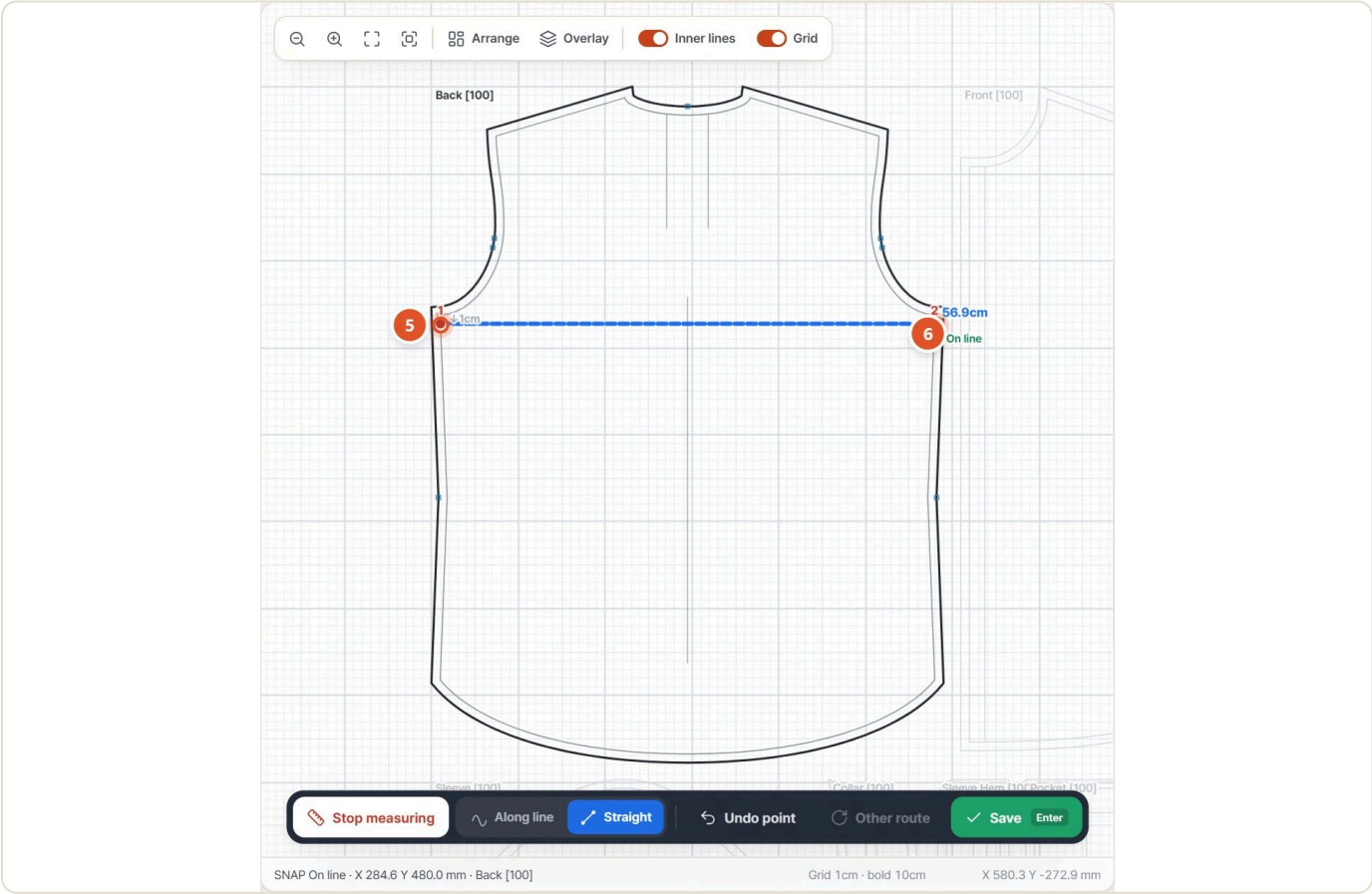
07 Measure a straight distance (chest width 1 cm below the underarm)

Here we measure the chest width of Back, size 100, 1 cm below the underarm. If you do not need to offset a point, skip

steps 3–5 and just click two points.



