



Superfine **GLASS**

Feel everything.

Superfine Touch Fiberglass Rods Tech Bulletin

Superfine GLASS

History

Prior to WWII, all high-end fly rods were made of split and glued bamboo. There was no other material that offered the strength and flexibility required in a fly rod. Rods were also made from other woods or even tubular steel, but these were inferior materials for building fly rods.

After WWII, fiberglass came into production as an alternative to bamboo. This synthetic material was strong and flexible, and could be made lighter than bamboo because of its hollow construction. For the next 30 years, bamboo and fiberglass fly rods dominated the fly rod market.

Fullflex Glass Fly Rods

For Medium Weight Line (6/7)		For Heavy Weight	
7 Foot, 2 piece, 3-1/8 oz. for 6 Weight Line. Fast action with Orvis HDG(6) Fly Line, Madison 6/7 Reel.		8 Foot, 2 piece, 3-3/4 oz. Medium action with Orvis HCF(7) Fly Line, Madison 8 Fly Reel.	
R9990-3 - Complete	\$ 81.00	R9980-3 - Complete	
R9990-1 - Rod only	\$ 49.00	R9980-1 - Rod only	
Handwritten: 410	Handwritten: 4.65	Handwritten: 131	Handwritten: 9
7 1/2 Foot, 2 piece, 3-1/2 oz. for 7 Weight Line. Medium action with Orvis HCF(7) Fly Line, Madison 6/7 Reel.		8 1/2 Foot, 2 piece, 4 oz. Medium action with Orvis HCF(7) Fly Line, Madison 8 Fly Reel.	
R9986-3 - Complete	\$ 84.50	R9976-3 - Complete	
R9986-1 - Rod only	\$ 52.50	R9976-1 - Rod only	
Handwritten: 171	Handwritten: 8.52	Handwritten: 570	Handwritten: 370
For Light Weight Line (5)			
... for long casts with superlight fly line ... delicate presentation of finest nymph and midge flies ... fishing "far-off" ...			
7 1/2 Foot, 2 piece, 3-1/4 oz. (Midge) for 5-Weight Line action with Orvis HEG(5) Fly Line, Madison 4/5 Reel.			
R9987-3 - Complete			
R9987-1 - Rod only			
Handwritten: 32	Handwritten: 41	Handwritten: 83	Handwritten: 147

FULLFLEX II

These are superb fly rods ... no compromise in the famous full length flex Orvis action ... exactly the same glass "sticks" used in the fine Orvis Fullflex Fly rods, but with slightly different fittings. The reel seat is black, ferrules are nickel silver, chrome guides. Each rod comes in cloth sack and aluminum rod case with screw cap.

As a "Learner's Outfit" it is absolutely ideal, because whereas the ordinary market type glass rod is difficult to master the smooth timing of Orvis action puts out long smooth casts with an ease very encouraging to the beginner.

Handwritten: 49

Handwritten: 147

A 1974 Orvis catalog showing a selection of our more popular models at the time.

In the 1980s, many of the high-end fly rod manufacturers stopped production of fiberglass rods. The new graphite raw material had a higher modulus of elasticity (resistance to bending) and could make rods that were longer and more powerful without the substantial increase in weight that made bigger fiberglass rods impractical. The market felt faster was better, because the increased line speed of the stiffer graphite rods made longer casts easier. Casting a 10-weight rod all day long became less tiring.

But there were always holdouts who believed the new graphite rods suffered in close-in, delicate presentations. They clung to their bamboo and fiberglass rods because they felt faster was not always better. The early graphite rods also suffered from being brittle under extreme pressure, thus the reason many Florida Keys tarpon guides stuck to their big, heavy 12-weight fiberglass rods. They might have been tiring to cast and perhaps would not cast as far as graphite, but they wouldn't break in the midst of a battle with a 150-pound tarpon. Eventually improved materials and resin systems made stronger graphite rods possible for saltwater fishing, but there always remained a tiny sect of fiberglass fans, especially for the use of shorter, light-line rods where they are best suited.

Fiberglass materials

Early fiberglass rods were made of what is called E-Glass, which was developed to replace plywood in aircraft radomes during WWII. Tiny glass filaments were held together with resins, which constrained the glass fibers and kept them aligned. After the war fiberglass was used for many civilian products, including boats, sports cars, and fishing rods.

E-Glass has a fairly low tensile strength, so early glass fly rods had thick walls and were heavy. Later another fiber with higher tensile strength, S-Glass, was developed. Its increased tensile strength made lighter, stronger, and crisper rods possible. However, just as it was introduced, graphite fibers became the rage for making fly rods. Although graphite fiber is more expensive than fiberglass, most of the value added in a fly rod comes from the rolling, cutting, sanding, and finishing of blanks, so rods made of S-Glass were almost as expensive as graphite rods. Fiberglass just could not hold onto its market share in the face of competition from graphite rods, which were considered vastly superior, and Orvis stopped making its Fullflex series of fiberglass rods in 1985. Fiberglass went into eclipse with some high-end rod makers, although big box stores still sold cheaper E-Glass rods and a few craftsmen produced S-Glass rods. These rods became almost a secret cult.



Why did Orvis get back into fiberglass?

