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Italian Bamboo Rodmakers Association

In this issue:

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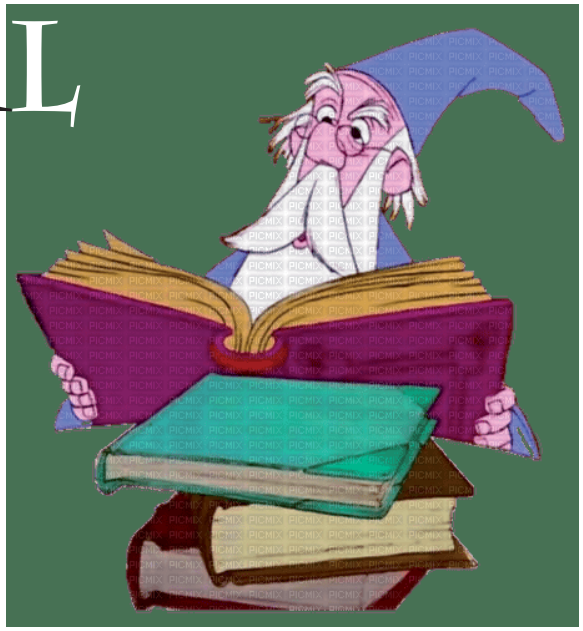
Front cover:	Gabriele Gori at the IBRA headquarters - Podere Violino - Sansepolcro (2006)
Photo on page 2:	Walter Brunner
Photo on page 61:	wooden cases made by Roberto Valli

EDITORIAL

by Maurizio Cardamone



How and where is fly fishing going in Italy, and with it bamboo rodmaking? If it is clear that the value of a bamboo fly rod, skilfully planed, assembled and finished by a skilled craftsman far transcends its primary function, i.e., that of fishing (and this is especially true for the rodmaker), however, we must accept that rodmaking had and obviously still has a direct relationship with the spread of fly fishing.

And fly fishing, but I would say fishing in general, is going through a difficult period in our beautiful country. Often questionable regulations on restocking and water management, climatic variations, levels, temperatures and pollution of our rivers, the contraction of biodiversity indices and the controversial problem of allochthonous species are slowly contributing to a change in the traditional relationship between Italians and inland fishing. The recent approval by the government, regarding the water emergency, of a vast maintenance plan for the reservoirs is probably not good news for our beloved trout: the risk of uncontrolled release of water and the deposit of fine sediments downstream, with the consequences that we have already experienced in many unfortunate cases is very serious.

Some published data and various rumours collected from authoritative sources tell us that the main fishermen's associations, those that manage the main fishing basins of the country (Sesia, Adda, Adige, Piave, etc.), have been experimenting for years now with a progressive and worrying drop in membership. Even the number of exhibitors and visitors to the main sector fairs in recent years seems to send us the same messages, with further evidence that much of the overall interest in the inland fishing sector has shifted towards put and take ponds in recent years.

The climatic trend in Italy between last year and the beginning of 2023 does not seem favourable to the reversal of this trend. Thanks to an extraordinarily hot December, 2022 ended with a new absolute temperature record in Italy. The data processed by the Institute of Atmospheric and Climate Sciences of the National Research Council set the heat record in Italy with a nice +1.15°C compared to the average for the period 1991-2020, shattering the previous record of + 0.65°C in 2018, as well as the hottest ever since 1800, when the historical series available for Italy began, therefore for 223 years. The analysis of temperatures by macro-region gives us the image of a horrible 2022 for the North, and in particular the North-West. It is here, between Valle d'Aosta, Piedmont and Liguria, that the most pronounced thermal anomaly is recorded: over 1.7°C of deviation from the average of the last 30 years.

It was also a year characterized by very low rainfall, a phenomenon which unfortunately seems to continue even more markedly even in these first months of 2023. It would seem a contradiction in terms, since the rise in temperatures certainly causes greater evaporation, greater amount of water vapor "suspended" in the air and therefore more rainfall. The global balance of evaporated water, destined sooner or later to fall on the planet's surface, obviously has to balance out, but who knows where these rain and snow precipitations have ended up?

Not in Italy, it seems, where the Po at the Becca bridge (at the confluence with the Ticino) is these days 3.5m below the average: the situation of most of the Alpine and Apennine rivers is dramatic at the moment and I am amazed that the public administrations have not decided to postpone the opening of the fishing season, under these conditions.

The chronic lack of rain and snow also in this last winter season, combined with the progressive contraction of the Alpine glaciers, which supply most of the water that flows in many rivers in the North, had in 2022 and will unfortunately have in 2023, a strongly negative impact, as well as of course on the flora and fauna, on agriculture and on the many industrial activities which consume more water, not to mention - for example - tourism linked to winter sports (we are talking about activities that represent from 12 to 15% of GDP).

The trend of progressive reduction of global biodiversity continues relentlessly in many areas of our country without visible signs of a trend reversal. In particular, the chronic suffering of the fish fauna of our rivers, and not only the most valuable ones, is the result of a complex exponential interaction between the various factors we have mentioned, since even the "invasion" of alien species, including the notorious cormorants, it is indeed partly due to deliberate and wicked imports by man, but also to the natural effect of climatic variations in recent decades.

So, I fear that a difficult season awaits us in 2023 as well. We try to distract ourselves by reading the Bamboo Journal: number 25 is finally online.

There are many technical contents in this issue: two by Angelo Arnoldi: the first takes its cue from a report of the stage on epoxy resins held at the Gustavo Cecchi company last October to deepen the discussion on the theoretical characteristics and practical use of these resins, the second deals with a problem often overlooked and not even imagined by many: the risks to human health deriving from mold and their spores that could lurk in bamboo.

Then we have a very technical analysis by Alberto Poratelli on the balance point of the rod and the effect that hollowing has on this parameter, which is fundamental for the real perception of the dynamic action of the rod. In this issue we find an article signed by Enrico Grasselli, who tells us how, why and with what results he has come to perfect over the years a hybrid construction method that promises interesting advantages on the weight and action of the rod. In my opinion, its "adjustable tension" ferrule should not be underestimated either. Marco Orlando Giardina (MOG) shows off his encyclopaedic knowledge once again with an article on Urushi lacquer, then inserted into the more general theme of varnishing. I candidly admit that until the day before yesterday Urushi could have been a variety of sushi for me!

For the "reflections" category, this issue also includes the traditional dissertation by Giorgio Grondona "from the Donkey's Desk " as well as an article by a new author of the BJ: who is hiding behind the acronym GPT? You'll find out by reading it to the end, and I'm sure it will surprise you.

We finish with the social events planned between now and the end of the year: the first is the IBRA 2023 Gathering, which will be held in May with a somewhat different formula than usual without bamboo day, international guests, members' rods exhibited, substituted with an in-depth themed discussion on varnishing: to which two days full of theory and practice will be dedicated. In November, however, a great international show will be held, in which IBRA members, as well as Italian and foreign rodmakers, will exhibit their art in a prestigious location in Milan.

I conclude by reminding you that it would be very interesting to receive some comments on the articles from both Italian and international members and simple readers. A fixed column of letters would greatly enrich the Bamboo Journal. The mailing address is the usual: editor@rodmakers.it. I undertake to collect and synthesize them in absolutely anonymous form, if you wish


Over

EPOXY CONNECTION

by Angelo Arnoldi

Some time ago, on a warm Saturday at the end of October, with some friends from IBRA, I visited a truly noteworthy company, the Cecchi company in Viareggio, and I had the good fortune to meet its founder, a remarkable person.

This company produces various types of varnish from the Spinnaker series, fillers of various types, other varnish, mainly aimed at the nautical sector, but above all epoxy resin, which is why we were there.

Epoxy resin is widely used in the nautical field - it is used for example, in some boats, to protect the hull, i.e., the immersed part of the boat, from the danger of osmosis, to rebuild worn parts as protection for wood from moisture. It really has a huge scope.

For the rodmaker it is used almost exclusively as a glue to join the strips, its low resistance to UV rays sometimes tends to turn yellow, it is not recommended for use as a varnish, but as a glue, in my opinion, it has absolutely no rivals.

Let's get to know it a little…

First, in order to understand how epoxy glue works, you need to understand more or less how glues work in general.

To stick, a glue must do two things, penetrate the substrate to be glued, and reticulate, i.e., polymerize forming a macromolecule, a compact compound formed by the individual molecules welded together.

Glues act mainly in two phases, the first concerns a type of electrostatic attraction, actually a little known and understood mechanism, called the Van der Waals force, this force is present on the surfaces of all substances, but in glues it is enormously higher. It is hypothesized to be due to the attraction between molecules with a positive charge and molecules with a negative charge, however we are in the field of pure hypotheses...

Subsequently, the glue begins cross-linking, i.e., an aggregation of its molecules, until strong chemical bonds are established between them and with its own molecules which have crept into the substrate.

This cross-linking, or rather, polymerization, is usually triggered by the solvent or its absence, and leads to a tangle of long-chain molecules.

Some glues don't seem to need this solvent, but in reality, this isn’t the case. The common Super Glue, the cyanoacrylate monomer, remains in a more or less liquid form until it comes out of the tube and meets atmospheric humidity, which causes it to polymerise: humidity is its solvent.

For other glues, such as the common white wood glue, the solvent is water, but it does not intervene in the polymerization, it is its lack, due to evaporation, which triggers it.

This mechanism is the same as for glues for PVC or plastic, but in this case the solvent used and which evaporates is usually acetone.

So, a glue to glue well must:

1. be able to penetrate deeply into the substrate, and therefore in order to do this it must have a low molecular weight, and the substrate must be as fibrous, disaggregated and rough as possible, to offer more useful surface.

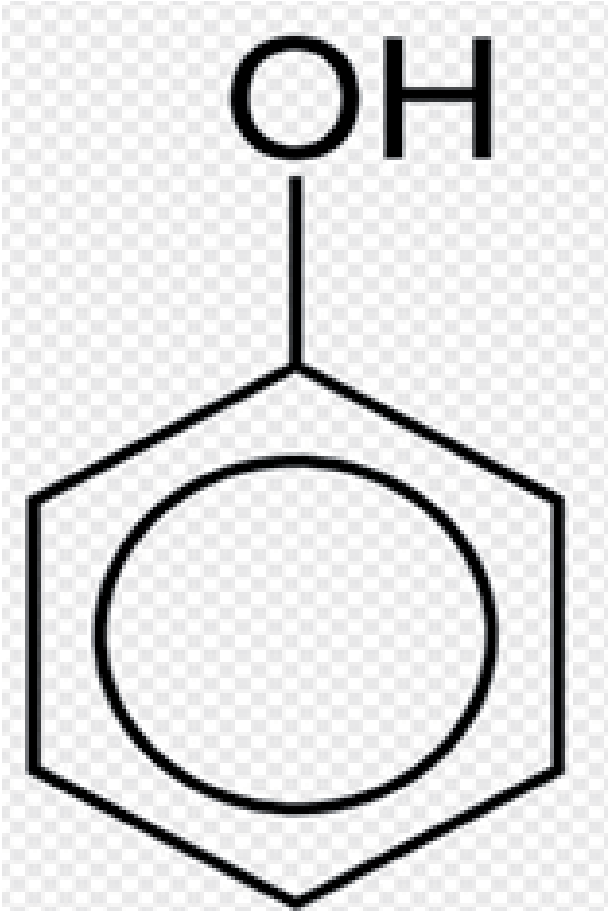
2. lattice, forming macromolecules, or even a single compact lattice.

It is evident that each substrate has a glue of choice, the white wood glue penetrates the

wood in a notable way. If used to glue plastic, it would give a bad result, on the contrary a neoprene glue for PVC, based on acetone, would work much better.

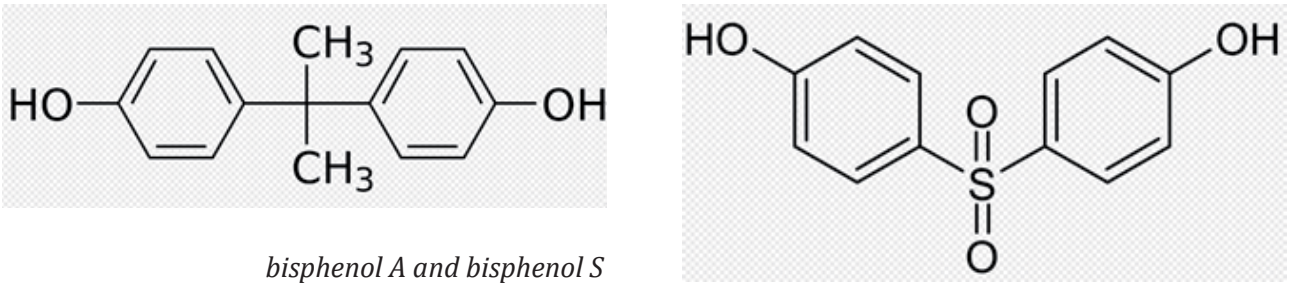
Now let's see our protagonist, the epoxy glue...

This is phenol, or hydroxybenzene, the starting point of epoxy glues. Starting from this compound, simple benzene with a hydroxyl group, O-H, many compounds containing two or more phenolic groups have been synthesized, called bisphenols for simplicity. Actually, the IUPAC name of the most famous, bisphenol A, is 2,2-bis (4-hydroxyphenyl) propane, this name explains how they are two phenols linked with two methyl groups.



These compounds are widely used, and enter the composition of many plastic materials such as polycarbonate, they are used in food containers, baby bottles, dental prostheses, in the internal coatings of cans and food cans. And like many other substances they immediately entered the sights of those who consider chemistry the antechamber of hell.

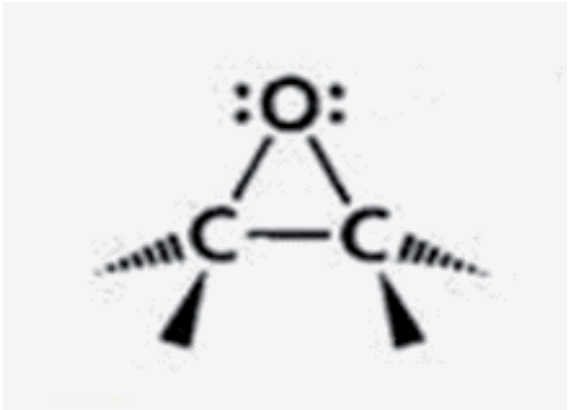
I won't go into the merits of these controversies that have always accompanied bisphenol A, accused of endocrine interference, or of the presumed teratogenicity of others, such as bisphenol S. We are only interested in it as a starting point for a glue, and in truth the undersigned also believes little in the absolute truths that circulate on the so-called social networks.



bisphenol A and bisphenol S

From the illustration of the molecule, it can be seen that they are two simple phenol molecules, joined by two methyl groups, in the case of bisphenol A, or by a sulphide bridge, in the case of bisphenol S.

These bisphenols are reacted with chloromethyl oxirane, a compound commonly called epichlorohydrin, containing an epoxy ring and with a strong base, sodium hydroxide.



epoxy ring, two atoms of C and one of O bonded in a ring

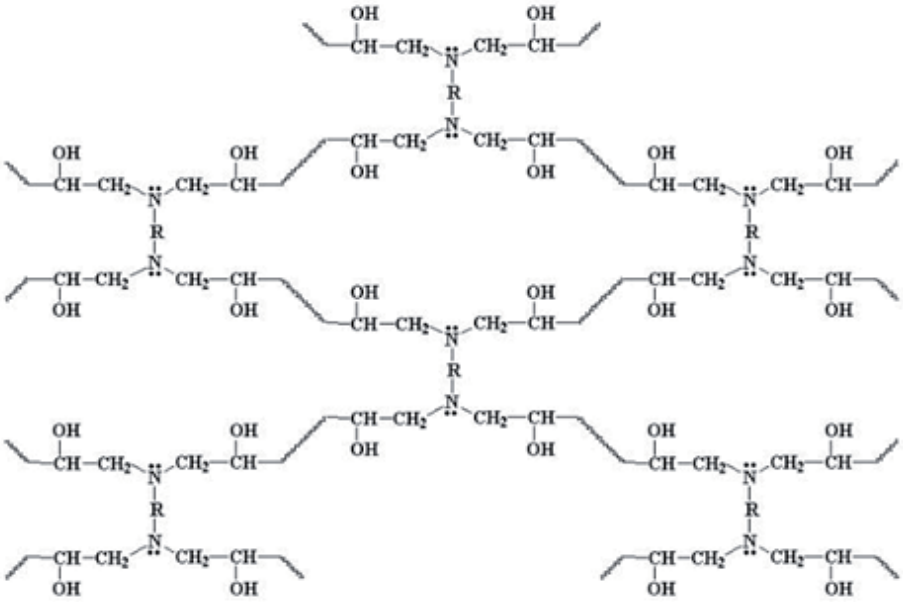
This compound, epichlorohydrin, among other things, lowers the viscosity which is high in bisphenol A and bisphenol F, the most used in epoxy resins, thus favouring penetration into the substrate to be glued.

spatial formula of epichlorohydrin

Well, now we have bisphenol and epichlorohydrin, that is component number 1 of an epoxy resin, only component 2 is missing, the one that will trigger the polymerization, that is the reaction that will unite the monomers of the resin.

In epoxy resins, given the considerable hardness reached by the final compound, it is called hardener, or even worse, catalyst, even if it should more properly be called a crosslinker.

This hardener is usually composed of various types of primary, secondary or tertiary cycloaliphatic amines, molecules capable of binding the monomer composed of bisphenol and epichlorohydrin.



And this is the result, a cured epoxy resin. If you look closely, you will notice the nitrogen bridges N, of the hardener which hold the monomer molecules together and form the hard, compact and very tenacious polymer which distinguishes epoxy resins.

This, in very simple words and in an extremely simplified way, is the synthesis of our glue.

Epoxy resins have high dimensional stability, remarkable toughness, resistance to high temperatures and very low shrinkage during polymerization. These characteristics, quite peculiar in the world of glues, make them suitable for many uses.