Straight mode: first point placed and the offset window open



Measured straight from the point 1 cm below to the other side seam

- 1 Click **Start measuring** , then **Straight** below the drawing (or press **L** while measuring).
- 2 Click the first point (left underarm).
- 3 Right-click → **Offset from this point...** . In the small **How far from the base point?** window, enter 1 (in the current length unit — cm here).
- 4 Click **Straight** . **Along line** would move the point that distance along the pattern line instead.
- 5 Move the mouse in the direction you want (down) and click. The point moves 1 cm down onto the side seam, linked to the base point by a dotted line.
- 6 Click the other side seam at the same height (hold **Shift** to lock it horizontal). When the blue dashed line and its length appear, click **Save** or press **Enter** and type a name (e.g. Chest width).

i Tip Hold **Shift** while moving to lock horizontal/vertical from the previous point (Straight only). Hold **Alt** and click to place a point exactly where you click, without snapping.

08 Managing results — name, multiplier, edit, delete

Saved measurements collect in the **Results** table on the right. Click a row and its path is highlighted in purple on the drawing.

3 Results 2

Name	Piece	Size	x	let length
1 Front armhole	Front	100	2 x2	49.4cm 24.7cm×2
— Chest width	Back	100	x1	56.9cm

Name cell = click to type · x cell = click for x1 → x2 → x1/2 ·
Double-click = edit path

3 Edit path **4** Apply to other sizes

5 Delete

2 measurement(s) · 1 size(s)

The **Results** table — Front armhole at x2, Chest width measured straight (— mark)

- 1 Name cell: click the name of the selected row again (or double-click it) to edit the name. Press **Enter** to finish.

- 2 **x** cell (multiplier): each click cycles $\times 1 \rightarrow \times 2 \rightarrow \times 1/2$. Use $\times 2$ when you need both left and right pieces together. The measured length is shown in small print (e.g. 24.7cm $\times 2$).
- 3 **Edit path** (or double-click the row): the points come back on the drawing. Add points or remove them with **Undo point**, then press **Enter**.
- 4 **Apply to other sizes**: copies the same path to the other sizes (next section).
- 5 **Delete** (**Delete**): confirm with **Delete** in the window. Deleted by mistake? Press **Ctrl** + **Z**.

i Tip Measurements taken in Straight mode have a — mark before the name. The line under the table shows how many measurements and sizes there are.

09 Apply to all other sizes at once

Copy a path you measured on one size to the other sizes of the same pattern and recalculate. Handy for checking grading.

