

THE EVERYDAY ARROW SYSTEM

Build the Right Hunting Arrow for Your Bow

Arrow Build Cheatsheet and Worksheet

Use your bow specs to set a target weight, compare performance, plan components, check FOC and spine, and verify one test arrow before you build the batch.

What you will have when you finish

- A bow-based arrow-weight target and working range.
- A primary build and an optional comparison build.
- A projected FOC and dynamic-spine planning check.
- One measured, tuned, and recorded test arrow.

I built this worksheet to keep the decisions in the right order. The calculators do the math. This sheet helps you keep the plan together and verify what you actually built.



OPEN THE ARROW SYSTEM

Start With Your Bow

The target comes from your bow setup and real shooting distance. It does not come from the animal you plan to hunt.

1 Record the setup you will use

Bow make and model

IBO rated speed (fps)

Actual draw length (in)

Actual draw weight (lb)

Weight added to bowstring (gr)

Typical shooting distance (yd)

Manufacturer minimum arrow weight

Current arrow weight - optional

2 Run the Everyday Arrow Weight Formula

Enter the same bow specs above. Record the target and working range. The range gives you room to balance trajectory, component choices, durability, and tuning.

Formula target (gr)

Working range - low (gr)

Working range - high (gr)

Why I may adjust within the range

OPEN THE FORMULA

Safety rule: Follow your bow manufacturer's minimum arrow-weight requirement even if a calculator or comparison suggests a lighter build.

See the Tradeoffs Before You Buy

Use the same bow inputs for each build. Change only the finished arrow weight so the comparison stays useful.

Selected downrange distance (yd)

These results are estimates. A chronograph replaces estimated launch speed when you have the finished arrow.

Current Arrow - optional

Weight (gr)

Launch speed

Launch KE

Launch momentum

Speed at distance

KE at distance

Momentum at distance

Everyday Formula Target

FORMULA TARGET

Weight (gr)

Launch speed

Launch KE

Launch momentum

Speed at distance

KE at distance

Momentum at distance

Alternate Build - optional

Weight (gr)

Launch speed

Launch KE

Launch momentum

Speed at distance

KE at distance

Momentum at distance

[OPEN THE PERFORMANCE CALCULATOR](#)

Use the comparison to understand speed, energy, and momentum tradeoffs. Do not choose a shaft from this page alone.

Build the Weight on Paper First

Fill in Build B only when you want to compare a different shaft, broadhead, insert, or fletching choice.

	PRIMARY BUILD A	OPTIONAL BUILD B
Shaft manufacturer and model		
Candidate shaft spine The spine you are considering		
Cut shaft length (in) Nock throat to shaft end		
Shaft GPI		
Calculated shaft weight GPI x cut length		
Insert or outsert (gr)		
Collar or footer (gr)		
Broadhead or point (gr)		
Nock and bushing (gr)		
Fletching total (gr)		
Wrap (gr)		
Other components (gr)		
PROJECTED TOTAL (gr) Compare with the Formula range		

OPEN THE ARROW WEIGHT CALCULATOR

Use manufacturer weights while planning. Weigh each part when you have it. The calculator page includes the inexpensive grain scale I use and my affiliate disclosure.

Make the Balance and Spine Decisions

Set the FOC target before permanent assembly. Use the manufacturer chart first, then use dynamic spine as an added planning check.

FOC: choose the path that matches your arrow

☐ Existing arrow - measure the finished arrow

☐ Concept build - estimate from projected specs

Arrow length (in)

Balance point (in)

Measured/projected FOC (%)

FOC target (%)

Build A projected FOC

Build B projected FOC

FOC guidance

10-15% is standard. I generally plan around 13-18%. More than 20% is high FOC and deserves a careful spine, weight, and trajectory check.

[OPEN THE FOC CALCULATOR](#)

Spine: confirm the planned shaft

Shaft model

Candidate shaft spine

Manufacturer chart starting spine

Dynamic Spine Calculator result

☐ Advanced inputs used - recommended, not required

More front weight usually makes the arrow behave dynamically weaker. A shorter shaft or a lower spine number makes it stiffer. Final proof comes from the completed test arrow and tuning.

[OPEN THE DYNAMIC SPINE CALCULATOR](#)

Build One Test Arrow

The calculations narrow the choices. The completed arrow, your bow, and your tuning work verify the build.

Before permanent assembly

- ☐ Finished weight meets the bow manufacturer's minimum.
- ☐ Shaft length and broadhead clearance are safe at full draw.
- ☐ Shaft, insert/outsert, collar, nock, and point are compatible.
- ☐ The manufacturer spine chart supports the shaft choice.
- ☐ Components were dry-fit and the planned total was checked.

Measure what you actually built

Finished weight (gr)

Actual shaft length (in)

Measured FOC (%)

Chronograph speed - optional

Final shaft spine

Total front weight (gr)

If you have chronograph speed, use it in place of the estimate.

Verify arrow flight

- ☐ Paper tune
- ☐ Broadhead tune
- ☐ Repeatable groups; components secure and undamaged
- ☐ Bare-shaft check - optional
- ☐ Test at realistic distance

[OPEN THE PAPER-TUNING GUIDE](#)

Save the Build That Worked

Record the final arrow as it was actually built and tuned. That gives you a repeatable starting point the next time you need shafts.

Final arrow build record

Build name or batch number

Date built

Shaft model and spine

Insert, collar, broadhead

Finished weight (gr)

Measured FOC (%)

Tuning result, sight notes, and anything I would change

Continue through the system

1

Everyday Arrow System

The complete build order and supporting guides.

2

Tools Hub

Open every calculator from one page.

3

Complete Arrow Build Guide

Follow assembly, tuning, and final verification.

4

New to Buying Arrows?

Learn the terms and what to ask before a shaft is cut.

The next move is simple: Build one arrow, measure it, tune it, and prove it before you finish the batch.

OPEN THE EVERYDAY ARROW SYSTEM

A note from Mike

This worksheet is a planning tool. Your bow manufacturer, shaft chart, completed test arrow, and tuning results make the final decision. Keep the record. It will save you time when you rebuild or compare a new setup.

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