System for Aiming With Sidespin (SAWS) BHE/FHE Calibration

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SAWS Instructions:

Complete the gridded table on the next page, determining the percentages of BHE and FHE required for each distance (short, mid, long) and each speed (slow, medium, fast). Use Dr. Dave's example percentages as starting points.

- a. **Practice the shot speed** for a given column first, using the speed definitions on the next page, and then **complete the entire column** before moving to the next.
- b. Keep the tip on the horizontal centerline of the CB, use your preferred bridge length consistently, keep the cue as level as possible (touch the rail), and use close to maximum sidespin for every shot.
- c. If using **right sidespin**, if the **CB goes to the left, increase the BHE %** (and decrease the FHE %); and if the **CB goes to the right, decrease the BHE %** (and increase the FHE %).
- d. Continue adjusting until the CB passes over the pocket donut with good accuracy.
- e. If you are left-handed, you can switch to the other side of the table to make the shots more reachable.
- f. An open bridge is recommended to help make the BHE pivots more accurate and consistent.



SAWS BHE/FHE Percentages

Speed definitions (hitting from the head string with an above-center hit for a rolling CB):

- "**slow**" ¼ stroke (off 1 rail back to the head string*)
- "medium" 1/2 stroke (off 2 rails to the center string*)
- "fast" ³/₄ stroke (off 3 rails to the foot string*)

*: under typical playing conditions

Tip on Horizontal Centerline with Level Cue

		speed		
		slow	medium	fast*
distance	short (1')	BHE:%	BHE:%	BHE:%
		FHE:%	FHE:%	FHE:%
	mid (3')	BHE:%	BHE:%	BHE:%
		FHE:%	FHE:%	FHE:%
	long (6')	BHE:%	BHE:%	BHE:%
		FHE:%	FHE:%	FHE:%

*: If your preferred bridge length is longer than your cue's natural pivot length, you will need to use a smaller pivot length for fast-speed-shot BHE, but you can extend your bridge length after the pivot if necessary. Alternatively, you can use a negative (reverse) FHE and then pivot at your normal bridge length to the final offset with all BHE (100% from the negative FHE position).

Corrections:

- Below-center hit (swerve delayed): +10% BHE (B = backspin = more BHE)
- Above-center hit (sooner swerve): +10% FHE (F = follow = more FHE)
- New/slick cloth (swerve delayed): +10% BHE
- Old/sticky cloth (sooner swerve): +10% FHE
- **Cue elevation** (more and sooner swerve; avoid whenever possible): less BHE, more FHE (and even reverse BHE/FHE for larger elevations)
- Larger-squirt cue: more BHE% (or shorten bridge length).

Example (Dr. Dave with a Revo LD Shaft and 12" bridge length on used Simonis 860):

		speed		
		slow	medium	fast
distance	short (1')	BHE: 60%	BHE: 80%	BHE: 90%
		FHE: 40%	FHE: 20%	FHE: 10%
	mid (3')	BHE: 40%	BHE: 70%	BHE: 85%
		FHE: 60%	FHE: 30%	FHE: 15%
	long (6')	BHE: 30%	BHE: 60%	BHE: 80%
	- • •	FHE: 70%	FHE: 40%	FHE: 20%