Moreover, they are much faster in catalysing than polyester or vinyl ester resins, with a cross-linking time, called pot life, which is very variable and depends on the components and therefore on the function for which it is synthesized. This time is long for epoxy resins used as paints, more or less fast if it is a glue.

If loaded with fibrous materials, they achieve mechanical properties close to those of steel. They also have a truly remarkable penetration into the wood fibres, and in fact they have somewhat undermined the use of white wood glue in carpentry, even if the price is much higher.

Another of the characteristics that I find interesting is the absolute impermeability to water, I have already mentioned before the gel coat painting of a boat to protect the hull from osmosis, the cancer of fiberglass, therefore it is very suitable for gluing objects not sheltered from moisture or left in the elements.

Even the conservation over time is truly unique. Although manufacturers usually advise against its use after a couple of years of storage, the undersigned last month used two cans of epoxy called Acqua-stop, that had been sitting on a shelf in my garage for exactly 16 years, yet were still pristine and did the job as if they had just came out of the factory. I don't think many other glues would have resisted for so long, just be careful not to contaminate them, perhaps with the tools used to mix the two solutions, keep them in the original jar, better if in the dark, and away from humidity and they will keep for a long time, unlike almost all other glues, in which the solvent evaporates more or less slowly.

Well, we have seen very broadly how two-component epoxy resins are made and how they work, but there are also single-component epoxy resins…

How can a single component initiate a polymerization? In reality, even in single-component resins, there are always two protagonists, and they are mixed together. The input that will start the reaction is the temperature, which must be supplied from the outside and which activates the crosslinker. These resins, convenient because there is nothing to mix, however, sometimes have the problem of missing or partial polymerizations, especially if in thin thicknesses. For our use, I don't think they are very suitable.

This new variable, the temperature, is also quite decisive for other types of solvent-based glue, for its evaporation, but also for two-component epoxy resins.

Without wanting to bother with concepts that are difficult to understand, such as entropy or absolute zero, let's try to understand why'. Let's take the example of a block of ice, in this block the molecules are still, stable, compact, like a platoon of soldiers standing at attention.

But if we began to supply thermal energy, this energy would be transferred to the atoms by the electrons which accelerate their movements, the molecular distance increases, and we arrive at a change of state, a liquid. If we continued to supply energy, the movements of the electrons would increase further, and therefore that of the atoms, as a consequence the distance between the molecules further increases, our liquid has become a gas.

Providing thermal energy to a substance therefore means increasing the movement of the atoms that make up the molecules, i.e., their kinetic energy, and consequently the reactivity and interactions between them. A certain amount of heat energy is always required for a chemical reaction. This has led resin producers to establish a minimum temperature below which the polymerization of the components occurs with difficulty or may be incomplete. It is generally recommended not to operate below 15 degrees or so.

Obviously, the 15 degrees must be there during the entire cross-linking period, not just when it is spread.

For many epoxy resins, this cross-linking, once triggered, is an exothermic reaction, i.e., it develops heat, which in some cases and especially with important thicknesses, can be excessive, to the point of compromising the bonding, if not maintained in an acceptable range with appropriate adjustments.

The temperature also has an effect on two other important parameters, on the speed with which total polymerization takes place and on the bonding strength, i.e., how resistant the glued piece will be.

Temperatures below 18 °C slow down the hardening process and worsen adhesion; an additional heat source (heater, infrared radiator or similar) is therefore required when working in cold rooms or in the open air.
Particularly strong adhesion is obtained if hardening takes place at higher temperatures, between 70 and 180 °C.
The following table shows the relationship between curing time and temperature:

45 minutes at 70 °C
30 minutes at 80 °C
20 minutes at °C
10 minutes at 100 °C
7 minutes at 120 °C
6 minutes at 140 °C
5 minutes at 150-180 °C

The temperature must not exceed 200 °C both during hardening and when applying pressure to the bonded parts, as higher temperatures affect the solidity and stability of the substance.

This illustration is taken from the technical sheet of an epoxy glue sold in green and yellow tubes, widely used in the world of rodmaking. The technical sheet states that it is bisphenol A and epichlorohydrin, no mention of the crosslinker. It is immediately noted that the bonding time is inversely proportional to the temperature, and in the table below it is noted that there is instead a direct proportion between temperature and resistance.

Temperature	Hardening/Curing time	Bonding strength
20 °C	12 hours	ca. 1200 N/cm2
40 °C	3 hours	ca. 1800 N/cm2
70 °C	45 min	ca. 2000 N/cm2
100 °C	10 min	ca. 2500 N/cm2
180 °C	5 min	ca. 3000 N/cm2

The undersigned usually bakes the strips glued with this resin at 80 degrees C for about 30 minutes, I think it's an acceptable compromise in order not to carbonize a future rod, but at the same time to have a strong and long-lasting bond.

What kind of problems can epoxy glue cause in the hobby use that belongs to us?

The most common problem is certainly non-homogeneous gluing, of areas glued well and areas which have not glued at all, and this is always the result of mixing errors between component A (bisphenol and epichlorohydrin) and component B (the amines).

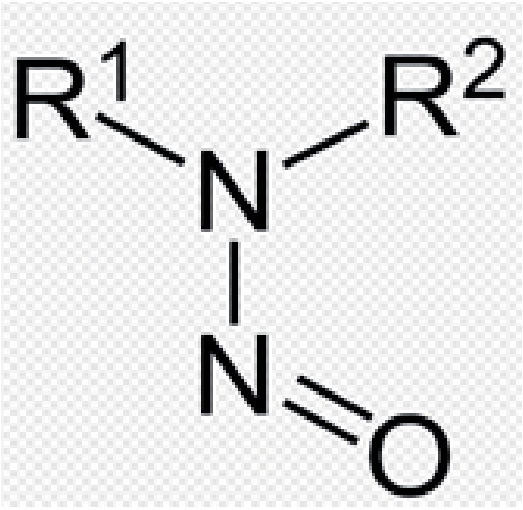
Epoxy resins must be mixed well and in the case of hobby use, i.e., without mechanical stirrers, being careful to bring the component placed into the glass first to the top and above during mixing.

The two components tend to stratify, simply stirring them like a coffee, there will always be non-homogeneous areas. This assumes more importance especially when component B is smaller in volume than component A.

In two-component polyurethane glues, the ratio between resin and crosslinker is 9 to 1, the mixing of the components must be done in a very precise way. Thankfully epoxies have more similar ratios of the two components.

I stated above that I don't really agree with the usual demonisations, sometimes devoid of any clinical significance, of some chemical products, including epoxies. However, this does not mean that our resins are pure spring water, they can have unpleasant effects, and in fact in the technical data sheet of all, some H are indicated, i.e., indications of danger, usually H315, H319, H317. Put simply, they can cause skin, eye irritation, or allergic manifestations, and obviously, they heavily pollute the environment.

The crosslinker also contains amines. Amines, which gave vitamins their name (amines of life), are nitrogenous compounds derived from urea and can be problematic. Aside from the certainly unpleasant scent, aromatic amines are toxic and can easily be absorbed through the skin. But their greatest danger is expressed when they encounter nitrites inside the body. Nitrites are the salts of nitrous acid, a classic example is saltpetre, sodium nitrite, widely used in cured meats as a preservative or in meat to prevent the proliferation of botulinum toxin. In an acidic environment, in the stomach for example, these nitrites break down, releasing nitrous acid which binds to amines, especially with aromatic amines, which are very reactive, giving compounds called nitrosamines. And nitrosamines, sadly, are potent carcinogens.

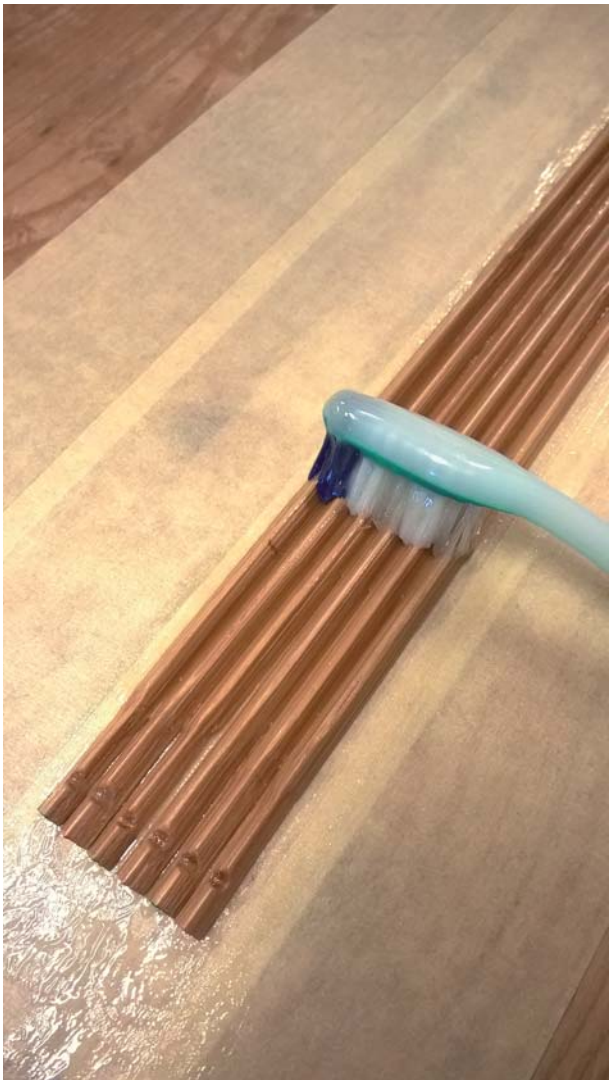


generic formula of nitrosamine

It follows that the handling of epoxy glues must be done with a certain amount of attention and prudence, using suitable PPE, i.e., disposable gloves, protective goggles, covering clothes, and trying not to breathe the vapours.

However, this resin, born in America in the 1920s, has come a long way, it is currently widely used and its applications are constantly expanding, even in unthinkable fields. As far as we are concerned, in rodmaking, I consider it the glue of choice and irreplaceable.

Angelo Arnoldi




the

EQUILIBRIUM AND HOLLOWING

by Alberto Poratelli

When I started out with fly fishing ... some years ago I remember that expert fishermen evaluated the rod, reel and line assembly by balancing the tool on their outstretched forefinger, like greengrocers with a steelyard, and declaring with a triumphant air “this is its reel” when the balance point was very close to the end of the cork handle. It was one of the things that fascinated me about fly fishing because the Bolognese rods I had frequented up until then did not allow for such refined judgements. Years have gone by; I too have switched to the side of experienced fishermen and this concept of balance fascinates me. How many times have I heard a rod judged with a "heavy tip" or "it falls forward".

Although these are judgments based on sensations and rather empirical criteria, the fact that a rod is unbalanced with a very forward centre of gravity makes it an uncomfortable and difficult rod to use and if it is a long rod then it becomes one of those that in one day fishing tires you and breaks your arm.

Designing long rods, I asked myself this problem and I realized that the correct positioning of the balance point is very important in the final result in rods from 7'6'' upwards, for shorter rods it is important but with a decidedly little incidence marked on the pleasantness of the tool.

Assuming that the rod-line-reel assembly is what we carry on the river and that the weight of the reel seat-line-reel assembly is easily modifiable by choosing a reel suitable for rod size and weight, we rodmakers must therefore focus on designing a blank that is as balanced as possible. An already balanced blank will allow you to better manage the choice of reel seat material which will have the possibility of being in a greater weight range and then knowing the position of the centre of gravity will allow you to design a handle of the most suitable length or to mount a down locking rather than an uplocking reel seat. One of the solutions adopted to overcome the weight of the blank of long rods is hollowing out which certainly allows you to gain grams in terms of weight, but often rodmakers do not consider the problem of balance. There are schools of thought that judge a rod on the basis of the finished weight, put the blank on the scale and shout cheers if the weight is less than ... x grams. But these gentlemen of these schools of thought do not hesitate to understand "where" the weight is and how it is distributed. I have seen extreme Hollowing to reach weights very similar to graphite which, if they do not create major problems in a 6'6'', are instead harmful in an 8'6''. Furthermore, this extreme hollowing did not take into account the decrease in the moment of inertia of the hollow section with respect to the solid one.

The result of this meaningless hollowing: light rods but with a completely different action from the original one and very unbalanced forward.

So, the problem I faced is to be able to lighten a long rod by hollowing out but designed in such a way that the weight reduction of the blank is compatible with:

- the adjustment of the taper section in the hollowed parts in order to maintain the moment of inertia.

- Moving the balance point (centre of gravity) of the blank as far back as possible, therefore as close as possible to the grip.

I developed a simple Excel sheet that allowed me to determine the progressive weight of the blank, using the canonical 5'' sections, and then to define the position of the equilibrium point with respect to which the weight of the upper portion of the rod is equal to that of the portion of the cane downwards. To work on real data, I used the taper data of three rods of equal length that had three very different theoretical actions.

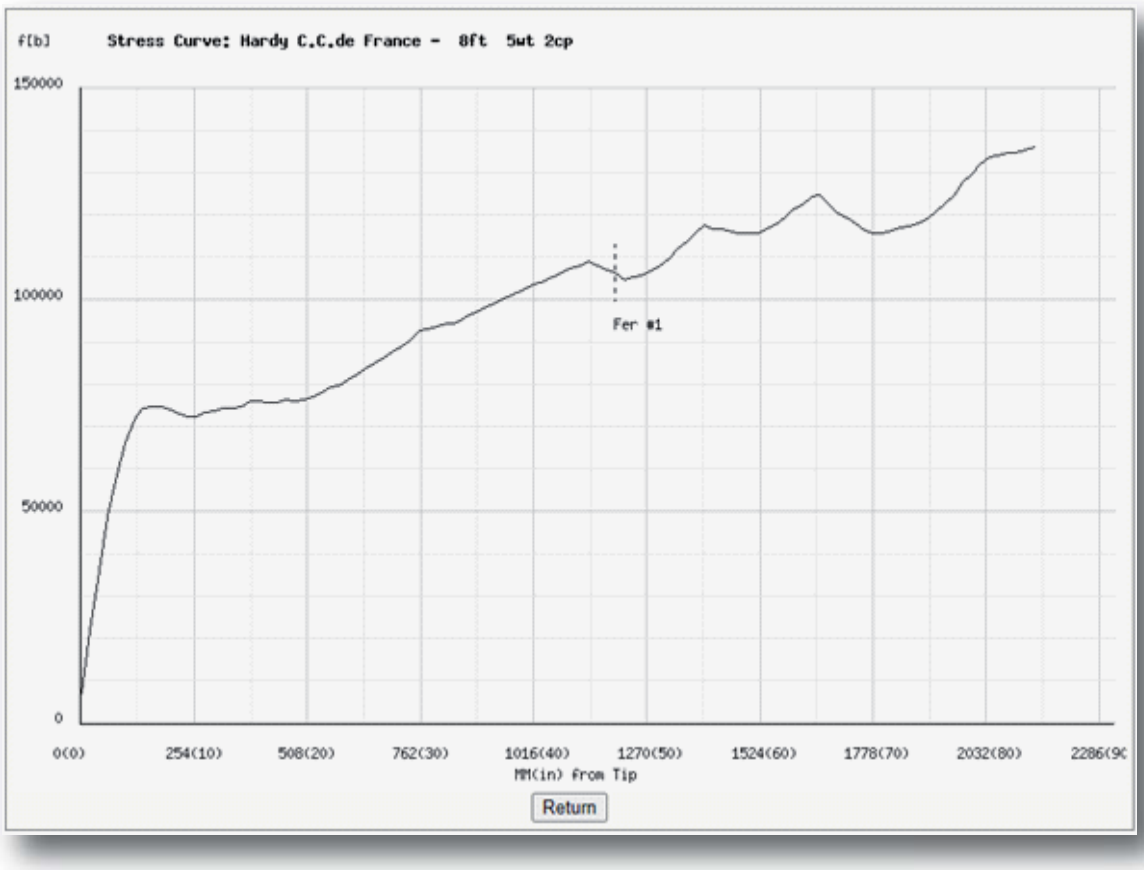
Hardy C.C. de France – 8'#5

Garrison 212E – 8'#6

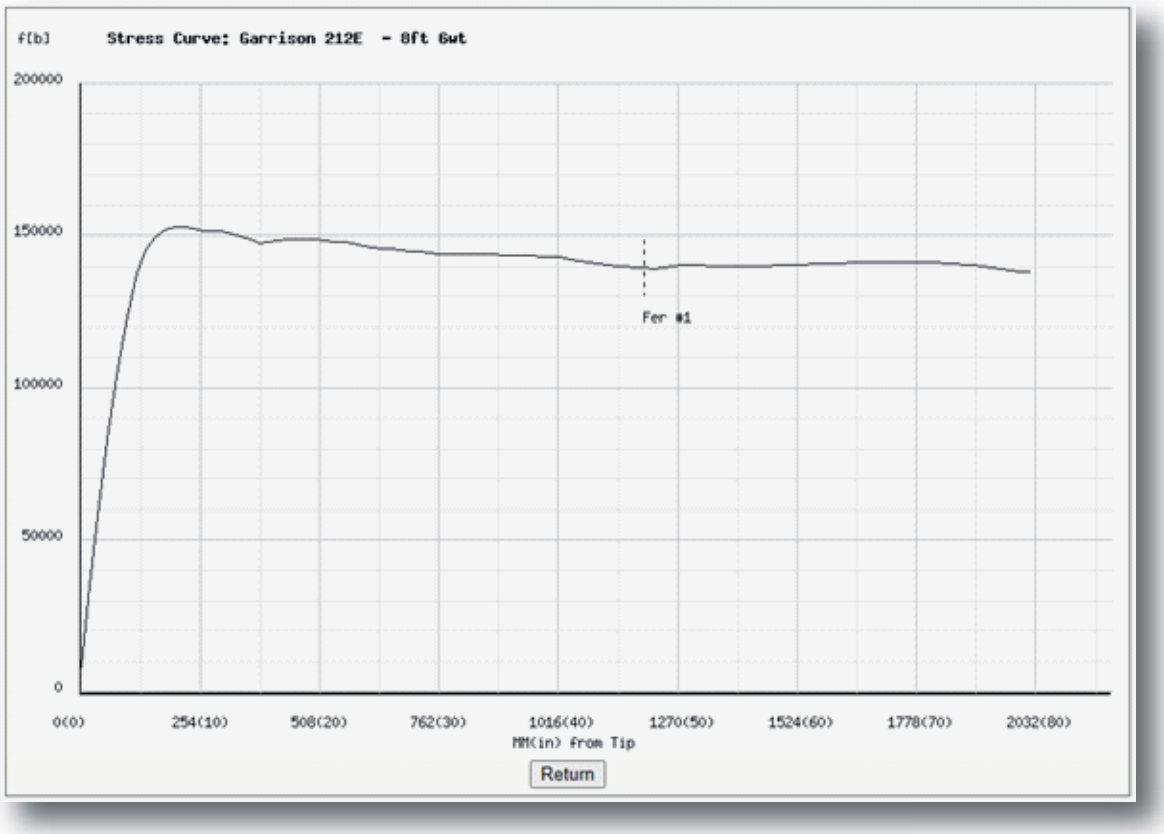
Leonard Tournament – 8'#3

The stress graph of these rods confirms that they have completely different actions: the Hardy typical English rod action with heavy tip and soft butt, the Garrison soft and relaxing, the Leonard tip action with hard butt and sensitive tip. Three completely different tapers that deserve to be examined in terms of weight and its distribution.

