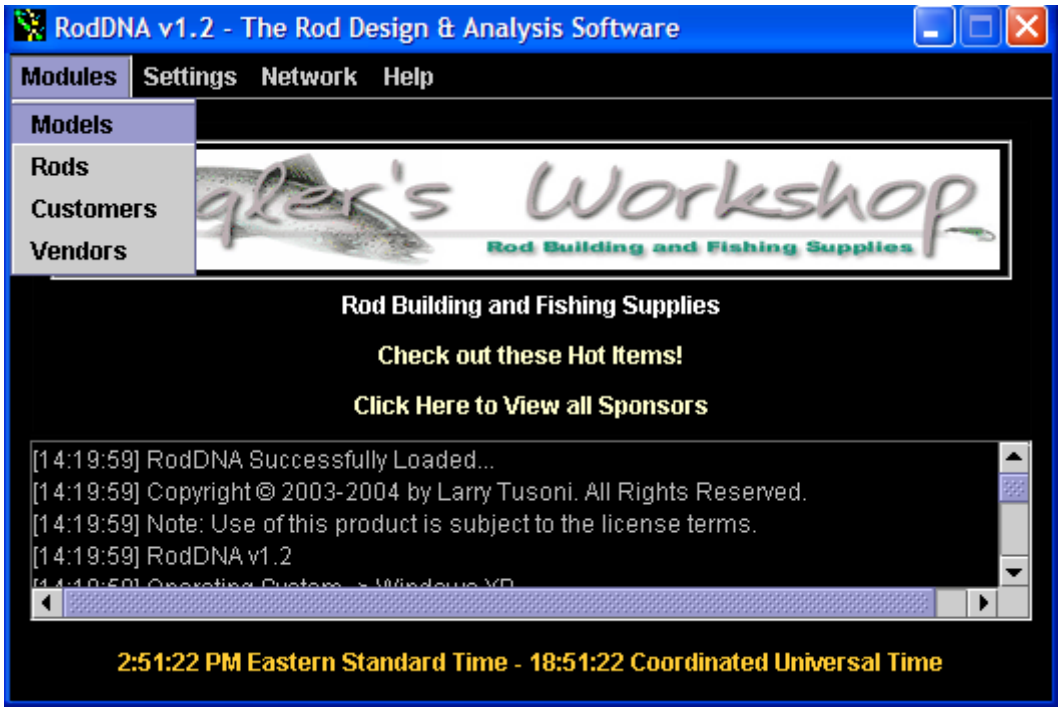
RodDNA – Number Magic – Part Two

This is the fourth in RodDNA Tips and Tricks articles. The first Number Magic article covered one method of inputting a rod taper into RodDNA that was not taken on 5" increments. The purpose of that article was to show how you could put any irregular taken rod tapers into RodDNA. When you have a taper with regular intervals other than the default 5" that is initially displayed in RodDNA there is a handy dandy tip that makes entering that taper easily. The example I used in the first Number Magic was a Hawes taper that was on 3" centers. When you have a taper like this, there is a far faster and easier way to input the taper dimensions into RodDNA. I know, why didn't I tell you this first! Well the reason is that you have to know both methods. Just like building rods, you got to play with nodes to understand how much easier going nodeless is. It is the same with inputting data. This method is easier for this particular taper.

