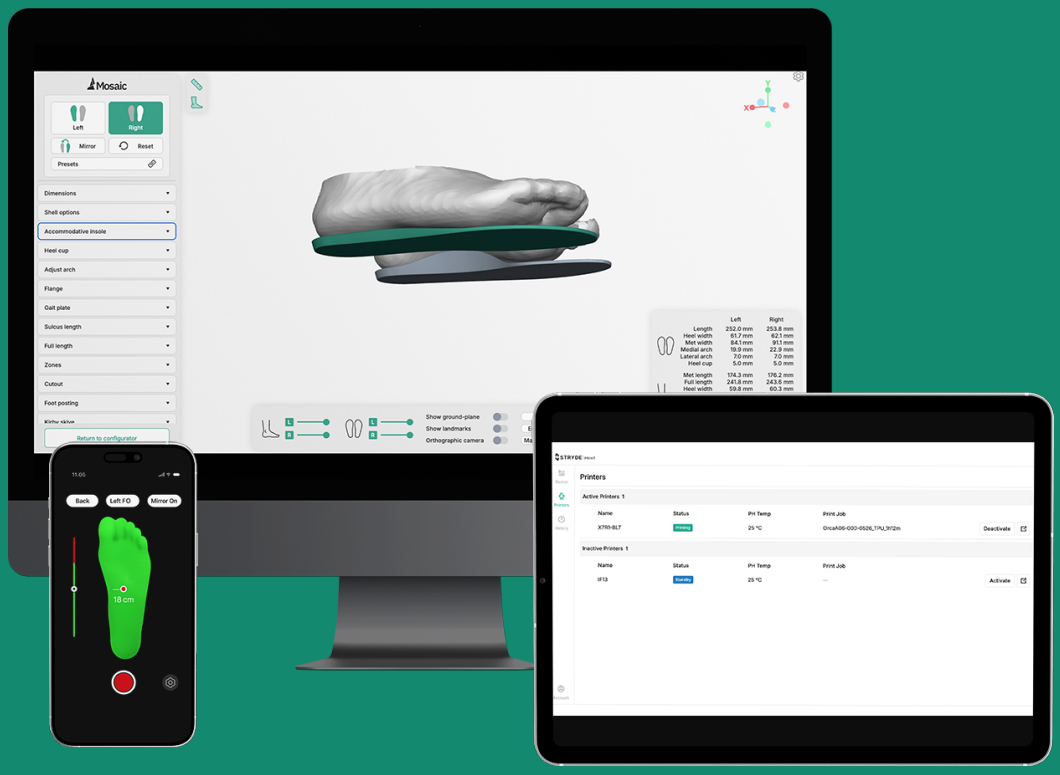
Mosaic

STRYDE | DESIGN

Stryde Design
Quick Start User Guide

From foot scan to printed insole: importing, designing, adjusting, and sending to Stryde Print.



IN THIS GUIDE

GUIDE 1

Importing & preparing a foot scan

Page 3

GUIDE 2

Setting up the design

Page 8

GUIDE 3

Design variables reference

Page 12

GUIDE 4

Sending a finished design to print

Page 17

Contents

1 **Importing & preparing a foot scan** 3

Stage 1 · Import 3

Stage 2 · Prepare 4

Stage 3 · Review 7

2 **Setting up the design** 8

Stage 4 · Edit: choose a style 8

The editor workspace 10

3 **Design variables reference** 12

Workspace controls 12

Design sections 13

FDM Zones (multi-density) 14

Editing a zone shape 15

Shore hardness, live measurements, and view controls 16

4 **Sending a finished design to print** 17

Stage 5 · Order 17

Stryde Print 19

STRYDE DESIGN · GUIDE 1 OF 4

Importing & preparing a foot scan

Get a scan into Stryde Design, set it upright, clean it up, and confirm the landmarks the insole is built from.

STAGE 1 Import | STAGE 2 Prepare | STAGE 3 Review | STAGE 4 Edit | STAGE 5 Order

YOU'LL NEED

- A foot scan as an **OBJ** or **STL** file
- Up to two scans (left and right)

TIME

About 2 minutes per foot once you're familiar with it.

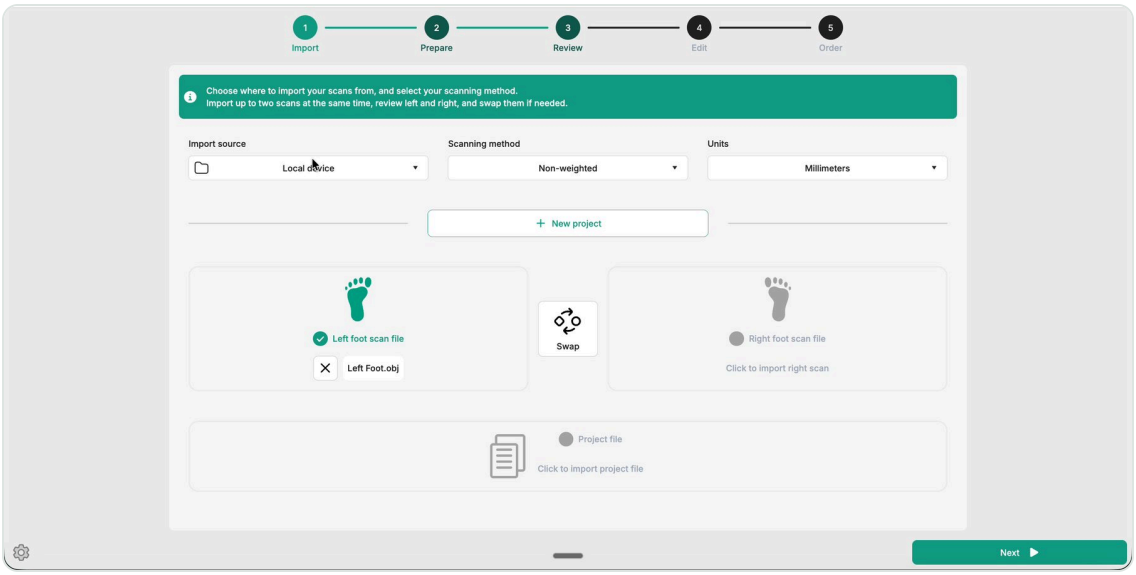
RESULT

A clean, correctly oriented scan with MPJ 1 and MPJ 5 confirmed, ready for design (Guide 2).