In recent years, the fiberglass movement began to swell, with people from the generation who did not grow up with good fiberglass rods using them partly out of curiosity and a hint of nostalgia—but also because they liked the way the rods felt. Fiberglass forums attracted more attention, and blogs like “The Fiberglass Manifesto” gave all of these aficionados a distinct sense of community. We first tested some fiberglass prototypes out of curiosity, just to see if we could do it, but we soon found the newer S2 Glass materials, combined with what we’ve learned about tapers from many generations of graphite rods, convinced us that tooling up for fiberglass rods again would be a reasonable gamble. Plus, it would be yet another rod we could make right here in our Vermont rod shop, providing more production for our labor force and giving our rod craftsmen further job security. You can watch a shot of fiberglass rods being made in our rod shop here:



<http://vimeo.com/80487870>

“There is no excuse for any serious glass geek not to at least give these rods a try. I recently spent an enjoyable afternoon casting small foam hoppers to hungry brown trout in Wisconsin’s Driftless Area using a 7’ Superfine Glass. The little 3-weight handled the hoppers without issue and rolled out accurate casts up to 40 feet without a problem.” - Cameron Mortenson of “The Fiberglass Manifesto” writing in Fly Fisherman magazine.

Yet another reason was that as soon as we leaked the word that we were experimenting with fiberglass rods, it became big news and was very positively received by the fiberglass community.

How do these rods differ from Orvis fiberglass rods from the 1970s?

The last generation of Orvis fiberglass rods, the Fullflex series, were made from S-Glass, using the best material available at the time. These rods were made with a woven fiberglass raw material, so the fibers were not unidirectional like they are in graphite rods. But further improvements in fibers and resin systems have since then allowed for the introduction of S2 glass, which is even stronger and lighter.

“The traditionalists and classic anglers, I think they will really enjoy this rod,” noted Colby Trow of Mossy Creek Fly Fishing. But the main improvements are in construction techniques and taper. The exact layup process for Orvis fiberglass rods is a trade secret, but it’s safe to say the new machines and new techniques that we developed for our graphite rods are now used to construct the rods, giving us strict quality control and more consistent blanks. All of the power fibers in our fiberglass rods are unidirectional (although they still have a small amount of woven scrim for crush strength). Tapers are vastly different from 1970s fiberglass rods. The world has come to appreciate the efficiencies of steeper tapers to make casting easier and more precise, so these tapers are closer to modern graphite tapers than they are to fiberglass tapers from 30 years ago. Someone accustomed to fishing graphite rods would have trouble adjusting to 1970s fiberglass rods and might never grow to appreciate them. But modern casters will have no trouble adjusting to our new Superfine Touch Fiberglass rods. They are lighter and faster than older fiberglass rods—and current fiberglass rods made by other companies. But they still retain that smooth, sweet casting motion.

How do these rods compare to modern fiberglass rods from other companies?

Rather than giving you a load of PR propaganda, we asked one of the leading independent authorities on fiberglass rods to compare the Orvis Superfine Touch to other brands. Here is what he told us:

“When comparing the Superfine Glass to the fiberglass fly rods from the other established fly rod companies, such as Redington, Hardy, and Thomas & Thomas, the one thing to keep in mind is that each series was designed with a specific intent and purpose for use. Other fly rod series, such as the fiberglass from Hardy and Scott are best suited for dry fly applications as they are full flexing and have a noticeable softness in the tip. The Redington Butter Stick fly rods have been in a lot of hands since August and the overall opinion seems to be these rods are best in close and at medium distances and are on the softer side of medium in action. The Thomas & Thomas Heirloom series also have a medium action but these are generally thought of as being very capable fly rods.

In the months that I’ve handled the Superfine Glass, I’ve found them to be medium/progressive in taper and very capable to handle just about any angling situation a fiberglass aficionado would find themselves in - from dry flies of all sizes to ripping streamers if needed or desired.”



The new Superfine Touch Fiberglass rods come in a fiberglass tube that matches the blanks, accompanied by a 1980s-era retro label.

So what will I get from a fiberglass rod that I won't get from graphite?

Fiberglass has a lower modulus of elasticity, or resistance to bending, than graphite. So the material itself flexes more, giving a rod that bends more with an equivalent casting stroke. You can feel even a fast action fiberglass rod bending right down into the handle. Some people prefer this feel, as it gives them more tactile feedback when casting. Fiberglass rods encourage a more relaxed, slower casting tempo. Also, because the material itself has more mass, fiberglass just feels different—some say it feels more alive than graphite, others feel it is smoother.

Fiberglass, because it bends more than graphite, all other things being equal (you could make a fiberglass rod as stiff as a graphite rod but it would be really heavy) is ideally suited for playing large fish with light tippets because a fiberglass rod will bend well down into the butt without breaking. Check out this video made by Tim Romano on a tour of our rod shop:



<http://midcurrent.com/2013/11/25/video-glass-rod-test-what-an-atlantic-salmon-on-a-three-weight-looks-like/>

Fiberglass rods also have thicker, more impact resistant walls than graphite rods, so a hard whack against a tree or falling on a rock while holding your rod will do less damage to a fiberglass rod than a more fragile graphite rod (even though graphite rods have incredible tensile strength, they are less likely to survive an impact with a big Clouser Minnow or a tree limb). A fiberglass rod is ideal for brushy, small-stream fishing, and is probably a better first rod for impatient kids (or clumsy adults!) than a graphite.

But to most people, the allure of fiberglass rods is more subjective. It's a different casting feel, because of the slower material and the fact the rod itself has more mass. Timing is more leisurely, casts more relaxed, line speed slower. It's not hard to see why many anglers prefer fiberglass rods for small flies and light tippets, because the slower line speed allows a more delicate delivery, especially for

casts 40 feet and under. One of the testers of Superfine Touch Fiberglass Rods, legendary guide Dave Jensen, probably sums it up best:

“This rod is all about the feel, and there’s no other rod that compares with it.”

- Dave Jensen, Fly Fish Alberta.

Line wt.	Rod Name	Flex	Length	Weight in oz.	Pieces	Item #
3-wt.	Glass 703-3	Full	7'	2	3	8T75
4-wt.	Glass 764-3	Full	7'6"	2½	3	8T76
5-wt.	Glass 805-3	Full	8'	2¾	3	8T77