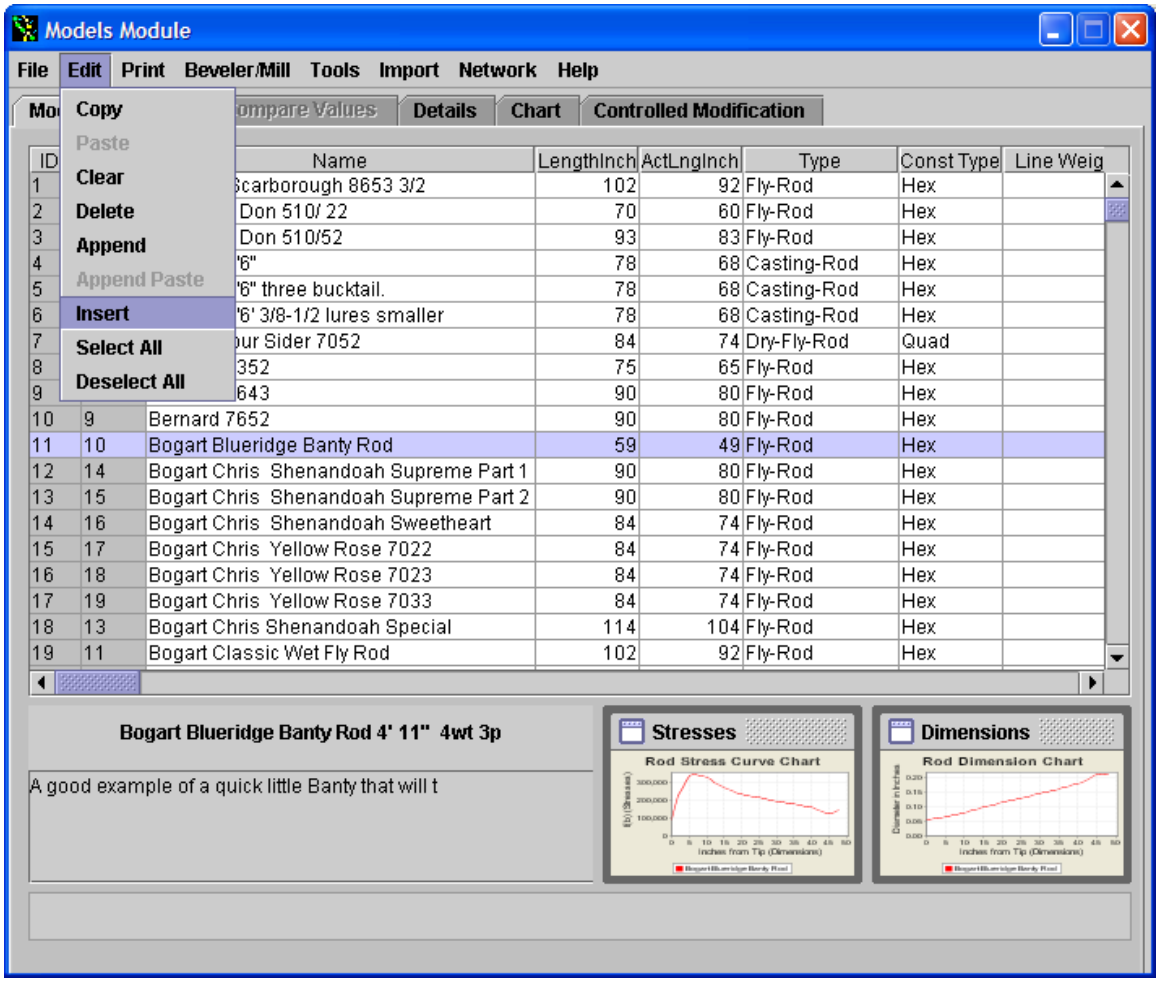
So let's look at the Hawes taper again. The Hawes taper is for an 8' 3piece 5-weight rod. The rod it was taken from had a Leonard Node Pattern (3x3) according to the notes. The taper is as follows:

Station	Tip	Mid	Butt
0	0.058	0.15	0.24
3	0.072	0.154	0.246
6	0.076	0.162	0.252
9	0.082	0.178	0.26
12	0.094	0.184	0.264
15	0.098	0.19	0.278
18	0.102	0.196	0.288