Stage 1 · Import

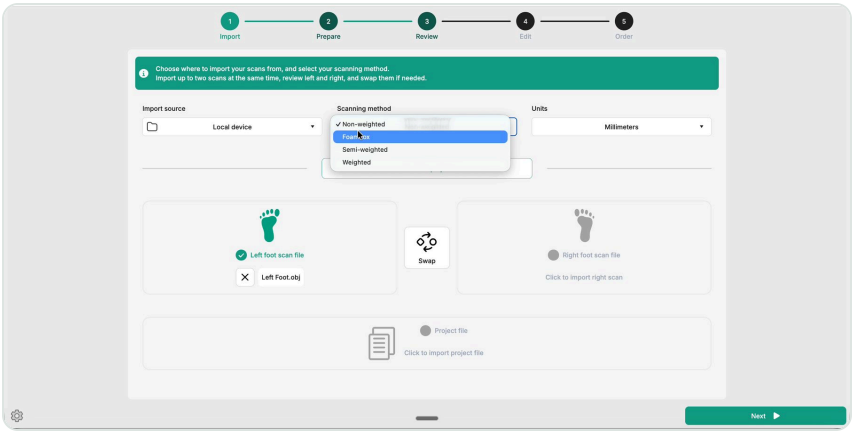
1 Start a project and load the scan

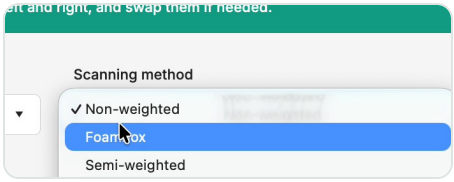
- Under **Import source**, choose **Local device**.
- Click the left or right foot tile and select the scan file (OBJ or STL). You can import up to two scans at once.
- If the files landed on the wrong side, click **Swap**.
- Already have a saved project? Use **Project file** at the bottom instead.



2 Set the scanning method and units

- Pick the **Scanning method** that matches how the scan was captured: **Non-weighted**, **Foam box**, **Semi-weighted,** or **Weighted**.
- Leave **Units** on Millimeters unless the scan was exported in another unit.
- Click **Next**.



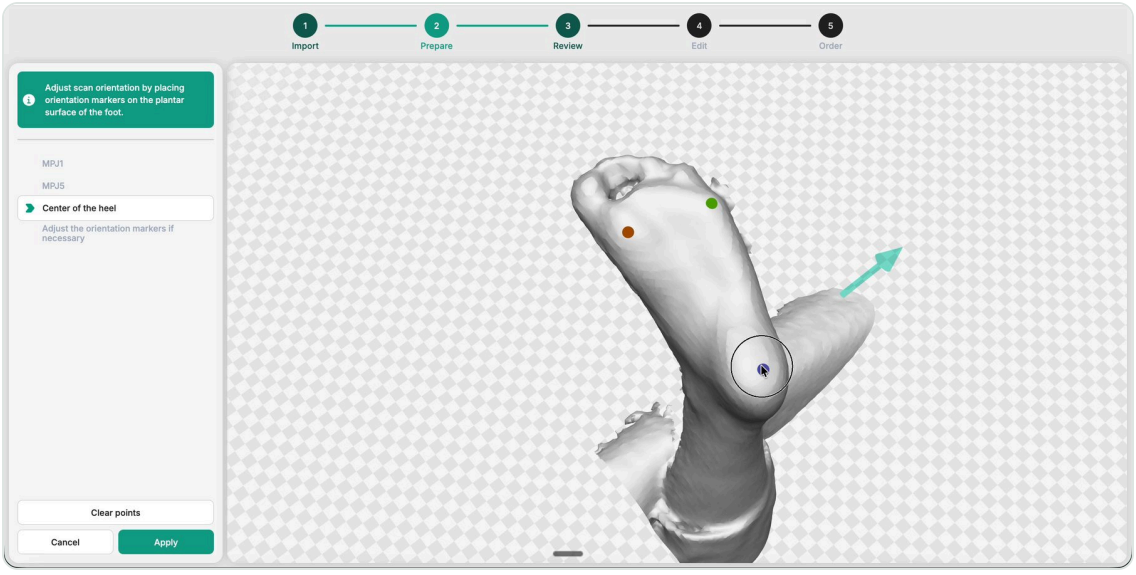


> **Why it matters:** the scanning method tells the software how the foot was loaded when it was scanned, which affects how the insole is generated. Selecting the wrong one is the most common setup mistake.

Stage 2 · Prepare

3 Place the three orientation markers

- Click on the plantar (bottom) surface of the foot to place, in order: **MPJ 1**, **MPJ 5**, and the **center of the heel**.
- Use **Clear points** to start over if a marker lands in the wrong spot.
- Click **Apply**. The scan rotates so the foot sits flat at the correct orientation.



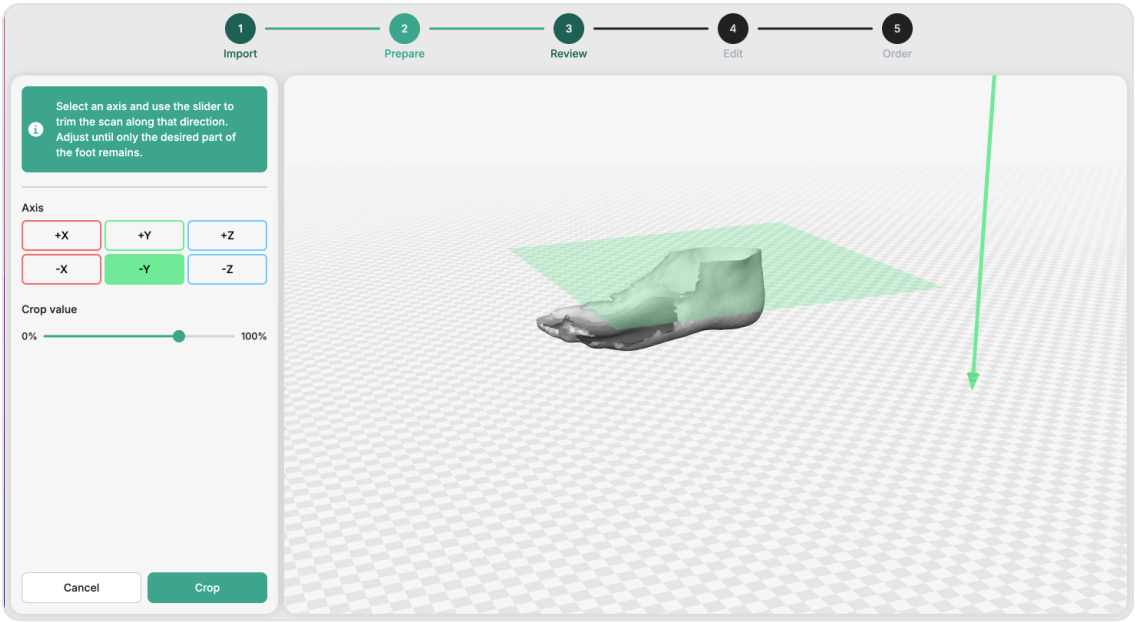
4 Check the orientation

- Confirm the foot now sits flat on the insole plane, viewed from the side.
- **Fix orientation** lets you go back and re-place the markers; **Reset** undoes the changes.