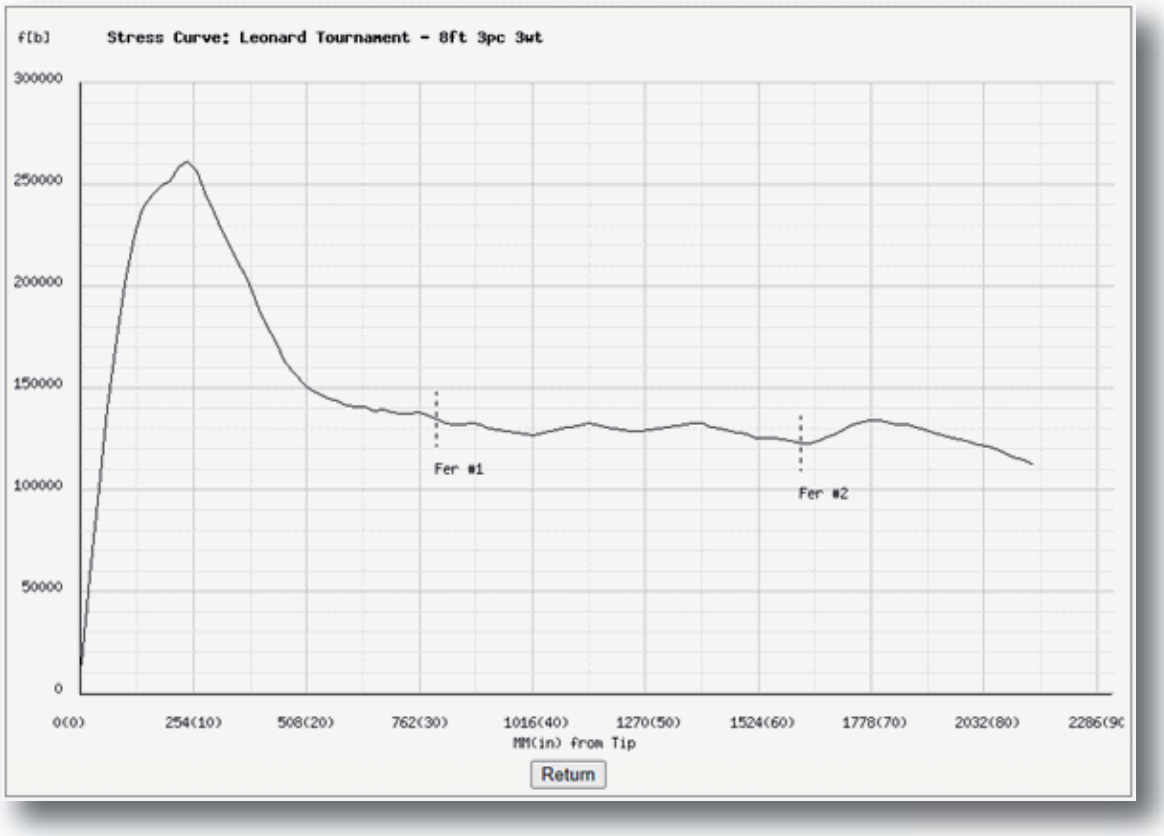
These are three 96'' long rods equal to 2,438 mm



Hardy C.C. de France 8ft #5 stress curve – solid



Garrison 212E 8ft #6 stress curve – solid



Leonard Tournament 8ft 3wt stress curve - solid

The first data we are going to compare is that of the total weight of the raw material (in the Excel sheet it is determined by using the specific weight of a glued raw material equal to 1,100 kg/m^3 as the basis of the calculation)

Hardy 84.94 grams
Garrison 70.92 grams
Leonard 64.13 grams

The difference in weight is significant and it is obvious that the fastest rod is also the lightest.
But let's see where the equilibrium point of these blanks is positioned:

Hardy at 1.719mm from point 0 and 719mm from the bottom
Garrison at 1.749mm from point 0 and 689mm from the bottom
Leonard at 1.834mm from point 0 and at 604mm from the bottom

And here we can see how it is evident that the fastest rod is the one with the most backward centre of gravity while the slowest one has the centre of gravity far forward.

In the following graphs, the position of the equilibrium point is highlighted with a blue dot.

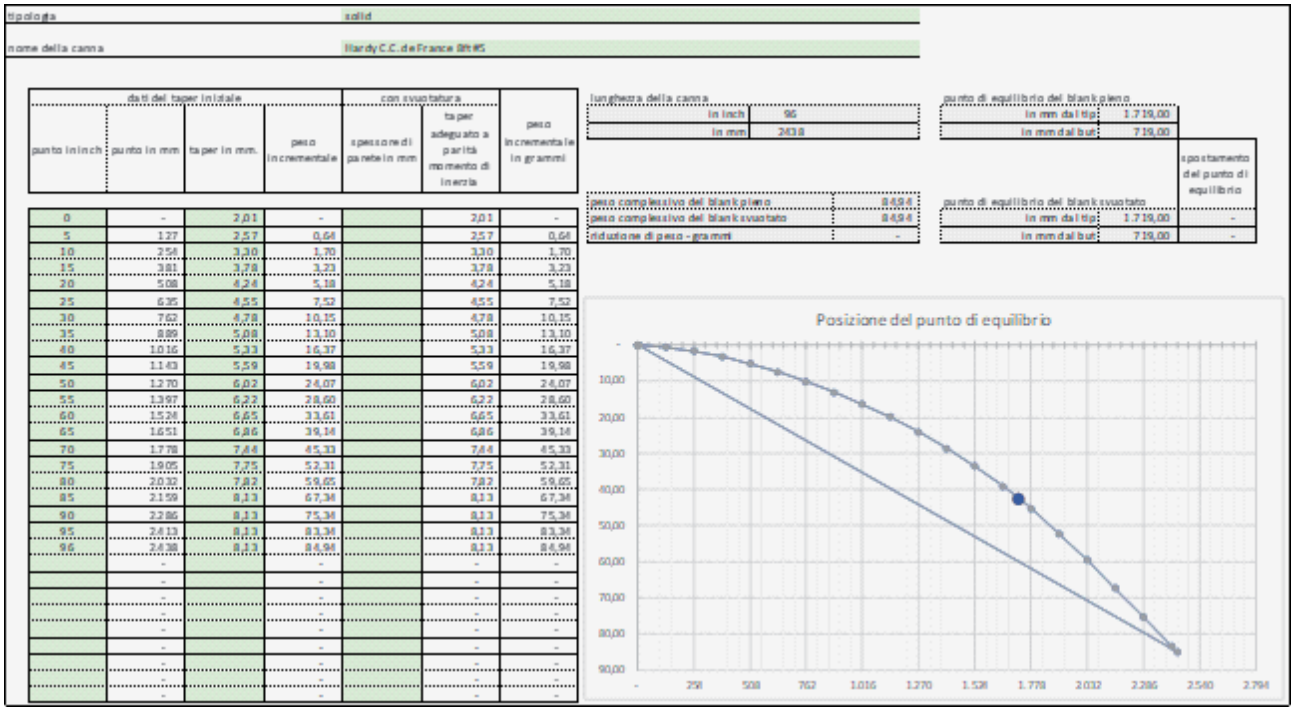
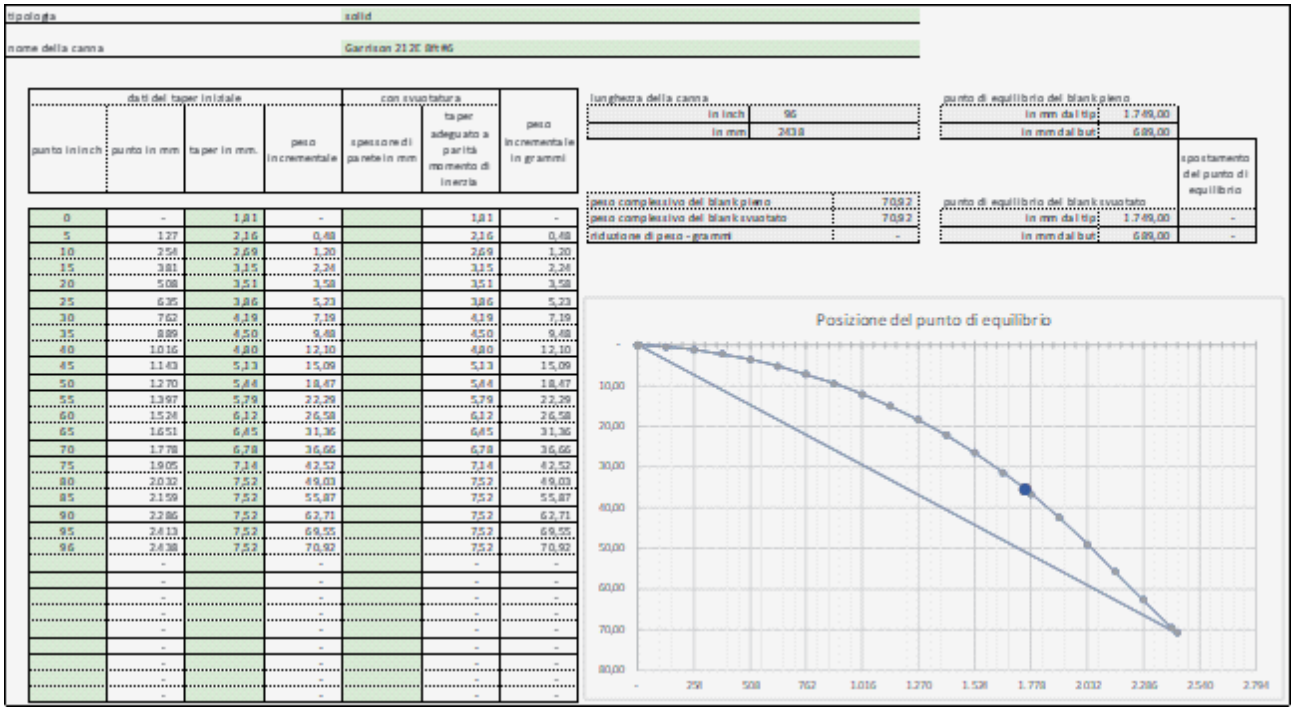


Tabella e Grafico Hardy C.C. de France 8ft #5 – solid



tipologia: solid

nome della canna: Garrison 212E 8ft #6

dati del taper iniziale				con svuotatura		
punto in inch	punto in mm	taper in mm.	peso incrementale	spessore di parete in mm	taper adeguato a parità momento di inerzia	peso incrementale in grammi
0	-	1,81	-		1,81	-
5	127	2,16	0,48		2,16	0,48
10	254	2,69	1,20		2,69	1,20
15	381	3,15	2,20		3,15	2,24
20	508	3,51	3,58		3,51	3,58
25	635	3,86	5,23		3,86	5,23
30	762	4,19	7,19		4,19	7,19
35	889	4,50	9,48		4,50	9,48
40	1016	4,80	12,10		4,80	12,10
45	1143	5,13	15,09		5,13	15,09
50	1270	5,44	18,47		5,44	18,47
55	1397	5,79	22,29		5,79	22,29
60	1524	6,12	26,58		6,12	26,58
65	1651	6,45	31,36		6,45	31,36
70	1778	6,78	36,66		6,78	36,66
75	1905	7,14	42,53		7,14	42,53
80	2032	7,52	49,01		7,52	49,03
85	2159	7,52	55,87		7,52	55,87
90	2286	7,52	62,71		7,52	62,71
95	2413	7,52	69,55		7,52	69,55
96	2438	7,52	70,92		7,52	70,92

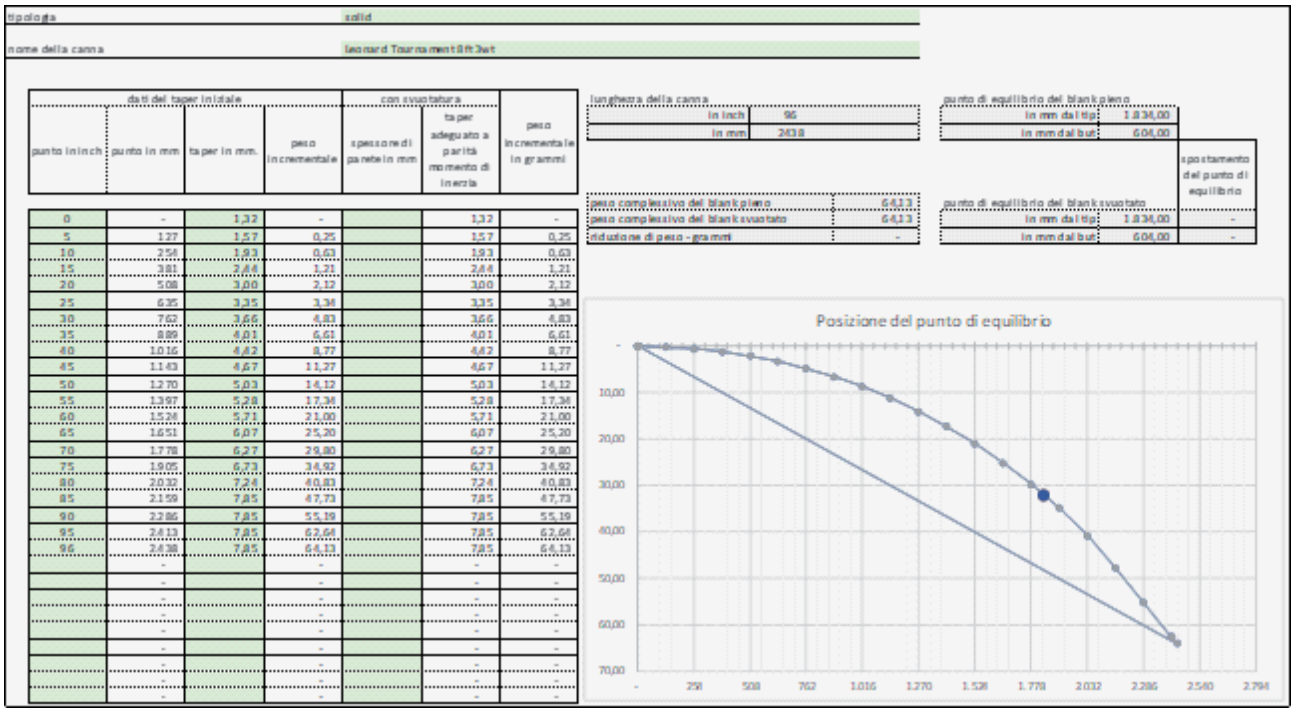
lunghezza della canna	
in inch	96
in mm	2438

peso complessivo del blank pieno	70,92
peso complessivo del blank svuotato	70,92
riduzione di peso - grammi	-

punto di equilibrio del blank pieno	
in mm dal tip	1.749,00
in mm dal but	689,00

punto di equilibrio del blank svuotato		spostamento del punto di equilibrio
in mm dal tip	1.749,00	-
in mm dal but	689,00	-

Table and graph Garrison 212E 8ft #6 – solid



tipologia: solid

nome della canna: Leonard Tournament 8ft 3wt

dati del taper iniziale				con svuotatura		
punto in inch	punto in mm	taper in mm.	peso incrementale	spessore di parete in mm	taper adeguato a parità momento di inerzia	peso incrementale in grammi
0	-	1,32	-		1,32	-
5	127	1,57	0,25		1,57	0,25
10	254	1,93	0,63		1,93	0,63
15	381	2,44	1,21		2,44	1,21
20	508	3,00	2,12		3,00	2,12
25	635	3,35	3,34		3,35	3,34
30	762	3,66	4,83		3,66	4,83
35	889	4,01	6,61		4,01	6,61
40	1016	4,42	8,77		4,42	8,77
45	1143	4,67	11,27		4,67	11,27
50	1270	5,03	14,12		5,03	14,12
55	1397	5,28	17,34		5,28	17,34
60	1524	5,71	21,00		5,71	21,00
65	1651	6,07	25,20		6,07	25,20
70	1778	6,27	29,80		6,27	29,80
75	1905	6,73	34,92		6,73	34,92
80	2032	7,24	40,81		7,24	40,83
85	2159	7,85	47,73		7,85	47,73
90	2286	7,85	55,19		7,85	55,19
95	2413	7,85	62,64		7,85	62,64
96	2438	7,85	64,13		7,85	64,13

lunghezza della canna	
in inch	96
in mm	2438

peso complessivo del blank pieno	64,13
peso complessivo del blank svuotato	64,13
riduzione di peso - grammi	-

punto di equilibrio del blank pieno	
in mm dal tip	1.834,00
in mm dal but	604,00

punto di equilibrio del blank svuotato		spostamento del punto di equilibrio
in mm dal tip	1.834,00	-
in mm dal but	604,00	-

Table and graph Leonard Tournament 8ft 3wt - solid

Let us now try to hypothesize a complete hollowing of these three rods by adapting their section in order to maintain the moment of inertia (using Gabriele Gori's tables), we will therefore hollow them starting from the first point which allows hollowing along the entire length with a wall thickness of 1.5 and 2mm according to the taper.

