

4.4.6 CLT (Center Line Transformation)

https://www.youtube.com/embed/KVp3njbLgFY?si=D_GTkJ2VdMHaalHv

4.4.6

measurement

CLT (Center Line Transformation) is a fitting measurement that captures how a bowler's finger centerline relates to the ball's grip center. Spectre Cloud uses it to derive the lateral finger pitch. This page explains the two ways CLT is measured, which one Spectre accepts, and the reference chart used to look it up.

▣ The Two Ways CLT Is Measured

CLT can be expressed two different ways — they describe the same thing, just in different units:

- **In inches** — the distance from the CLT to the centerline at the **top of the thumb**. This is the most common method. A typical value is around 1".
- **In degrees** — the angle between the normal centerline and the CLT at the **fingers**. A typical value is around 16°.

Important: Spectre Cloud accepts CLT **in degrees only**. If you measured in inches, convert to the angular value — the reference chart below maps the two together.

▣ CLT Reference Chart

The chart below maps each CLT line (A-E) to its angle and to the resulting lateral finger pitches. Because the layout mirrors with handedness, the middle and ring values swap between right- and left-handed bowlers.

[Insert CLT reference diagram here] — add the "Diagram #1" CLT chart image (right-hand and left-hand versions). The transcribed values are below for quick reference and searchability.

Right-Handed Bowler

Line	Angle	Middle Finger	Ring Finger
A	8°	3/8" Left	1/2" Right
B	16°	5/16" Left	9/16" Right
C	24°	1/4" Left	5/8" Right
D	32°	3/16" Left	11/16" Right
E	40°	1/8" Left	3/4" Right

Left-Handed Bowler

Line	Angle	Middle Finger	Ring Finger
A	8°	3/8" Right	1/2" Left
B	16°	5/16" Right	9/16" Left
C	24°	1/4" Right	5/8" Left
D	32°	3/16" Right	11/16" Left
E	40°	1/8" Right	3/4" Left

CLT and Auto-CLT

Once a CLT value is entered in degrees, the **Auto-CLT setting (2.6.3)** uses this chart to apply the corresponding lateral finger pitches automatically — so the lateral pitch is derived from the CLT rather than entered by hand.

-  Enter CLT in degrees; Auto-CLT looks up the lateral finger pitch from the chart.
-  Because the chart is handedness-specific, the correct lateral directions are applied based on the bowler's dominant hand.
-  **Verify with your Spectre team:** confirm exactly how Auto-CLT interacts with a manually entered lateral finger pitch (4.4.3) when both are present on a sheet.

Related Sections

- 4.4.5 — Inputting finger pitch (forward, reverse, lateral)
- 4.5.3 — Entering vertical and lateral pitch for thumb
- 4.1.4 — Pitch terminology: Forward, Reverse, Lateral, Zero

- 2.6.3 — Auto-CLT: lateral pitch of fingers based on the CLT chart
- 4.2.5 — Cloning a spec sheet (CLT carries forward with other measurements)

Tip: Since Spectre only takes CLT in degrees, decide as a shop whether you measure at the thumb (inches) or at the fingers (degrees). If your fitting habit is the 1" thumb-based measurement, keep this chart handy to translate it to the angular value Spectre expects before you enter it.

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