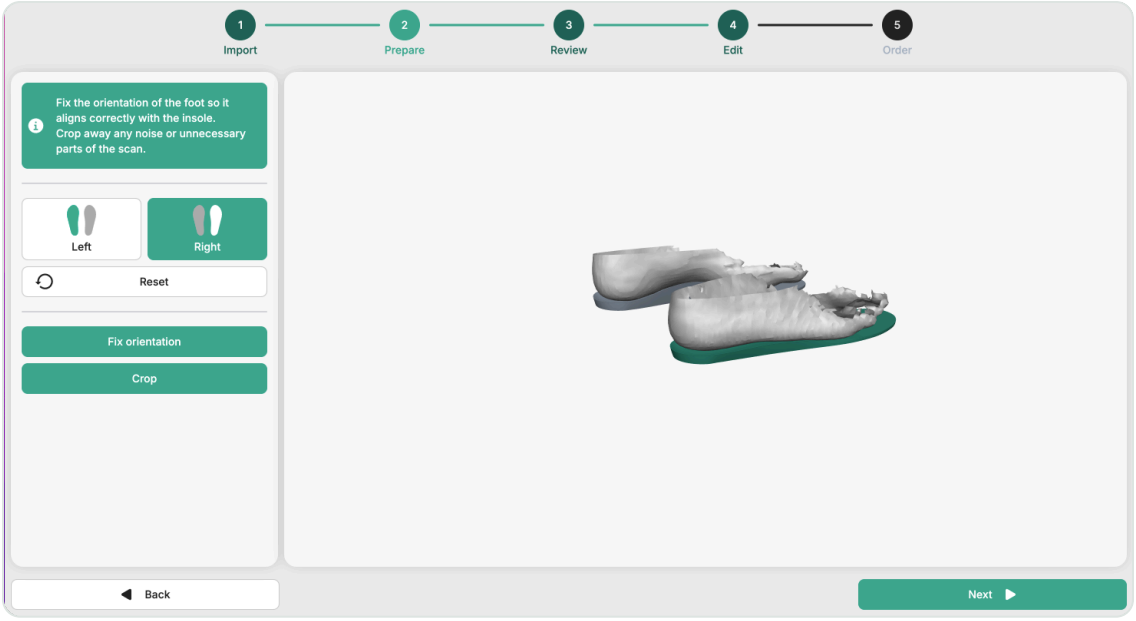
5 Crop away excess scan data

- Click **Crop**, pick the **Axis** to cut along (+X/−X, +Y/−Y, +Z/−Z) and drag the **Crop value** slider until the plane sits just above the foot.
- Everything on the far side of the green plane (leg, noise, stray data) is removed.
- Click **Crop** to confirm.



6 Review the cleaned scan

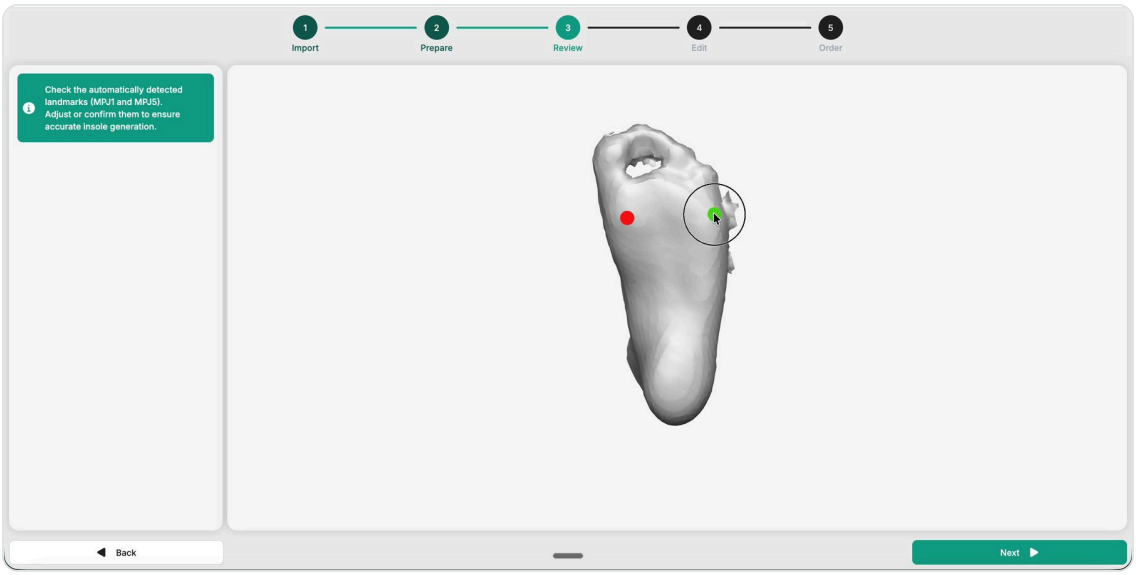
- You should now see only the foot sitting on the insole base.
- Click **Next**.



Stage 3 · Review

7 Confirm the auto-detected landmarks

- The software automatically detects **MPJ 1** (red) and **MPJ 5** (green).
- Auto-detection isn't always perfect: drag either point to the correct joint if it's off.
- The rest of the landmarks are generated from these two, so getting them right is what makes the insole accurate.
- Click **Next** to move on to design.



> **Tip:** zoom and rotate the view before confirming. A few millimetres off on MPJ 1 or MPJ 5 shifts the whole insole.

NEXT

Continue with **Guide 2: Setting up the design**.

STRYDE DESIGN · GUIDE 2 OF 4

Setting up the design

Choose an insole style, open the editor, and get oriented with the workspace before making adjustments.

STAGE 1 Import | STAGE 2 Prepare | STAGE 3 Review | STAGE 4 Edit | STAGE 5 Order

STARTS FROM

A reviewed scan with landmarks confirmed (end of Guide 1).

TWO FAMILIES OF STYLES

- **FDM soft shell**, printed in Mosaic Aero
- **Rigid shell**, printed in Mosaic Align

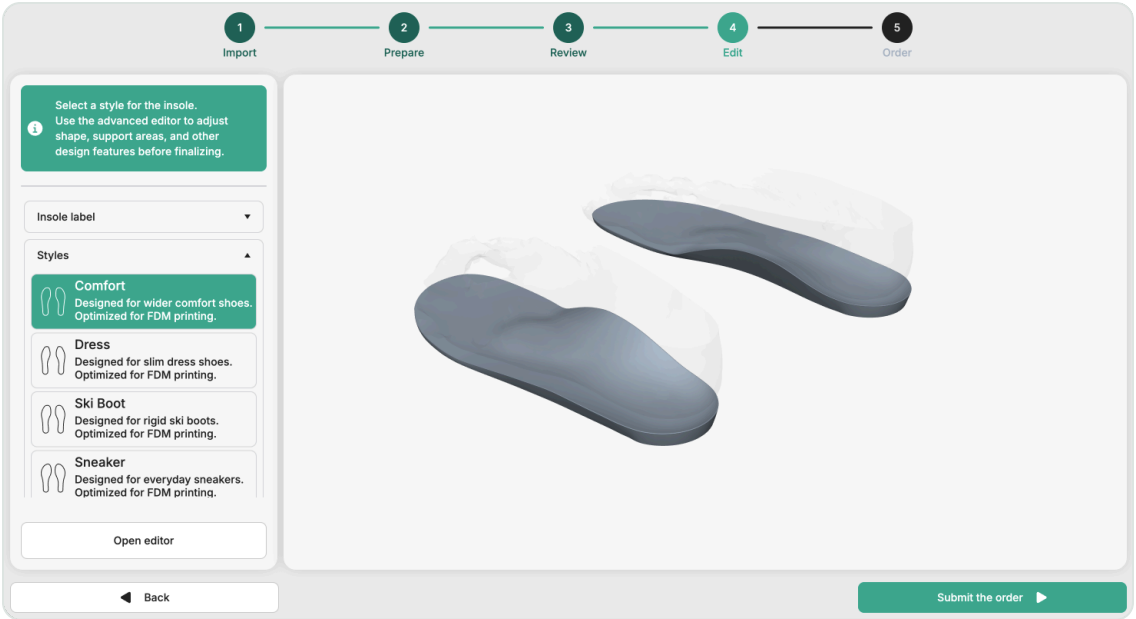
RESULT

The editor open with every design option available. Guide 3 explains each one.