Let's compare the data we are interested in from completely hollowed rods.

Hardy

Hollowing from point 20''. The weight has become 65.35 grams with a reduction of 19.59 grams and the balance point has moved slightly backwards, placing itself at 1,802 mm from the tip with a displacement of 83 mm. We got a good weight reduction but basically our rod remained as they say, forward heavy.

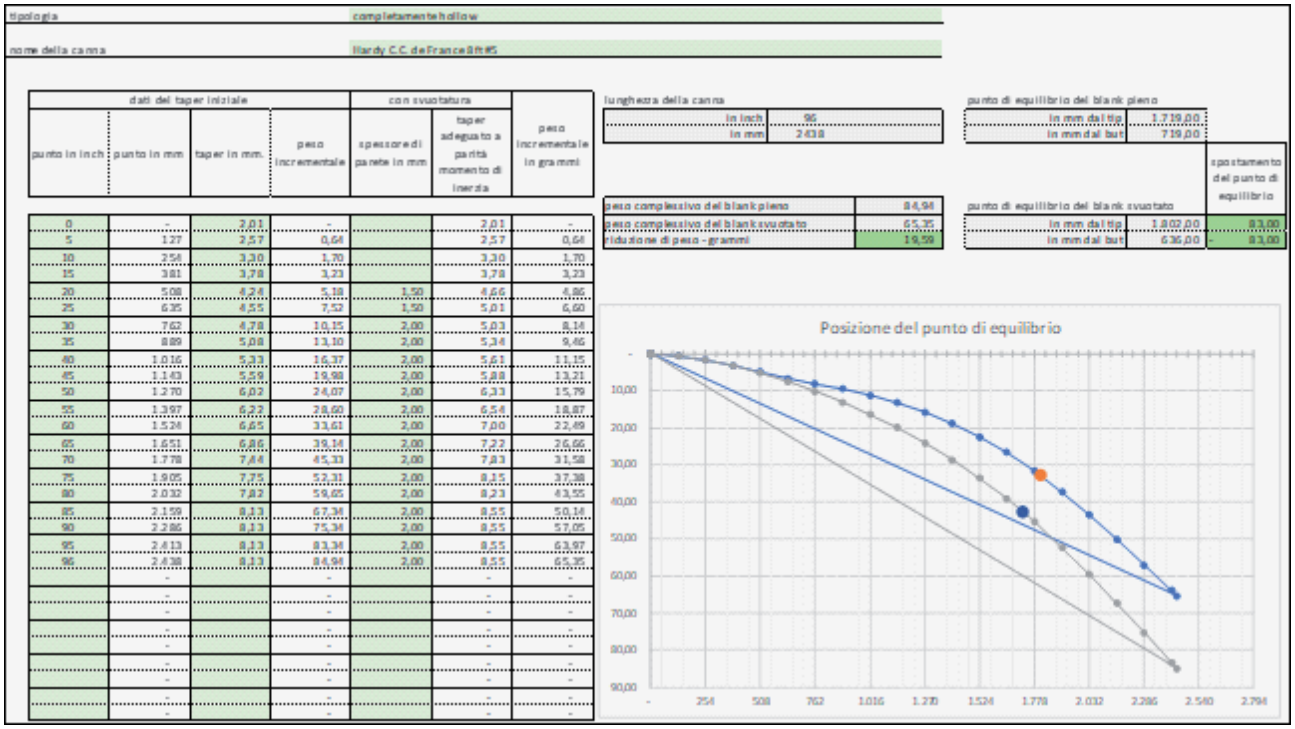
Garrison

Hollowing from point 25''. The weight stands at 56.30 grams with a good reduction of 14.62 grams but the balance point has practically remained unchanged, we are 1,768 mm from the tip with a displacement of only 19 mm towards the bottom.

Leonard

We cannot hollow it starting from the 20'' point because it is too thin, so we will start from the 30'' point, we obtain a weight of 49.46 grams with a reduction of 14.67 grams with a backward shift of the balance point to 1887 mm., a displacement of only 53 mm.

In the following tables and graphs the balance points of the full rod and the hollow rod are highlighted on the incremental weight curve



tipologia: completamente hollow

nome della canna: Hardy C.C. de France 8ft #5

dati del taper iniziale				con svuotatura		
punto in inch	punto in mm	taper in mm	peso incrementale	spessore di parete in mm	taper adeguato a parità momento di inerzia	peso incrementale in grammi
0	-	3,81	-		2,01	-
5	127	2,57	0,64		2,57	0,64
10	254	3,30	1,70		3,30	1,70
15	381	3,78	3,23		3,78	3,23
20	508	4,24	5,18	1,50	4,66	4,86
25	635	4,55	7,52	1,50	5,01	6,60
30	762	4,78	10,15	2,00	5,03	8,14
35	889	5,08	13,10	2,00	5,34	9,46
40	1.016	5,33	16,37	2,00	5,61	11,15
45	1.143	5,59	19,98	2,00	5,88	13,21
50	1.270	6,02	24,07	2,00	6,33	15,79
55	1.397	6,33	28,60	2,00	6,54	18,87
60	1.524	6,65	33,61	2,00	7,00	22,49
65	1.651	6,86	39,14	2,00	7,22	26,66
70	1.778	7,44	45,33	2,00	7,83	31,58
75	1.905	7,75	52,31	2,00	8,15	37,38
80	2.032	7,82	59,65	2,00	8,23	43,55
85	2.159	8,13	67,34	2,00	8,55	50,14
90	2.286	8,13	75,34	2,00	8,55	57,05
95	2.413	8,13	83,34	2,00	8,55	63,97
96	2.438	8,13	84,94	2,00	8,55	65,35

lunghezza della canna: in inch 96; in mm 2438

peso complessivo del blank pieno: 84,94

peso complessivo del blank svuotato: 65,35

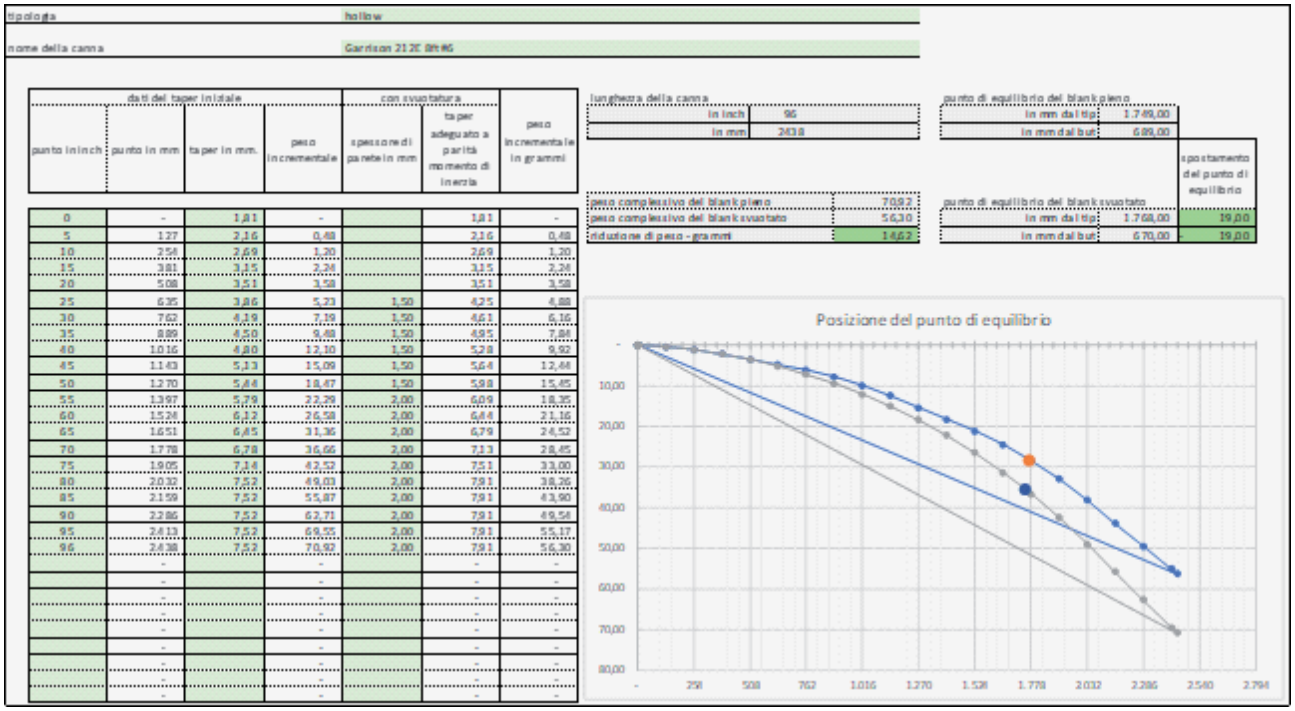
riduzione di peso - grammi: 19,59

punto di equilibrio del blank pieno: in mm dal tip. 1.719,00; in mm dal but 719,00

punto di equilibrio del blank svuotato: in mm dal tip. 1.802,00; in mm dal but 636,00

spostamento del punto di equilibrio: 83,00

Table and graph Hardy C.C. de France 8ft #5 – completely hollow



tipologia	hollow
nome della canna	Garrison 212E 8ft #6

dati del taper iniziale				con svuotatura		
punto in inch	punto in mm	taper in mm.	peso incrementale	spessore di parete in mm	taper adeguato a parità momento di inerzia	peso incrementale in grammi
0	-	1,81	-		1,81	-
5	127	2,16	0,48		2,16	0,48
10	254	2,69	1,20		2,69	1,20
15	381	3,15	2,24		3,15	2,24
20	508	3,51	3,58		3,51	3,58
25	635	3,86	5,23	1,50	4,25	4,88
30	762	4,19	7,19	1,50	4,61	6,16
35	889	4,50	9,48	1,50	4,95	7,84
40	1016	4,80	12,10	1,50	5,28	9,92
45	1143	5,13	15,09	1,50	5,64	12,44
50	1270	5,44	18,47	1,50	5,98	15,45
55	1397	5,78	22,36	2,00	6,09	18,36
60	1524	6,12	26,58	2,00	6,44	21,16
65	1651	6,45	31,36	2,00	6,78	24,52
70	1778	6,78	36,66	2,00	7,13	28,45
75	1905	7,14	42,52	2,00	7,51	33,00
80	2032	7,52	49,01	2,00	7,91	38,26
85	2159	7,52	55,87	2,00	7,91	43,90
90	2286	7,52	62,71	2,00	7,91	49,56
95	2413	7,52	69,55	2,00	7,91	55,17
96	2438	7,52	70,92	2,00	7,91	56,30

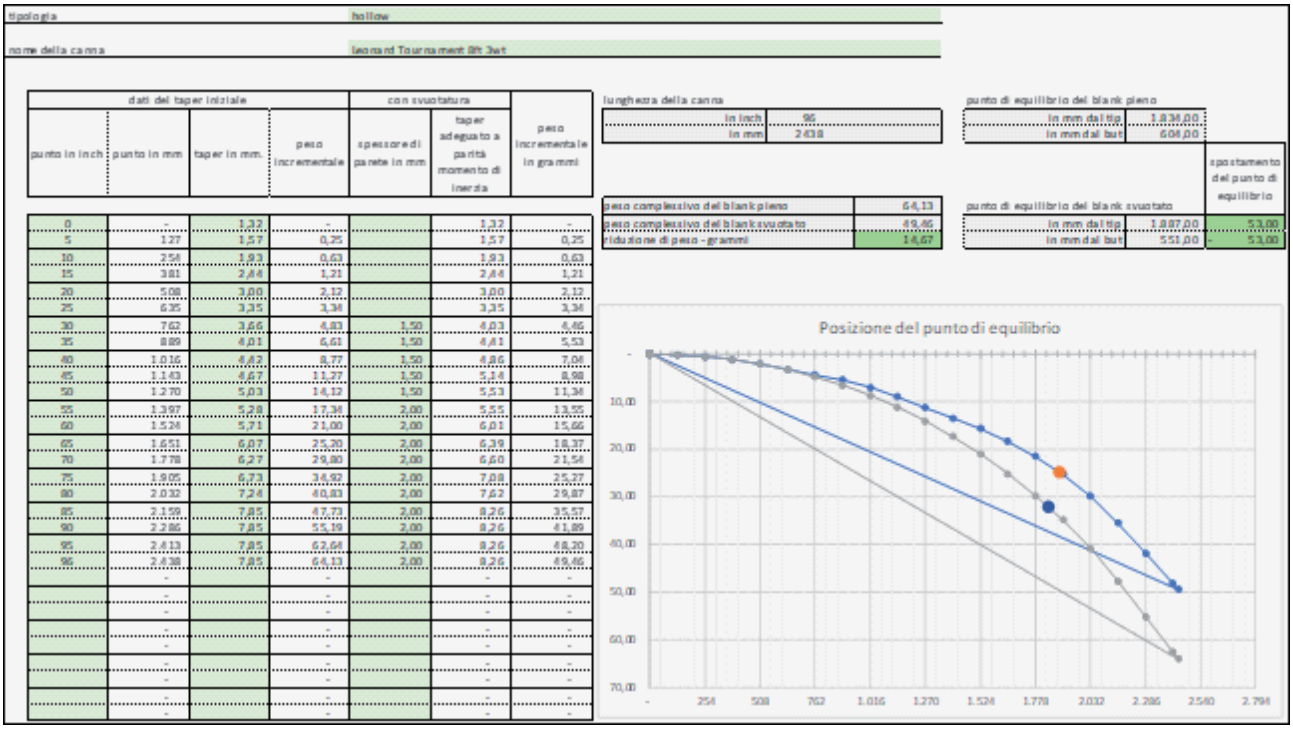
lunghezza della canna	
in inch	96
in mm	2438

peso complessivo del blank pieno	70,92
peso complessivo del blank svuotato	56,30
riduzione di peso - grammi	14,62

punto di equilibrio del blank pieno	
in mm dal tip	1.749,00
in mm dal but	689,00

punto di equilibrio del blank svuotato		spostamento del punto di equilibrio
in mm dal tip	1.768,00	19,00
in mm dal but	670,00	19,00

Table and graph Garrison 212E 8ft #6 – completely hollow



tipologia	hollow
nome della canna	Leonard Tournament 8ft 3wt

dati del taper iniziale				con svuotatura		
punto in inch	punto in mm	taper in mm.	peso incrementale	spessore di parete in mm	taper adeguato a parità momento di inerzia	peso incrementale in grammi
0	-	1,32	-		1,32	-
5	127	1,57	0,25		1,57	0,25
10	254	1,83	0,63		1,83	0,63
15	381	2,44	1,21		2,44	1,21
20	508	3,00	2,12		3,00	2,12
25	635	3,35	3,34		3,35	3,34
30	762	3,66	4,83	1,50	4,03	4,46
35	889	4,01	6,61	1,50	4,41	5,53
40	1016	4,42	8,77	1,50	4,86	7,06
45	1143	4,67	11,27	1,50	5,14	8,98
50	1270	5,03	14,12	1,50	5,53	11,34
55	1397	5,28	17,34	2,00	5,55	13,55
60	1524	5,71	21,00	2,00	6,01	15,66
65	1651	6,07	25,20	2,00	6,39	18,37
70	1778	6,27	29,80	2,00	6,60	21,54
75	1905	6,73	34,92	2,00	7,08	25,27
80	2032	7,24	40,83	2,00	7,62	29,87
85	2159	7,85	47,71	2,00	8,26	35,57
90	2286	7,85	55,19	2,00	8,26	41,89
95	2413	7,85	62,64	2,00	8,26	48,20
96	2438	7,85	64,13	2,00	8,26	49,46

lunghezza della canna	
in inch	96
in mm	2438

peso complessivo del blank pieno	64,13
peso complessivo del blank svuotato	49,46
riduzione di peso - grammi	14,67

punto di equilibrio del blank pieno	
in mm dal tip	1.834,00
in mm dal but	604,00

punto di equilibrio del blank svuotato		spostamento del punto di equilibrio
in mm dal tip	1.887,00	53,00
in mm dal but	551,00	53,00

Table and graph Leonard Tournament 8ft 3wt – completely hollow

I summarize here the data expressed above.

Rod	solid		completely hollow			
	Weight grams	Point of equilibrium mm. from tip	Weight grams	Point of equilibrium mm. from tip	Weight reduction	Movement of the Point of equilibrium mm.
Hardy CC de France	84,94	1.719	65,35	1.802	19,59	83,00
Garrison 212E	70,92	1.749	56,30	1.768	14,62	19,00
Leonard Tournament	64,13	1.834	49,46	1.887	14,67	53,00

In the light of this data, the question I asked myself is whether it is worthwhile to completely hollow these rods which, in the face of weight reductions of the order of 15 grams, do not have significant improvements in their balance. I know many builders who triumphantly publish the response of their scales which certify that their latest blank weighs very little but I don't know even one who has extended the index and has balanced the blank to determine its centre of gravity.

Is it better to have a very light but forward weighted blank or one with a few more grams but correctly balanced?

No one has the truth and perhaps we need to find the right balance between the two options, so what I think is correct is to lighten with criteria until you reach the best position of the centre of gravity ... by moving it back.