21	0.11	0.208	0.302
24	0.122	0.212	0.332
27	0.134	0.216	0.352
30	0.14	0.23	0.352
33	0.146	0.236	0.352

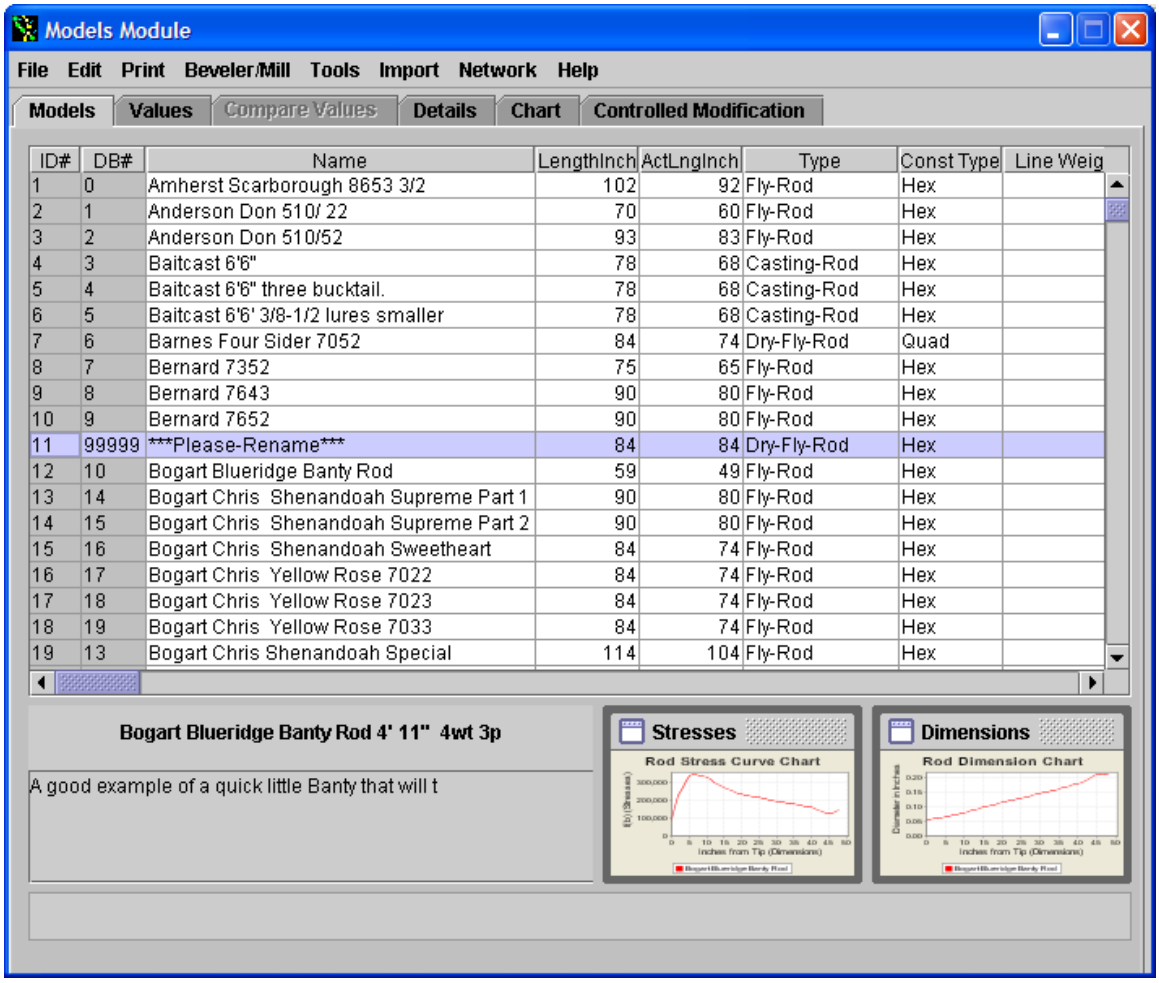
To begin with, lets assume you have RodDNA open on your computer and select the Models Module menu item to bring up the main models window:



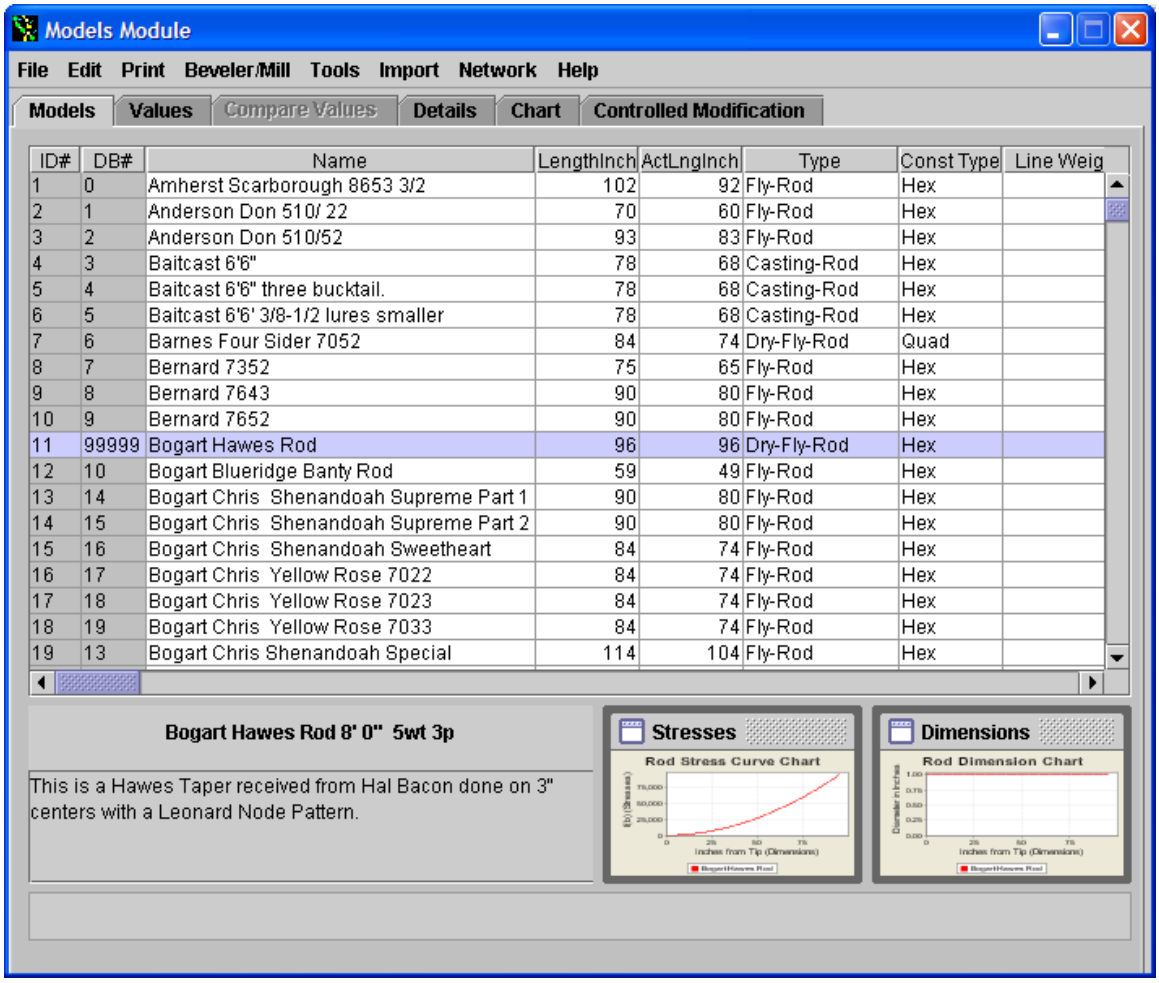
Now you can select a place where you want to insert the new taper into the list