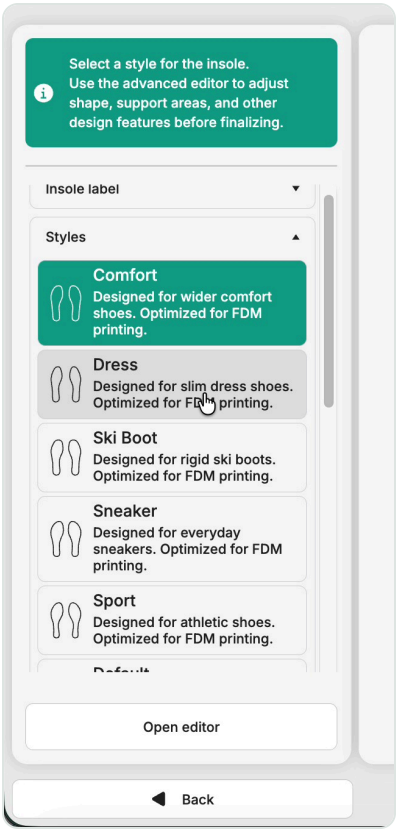
Stage 4 · Edit: choose a style

1 Pick an insole style

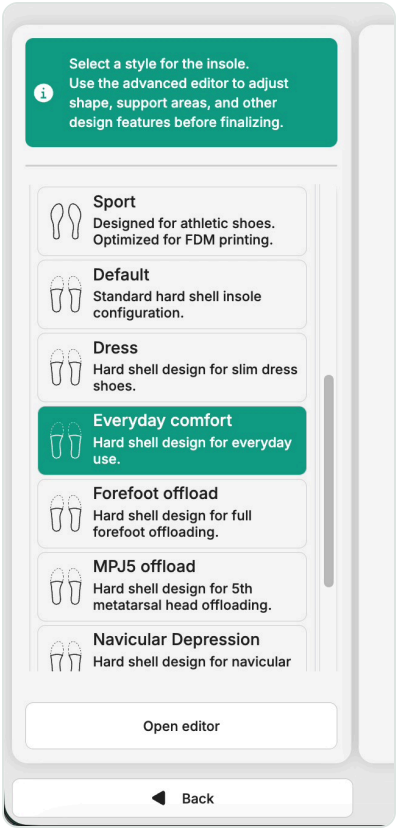
- The left panel lists every style. Click one to preview it on the scan.
- Optionally add an **Insole label** at the top of the panel.
- The example in this guide uses **Comfort**, the Mosaic Aero EVA-style device.



2 Know what each style is for



FDM SOFT SHELL (AERO)	DESIGNED FOR
Comfort	Wider comfort shoes
Dress	Slim dress shoes
Ski Boot	Rigid ski boots
Sneaker	Everyday sneakers
Sport	Athletic shoes

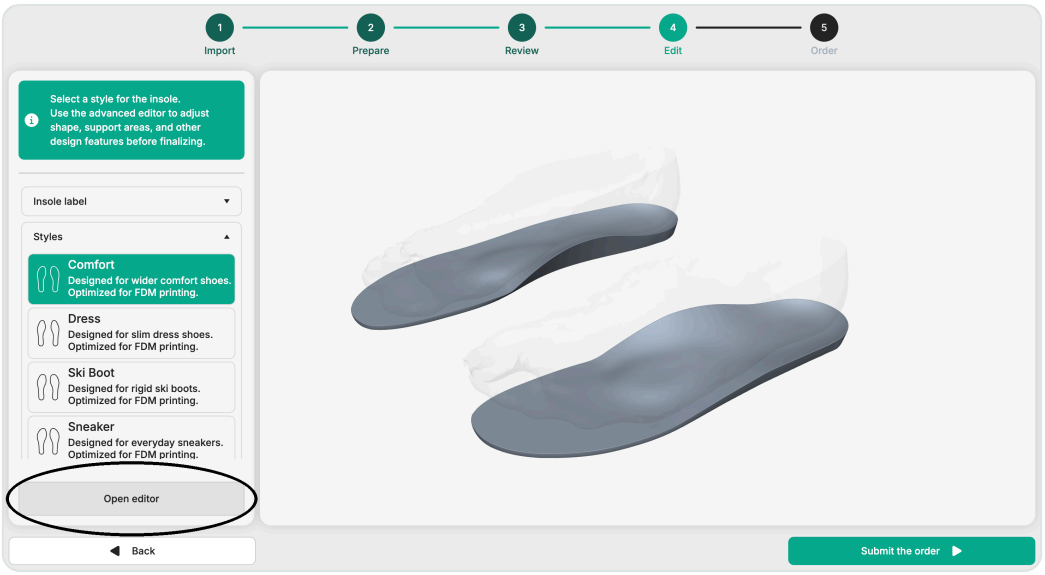


RIGID SHELL (ALIGN)	DESIGNED FOR
Default	Standard hard shell insole configuration
Dress	Hard shell for slim dress shoes
Everyday comfort	Hard shell for everyday use
Forefoot offload	Full forefoot offloading
MPJ5 offload	5th metatarsal head offloading
Navicular Depression	Navicular relief

The rigid list continues below Navicular Depression; scroll the panel to see every option.

3 Open the editor

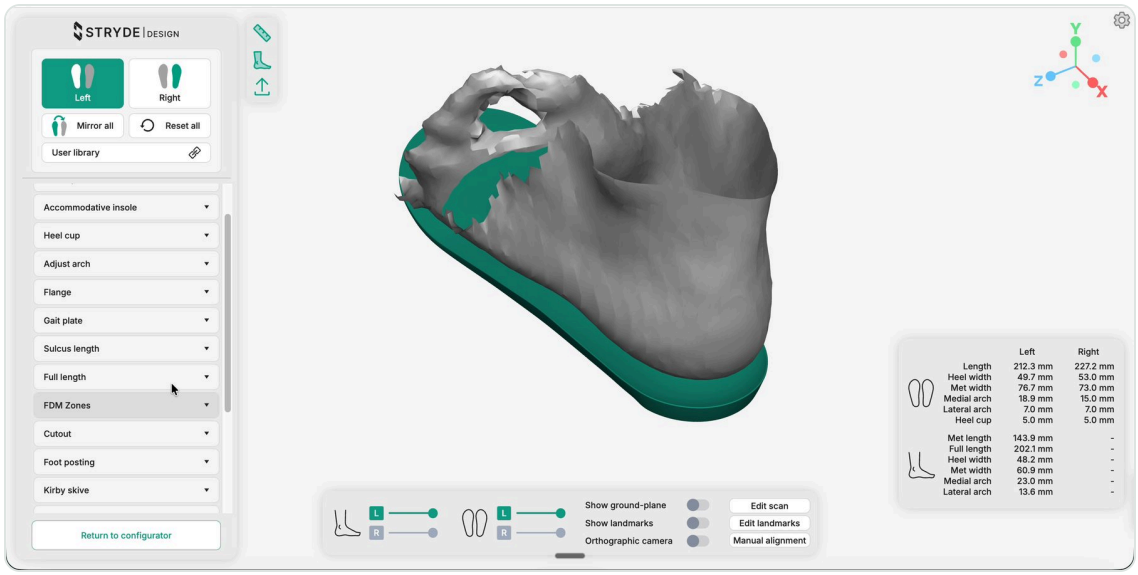
- With your style selected, click **Open editor** at the bottom of the style panel.