3 Results 8

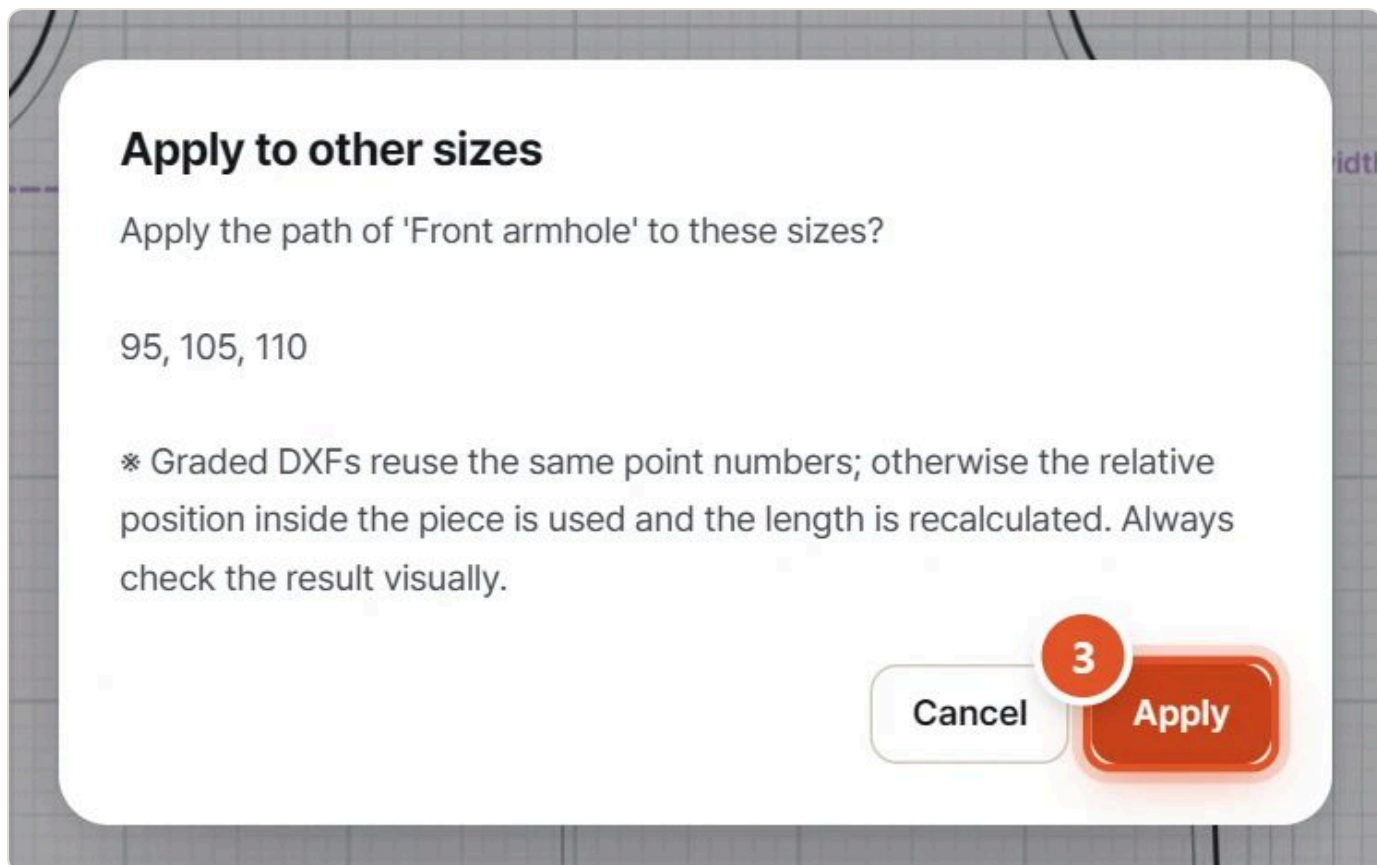
Name	Piece	Size	x	Net length
Front armhole	Front	100	$\times 2$	49.4cm 24.7cm $\times 2$
— Chest width	Back	100	$\times 1$	56.9cm
— Chest width	Back	95	$\times 1$	54.9cm
— Chest width	Back	105	$\times 1$	58.9cm
— Chest width	Back	110	$\times 1$	60.9cm
Front armhole	Front	95	$\times 2$	48.2cm 24.1cm $\times 2$
Front armhole	Front	105	$\times 2$	50.6cm 25.3cm $\times 2$
Front armhole	Front	110	$\times 2$	51.8cm 25.9cm $\times 2$

Name cell = click to type · x cell = click for $\times 1 \rightarrow \times 2 \rightarrow \times 1/2$ · Double-click = edit path

Edit path **Apply to other sizes** **Delete**

8 measurement(s) · 4 size(s)