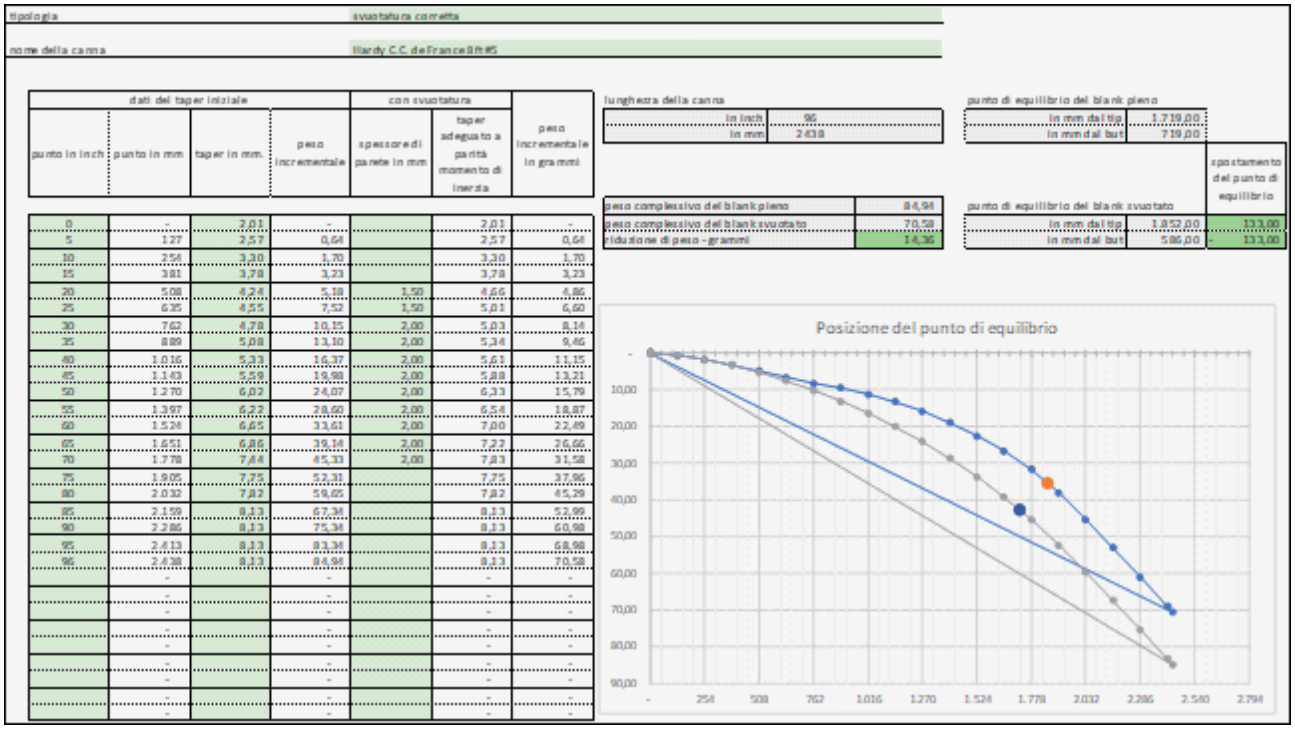
Using the usual Excel sheet, I therefore hypothesized partial hollowing with different thicknesses of 1.5 or 2 millimetres compatibly with the section of the rod and with consequent adjustment of the taper to keep the moment of inertia unchanged.

We can see the results in the tables and graphs that follow and which demonstrate that the correct hollowing is not the one that affects the whole rod but the one that stops at about 75% of its length because it allows a good reduction in weight but with a considerable moving backwards towards the balance point handle.

Hardy. Hollowing from the 20'' to the 70'' point. Weight reduction of 14.36 grams and balance point displacement of an impressive 133 mm towards the bottom.

Garrison. Hollowing from the 30'' to the 70'' point. Weight reduction of 9.45 grams and balance point shift of 73 mm towards the bottom.

Leonard. Hollowing from the 30'' point to the 85'' point. Weight reduction of 12.73 grams and balance point shift of 109 mm towards the bottom.



tipologia: svuotatura corretta

nome della canna: Hardy C.C. de France 8ft #5

dati del taper iniziale				con svuotatura		
punto in inch	punto in mm	taper in mm	peso incrementale	spessore di parete in mm	taper adeguato a parità momento di inerzia	peso incrementale in grammi
0	-	2,01	-		2,01	-
5	127	2,57	0,64		2,57	0,64
10	254	3,30	1,70		3,30	1,70
15	381	3,78	3,23		3,78	3,23
20	508	4,24	5,18	1,50	4,66	4,86
25	635	4,59	7,52	1,50	5,01	6,60
30	762	4,78	10,15	2,00	5,03	8,14
35	889	5,08	13,10	2,00	5,34	9,46
40	1.016	5,33	16,37	2,00	5,61	11,15
45	1.143	5,59	19,98	2,00	5,88	13,21
50	1.270	6,02	24,07	2,00	6,33	15,79
55	1.397	6,23	28,60	2,00	6,54	18,87
60	1.524	6,65	33,61	2,00	7,00	22,49
65	1.651	6,86	39,14	2,00	7,22	26,66
70	1.778	7,44	45,33	2,00	7,83	31,58
75	1.905	7,75	52,31		7,75	37,96
80	2.032	7,82	59,65		7,82	45,29
85	2.159	8,13	67,34		8,13	53,86
90	2.286	8,13	75,34		8,13	60,98
95	2.413	8,13	83,34		8,13	68,98
96	2.438	8,13	84,94		8,13	70,58

lunghezza della canna: in inch 96; in mm 2438

peso complessivo del blank pieno: 84,94

peso complessivo del blank svuotato: 70,58

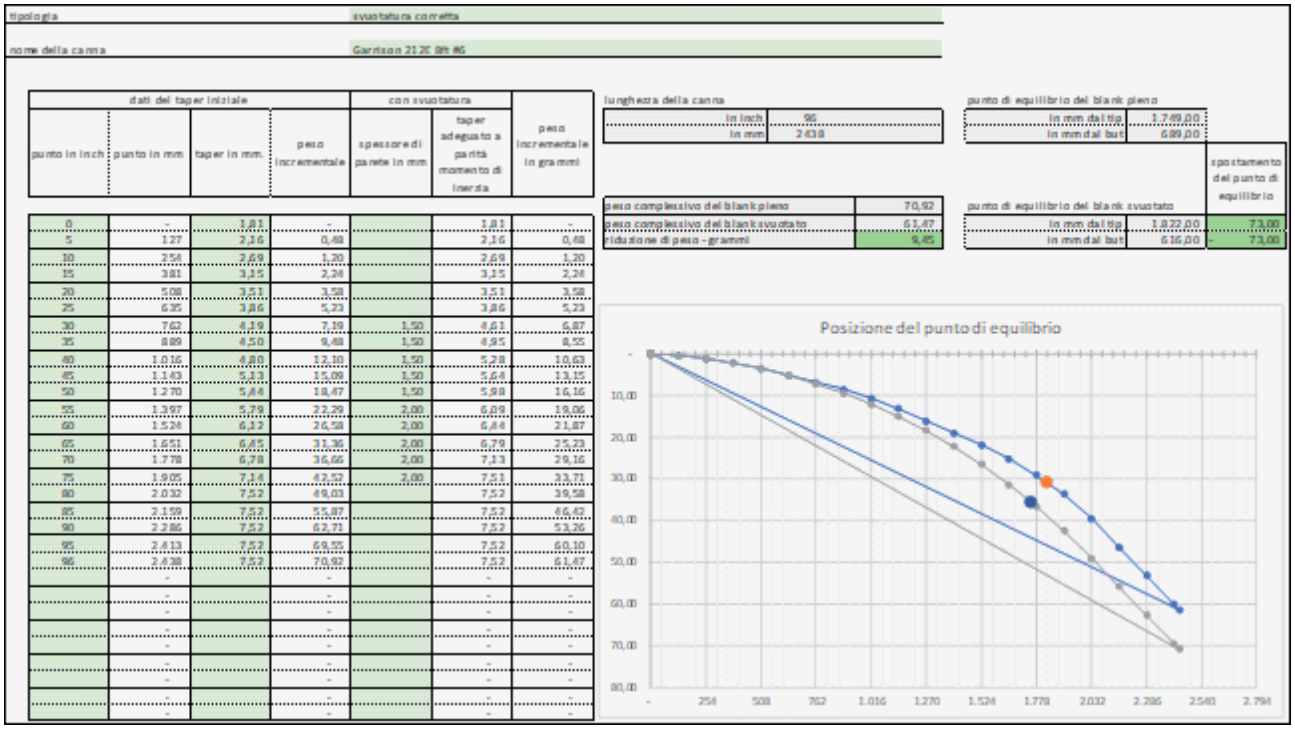
riduzione di peso - grammi: 14,36

punto di equilibrio del blank pieno: in mm dal tip 1.719,00; in mm dal but 719,00

punto di equilibrio del blank svuotato: in mm dal tip 1.852,00; in mm dal but 586,00

spostamento del punto di equilibrio: 133,00 / 133,00

Table and graph Hardy C.C. de France 8ft #5 – correct hollowing



tipologia: svuotatura corretta

nome della canna: Garrison 212E 8ft #6

dati del taper iniziale				con svuotatura		
punto in inch	punto in mm	taper in mm	peso incrementale	spessore di parete in mm	taper adeguato a parità momento di inerzia	peso incrementale in grammi
0	-	1,81	-		1,81	-
5	127	2,16	0,48		2,16	0,48
10	254	2,69	1,20		2,69	1,20
15	381	3,15	2,24		3,15	2,24
20	508	3,51	3,58		3,51	3,58
25	635	3,86	5,23		3,86	5,23
30	762	4,19	7,19	1,50	4,61	6,87
35	889	4,50	9,48	1,50	4,95	8,55
40	1.016	4,80	12,10	1,50	5,28	10,63
45	1.143	5,13	15,09	1,50	5,64	13,15
50	1.270	5,44	18,47	1,50	5,98	16,16
55	1.397	5,79	22,29	2,00	6,09	19,06
60	1.524	6,13	26,58	2,00	6,44	21,87
65	1.651	6,45	31,36	2,00	6,78	25,23
70	1.778	6,78	36,66	2,00	7,13	29,16
75	1.905	7,14	42,52	2,00	7,51	33,71
80	2.032	7,52	49,03		7,52	39,58
85	2.159	7,52	55,87		7,52	46,42
90	2.286	7,52	62,71		7,52	53,26
95	2.413	7,52	69,55		7,52	60,10
96	2.438	7,52	70,92		7,52	61,47

lunghezza della canna: in inch 96; in mm 2438

peso complessivo del blank pieno: 70,92

peso complessivo del blank svuotato: 61,47

riduzione di peso - grammi: 9,45

punto di equilibrio del blank pieno: in mm dal tip 1.749,00; in mm dal but 689,00

punto di equilibrio del blank svuotato: in mm dal tip 1.822,00; in mm dal but 616,00

spostamento del punto di equilibrio: 73,00 / - 73,00

Table and graph Garrison 212E 8ft #6 – correct hollowing

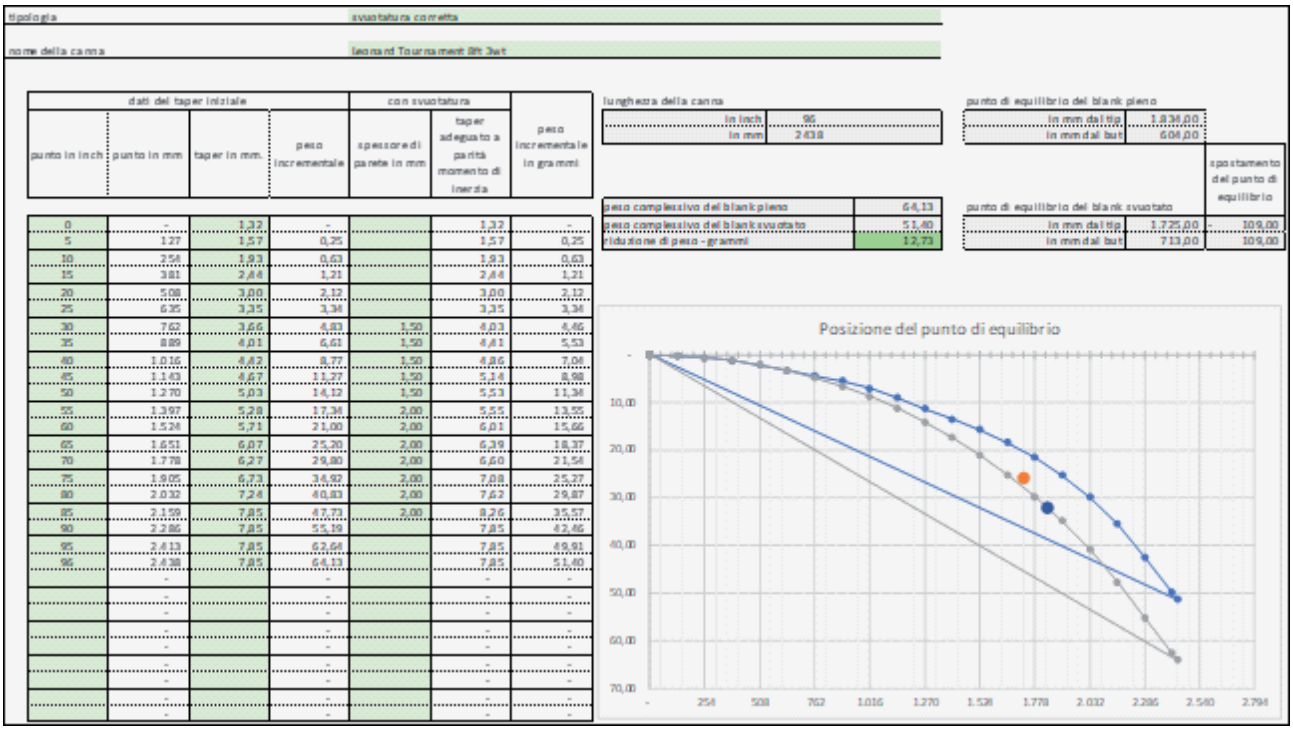


Table and graph Leonard Tournament 8ft 3wt – correct hollowing

Here I summarize the data expressed above relating to hollowing which in my opinion should be considered correct:

Rod	solid		completely hollow			
	Weight grams	Point of equilibrium mm. from tip	Weight grams	Point of equilibrium mm. from tip	Weight reduction	Movement of the Point of equilibrium mm.
Hardy CC de France	84,94	1.719	70,58	1.852	14,36	133,00
Garrison 212E	70,92	1.749	61,47	1.822	9,45	73,00
Leonard Tournament	64,13	1.834	51,40	1.725	12,73	109,00

Evaluating the simple data obtained on these three rods, one wonders whether on an already fast and light rod like the Leonard Tournament it is necessary to intervene with a hollowing action which instead appears absolutely ameliorative on a slow and heavy rod like the Hardy. Everyone can draw their own conclusions.

The ones I have presented are theoretical data because they do not take many factors into consideration, for example that hollowing cannot be continuous because there are diaphragms in any case or that hollowing in the ferrule area is not feasible and therefore in a three-piece rod there will be two ferrules and two hollowed areas.

So the results have to be interpreted, a bit like the Garrison stress graph which we all know is theoretical but which still gives us the exact “feel” of how the rod will perform. It is necessary to bear in mind that every operation we carry out has pros and cons, Hollowing is one of these and must be designed and carried out with "balance" thinking carefully about what is being done and its consequences.

Alberto


years

Rodmaking and Artificial Intelligence

by GPT

The creation of bamboo fishing rods in Europe began in the late 19th century but really spread from the 1950s. After a while, however, the use of bamboo in fishing rods underwent a decline due to the appearance of synthetic materials, first fiberglass and then carbon, to then experience a rebirth, limited to fly fishing rods, starting with late 90's. Today, the creation of bamboo fishing rods is mainly carried out on an artisanal level, with great attention to the quality and durability of the materials.

Rodmaking has once again become a valued art, and many artisans and small businesses have begun manufacturing and selling high quality bamboo rods. Furthermore, the diffusion of online tutorials and training courses has made the construction of one's own rods more accessible. In general, during the last two decades, bamboo rodmaking has been a rapidly growing industry with an increasingly large fan base in many countries around the world. This was partly due to the growing popularity of fly fishing but also to the rediscovery of the craft tradition of making your own fishing rods. Furthermore, the beauty and versatility of bamboo rods have attracted many anglers and enthusiasts who are looking for something more than mass industrial production in rods.

During these twenty years bamboo rodmaking has continued to evolve. There have been many innovations in the materials and techniques used in rod construction, and an ever-wider range of options have become available to builders and anglers alike. With the advent of new materials and technologies, manufacturers have also been able to create stronger, lighter, better performing bamboo fishing rods.

In addition, the growing popularity of fly fishing has led to an increase in demand for high quality bamboo rods and greater visibility for the artisans who produce them. With the advent of new digital technologies, many manufacturers have started using design and manufacturing software to create custom models for their customers. This has allowed greater flexibility in creating bespoke fishing rods, with unique specifications for each angler.

Surely, bamboo rodmaking is an art form that requires skill, precision and knowledge of materials. The choice of bamboo as a material for fishing rods is linked to its flexibility and resistance, making it ideal for a wide range of fishing techniques. Furthermore, bamboo is a sustainable and recyclable material, making it increasingly a popular choice among anglers looking to minimize their environmental impact.

The process of building bamboo rods takes time and dedication, but for many fly fishing enthusiasts, the end result is a unique, custom rod that is perfectly suited to their needs. Additionally, building your own rods can be a rewarding activity and an opportunity to develop new skills. There are however many world-renowned bamboo rodmakers currently active who are renowned for the quality of their rods and for using innovative techniques and the high quality of their constructions. Their reputation has been built through years of experience and dedication to rodmaking. These rodmakers continue to influence the bamboo rodmaking community and create rods that are considered to be among the best in the world.