of tapers you have displayed. The new taper will be inserted above the taper I have selected. This is exactly the same as described in my last article:



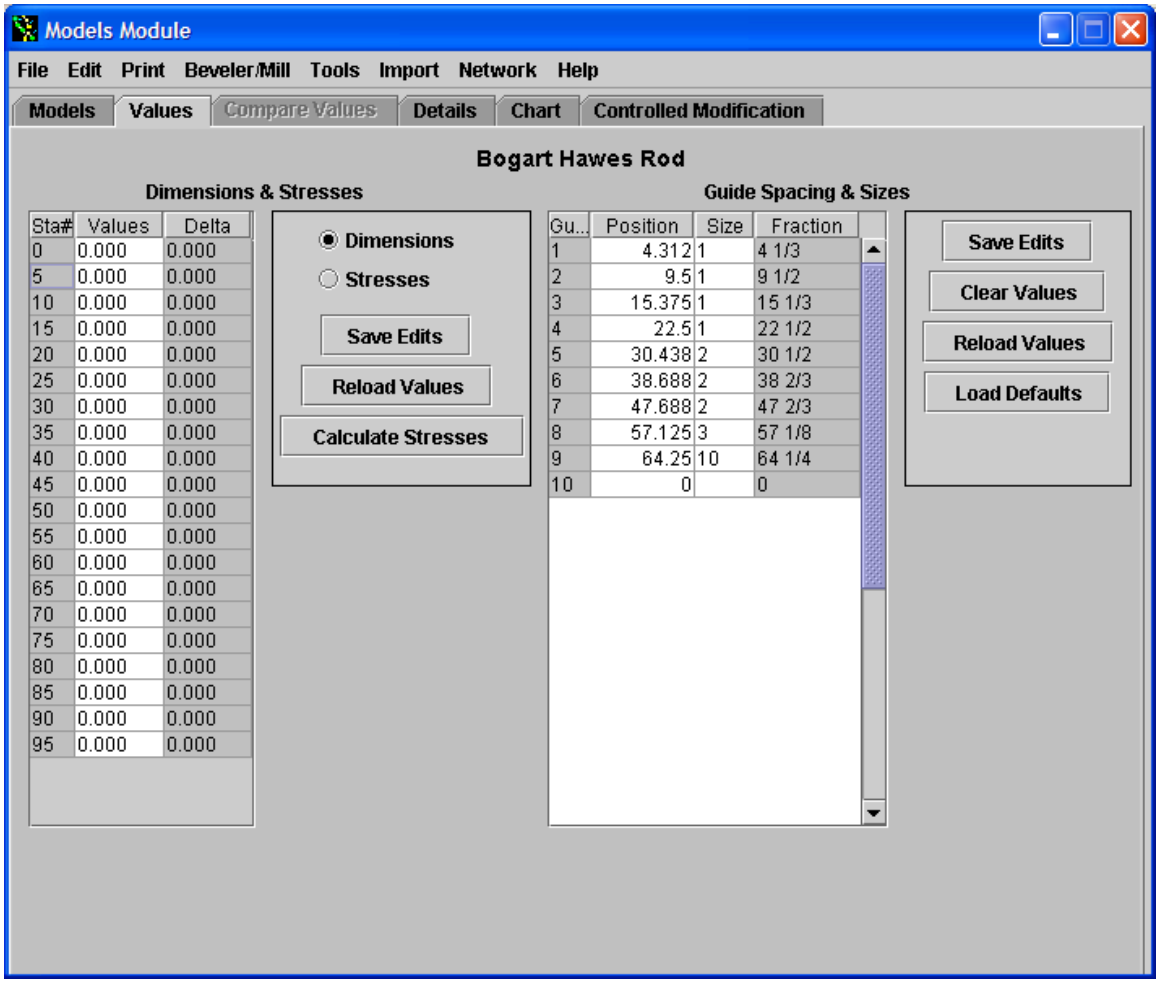
As you can see, RodDNA has created a new taper entry in the database:



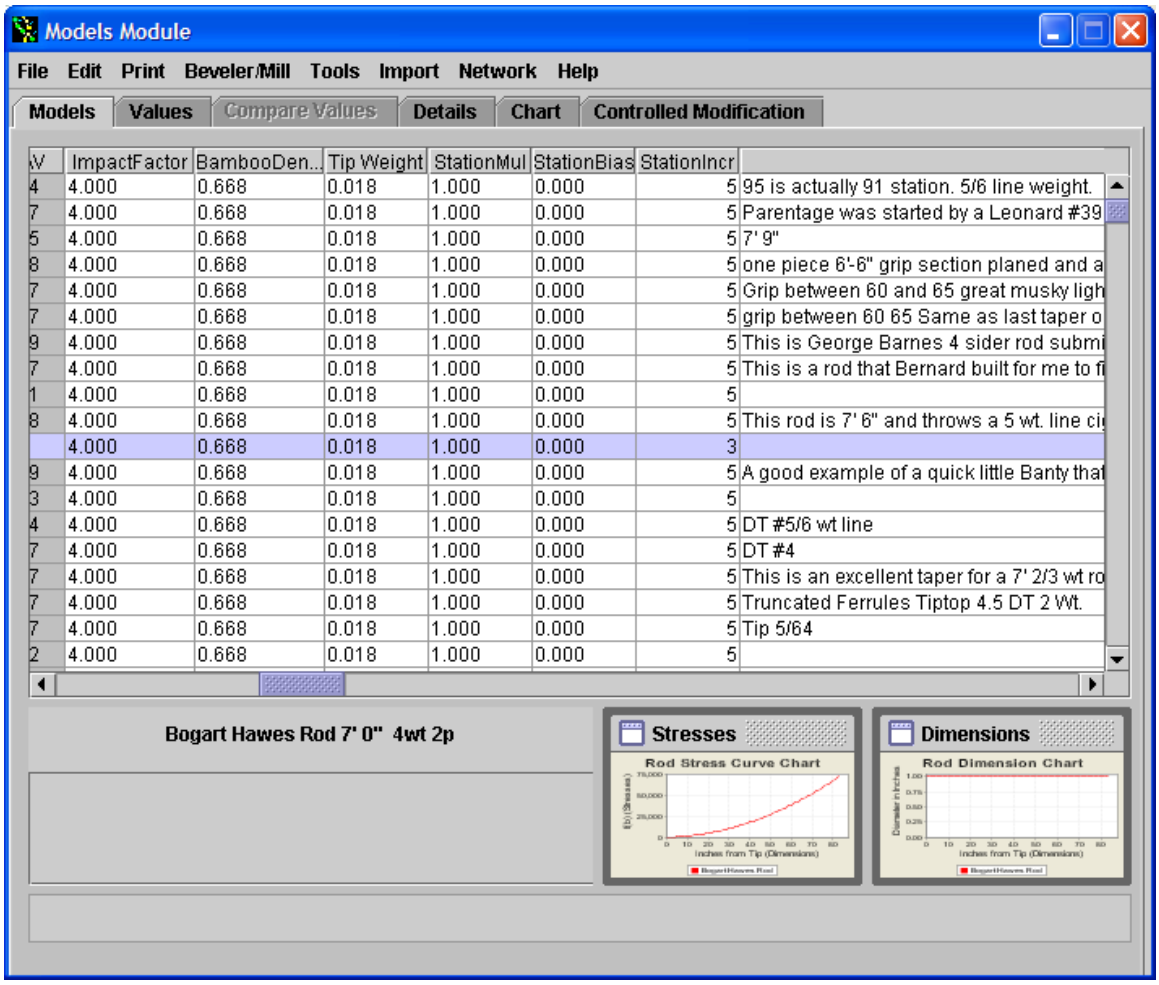
Now edit the taper name, length (96”), action length (96”), type, construction type line weight, number