The editor workspace

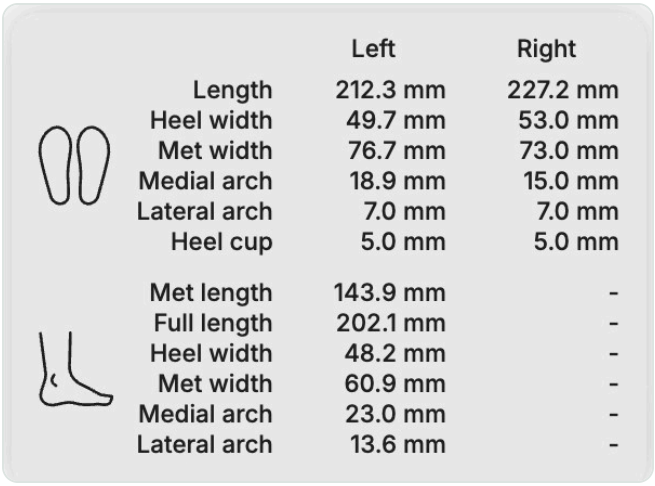
4 Get oriented in the editor

- **Left panel:** pick **Left** or **Right** foot, **Mirror all** to copy settings to the other foot, **Reset all**, and save or load presets from the **User library**.
- Below that is the list of design sections (Dimensions, Shell options, Heel cup, FDM Zones, and more). Click any section to expand it.
- **Center:** the live 3D insole over the scan. Drag to rotate, scroll to zoom; the axis widget top-right shows orientation.
- **Right:** live measurements. **Bottom:** view controls.



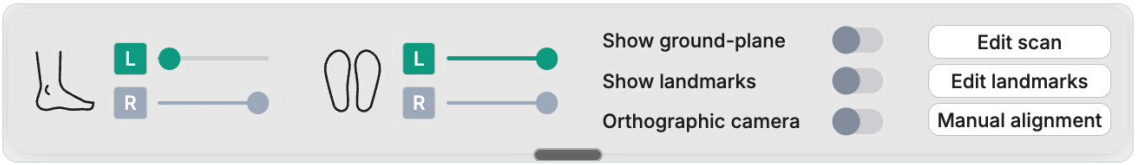
5 Read the live measurements

- Updates as you change the design, for both feet.
- Insole values: length, heel width, met width, medial arch, lateral arch, heel cup.
- Foot values from the scan: met length, full length, heel width, met width, medial and lateral arch.



6 Use the view controls

- **Sliders:** fade the scan (foot icon) and the insole (insole icon) in or out, separately for L and R.
- **Toggles:** Show ground-plane, Show landmarks, Orthographic camera.
- **Buttons:** Edit scan, Edit landmarks, and Manual alignment jump back to fix the scan without starting over.



NEXT

All design options are now in front of you. **Guide 3** lists every variable you can adjust; **Guide 4** covers sending the finished design to print.

STRYDE DESIGN · GUIDE 3 OF 4

Design variables reference

Every setting you can adjust in the Stryde Design editor, grouped the way they appear on screen.

STAGE 1 Import | STAGE 2 Prepare | STAGE 3 Review | STAGE 4 Edit | STAGE 5 Order

HOW TO USE THIS

Each section in the editor's left panel expands to show its controls. Settings apply to the selected foot; **Mirror all** copies them to the other.

AT A GLANCE

- 11 insole styles
- 17 design sections
- 8 FDM density zones

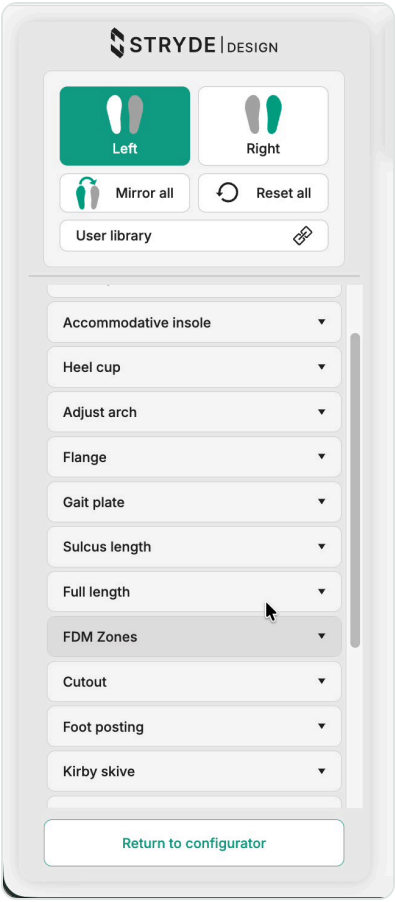
NOTE

The walkthrough opens FDM Zones in detail. Other sections are described by what they do; open each one in the editor to see its exact controls.

Workspace controls

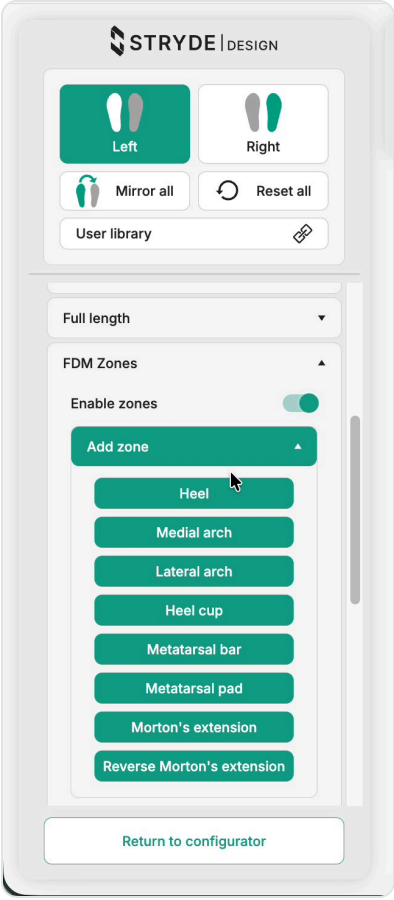
CONTROL	WHAT IT DOES
Left / Right	Choose which foot you are editing.
Mirror all	Copy every setting from the current foot to the other.
Reset all	Return all settings for the foot to the style defaults.
User library	Save and reuse your own presets.
Insole label	Label applied to the insole (style screen).
Return to configurator	Go back to the style screen to submit the order.