It is difficult to predict future trends in bamboo rodmaking, but one can assume that interest in the art form and in fly fishing will continue to grow. The sustainability and versatility of bamboo rods should continue to be important factors for anglers and fishing tackle enthusiasts.

With growing environmental awareness and the demand for sustainable products, bamboo rodmaking may continue to gain popularity as an alternative to synthetic rods. Disseminating information on bamboo rod-making techniques through digital media and training courses could contribute to greater growth in the industry.

As for possible future developments, the use of artificial intelligence could help create more efficient, faster and more customizable production. For example, it could be used for 3D modelling of designs and performance simulation, as well as optimizing manufacturing processes by automating material selection and quality control.

Is it legitimate to ask whether the modern availability of A.I. (Artificial Intelligence) will have an impact and give further impetus to bamboo rodmaking, as is happening in many other sectors?

In reality, even artisanal or semi-industrial activities, as is typically the case today with the production of bamboo rods, can in fact take advantage of AI, for example through:

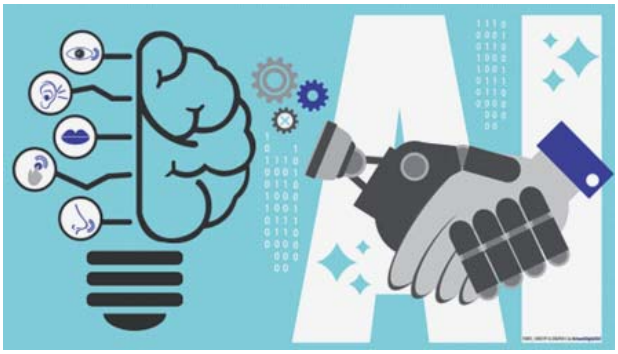
1. Analysing data on bamboo rod performance under different fishing and environmental conditions to identify repetitive patterns and trends.

2. Optimization of taper design using machine learning technologies and simulation models.

3. Prediction of rod performance based on historical data and modelling of various factors affecting its performance, such as the specific characteristics of the bamboo used.

4. Customize the taper design to match individual angler preferences and specific fishing needs.
5. Analysis of bamboo properties to select the most suitable quality for the production of fishing rods
6. Prediction of finished product quality using machine learning models based on historical data.

In reality, despite the technological advances of the recent past and those foreseeable for the near future, many enthusiasts will continue to prefer bamboo fishing rods created entirely by hand, as they consider the latter to be unique and unrepeatable works of art.



Editor's Note: Did you find this analysis interesting? Maybe you've also discovered some mistakes, but maybe you'll find it even more interesting after I've revealed a little secret: GPT is not a human being.

This small treatise, but absolutely everything, from the first to the last word, is the birth of a so-called "Artificial Intelligence". In particular, it was "written" by ChatGPT, a language processing software developed by OpenAI and which has recently become famous for the stellar budget recently invested in it by Microsoft, a good 10 billion dollars. Currently ChatGPT is available "for free" (actually this is for AI training), and therefore it is used to prepare essays and class assignments, correct math homework, write speeches and even Sunday sermons!

I was doing some tests for vaguely professional reasons and I thought of combining business with pleasure by teasing ChatGPT on the theme "bamboo rodmaking and A.I.". So, I didn't write this article, and it's not even the trivial "copying" of a text found on the net. The text was created in real time by the "bot" (nickname given to modern software specialized in specific tasks including natural language processing, structured automatic search for information, etc.) in the form of a question-answer dialogue, in less than ten seconds!

We call it "Intelligence", but obviously it is not in the "human" sense of the word. However, these algorithms are already capable of interpreting complex questions asked in a conversational way, searching for the most appropriate information by "reading" and processing millions of documents and texts on the web, and finally synthesizing the information with an absolutely human-like language. I am able to recognize and admit my mistakes and also to reject unsuitable requests. GPT has already been used to write essays and assignments in math class, and – it is said – even to write Sunday sermons!

The feeling of speaking with a real human being is truly impressive (I would even say disturbing!). If this seems little to you, get ready to see what the near future has in store for us... Ah, ChatGPT has a sister, called Dall.E. It too is a so-called A.I. specialized in image processing. Dall. And you create drawings and even pseudo-photographic images by interpreting more or less accurate verbal descriptions! The first two images in this article, which look like photographs (but aren't) have been "created" by Dall.E for me.

PS: maybe someone is wondering at this point... no, I wrote the last lines, the ones in italics


many

Latet anguis in herba

by Angelo Arnoldi

Latet anguis in herba. this strange Latin allocution, by Virgil, is in the Eclogue III, it literally means the snake lies in the grass.
But in reality, it is an allegory, and it means something else. It means that there is a danger close to us, even if hidden, concealed and difficult to see in the grass, it exists.

Among the innumerable ways in which humanity manages its free time, bamboo rodmaking certainly does not figure in first place for its danger or for the accidents it can incur. Hunting is certainly enormously riskier, every year it causes several injuries or deaths, many other sports endanger the person who practices them, those who engage in contact sports for example, can suffer face fractures, bruises and similar pleasantries, and even a widespread sport like skiing is no joke in terms of accidents (alas, I know something about it...).

Some time ago, also in the light of what happened to a rodmaker in my area, I wondered if there were more or less high risks in bamboo rodmaking that could be encountered.

Yes, unfortunately there are, and I'm not referring to any cuts in the fingers caused by the bamboo or the plane that hits my foot when it falls, there are also more hidden risks, not easily detectable, but present, insidious, and potentially very dangerous, if not known and faced with some simple precautions, it is therefore worth investigating and trying to understand what they are.

Many years ago, in the 1970s, to investigate or refute the phenomenon of UFOs and "extra-terrestrials" in general, various theories were formulated, some truly bizarre, others with a slightly more solid foundation. Two of these, namely the theory of speciation (Note 1) and the theory of numerical progression, could point us in the right direction, albeit with some limitations.

These two theories, in very simple words, claim that there is only one human species on planet earth, but going down the evolutionary pyramid, these species increase dramatically, reaching more than 30 million different species currently living, and at the same time, there are about 7 billion or a little more people in the world, but in a simple bottle full of dirty water, there are infinitely more simple and perhaps unicellular microorganisms.

So statistically it is in the most primitive and numerically prevalent species that we must look for, in unicellular microorganisms, Protista, or in any case in simple multicellular microorganisms, such as eumycetes, which can more easily represent a risk for us.

These microorganisms, very often present on the outside or inside our culm, and which can attack us when we handle it, are the ones that interest us and which we need to investigate.

In order to understand something about these microorganisms, one must enter an obscure and little-known kingdom, the so-called third kingdom, that is, something that is neither part of the animal kingdom nor of the vegetable kingdom... the world of fungi and moulds.

Let's see what they are....

The word mushroom immediately evokes refined dishes, sautéed mushrooms, risotto with porcini mushrooms, spaghetti with chanterelle mushrooms or similar delicacies, but what we commonly call a mushroom is only the fruiting body of the mushroom, that is the part of the plant above the ground, and which is intended only for reproduction. The real fungus is underground, it is made up of very thin multicellular filaments, called hyphae, which expand in the ground, sometimes for many metres.

Unearthed underground fungal hyphae

Other species also belong to this huge kingdom, some unicellular, yeasts, called protists, and others multicellular but without the fruiting body, moulds, also called filamentous fungi. Yeasts are organisms with a generally rounded shape, moulds on the contrary are formed by an elongated body also made up of thin multicellular filaments, the hyphae.

The most immediately visible difference between the kingdom of plants and that of fungi and moulds, is the colour. Plants are green because an important green molecule is present inside the leaves and young stems: chlorophyll, structurally very similar to haemoglobin, present in our red blood cells and to cyanocobalamin, vitamin B12.

This molecule participates in a complex chemical reaction, certainly the most important chemical reaction that takes place on planet earth, photosynthesis. That is, the formation of a molecule of glucose, the nourishment of the plant, starting from 6 molecules of carbon dioxide CO2 and 6 of water H-O-H, with the release of 6 oxygen atoms. This oxygen is what allows us poor mortals to breathe and therefore to survive.

This reaction takes place in the presence of light which is selectively absorbed by chlorophyll.

Mushrooms and moulds, on the other hand, do nothing similar, they do not possess chlorophyll, they are heterotrophic organisms, they absorb nourishment exclusively from the environment in which they live, which means that they develop peacefully even in the absence of light, in the dark, and as far as we are concerned, unfortunately also inside our beautiful bamboo culm, if they find the right temperature and humidity conditions.

Moulds are widespread in nature, and in the presence of optimal temperature and humidity conditions, they have the ability to settle rapidly in plant tissues by exploiting cracks or lesions caused by trauma, insects or parasites. Excess humidity, heat or the so-called floating of wood, or bamboo, transport via water, favour its growth. A high concentration of carbohydrates, as in the case of corn, rice and unfortunately also bamboo, accelerates their synthesis and proliferation.

Mosaic virus

It is known that fungal moulds are the main adversities that can affect plants. We have all heard of downy mildew of the vine, fusariosis of wheat, rust of roses or in the Middle Ages, of Claviceps purpurea, a fungus that infected rye, causing real epidemics of ergotism, a disease called St. Anthony's fire, characterized by hallucinations and rapid gangrene in the limbs caused by the strong vasoconstriction it provoked. Even bamboo has its fungal adversities such as rust, bamboo mosaic virus or sooty mould.

Mycoses that affect plants have always been one of the main problems that are not easy to solve for growers.

Both fungi and moulds are decomposers, and both reproduce by means of spores, a type of reproductive cell capable of remaining in a latent vegetative state for a very long time, until the necessary temperature and humidity conditions arise to be able to reproduce.

The spores are usually round for mushrooms, and are released from the fruiting body (that's why a good mushroom hunter uses a large mesh basket to collect them). In moulds, on the other hand, the spores are formed in tubular structures of the hyphae, called sporangia, they are conical in shape and therefore called conidia.

Release of conidia from a sporangium

But fungi, i.e., fungi and moulds, as well as for plants, can they be dangerous for humans?

Yes, even leaving out the direct toxicity of the fruiting body of many more evolved species, such as amanitas for example, many, even among the simplest ones, can be a danger to us if somehow, they enter our body and find the right conditions there.

They can harm us in many ways, for example by giving direct infections, that is, by proliferating abnormally in our body, especially in the case of debilitated patients, or with reduced immune responses or treated with immunosuppressants. The proliferation of Candida albicans, children's thrush, a mycosis currently booming in the Western world, and which finds fertile ground in the consumption of refined sugars, is a notable example.

Or they can function as antigens, i.e., by stimulating abnormal allergic responses from our body in the first upper airways, causing the development of rhinitis or in the eyes with allergic conjunctivitis, behaving in a similar way to the pollens of some plants.

Or, a very rare but much more serious case, they can directly damage us with some secondary metabolites that are released during the growth of the fungus in certain pathological conditions. These secondary metabolites, substances called mycotoxins or aflatoxins, are a heterogeneous group of low molecular weight substances, chemically related to alkaloids, coumarins or terpenoids.

Some of these are among the most poisonous substances known so far, and in the very first places among carcinogenic and mutagenic substances. It is not for nothing that they have also been studied for war use.

Aflatoxins can develop during the cultivation, harvesting and storage of many plant products, due to incorrect cultivation or harvesting methods, as well as adverse seasonal events. Cereals, corn, peanuts, oilseeds, dried fruit can carry them, but products such as milk can also contain them due to the contamination of livestock feed, which, fortunately, is partially immune to these substances.

The possibility of finding such dangerous substances in widely consumed food products has fortunately for some time contributed to the creation of a monitoring and alert system on the aflatoxin content in plants involved in human nutrition and animal breeding.

But unfortunately, not all countries do it, and in some developing countries, we see high levels of neoplasms, such as liver cancer, much higher than the numbers found in more developed countries, an increase certainly due to the ingestion of group B1 aflatoxins, and unfortunately not detected.

The only positive note from our point of view is that aflatoxins enter the body practically only with direct ingestion, for a rodmaker, this danger is fortunately very remote unless you eat the stem...

But going back to bamboo, what is the danger of moulds that we can come across while handling it trying to get a fishing rod out of it?

The danger is the spores.

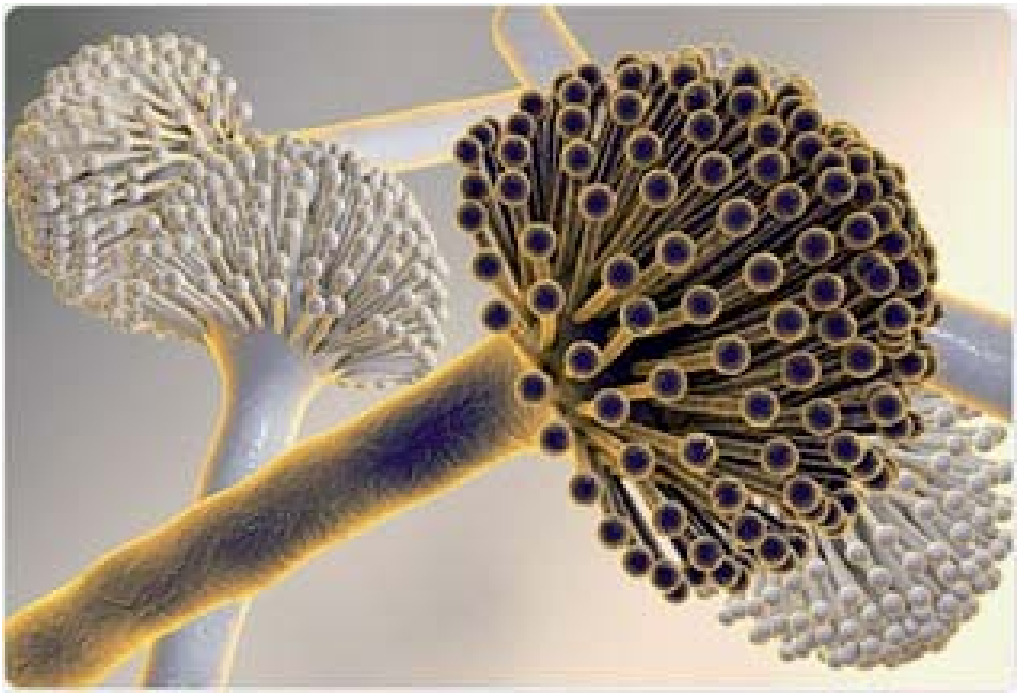
Spores are the reproductive cellular structures of many microorganisms, including bacteria. They are transported and dispersed in the air, in the water or similarly to the seeds of many plants, carried around by animals.

Spores released by contact with an insect

Unfortunately, those dispersed in the air are the vast majority, it is believed that there are tens of thousands of types of fungi and moulds whose spores are dispersed in the air. The diffusion of spores in the air depends on the degree of temperature, above 20 degrees, and humidity, above 65%, of the air. They can be transported by the wind over considerable distances and similarly to pollen, they can unfortunately be inhaled by the upper respiratory tract and then end up in the deeper respiratory tract.

The most common moulds that can be encountered in daily life belong to the families of Aspergillus, Alternaria, Fusarium and Penicillium. The Penicillium family is noteworthy, not only has it given rise to a lineage of antibiotics, but Penicillium glaucum is the mould that appears in some blue cheeses, such as the Italian Gorgonzola or the French Roquefort...therefore not all moulds are bad...

However, the one that interests us more closely, due to its close relationship with bamboo, is the Aspergillus family, one of the most common and widespread, very rustic, it does not need high humidity and temperature to develop and give rise to colonies. Discovered by an Italian priest, its name derives from the Latin asperger, which means sprinkler, because it quite recalls its shape.



aspergillus

In this family the most common representatives are Aspergillus niger, Aspergillus flavus and Aspergillus fumigatus.

Aspergillus niger, dark in colour, is the most common, it is the mould of the walls, its spores are often also present on our skin, in the oral cavity, and in non-pathological conditions, they remain latent there, without developing too much nor cause problems.

aspergillus niger

Aspergillus Flavus and especially Aspergillus Fumigatus, can also produce aflatoxins, unlike Aspergillus Niger.

These moulds, in our body, can cause a disease called aspergillosis; its variants include: obstructive aspergillosis or allergic aspergillosis, and mainly affects those involved in the bamboo supply chain, which I remember, it is obviously not used only to make fishing rods, but has now reached a significant development of uses, and therefore of operators in the its processing. For them, it has long since become a real occupational disease.

And can there be similar cases in the world of rodmaking?

The rodmaker has few occasions to come into contact with the fungal spores that infect the bamboo during the construction of a rod, practically only during the splitting of the culm or a treatment that releases dust mixed with spores, he can be surrounded by and breathe the cloud of spores.

Fortunately, these events are very rare, but Sherlock Holmes always advised Doctor Watson not to confuse the improbable with the impossible, and in fact, as I mentioned at the beginning, it happened to a talented rodmaker, who also lives a few kilometres from me.

Probably during the splitting of the culm or during its processing, he inhaled spores which, once they entered the respiratory system, began to reproduce causing him obstructive aspergillosis. Luckily for him and for us, many years ago antifungal drugs derived from imidazole were synthesized, drugs to be used with a certain amount of care, but which are remarkably effective on this type of infection and which solved the problem in an acceptable amount of time.

The question we now ask ourselves is how to avoid breathing Aspergillus spores or similar moulds when we split or process a bamboo stalk?

The simplest thing is certainly to wear a mask during the early stages of processing the culm. An FFP2 mask is able to retain particles of 0.6 microns, and if we consider that mould spores start at 1 micron, and those of Aspergilli or Penicillins are 3 microns, it can be seen that it is more than enough to avoid surprises. However, other solutions can also be used if you do not have the aforementioned masks at hand. The spores are an impalpable powder, and like all powders they do not escape the complex laws of wettability between a solid and a liquid, it is therefore sufficient to fill the culm to be split with simple water, after breaking the diaphragms, will prevent the dispersion in the air and consequently make the fungal spores that may be present harmless…

Note 1: not to be confused with the more recently enunciated theory of speciation and which gave origin of the movement called "neo-Darwinism".