After applying — new rows for sizes 95 · 105 · 110



The **Apply to other sizes** confirmation

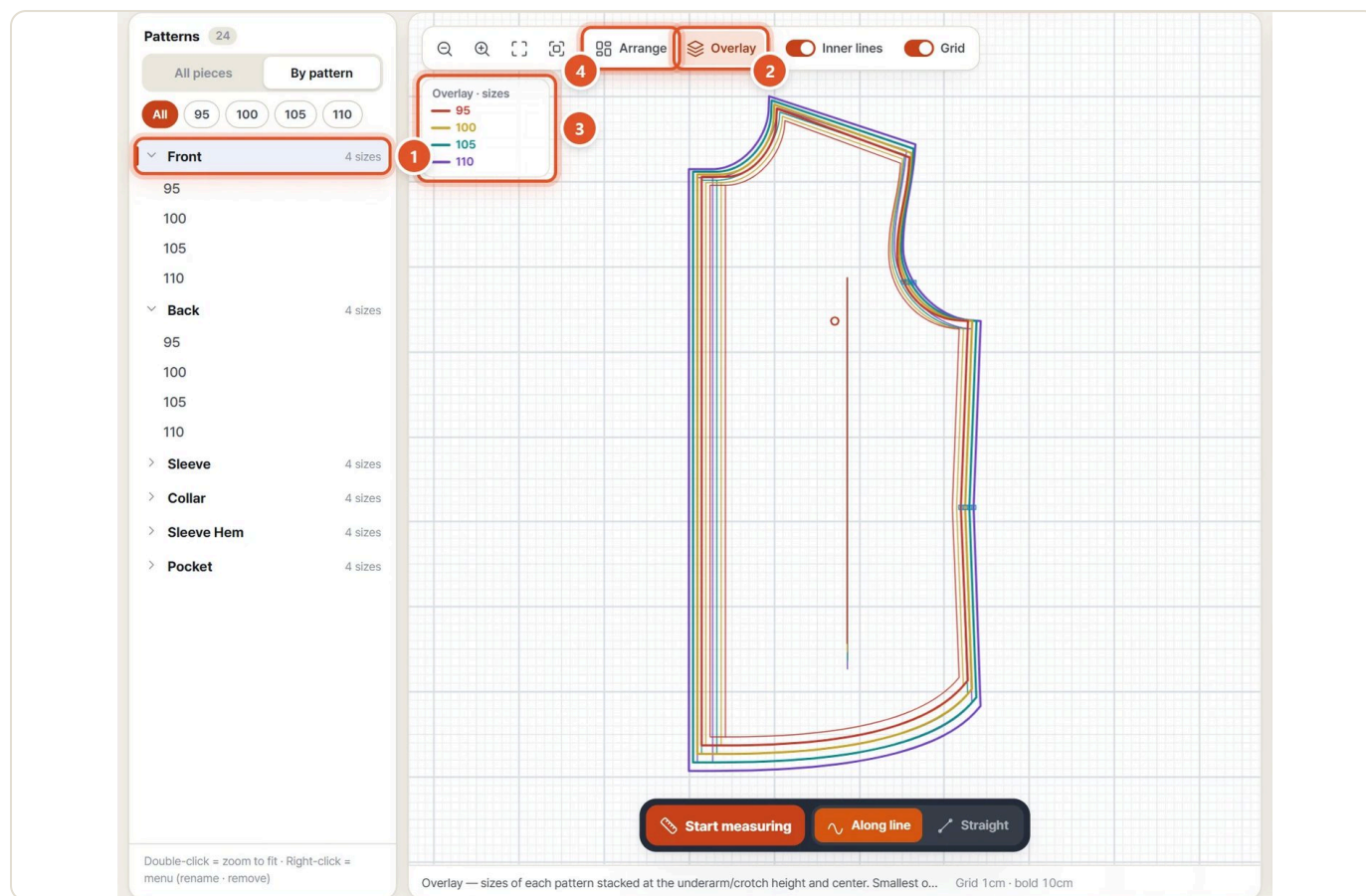
- 1 Click the row you want to copy in the **Results** table.
- 2 Click **Apply to other sizes**.
- 3 The window lists the target sizes (e.g. 95, 105, 110). Click **Apply**.
- 4 A new row is added for each size, with the same name and multiplier, so you can compare lengths size by size.

Note Graded DXFs reuse the same point numbers; otherwise the relative position inside the piece is used. Always check the result on the drawing — click the size chip **All** to see the measurement lines on every size.

10 Compare sizes by overlaying them

Stack the sizes of a pattern aligned at the underarm (or crotch) height and the centre, so grading differences are visible at

a glance.