of sections and comments by clicking on each and entering the value desired:



Now we are ready for the tip and trick part of the lesson. We have all the essential information on this rod entered except taper values. If we click on the Values tab in the Models Module window you notice that you are prompted to enter the values in 5” increments:

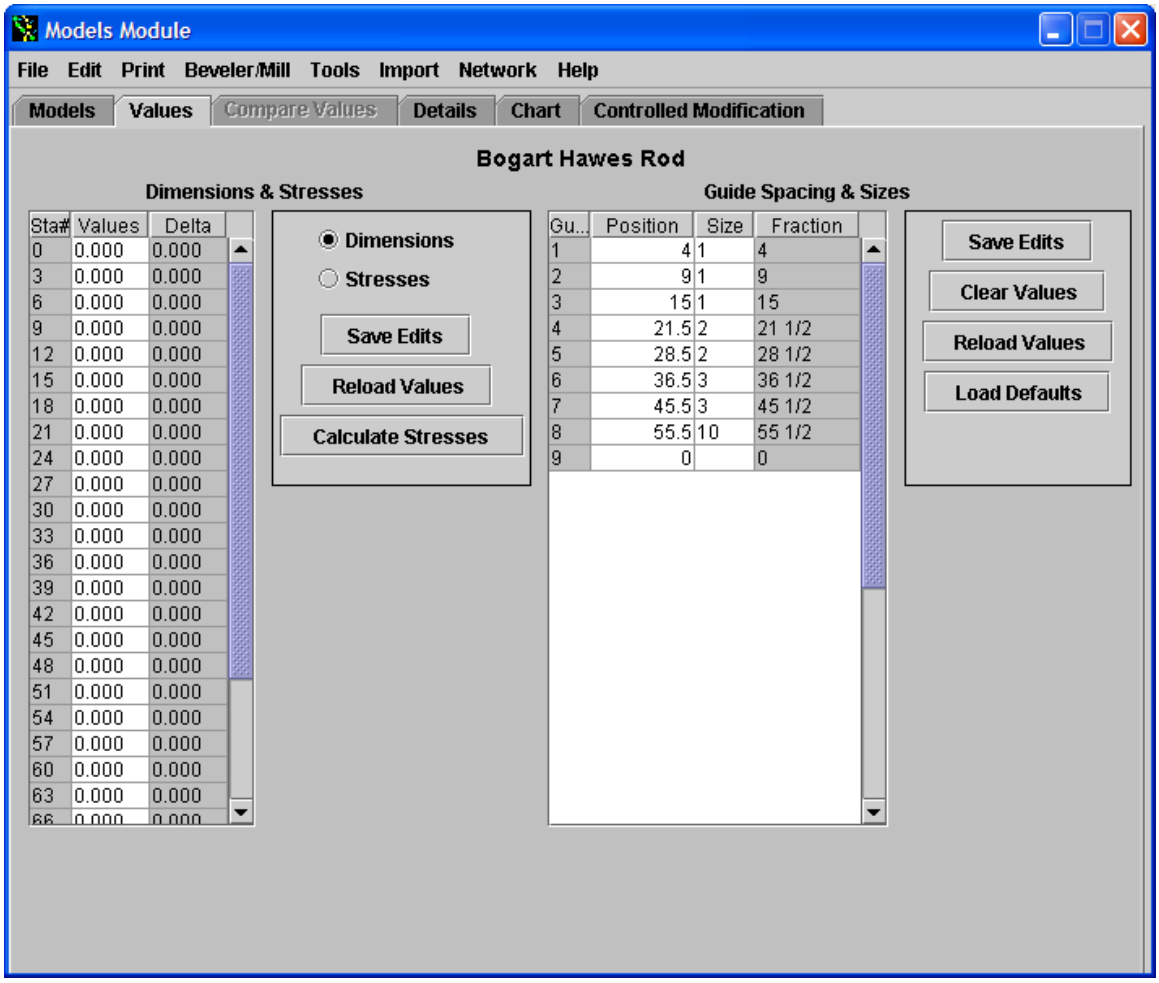


In the first article I had you in the Models tab scroll over to the Dimensions field using the bottom slide bar. That was to first acquaint you with a method to enter a taper with irregular stations. This time we will work a little RodDNA number magic for you. Click back on the Models tab. Now scroll over the “StationIncr” Column. You will notice that the number in your row is 5. Now change that number to 3.