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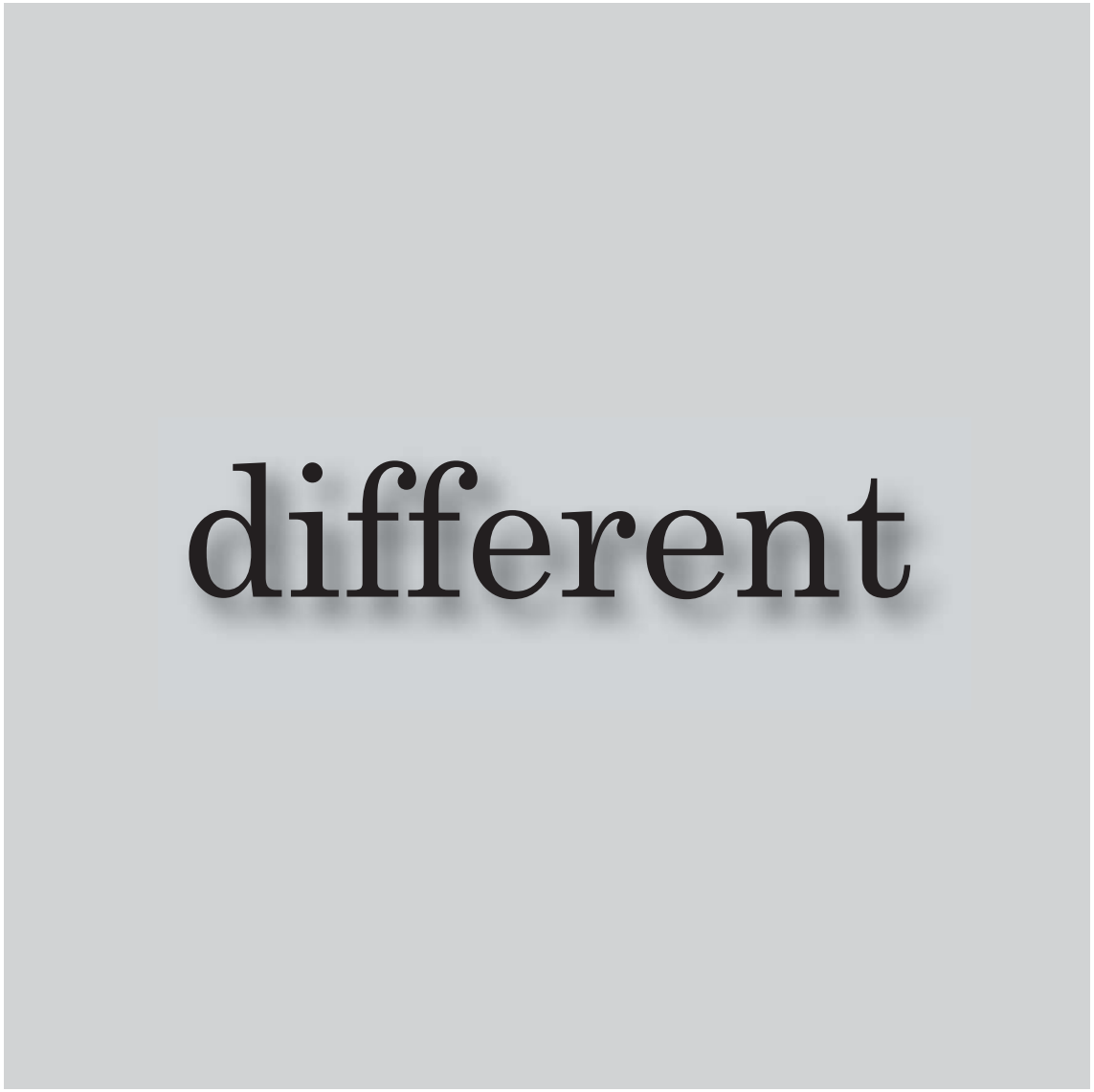

different

My “hybrid” rod

by Enrico Grasselli

I've always been fascinated by bamboo rods, since I was a kid, their shape and versatility made them the ideal playmate, bows, arrows and anything else they could inspire, they accompanied us by animating our fantasy world.

Even the first fishing rod was made of bamboo, a classic two-piece made in a good way with which we enjoyed fishing for roach and pumpkinseeds in Lake Como.

The first fly rod, at the time we called them whips, was a gift from a family friend, a three-piece Japanese-made split cane, probably a post-war artifact which was very heavy. I was barely able to use it, certainly not ideal for the wrist of a little boy. As soon as it was possible, I got myself an 8-foot fiberglass rod: a whole different story, I felt like I was flying.

Since that distant period, I have continued to fish, fly, spinning, trolling etc. etc., without taking into consideration the possibility of using bamboo rods, preferring materials such as graphite and fiberglass, until one day, looking at a vase in the garden in which there was a creeper supported by a large bamboo cane, I had the idea of trying to transform that poor support into something that could look like a fly rod.

I soon realized how unsuitable that bamboo was and how many things I would have to learn before making anything that even looked like a cane. An uphill start, without experience, without someone to share or exchange information with. Armed with good will and a good dexterity, I set out to gather as much information as I could about the materials and tools necessary for the construction of a bamboo fly rod.

I have to admit that the internet has been a huge help, it has allowed me to start taking my first steps in a new world that has literally enraptured me.

Once I got what I needed, I started step by step, with the intention of transforming an herbaceous trunk into a fly rod. After the first construction step, I found 12 strips of wood in my hands that I had managed to plane with so much effort.

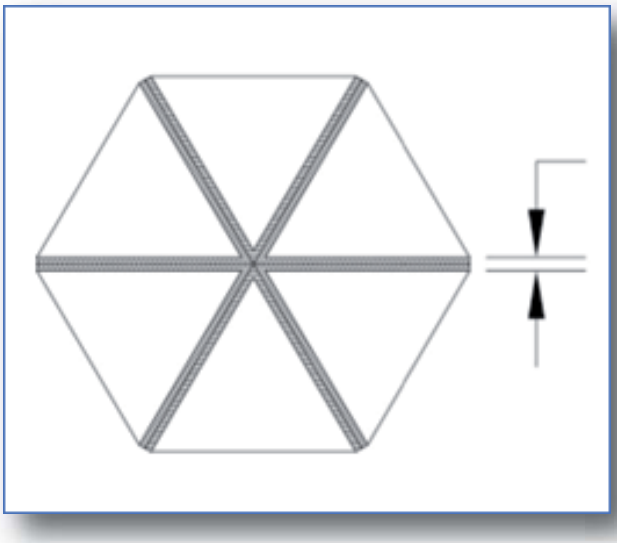
At that precise moment I remembered the Japanese "whip", and how much effort it was to use that tool.

Honestly, that memory was lost in the maze of memories, but perhaps unconsciously it had conditioned me in the following fifty years, instinctively leading me not to consider bamboo as a fishing tool.

After an initial moment of rethinking about my real intentions to continue with that project, I decided to persevere, perhaps managing to improve, as far as possible, those negative characteristics that had conditioned the choices of my equipment, completely ignoring how much the construction technique had improved in the meantime of split cane rods, bringing them closer to my ideal fishing tool.

But sometimes ignorance has its good sides…., on the strength of my limited knowledge, seasoned with a pinch of presumption, I put my experience into the field of composite materials and structural resins, to transform a natural material into a hybrid composed of bamboo (Tonkin) and carbon fibres bonded with epoxy.

After dozens of attempts and just as many failures, I managed to create a "composite" that combines the charm of bamboo wood with the mechanical characteristics of carbon fibre.



What to do with it, or rather, how to use it for the purpose that inspired me from the first moment? And here the first doubts and perplexities arose, which taper to use and with what percentage of hybridization, etc. etc.

On the web there are thousands of more or less famous tapers to be inspired by, but the material I created behaves very differently from bamboo wood, and as much as I tried to get inspired by this or that taper, what I got was something completely different from what I expected.

I started by excluding the reference to bamboo models and using linear profiles to better understand the behaviour of the material and discover the characteristics, limits and problems that this new material could express.

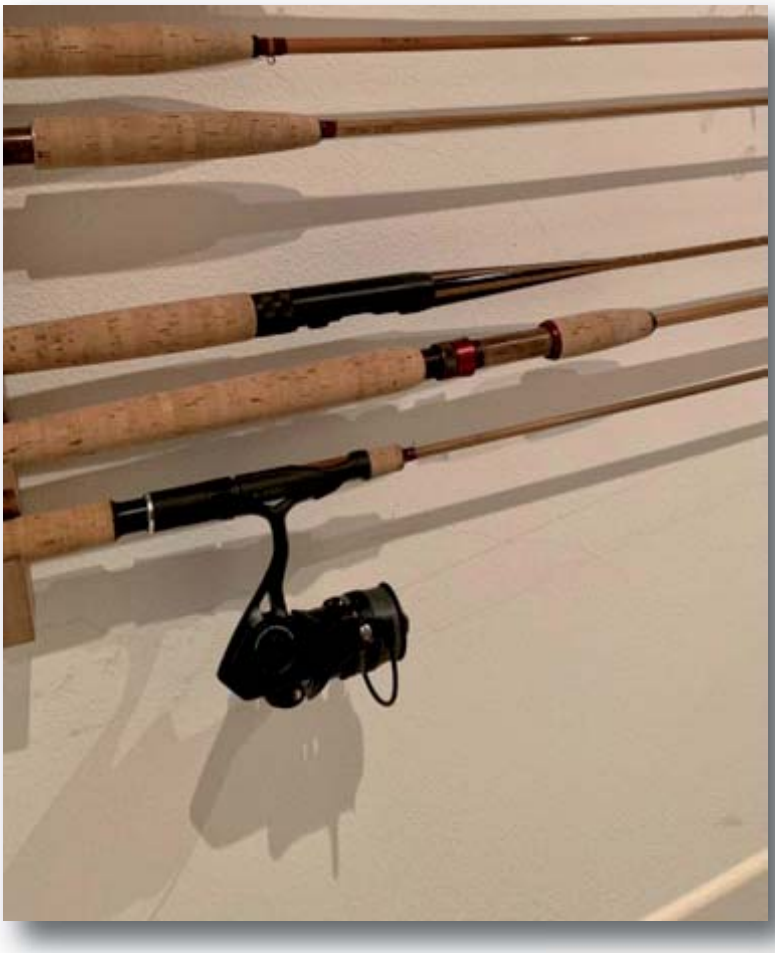
Garrison 202E classic and hybrid in comparison

I have also made some bamboo rods with the traditional method using tapers universally recognized as valid and versatile, for example the Garrison 202E, to have references on which to base the comparison between the two materials. This helped me to find the crux of the matter and to experimentally untangle the web of doubts and perplexities that had arisen.

Logically not all the questions have found an answer, but after a hundred realizations I managed to identify some peculiarities of the material and to create satisfactory fishing tools, many of which are distributed to fishermen friends who currently use them with satisfaction.

Among the salient features I can include a high stability of shape and a remarkable lightness when compared to traditional bamboo. With "equal" performance, the hybrid rod is about 10% lighter, rather fast and resistant. There has never been breakage or delamination, furthermore it is possible to reach sections of the tip of less than a millimetre, to the full advantage of lightness and sensitivity when fishing, a feature that I have experienced in one-piece rods for whitefish fishing from the boat.

Even if the main use is represented by fly fishing rods, this did not prevent me from experimenting with the material also in light and heavy spinning rods.



The constructive realization is not dissimilar from the "classic" one, the phases are essentially the same (split of the culm, straightening, levelling of the nodes, pre and post planing) the difference is represented by the gluing system which specifically takes place after the assembly of the strips (which already contain the carbon fibres placed between one strip and another) through the vacuum infusion of the epoxy resin, this method ensures a homogeneous and uniform bonding without empty spaces.

The polymerization phase takes place in the oven, after extraction from the vacuum bag and flattening, at a temperature of 135°C for a time of 20 minutes (these parameters are determined by the type of resin used).

Once the polymerization has taken place, proceed as usual with the elimination of the binding cord and sanding. What you get is a blank that resembles a classic bamboo blank in all respects, but characterized by black lines in conjunction with the joint lines of the strips, this is the only visible difference.

This method does not allow for "classic" hollowing, as infusion bonding would fill the internal spaces with resin, nullifying all efforts to reduce weight.

To overcome this limitation, I have chosen to carry out hollowing and subsequent filling with balsa wood, this allows me to push the thinning of the bamboo walls up to a thickness of 0.4 for the tip and 0.6 for the butt with reductions of considerable weight without substantially modifying the dynamic responses of the rod. After all, the use of balsa wood (I use 150 kg per m3 balsa) has proved to be extremely easy to use and is not affected by the thermal cycles in the polymerization oven.

With the balsa filling I obtained very light blanks, for example a 7.2 foot for line 4, the butt weighs 35 g and the tip 11 g, with the finished rod the weight is fixed at 77 g. I would say a good result in terms of lightness without sacrificing the sturdiness guaranteed by the carbon star.

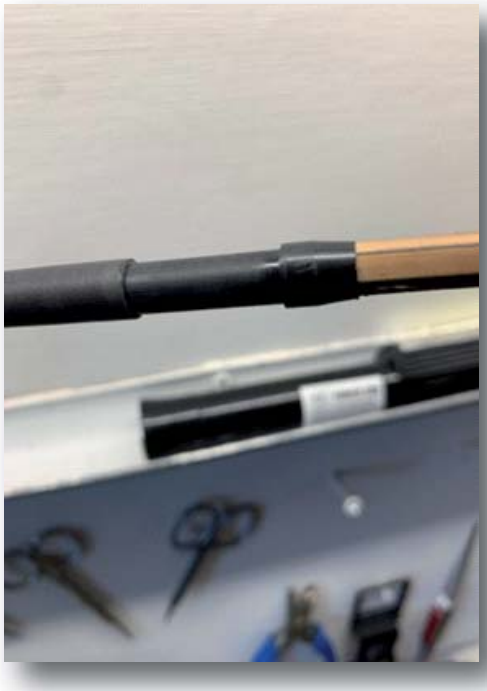
After so much effort to save a few grams, I asked myself: why frustrate everything by putting nickel/silver ferrules that weigh at least 6/7 grams? I have to admit that another reason is the fact that I haven't been able to find the N/S to make self-made ferrules, and the bamboo ones are still too far from my manufacturing ability.

Therefore, I dedicated myself to the search for alternative materials (the aesthetic "damage" I had already stubbornly obtained with the carbon in the raw material) for the realization of the ferrules, identifying in anodized aluminium a valid alternative.

Logically it is not possible to use aluminium for both the male and female, the risk of gripping is too high. The solution was to use anodized aluminium for the female and acetal resin (Delrin) for the male, this solution allows me a considerable weight reduction (about 2.7 gr) and a perfect joint without seizure effects. Furthermore, the positioning of an M2.5 Allen screw with countersunk head allows you to adjust the friction between the ferrules, recovering any "play" due to the expansion of the bamboo wood due to the effect of humidity.

I obtained further weight reduction by using graphite tubes instead of aluminium, in this case the weight of a ferrule drops below 2 grams.

I excluded the use of graphite for both the male and the female because also in this case the risk of gripping is too high, again due to the expansion of the wood, something that the acetal resin does not suffer by virtue of its elastic component which cushions any sectional size changes.



The handcrafted construction of bamboo rods allows you to independently create a multitude of versions, whose characteristics, determined by sections, profiles and geometry of the sections (square, oval, pentagonal, hexagonal, etc. etc.) increase exponentially the realization fantasies, obtaining incredible results, the angle of freedom offered by these creations is not comparable to that offered by standards industrially made with materials such as graphite or fiberglass.

I believe that the inclusion of (alien) fibres in the classic construction can only increase creativity and the approach to performance currently the prerogative of completely "synthetic" systems such as graphite and fiberglass.

I know that my experience may cause perplexity in those who consider the use of non-canonical materials inappropriate in the construction of bamboo rods, but what has been described is the result of my experience, gained independently without the contribution and comfort of specific knowledge.

Today the rods that I use personally or that I have given to friends are fishing, and this is the best recognition I could expect.

I apologize in advance for those expecting a page of calculations and diagrams on the physical and mechanical peculiarities of this hybrid material, also because I have not found any evidence in the literature available on the web about the characteristics of a bamboo and graphite composite material, maybe there will be in the future.


woods

URUSHI

by MOG
Marco orlando Giardina

Currently, in IBRA, an interesting discussion has begun among the members regarding the best techniques for varnishing bamboo rods.

In the wake of this debate, the IBRA Board has decided to organize a workshop dedicated precisely to varnishing techniques and aimed at comparing and implementing procedures dedicated to the members of the Association. The workshop will be held in Boario on 20 and 21 May in conjunction with the annual gathering.

I thought it was worth introducing a niche painting technique into the discussion, decidedly used little in the West - if not unknown to most - but no less interesting and with surprising results.

The Urushi varnishing technique.

Why give so much importance to the varnishing procedure of a bamboo rod?

Let's broaden the discussion a little: what distinguishes a "good" rod from a "bad" rod?

In my opinion there are three elements that come into play. The design. Construction correctness. The aesthetics.

It is clear that these three elements of the meta-project are all related to each other and that the result of the final work will depend on their harmonic fusion, but it is also certain that the technical/design mastery applied by the rodmaker will greatly condition the final outcome.

The varnishing comprises two elements of the meta-project at the same time: the need to protect the blank from the dangers of the external environment (Constructive Correctness) and to create an aesthetically appreciable look for those who observe the finished rod (Aesthetics).

Urushi varnishing is a very ancient technique that developed in a particular way in the triangle between China, Korea and Japan.

The Urushi varnishing technique is commonly called in Italian "lacquering".

The art of lacquering in Japan probably dates back to the Jōmon period (ca. 10,000 BC-300 BC) as confirmed by the discovery of some lacquered artefacts dating back to 9,000 BC. in Hokkaido. Urushi is simultaneously the name of a natural lacquer and of the traditional handicraft that uses this product in Japan.