Four sizes of Front overlaid

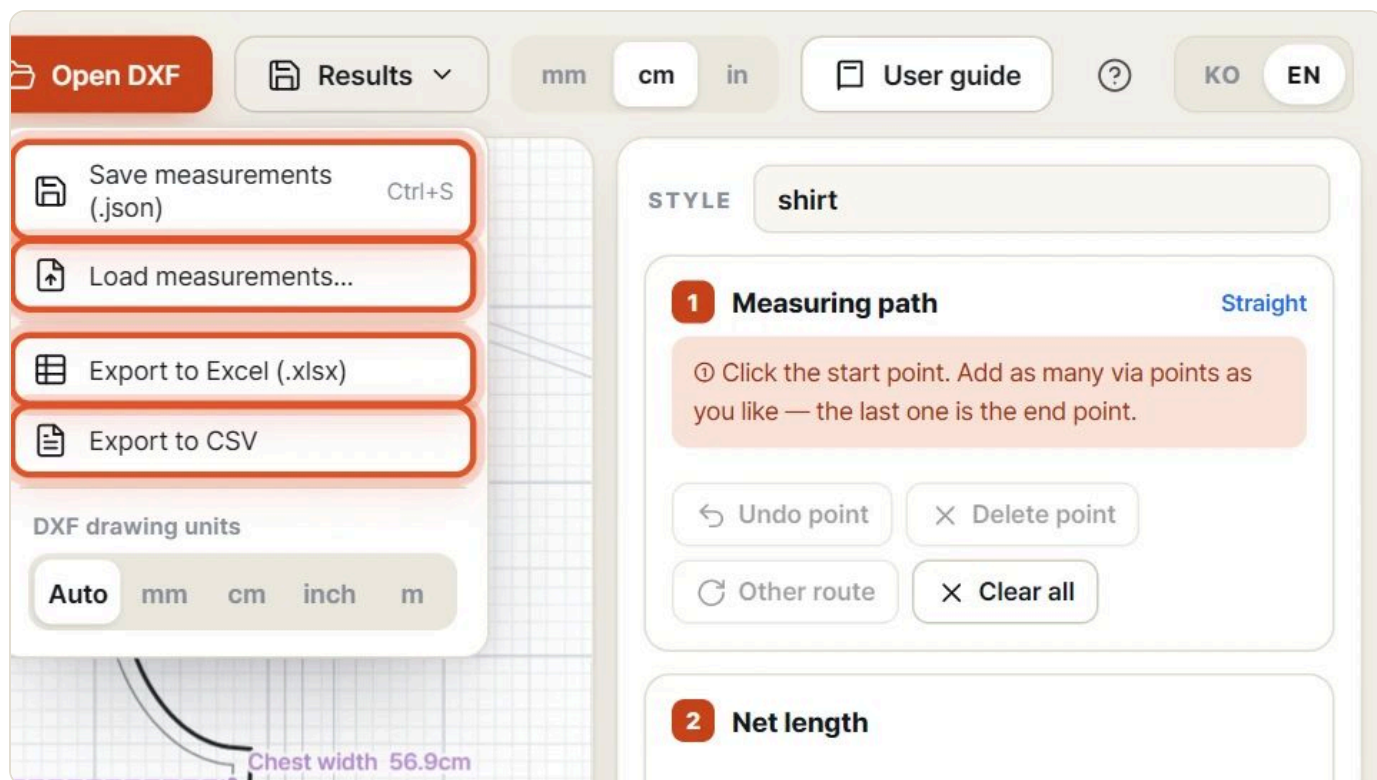
- 1 (Optional) In **By pattern**, click a pattern name (e.g. Front) to overlay just that pattern. Otherwise every pattern gets its own stack.
- 2 Click **Overlay** in the toolbar.
- 3 Each size gets its own colour, listed in the **Overlay · sizes** legend at the top left. The smallest size is on top; the small circle marks the alignment point.
- 4 Click **Arrange** to spread the pieces out again.

i Tip With two files opened via **Add to compare**, pieces with the same name are stacked. Each further click on **Overlay** switches between ① same size only and ② all sizes in one stack.