Design sections



SECTION	WHAT IT ADJUSTS
Dimensions	Overall size and outline of the insole.
Shell options	How the shell itself is built, such as its thickness and profile.
Accommodative insole	Switches the device toward an accommodative design focused on cushioning and pressure relief.
Heel cup	Depth of the heel cup. Shown live in the measurements panel (e.g. 5.0 mm).
Adjust arch	Medial and lateral arch height. Shown live in the measurements panel.
Flange	Medial or lateral flange extending up the side of the device for added control.
Gait plate	Gait plate extension, used to influence in-toeing or out-toeing.
Sulcus length	Ends the device at the sulcus, just behind the toes.
Full length	Extends the device to full length under the toes.
FDM Zones	Multi-density zones: assign a different softness to specific regions. Detailed below.
Cutout	Cut-outs that remove material to offload a specific area.
Foot posting	Rearfoot and forefoot posting (wedging) to correct alignment.
Kirby skive	Medial heel skive (Kirby technique) for added pronation control.
Domes and wells	Raised domes or recessed wells to support or offload specific points.
Metatarsal pad	Adds a metatarsal pad behind the met heads.
Fascial groove	A groove to relieve pressure on the plantar fascia.
Styloid	Relief for the styloid process of the 5th metatarsal.

FDM Zones (multi-density)



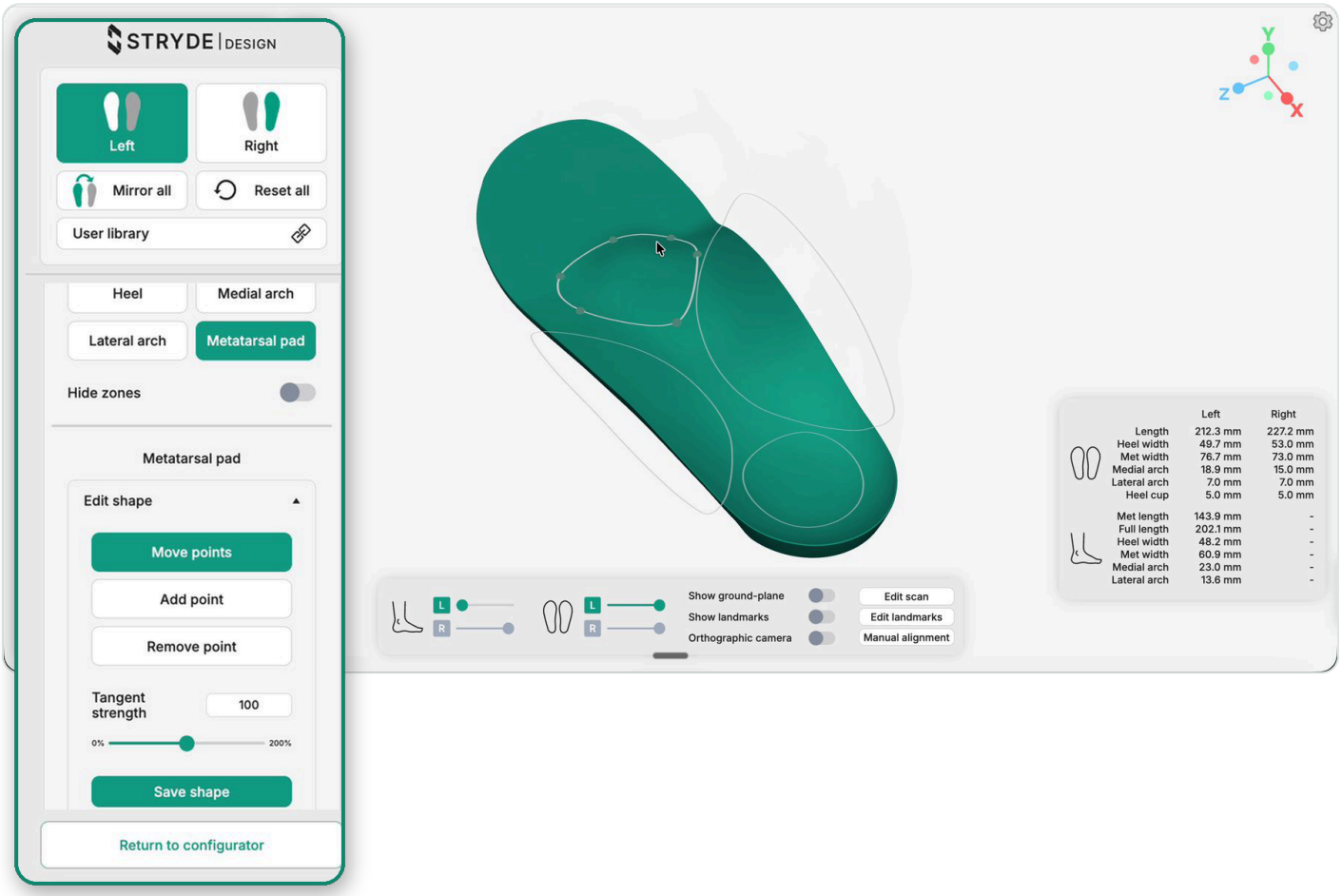
CONTROL	WHAT IT DOES
Enable zones	Turns multi-density zones on for the device.
Add zone	Adds one of the 8 preset zones below.
Zone shapes	Lists zones in use; click one to select and edit it.
Hide zones	Hides zone outlines in the 3D view.
Remove zone	Deletes the selected zone.
Mirror / Reset	Copy the zone to the other foot, or reset its shape.

AVAILABLE ZONES	REGION
Heel	Rearfoot cushioning
Medial arch	Arch support along the inside
Lateral arch	Support along the outside
Heel cup	The walls around the heel
Metatarsal bar	A band behind all met heads
Metatarsal pad	A pad behind the central met heads
Morton's extension	Extension under the 1st MPJ / big toe
Reverse Morton's extension	Extension under the 2nd to 5th MPJs

Most common setup: Heel, Medial arch, Lateral arch, and Metatarsal pad.

Editing a zone shape

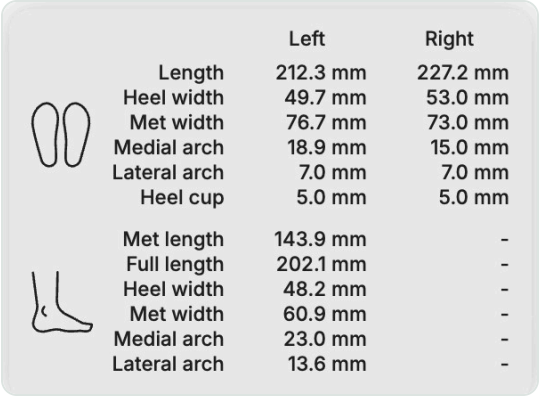
CONTROL	WHAT IT DOES
Edit shape	Opens the shape tools for the selected zone.
Move points	Drag the outline points on the insole to reshape the zone.
Add point / Remove point	Add detail to the outline or simplify it.
Tangent strength	How smoothly the outline curves between points, 0% to 200% (default 100).
Save shape	Locks in the new outline.



