5.7.1 Using "Flip V/H on oval cuts" to match your machine's axis

Using "Flip V/H on oval cuts" to match your machine's axis

> 5.7.1 calibration

When Spectre Cloud outputs oval cut directions, it displays them relative to a default axis orientation. Depending on how your drill press is set up — and how you physically orient the ball in the jig — the app's default **Vertical** and **Horizontal** labels may or may not match what your machine actually cuts. The **Flip V/H on Oval Cuts** setting exists to correct this mismatch without changing your pitch specs, oval sizes, or any other calculation. It is a pure display and output correction — one switch that realigns Spectre Cloud's language to match your press.

□□ What Flip V/H Does

Spectre Cloud expresses oval cut orientation in terms of two axes — **Vertical (V)** and **Horizontal (H)** — relative to the ball's position in the drilling jig. When Flip V/H is off, the app outputs oval directions using its default axis assignment. When Flip V/H is on, the Vertical and Horizontal labels are **swapped** on all oval cut outputs:

- What was labeled **Vertical** is now labeled **Horizontal**.
- What was labeled **Horizontal** is now labeled **Vertical**.
- The underlying oval size, angle, and pitch calculations are **completely unchanged** — only the axis labels on the output are flipped.

□□ **Note:** Flip V/H is a labeling correction, not a recalculation. Enabling it does not alter any measurement on a spec sheet — it changes how the oval cut direction is *described* so it matches the physical reality of your drill press setup.

□□ Why This Mismatch Happens

Drill presses are not all oriented the same way. Some presses hold the ball with the finger holes drilling vertically downward — meaning the forward/back axis of the grip runs vertically in the machine. Others orient the ball differently, rotating the effective V/H axes by 90°. When a driller reads a spec sheet produced by Spectre Cloud and sets their press accordingly, they need the V and H labels on that sheet to match the axes their machine actually moves in — otherwise a spec calling for a **Vertical** oval cut gets applied on the **Horizontal** axis, and the finished hole is rotated 90° from the intended orientation.

Common situations where Flip V/H is needed:

- □ Your drill press orients the ball with the span axis running **horizontally**, where Spectre Cloud's default assumes **vertical**.
- □ You have changed drill press models and the new machine uses the opposite axis convention from your previous one.
- □ Your shop uses a **custom jig or ball cup** that seats the ball at a 90° rotation relative to standard orientation.
- □ A second driller in your shop uses a different press from yours, and their machine's axis convention is the reverse of the shop default — they can run Spectre Cloud on their own device with Flip V/H enabled independently.

□□ How to Enable Flip V/H on Oval Cuts

1. Open **Settings** from your profile menu (top-right corner).
2. Navigate to the **Oval Calculator** section.
3. Locate the **Flip V/H on Oval Cuts** toggle.
4. Enable the toggle to swap the Vertical and Horizontal labels on oval cut outputs.
5. Save your settings.

Once enabled, all new spec sheets will display oval cut directions with the flipped axis labels. Previously saved spec sheets are not affected.

How to Tell If You Need This Setting

If you are unsure whether your press requires Flip V/H, a quick physical test resolves it without risk:

1. Create a test spec sheet in Spectre Cloud with a known oval cut — for example, a `1/4"` oval on a finger hole with clear forward pitch.
2. Note the oval cut direction Spectre Cloud outputs — for example, **Vertical 1/4"**.
3. Set your press to cut that oval on the Vertical axis as the machine defines it.
4. After drilling, check the finished hole. The oval elongation should run **forward and back** relative to the bowler's grip — aligned with the pitch axis, not across it.
5. If the oval ran the wrong way — across the grip rather than along it — enable Flip V/H and redrill the test hole on a plug or scrap ball.

Tip: Run this test on a practice ball or plug before applying it to a paying customer's equipment. One test hole is all it takes to confirm which axis orientation your press uses.

⚖ Flip V/H and Oval Cut Direction — How They Interact

Flip V/H works alongside the **Oval Cut Direction** setting (NONE, Forward/Back, or Left/Right) rather than replacing it. The two settings control different things:

Setting	Controls	Affects calculations?
Oval Cut Direction	Whether directional oval labels appear on spec sheets at all, and which axis convention (F/B or L/R) is used	Yes — determines how oval measurements feed into spec sheet fields
Flip V/H on Oval Cuts	Whether Vertical and Horizontal labels are swapped on oval cut outputs	No — labeling correction only

If your Oval Cut Direction is set to **NONE**, Flip V/H has no visible effect — no directional labels are displayed for it to swap. The setting becomes relevant when you are using the Forward/Back or Left/Right directional modes and your press axis convention does not match Spectre Cloud's

default output.

□□ Multi-Location and Multi-Staff Considerations

In shops with more than one drill press, or in multi-location operations, the Flip V/H setting may need to be configured differently on each device or user account — reflecting the axis convention of whichever press that operator works at. Spectre Cloud's settings are account-level, so each operator can maintain their own Flip V/H preference independently without affecting other users' outputs.

- □ Driller A uses a press where Vertical matches Spectre Cloud's default — Flip V/H off.
- □ Driller B uses a press with the opposite orientation — Flip V/H on.
- □ Both drillers produce correctly labeled spec sheets for their respective machines from the same Spectre Cloud account structure.

□□ **Note:** If spec sheets are printed and shared between drillers at different stations, make sure the driller reading the sheet knows which axis convention it was generated for. A spec sheet produced with Flip V/H on will have swapped labels relative to one produced with it off — the same physical oval cut, described in opposite terms.

Related Sections

- 5.5.1 — Setting up: Oval Cut Direction = NONE in Settings
- 5.5.3 — When NONE mode is preferable (experienced fitters, custom setups)
- 5.6.5 — Choosing EDGE vs. CENTER: which method fits which bowler
- 5.6.6 — 1° vs. 5° Oval Degree increments and their precision impact
- 5.7.2 — Reading and interpreting Oval Calculator output on a spec sheet

□ **Tip:** When setting up Spectre Cloud on a new device or for a new driller, confirm the Flip V/H setting as part of the initial configuration checklist — alongside Oval Cut Direction, calculation method, and degree increment. Getting it right at setup avoids a whole category of oval orientation errors before they reach a customer's ball.

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