11 Save and export

Use the **Results** menu at the top to keep your measurements as files. File names start with the style number in the

STYLE box on the right (e.g. shirt_pattern-length.xlsx).



The **Results** menu

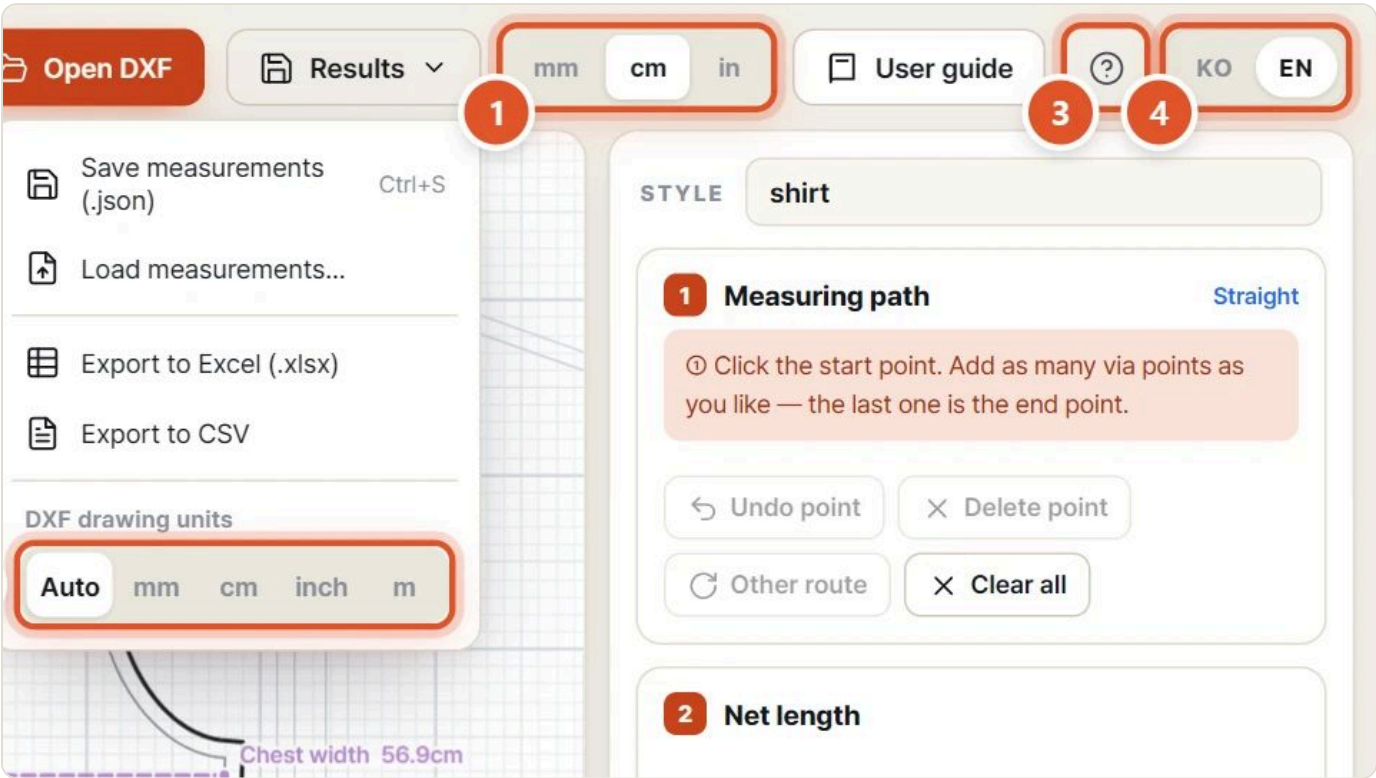
- 1 **Save measurements (.json)** (**Ctrl** + **S**) — saves the whole list so you can continue later. The file also opens in the desktop app.
- 2 **Load measurements...** — reopens a saved .json. Open the DXF it was measured on first, then load it. You can also drag the .json onto the page.
- 3 **Export to Excel (.xlsx)** — two sheets: "Measurements" (style · file · size · name · piece · method · length · multiplier · final length in cm/mm/inch · segments) and "Size comparison" (a size-by-size table).
- 4 **Export to CSV** — the same content as CSV, with the size comparison table at the bottom.

i Tip Only the net length is reported — add loss and allowance when you order.