Urushi is the resin extracted by making a series of horizontal cuts on the bark of the East Asian lacquer tree, Toxicodendron paintfluum, called "Urushi no Ki" in Japan.

The lacquer when applied is initially dark brown, but after hardening which occurs by polymerization it becomes transparent and honey or amber in colour. Varnishing requires a high and constant humidity (about 80%) and an equally constant temperature (30° C) and a reasonable time (24h) to harden.

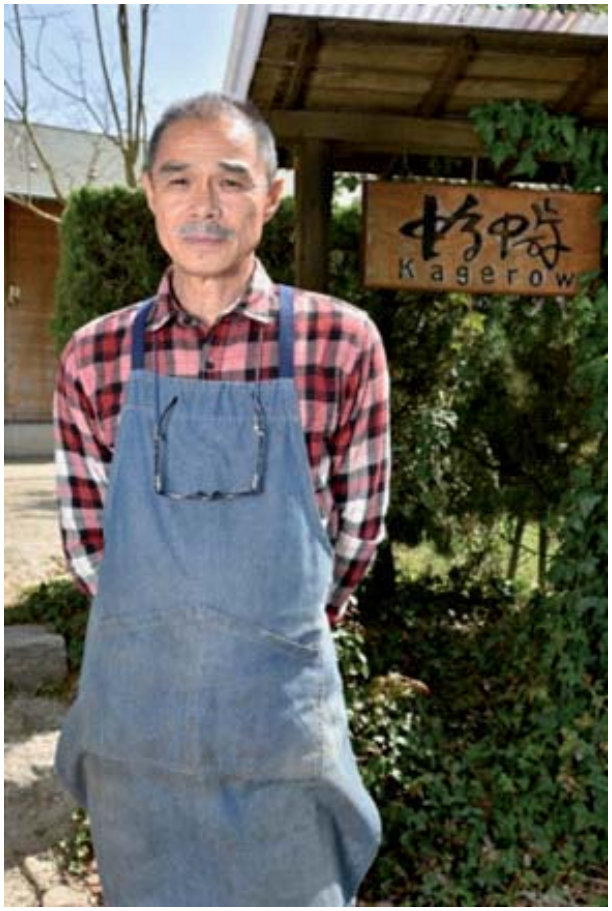
The varnish can only be applied in very thin layers by hand with a brush, each layer must be "sanded" after hardening. Traditionally sanding is carried out using pumice stone powder mixed with camellia oil.

After the final sanding process, the lacquer is impregnated with "Kijo-mi Urushi" extremely fine varnish and repeatedly polished to a glass-like sheen

The "Kijo-mi Urushi" is the raw lacquer filtered with a high percentage of water (about 25%) particularly suitable for the final polishing. With the Roiro technique, certainly one of the most refined techniques of Urushi varnishing, this varnish is used to impregnate the last layer of Urushi. It dries much faster than other Urishi varnish (2-4 hours) and is then polished with a Migakiko polishing powder and camellia oil.

The final result is objectively of a very high aesthetic level.

One of the most important and well-known Japanese users of this technique is Master Ishida Hideto.



I have never had the opportunity to see one of his rods in person, but carefully analysing a significant number of photographs of the rods of his production - under the name of Kagerow Rods - I am convinced that his production reaches extremely high levels of aesthetic quality which perfectly represent the Japanese aesthetic, which combines absolute attention to detail, simplicity of design and an impeccable constructive result.

I hope Ishida-san doesn't mind if I took the liberty of inserting a photo of him and some of his splendid work in this article.

Personally, I have, up to now, made only one rod with the Urushi technique. I must say that the result was satisfying and instructive for me… and perhaps even of a good standard!

Pros and cons of the Urushi technique

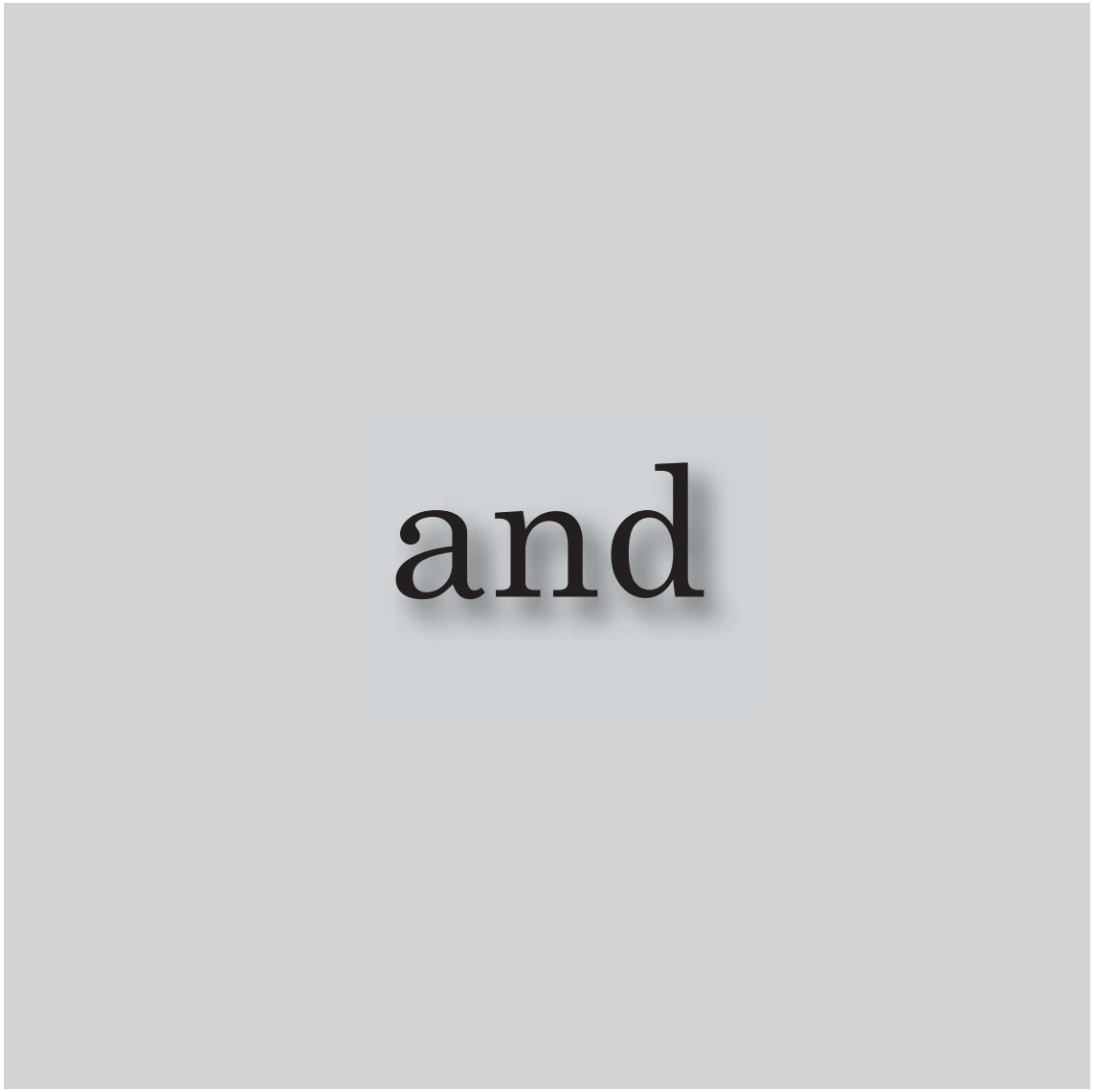
Pros: aesthetically very satisfying result. Urushi finished products are resistant to water, alcohol, solvents and acids, are permanently elastic and food safe. Urushi is very resistant to use and extremely protective.

Cons: A potential health risk of using Urushi. High cost of varnish. Medium/long lead times.

Warning to sailors

Uncured varnish contains urushiol, an oily liquid. Like the sap of other plants in the family, such as poison ivy, common in North America, but also the cashew tree or mango, the sap of the lacquer is toxic and highly allergenic. Depending on the sensitivity, it can cause urushiol-induced contact dermatitis. Therefore, raw Urushi can only be used with rubber gloves, goggles, disposable clothing.

On the contrary, once hardened, Urushi is totally harmless and is also used for objects that are food safe.


and

PASTRY CHEFS AND ... MUD CAKES

by Giorgio Grondona

Laughing and joking... maybe it's better to say "laughing and braying", we have reached the tenth "reflection from the donkey's desk"! When, after the first "issue", I was offered to make a column, I accepted with enthusiasm, which B.J. after B.J., hasn't diminished, indeed it has perhaps increased!!! The "donkey's desk", it is useless to deny it, is a privileged observatory, I can bray about any topic sure that no one will take it out on a poor donkey... assuming that someone reads these lines, I write what I think... without thinking about what I write, I write in the hope that someone who wants to approach rodmaking understands that bamboo rods can be built with light-hearted irony (first of all towards oneself) then, once the practice has begun, my words (my braying) can easily be skipped, on the various issues, past and future, of the B.J..

There is everything you need to do things seriously.

Tenth issue, we could celebrate, so everyone at the bar!!!... bar talk, on the latest issue of the Bamboo Journal I thus defined those discussions that often arise between fishermen on the various aspects of our passion, bar talk because this is the place where we meet before and/or after a fishing trip or just for the pleasure of meeting. We are not "faithful" to a place in particular, we are wanderers, sometimes our wanderings arrive in bars with adjoining pastry shops... and here a reflection, or rather reflections, are triggered.

Being a poor donkey, the term Pastry already generates a certain confusion in me, yes because, listening to your speeches, I happened to hear you define your fellow's work as a "mud cake"... so is the Pastry-chef perhaps the chief of mud cakes?

... I don't think so... or at least we hope it's not so!!!

I was joking, being in your company I am learning the meaning of the things you say, I still don't succeed very well and... I hope this never happens otherwise goodbye "reflections from the donkey's desk". Don't worry it's a remote hypothesis, I have a hard head, otherwise what kind of ass would I be?!!!

But let's go back to the Patisserie and look around, refrigerated displays for the cakes, some large and decorated, others simpler (at least to look at them), in the counter at the entrance trays filled with pastries with the most diverse creams, a second showcase houses the "dry patisserie" and on the shelves packs of various biscuits make a delicious decoration, all to stimulate sight and appetite but... will they all be to our liking? Will we be able to appreciate and evaluate the differences between one product and another? Will the raw materials used to package those delicacies be first choice? If something doesn't satisfy us, is it our palate's fault or did the Pastry Chef...make a mud cake?

I know you're losing patience, this is the Bamboo Journal, the rodmakers' magazine, what does cannoli and cream puffs, puff pastry and canestrelli have to do with bamboo fishing rods?

They have something to do with it!!!!! When you allow yourself a break between one planing and another or when you rest your hands tired of straightening strips, try treating yourself to a cannoncino with cream, a pastry with whipped cream, a fragrant puff pastry ... if instead you are afraid that the sugar and the fats they contain are bad for your health you can nibble on a cracker or even skip the break... it's not essential, maybe you'll just and even unconsciously be a little less cheerful rodmakers, but still rodmakers and as rodmakers you'll be subject to the same praise and, ouch, to the same criticisms that those who work in a pastry shop are subjected to.

If anyone among those who have had the rashness to read up to this point is thinking that he wants to offer perhaps a grip in candied orange peel or wrappings made from vanilla beans to then "glaze" them with varnish based on (don't be alarmed) with stiffly whipped egg whites, what I would like to point out is that the risks faced by the rodmaker are the same as those faced by the pastry chef:

"Excellent raw materials and appropriate equipment are not enough to guarantee the result"... and then there is a factor that inextricably links the two, more than a factor it is a very important component of the laboratory of both... what is it ... the oven of course!!!

If both the pastry chef and the rodmaker leave the batch "warm" for too long, they inexorably arrive at the same result: ASH. This is to say that both "trades" must be carried out carefully, scrupulously observing important aspects on which the final result will depend.

Every Pastry Chef is proud of his own "Cookbook" just like every Rodmaker is proud of his own, obviously both are willing to reveal only one part, the other, what they consider the "distinctive sign" of their production they would not reveal it even under torture, they would respond to specific questions with a laconic said and not said, perhaps even with something very different from reality. But will it always be true that some expedient, some deviation from the "original recipe" leads to a better result?

I have serious doubts about this aspect, if some Pastry Chefs, as well as some Rodmakers, are more successful than others, it will not be just the result of chance. Both the pastry products and the fishing rods, in our case in Bamboo, must satisfy the users, it is the "clients" that select the producer!!!

Someone will observe that when you are HUNGRY you are not picky, others will say that you can fish with any rod and... we could end the discussion here but... if the "starred" chefs and food and wine critics from all over the world they agree in saying:

"It's the dessert that, at the end of the meal, makes you digest even a very salty bill " the echo comes from the world of Fly-Fishing: "If at the end of the "fishing" you haven't fought all the time with a difficult to manage rod, you endure even put up with being dunked during your last wade".

At first glance, both the Pastry Chef's showcase and the Rodmakers rack wink at the interested party, but when the "Sirens' song" fades away and the sight is satisfied, you want to taste the product, tasting is so to speak (bray) biting a biscuit, a praline or a slice of cake quietly, with the rods you limit the taste to a "dry waving" or if possible, make a few casts on the lawn, casting pool, river, etc.

Obviously, if you don't like a dessert, you'll realize it right away, for bamboo it's not so obvious, and then you're really sure that your palate has been put to the test at the right time or, like bamboo, it needs a more in-depth test?

You just have to keep casting and while you "interrogate" the rod that has captivated your sight, move, by moving you burn calories and by burning calories you get the feeling of HUNGER that you will go to quell with a "twin" pastry of that of first and this too... you don't like it, so you take courage, call the pastry chef's wife on the side-lines and ask her why what until your last visit to the restaurant had been your favourite pastry today is not to your liking and she, with ill-concealed pride, will answer:

"We have just returned from the International Pastry Exhibition where we attended a course on the use of some essences... we skipped the last lesson... they were talking "only" about the dosages"...

Done!!! You turn, look outside where, when you entered, there was the sign now imagine the throne of the banner of "King of Mud cakes".

It doesn't take much to "ruin" a valid product!!!

In the meantime, the Rodmaker has also been busy, the desire to "improve" is a healthy ambition, but the risk of making a mistake is the same as that of the Pastry Chef's husband.

When you decide to "improve" a valid recipe it means (in the head of this poor donkey) that that recipe is not considered the "best"... otherwise why try to improve the best?

And then... and then it's always the others who confirm the success of the work, the superfine palates will judge cannoli and cream puffs, puff pastry and canestrelli, cakes and puddings while good fishermen/casters will appreciate or not the work of the Rodmaker.

We are at the end, perhaps there are those who have wondered how I came up with the idea of combining Rodmaking and Pastry, the answer is simple: “It seems to me that “Pastry chefs and mud cakes” sounds good. More seriously, who knows how many times you have seen cakes and pies of various sizes decorated with fresh fruit, in spring with red fruits typical of the season, in summer with peaches, apricots, grapes or more. To ensure that the fruit does not deteriorate, the pastry chef "protects" it with a light layer of edible gelatine which is also defined as transparent glaze, on the contrary, the pastry chef abounds in this substance, in a sinister attempt to mask fruit already on the "avenue of sunset” and the result is that transparency is lost. The glaze, too abundant, takes on that unstimulating opacity that recalls the eyes of fish... boiled, the disaster is completed when at the first bite you have the sensation of having a live snail in your mouth... And in rodmaking?!!! Certainly, different reasons and ingredients but the same result!!! Flutes with a dose of varnish similar to an exaggerated glaze...we watch the thousandth of an inch when planing and then frosted flute and caramelized bindings.

Aesthetic defects (mud cakes) could be considered as "venial", perhaps the result of a taste different from ours, mud cakes (those that you can't see) shouldn't deserve excuses...

The important thing is to be careful with the oven, be careful when tempering, if you get distracted you know what happens, incinerate the strips!!!

If you are one of those who love "important" painting, I'll have to pay attention in case we meet... I wouldn't want to be incinerated by your glare.

Thank you if you had the patience to read, sorry if you don't agree, if you think the same things don't worry, you're not becoming donkeys, just one who reminds others that, as always:

"Donkey braying doesn't go up to heaven"!!!

bamboos ...

IBRA – Italian Bamboo Rodmakers Association Gabriele Gori

25 / 26 november 2023

has organized a grandiose event that will bring together the best European rodmakers in a location of absolute prestige without distinction between IBRA members and non-members.

This demonstration, called

"IBRA BAMBOO ROD SHOW"

will be a large exhibition of bamboo fishing rods in which each rodmaker will have at his disposal his own exhibition table.

Participants in the event will be IBRA member rodmakers and the best European rodmakers especially invited by IBRA.

The exhibition will take place in the last week of November, when the city of Milan is already ready for pre-Christmas shopping, one more reason to visit the Lombard capital.

The C.I.C. will also take place at the same time. This Show is an exhibition of the creations of the members of the Italian Knife Makers Corporation (C.I.C.)

These exhibitions will take place in the twin halls: "Torre Diamante" and "Torre Velasca" of the Hotel Melià and therefore both exhibitions will be coordinated and can be visited freely


IBRA
ITALIAN BAMBOO RODMAKERS ASSOCIATION GABRIELE GORI
IBRA BAMBOO ROD SHOW
EXPO
OF HANDCRAFTED
BAMBOO RODS
HISTORIC AND MODERN
SATURDAY 25
SUNDAY 26
NOVEMBER 2023
Hotel Melià Milano
via Masaccio 19
simultaneously with 25th Show
Corporazione Italiana Coltellinai
opening time
saturday 9:00 / 17:30
sunday 9:00 / 16:00
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Italian Bamboo Rodmakers Association

the insertions pages of this issue
contain a quiz

what is the solution?

Newsletter e Bollettino
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