fujikura Motore X F1 and F3 Golf Shafts

I feel the need, the need ... for another new shaft. OK, that's not exactly the line but apparently 2020 is the year of Top Gun-themed product releases so it's more than fitting that the Fujikura Motore X F1 and F3 promises to deliver more speed in your golf swing.

In 2009, Fujikura introduced the Motore F1 with H.I.T. (high inertia tip) technology. Engineers used specific materials to allow the tip of the shaft to better store energy during the swing and release it just prior to impact. A decade later, the premise behind Motore remains the same, though it benefits from a more advanced design and material integration. Motore is Italian for *engine* which maybe is what spawned all *the shaft is the engine of the golf club* nonsense.

Just a suggestion, but maybe next time we could go with Essenza? Or Velocita? I digress.

Fujikura developed ENSO (proprietary 3D motion capture system) and began using it in 2013. For several years, the primary benefit was as an R&D tool. But, because Enso provides insight into the relationship between the player and the shaft, it has become an integral tool in Fujikura's shaft design arsenal.



MOTORE X MATH

Every product starts with an end goal in mind. With the Fujikura Motore X, the task was to create a shaft to <u>multiply</u> <u>swing speed</u> as opposed to simply increasing it.

Increases in performance are based mostly on linear — "if A, then B" — thinking. For example, if we push more weight low/rear in the clubhead, then MOI increases.

Multiplying technologies challenges golfers to consider the symbiotic relationship between different parts of the same system. The 2019 Fujikura Ventus is a solid example of this shift in thinking.



With Ventus, Fujikura used high modulus Pitch 70 composite materials in the bias layer to increase clubhead stability. In doing so, Ventus worked to allow the MOI characteristics already present in the clubhead to behave more effectively. As a result, many players (yours truly included) noticed a lower standard deviation of ball speeds. Simply, Ventus allowed the clubhead to do what it was designed to do, just a bit better.

With Fujikura Motore X, the approach is similar but instead of MOI, the target is swing speed.

FUJIKURA MOTORE X DESIGN DETAILS

There are two primary areas Fujikura addressed in the

Motore X design to promote increased swing speeds. Specifically, it targeted the handle section and the bias layer.

Through ENSO, Fujikura determined that a torsionally stiffer handle section could improve swing speed for players who place more load on the shaft. Skipping some of the scientific terms, engineers designed the handle section of Motore X to better accommodate twisting forces generally applied by more aggressive swingers. Case in point: last week Mizuno staffer Rhein Gibson put a Fujikura Motore X F1 in play, noting better dispersion.



To review, the bias layer refers to composite materials oriented at a 45° angle during shaft production. Moreover, the bias layer can run the entire shaft length or target specific sections.

Fujikura used full-length Pitch 70 fibers in the bias layer on

Ventus to help generate VeloCore (*velocity* at the *core*) technology. Think of VeloCore <u>as a container</u>. By placing different materials in various arrangements in the container (bias layer), Fujikura can alter shaft performance.

In this instance, engineers went with a mix of <u>40T carbon</u> <u>fiber and other high/intermediate modulus materials</u>. Compared to Pitch 70, these materials are more readily available, cost less and are less resistant to twisting.

FUJIKURA MOTORE X MODELS

With Motore X, Fujikura is sticking with two models, F1 and F3. Of the two, Motore X F1 will be lower spinning/lower launching while Motore X F3 is less stiff with a bit more spin and higher launch. Compared to Ventus Blue, Motore X F1 has a slightly softer tip section but similar mid and handle sections. So even though Ventus Blue isn't the stiffest of the Ventus options (Ventus Black claims that spot), it's a stouter shaft than the Motore X F1.

Though it's necessary on some level to categorize shafts based on two variables (launch/spin) and three sections (tip, middle, handle), there's a risk of over-simplification. On paper, Motore X F3 appears to have a profile well-suited for fairway woods. That may be the case. However, at the Farmer's Insurance Open last week, Xinjun Zhang used it in his driver and picked up two to three miles per hour of clubhead speed.

The lesson? Charts and spec sheets are helpful guides but labels can be misleading. Assuming a shaft will/won't work for you based on generic terms and comparisons is likely robbing your game of performance.



FINAL THOUGHTS

The Motore X fills a price gap in Fujikura's line up. At an MSRP of \$275, it's more affordable than Ventus and Speeder Evo V (both \$350) and more advanced than the Pro 2.0. Also, Motore X serves as evidence that Fujikura understands that speed and distance win launch-monitor battles, particularly with drivers.

We also should reframe our thinking as to what constitutes a **noteworthy increase in performance**. Assuming a player has already been optimally fit, finding 10 more yards by swapping driver heads isn't out there. Likewise, gaining six miles per hour of swing speed by changing shafts isn't a reasonable expectation.



Until the industry finds the next titanium face, graphite shaft or solid-core ball, changes are going to be incremental. That means .5 miles per hour of ball speed is a big deal. An additional one mile per hour of swing speed is also a big deal. This isn't the industry lowering the bar so it can more easily impress you next year. It's the reality based on current regulations. It's a more onerous task for OEMs to find universal improvements in performance.

That said, it doesn't mean innovation isn't possible. It does, however, mean any steps forward will likely be smaller and more specific to individual characteristics. This is where ENSO could become a key differentiator if it can allow Fujikura to more precisely fit individual golfers. It could also potentially leverage Enso-created data to assist its network of 600-plus charter dealers.

The Fujikura Motore X shafts will be available at retail on February 3. MSRP is \$275.

For additional information, visit **<u>fujikuragolf.com</u>**.