! Note Measurements are not kept by the browser. Save them with **Save measurements (.json)** before you close or reload the page.

12 Units, language and help

Settings on the right of the top bar.



Length unit, DXF drawing units, help and language

- 1 Length unit **mm** · **cm** · **in** — the unit used on screen (cm at first). The table and the drawing labels change right away.
- 2 **DXF drawing units** (inside the **Results** menu) — the unit of the DXF file itself. Normally **Auto**. If lengths look wrong (e.g. 10× too big), pick the right unit. If you already have measurements, confirm with **Change**.
- 3 Question-mark button (**F1**) — the **How to use** window lists features and shortcuts.
- 4 **KO** · **EN** — switches the screen language. Your browser remembers the choice.

Note Changing **DXF drawing units** re-reads the drawing. Lengths already saved keep their old values, so measure them again.

13 Keyboard shortcuts

M	Start / stop measuring
L	While measuring: Along line ↔ Straight
Enter	Save the measurement

Esc	Cancel measuring · close the right-click menu
Ctrl + Z	Undo the last point (when not measuring: undo list or piece-position changes)
Ctrl + S	Save measurements (.json)
Ctrl + O	Open a DXF
Ctrl + A	Select all visible pieces (press again to clear)
Delete	Delete the selected measurement (when not measuring)
F1	Show help
F2	Rename the piece selected in the list
Shift	Straight mode: hold while moving to lock horizontal/vertical · with the wheel: scroll sideways
Alt	Hold and click to place a point without snapping
Ctrl	Hold and click pieces to select several · hold with the wheel to zoom
Space	Hold and drag to pan

14 FAQ

Q. The lengths are 10× (or 1/10) off.

It is a unit problem. Check "DXF units ..." in the status bar, then choose the right unit under **Results** → **DXF drawing units**. A DXF without unit information is read as mm.

Q. Is my pattern file uploaded anywhere?

No. The file is read and measured inside your browser only. It is never sent to a server.

Q. Which DXF files can I open?

It opens .dxf files (and measurement .json files saved by this tool). LINE, ARC, CIRCLE, ELLIPSE, POLYLINE, LWPOLYLINE and SPLINE entities are read, and each BLOCK becomes a piece. Names and sizes come from the text inside the piece. Without BLOCKs, nearby lines are grouped and numbered like **Piece 1**.

Q. Korean piece names are broken and shown as numbers.

The CAD export damaged the Korean text. Check the text encoding (Korean / CP949) in your export options. You can also name the pieces yourself: right-click in the list → **Rename**.

Q. Clicking does not place a point.

Make sure you pressed **Start measuring**. Points are not placed too far from a line — click closer or zoom in. One measurement stays inside one piece, so press **Esc** before starting on another piece. To place a point off the lines, use **Alt** +click.

Q. The path goes the wrong way round.

Points are joined by the shortest route along the lines. Press **Other route**, or click an extra via point on the route you want.

Q. Does the value include seam allowance or ease?

No. It is exactly the length of the line you clicked (net length) — the sew line gives the sew-line length, the cut line the cut-line length. Add loss and allowance when you order.

Q. How do I measure the full length of a half (fold) piece?

Right-click the piece and unfold it on its fold edge, e.g. **Unfold on left edge (fold line)**, then measure. Or measure the half and set the $\times$ cell to $\times 2$. If the piece is already unfolded, $\times 2$ shows a reminder to double-check.

Q. How do I continue later?

Save with **Save measurements (.json)**. Next time, open the same DXF first, then use **Load measurements...**.

Q. Can I compare two versions of a pattern?

Yes. With one file open, open the other with **Open DXF** and choose **Add to compare**. Each file gets its own coloured box (A · B · C), and **Overlay** stacks pieces with the same name.