Shore hardness (set at submission)

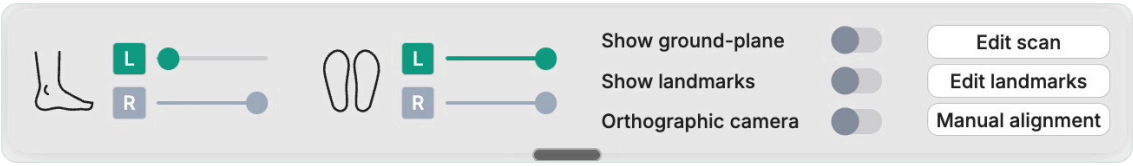
SETTING	WHAT IT DOES
Shore hardness per zone	Set when you submit the order (Guide 4). Each zone gets its own value; lower is softer. The example in this guide uses Heel 35A, Medial arch 30A, Lateral arch 30A, Metatarsal pad 25A.

Live measurements



GROUP	VALUES
Insole	Length, heel width, met width, medial arch, lateral arch, heel cup (left and right)
Foot (from scan)	Met length, full length, heel width, met width, medial arch, lateral arch

View controls



CONTROL	WHAT IT DOES
Scan / insole sliders	Fade the scan or the insole in and out, per foot.
Show ground-plane	Shows the floor plane under the device.
Show landmarks	Displays MPJ 1, MPJ 5, and the other landmarks.
Orthographic camera	Flat, no-perspective view for checking proportions.
Edit scan / Edit landmarks / Manual alignment	Jump back to fix the scan, landmarks, or alignment.

STRYDE DESIGN · GUIDE 4 OF 4

Sending a finished design to print

Set the hardness for each zone, submit to Stryde Print, and confirm the job is sliced and queued.

STAGE 1 Import | STAGE 2 Prepare | STAGE 3 Review | STAGE 4 Edit | STAGE 5 Order | THEN Stryde Print

STARTS FROM

A finished design in the editor (Guides 2 and 3).

TWO WAYS OUT

- **Submit** straight to Stryde Print
- **Export** the insole files instead

RESULT

The job sliced with the right profile and sitting in the print queue.

Stage 5 · Order

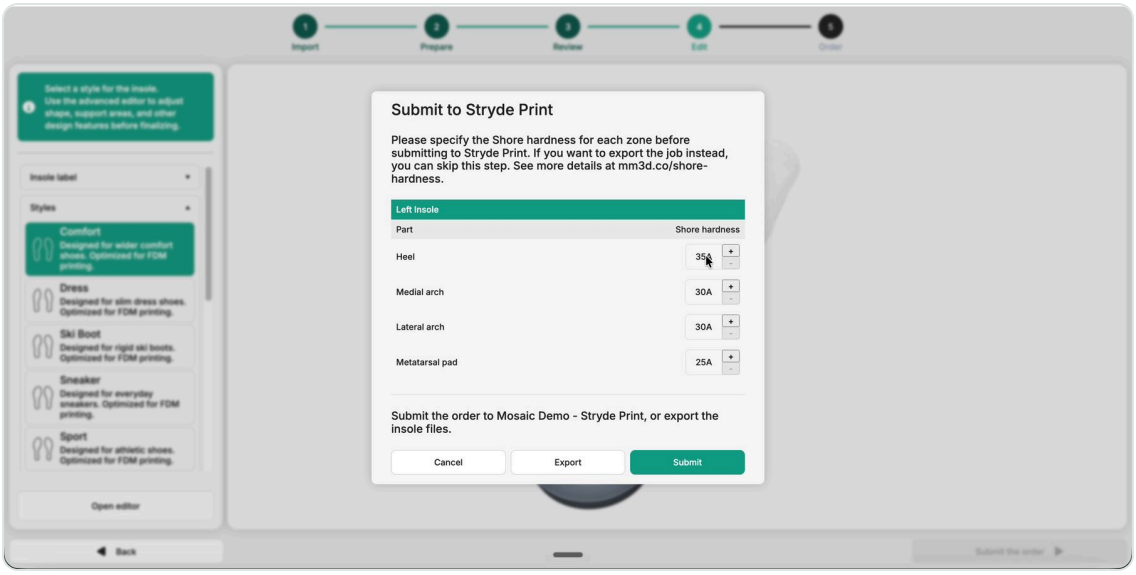
1 Return to the configurator

- In the editor, click **Return to configurator** at the bottom of the left panel.
- Check the preview: your zones are outlined on the insole.
- Click **Submit the order** (bottom right).



2 Set the Shore hardness for each zone

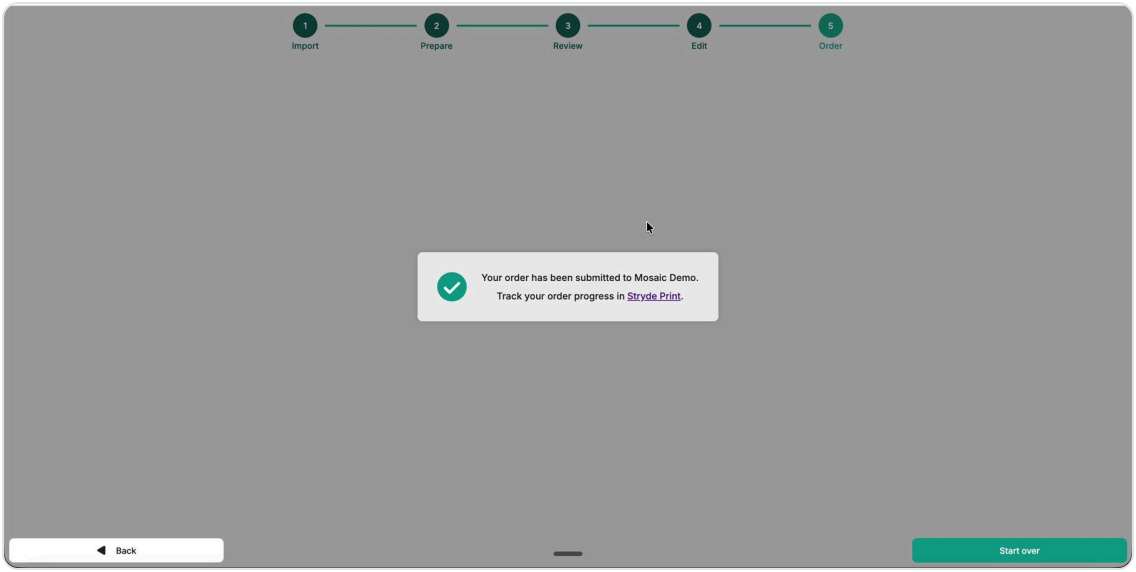
- A **Submit to Stryde Print** window lists every part of the insole.
- Use the + / – buttons to set the **Shore hardness** for each zone. Lower values are softer.
- Click **Submit** to send to Stryde Print, or **Export** to download the insole files instead.



> **Guide values:** Heel 35A · Medial arch 30A · Lateral arch 30A · Metatarsal pad 25A. More detail on choosing values at mm3d.co/shore-hardness.