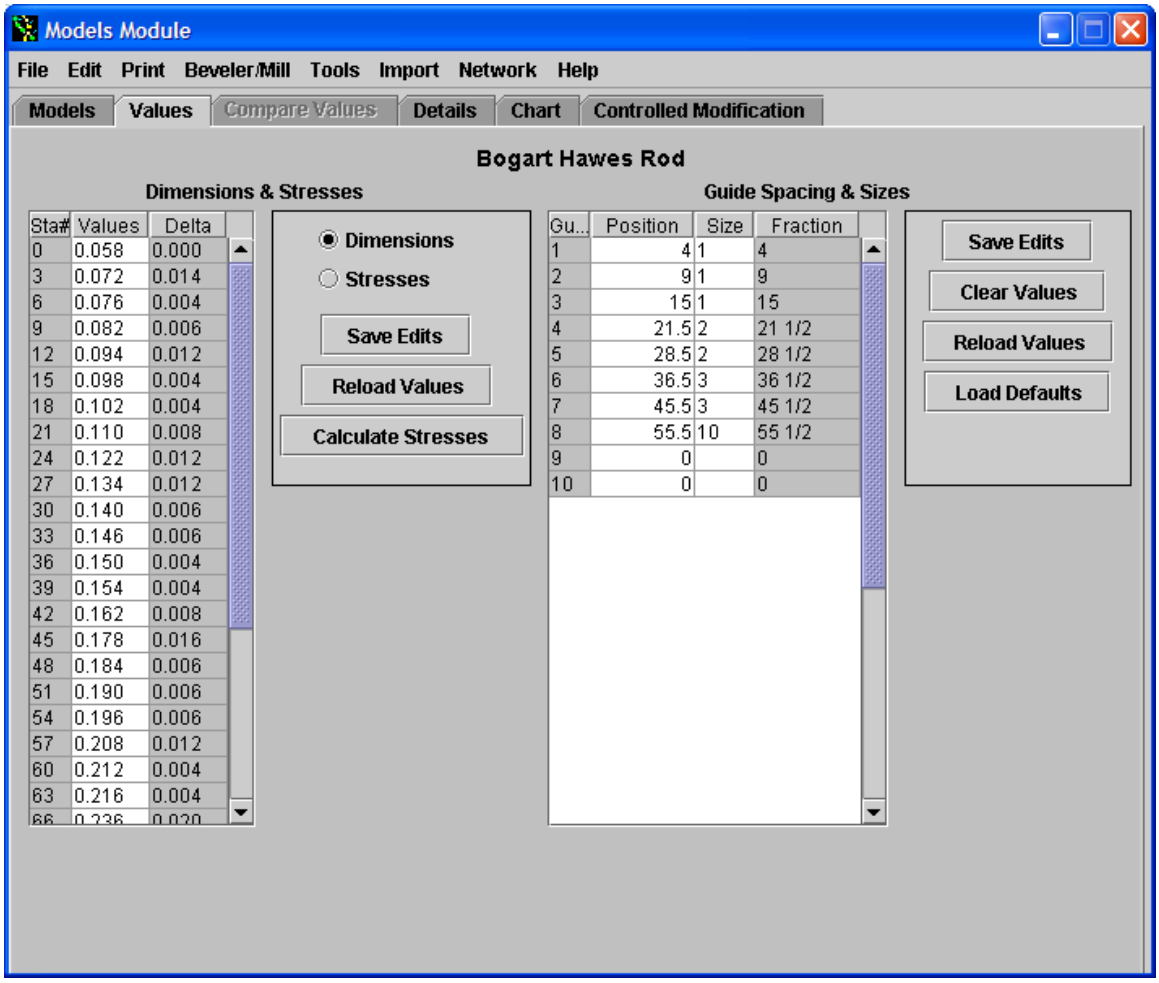


V	ImpactFactor	BambooDen...	Tip Weight	StationMul	StationBias	StationIncr	
4	4.000	0.668	0.018	1.000	0.000	5	95 is actually 91 station. 5/6 line weight.
7	4.000	0.668	0.018	1.000	0.000	5	Parentage was started by a Leonard #39
5	4.000	0.668	0.018	1.000	0.000	5	7' 9"
8	4.000	0.668	0.018	1.000	0.000	5	one piece 6'-6" grip section planed and a
7	4.000	0.668	0.018	1.000	0.000	5	Grip between 60 and 65 great musky ligh
7	4.000	0.668	0.018	1.000	0.000	5	grip between 60 65 Same as last taper o
9	4.000	0.668	0.018	1.000	0.000	5	This is George Barnes 4 sider rod submi
7	4.000	0.668	0.018	1.000	0.000	5	This is a rod that Bernard built for me to fi
1	4.000	0.668	0.018	1.000	0.000	5	
8	4.000	0.668	0.018	1.000	0.000	5	This rod is 7' 6" and throws a 5 wt. line ci
	4.000	0.668	0.018	1.000	0.000	3	
9	4.000	0.668	0.018	1.000	0.000	5	A good example of a quick little Banty that
3	4.000	0.668	0.018	1.000	0.000	5	
4	4.000	0.668	0.018	1.000	0.000	5	DT #5/6 wt line
7	4.000	0.668	0.018	1.000	0.000	5	DT #4
7	4.000	0.668	0.018	1.000	0.000	5	This is an excellent taper for a 7' 2/3 wt ro
7	4.000	0.668	0.018	1.000	0.000	5	Truncated Ferrules Tiptop 4.5 DT 2 Wt.
