4.3.3 Inputing Vertical and Lateral pitch for fingers

Forward and lateral pitch for fingers

> 4.3.3 measurement

https://www.youtube.com/embed/s8Ec4t9hpZ8?si=anmPbEwhmubHYKHD

Pitch describes the angle at which each finger hole is drilled into the ball — not straight down, but tilted in a specific direction to match the natural resting angle of the bowler's finger. Spectre Cloud records two pitch values for each finger hole: **vertical pitch** (the tilt toward or away from the bowler's palm) and **lateral pitch** (the tilt toward or away from the thumb). Entering both values accurately is essential to a comfortable, repeatable fit.

□□ Understanding Vertical Pitch

Vertical pitch describes the angle of the finger hole along the **palm-to-fingertip axis** — that is, whether the hole tilts toward the palm (forward) or away from it (reverse).

Direction	What it means	Typical use

Forward	Hole tilts toward the bowler's palm. The bottom of the hole leans in the direction of the thumb.	Most common for fingertip grips. Helps the finger seat naturally at the first knuckle without strain.
Zero (0)	Hole drilled perpendicular to the ball surface — no tilt in either direction.	Used for some conventional grips and as a neutral baseline.
Reverse	Hole tilts away from the bowler's palm. The bottom of the hole leans away from the thumb.	Less common for fingers; used occasionally for conventional grips or when a bowler has a specific release preference.

Typical vertical pitch ranges for fingers

- **Fingertip grip:** `¼"` to `½" forward` is the most common starting range for both middle and ring fingers.
- **Conventional grip:** `0"` to `¼" forward` is typical — conventional bowlers generally need less forward pitch than fingertip bowlers.
- Vertical pitch beyond `¾" forward` for fingers is unusual and should be confirmed before drilling — it may indicate a measurement error or an atypical hand anatomy that warrants a closer fitting.

↔ Understanding Lateral Pitch

Lateral pitch describes the angle of the finger hole along the **thumb-to-little-finger axis** — whether the hole tilts toward the thumb side of the hand or away from it.

Direction	What it means	Typical use
Toward thumb (inward / medial)	Hole tilts in the direction of the thumb. For a right-handed bowler, the middle and ring finger holes tilt left.	The most common lateral direction for finger holes — mirrors the natural inward curl of the fingers.
Zero (0)	No lateral tilt — hole drilled straight relative to the lateral axis.	Used as a starting point or when a bowler has a very square finger position.
Away from thumb (outward / lateral)	Hole tilts away from the thumb. Less common for finger holes.	Occasionally used for bowlers with a pronounced outward finger angle or specific release mechanics.

Typical lateral pitch ranges for fingers

- **Most bowlers:** `0"` to `¼" toward thumb` for both middle and ring fingers.

- □ Middle and ring fingers often carry the same lateral pitch, but they do not have to — record each finger independently.
- □ Lateral pitch beyond `3/8"` in either direction for finger holes is uncommon and worth double-checking.

□□ Entering Pitch Values in Spectre Cloud

1. In the spec sheet, locate the **pitch section** for the middle finger and ring finger — each finger has its own vertical and lateral pitch fields.
2. For each finger, enter the **vertical pitch value** — the amount in inches (e.g., `¼`, `3/8`, `½`) — and select the direction: `Forward`, `Zero`, or `Reverse`.
3. Enter the **lateral pitch value** and select the direction: `Toward Thumb`, `Zero`, or `Away from Thumb`.
4. Repeat for both the middle and ring finger.
5. Review all four pitch entries (vertical + lateral for each finger) before moving on to thumb pitch.

Verify with Spectre team: confirm whether pitch is entered as a fraction (e.g., ¼") or a decimal (e.g., 0.25"), and whether direction is selected via a dropdown, radio buttons, or a +/− toggle. Also confirm the exact field labels used in the UI.

□□ How Pitch Is Recorded on Fitting Sheets

Legacy and handwritten fitting sheets record pitch in a variety of ways. Here is how to interpret the most common notations when transferring records into Spectre Cloud:

Notation on fitting sheet	How to enter in Spectre Cloud
`¼F` / `1/4 Fwd` / `¼ Forward`	Vertical: `¼"`, direction: **Forward**
`0` / `Zero` / `Neutral`	Vertical or lateral: `0"`, direction: **Zero**
`¼R` / `1/4 Rev` / `¼ Reverse`	Vertical: `¼"`, direction: **Reverse**
`¼T` / `¼ In` / `¼ toward thumb`	Lateral: `¼"`, direction: **Toward Thumb**
`¼ Out` / `¼ Lat` / `¼ away`	Lateral: `¼"`, direction: **Away from Thumb**

Notation on fitting sheet	How to enter in Spectre Cloud
`3°` / `5°` (degrees)	Convert to inches using your drill press conversion chart, then enter. *Verify with Spectre team: confirm whether Spectre Cloud accepts degree entry directly or requires conversion to inches.*

Tips for Accurate Pitch Entry

- Enter middle finger pitch and ring finger pitch **separately** — they are often the same, but do not assume. Many bowlers carry slightly different pitches on each finger.
- When in doubt on lateral pitch for a new bowler, `0"` to `¼" toward thumb` is a safe starting point. You can refine on future visits.
- If a bowler reports finger soreness or difficulty releasing after a drilling, pitch is usually the first adjustment to consider — noting the original pitch values accurately makes future corrections much easier.
- Do not confuse vertical and lateral pitch fields when entering data from a handwritten sheet — double-check the axis before saving.
- Do not leave pitch fields blank if the original fitting sheet shows zero — enter `0"` explicitly so the record is unambiguous.

IBPSIA tip: Spectre Cloud's auto-suggestion feature can recommend starting pitch values based on grip type and span measurements. These are reference points, not prescriptions — always defer to a measured fitting or a returning bowler's known preferences over a suggested value. See *4.5 — IBPSIA Auto-Suggestions* for details.

Related Sections

- 4.3.2 — Entering span measurements (Full Span and Cut to Cut)
- 4.3.4 — Inputting thumb pitch
- 4.2.4 — How to identify grip type from a measurement sheet
- 4.5 — IBPSIA auto-suggestions
- Book 05 — Oval Calculator

Tip: Keep a laminated pitch reference card at your drill press with common notation translations. When transferring a stack of legacy fitting cards, having the conversion table visible saves time and prevents the most common transcription errors.

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