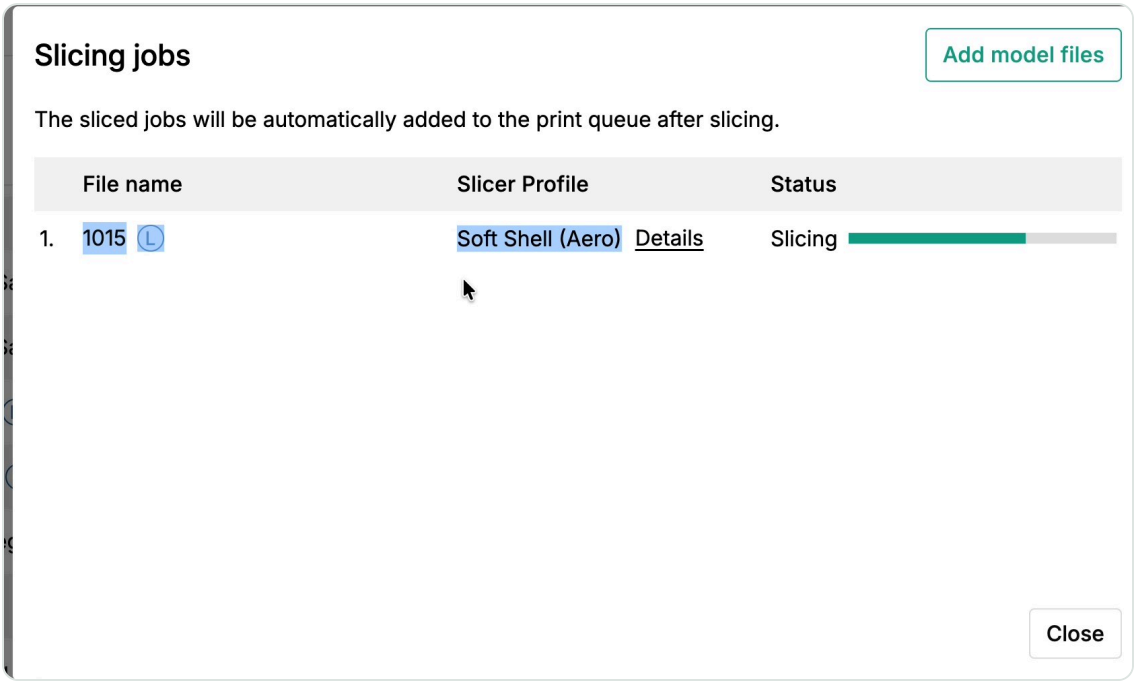
3 Confirm the order was submitted

- A confirmation appears: *Your order has been submitted.*
- Click the **Stryde Print** link to follow the job, or **Start over** for the next patient.



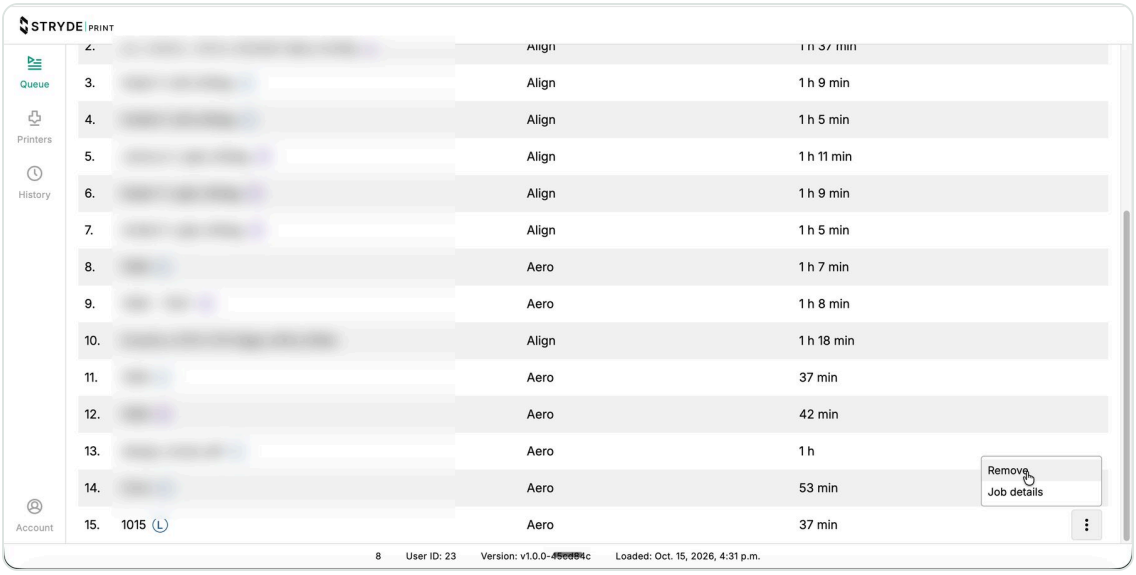
4 Watch it slice automatically

- The job appears under **Slicing jobs** with its slicer profile (here **Soft Shell (Aero)**) and a progress bar.
- No manual slicing needed: once done, it's added to the print queue automatically.



5 Find the job in the queue

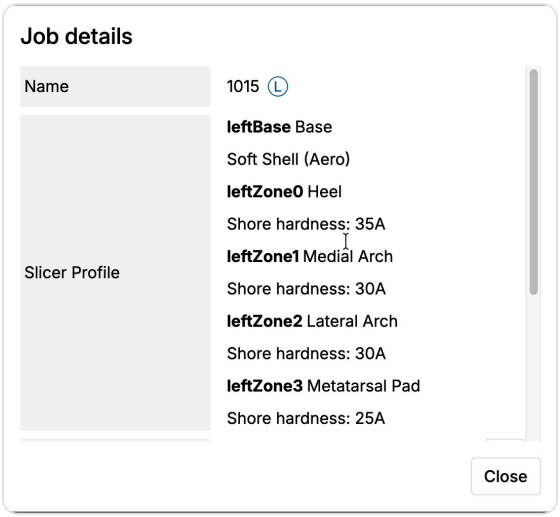
- Open **Queue** and scroll down: the new job is at the bottom with its material and estimated print time.
- Use the ⋮ menu on the row for **Job details** or **Remove**.

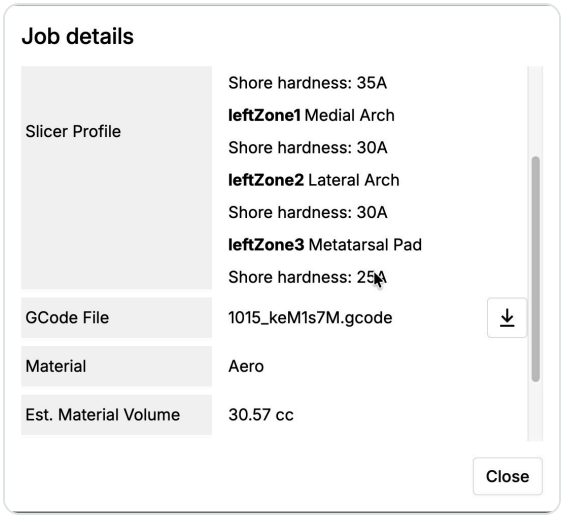


> Other job names in this screenshot are blurred for privacy.

6 Check the job details

- **Slicer profile:** each zone with its Shore hardness, so you can confirm the values before printing.
- Also shows the **GCode file** (downloadable), **Material,** and **Estimated material volume**.





DONE

The insole is queued and will print on the next available printer. Track it under **Queue** and **Printers** in Stryde Print.