7	4.000	0.668	0.018	1.000	0.000	5	Tip 5/64
2	4.000	0.668	0.018	1.000	0.000	5	

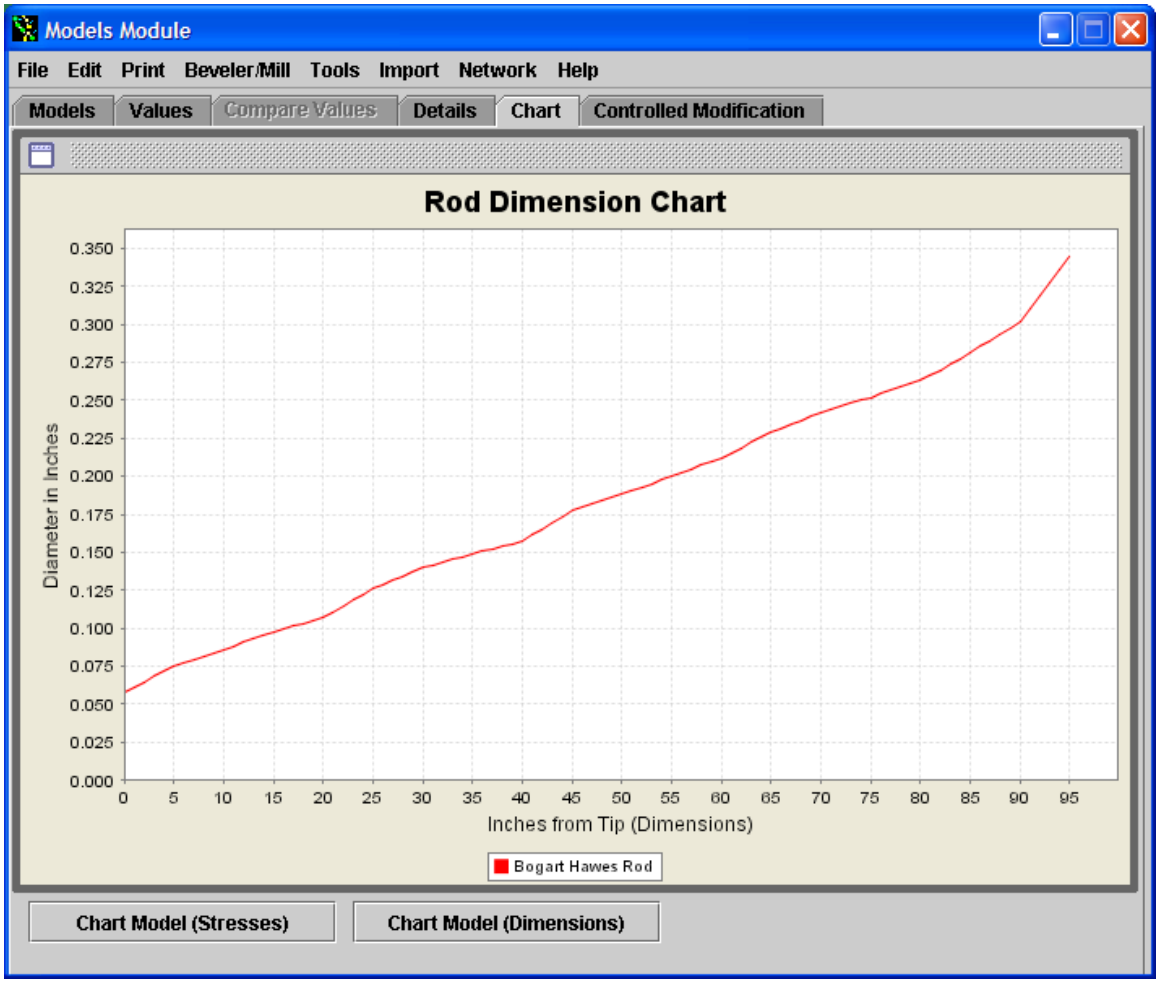
What this field does is tells the Values tab the display Station Increment. The default value is 5. Now click on the Values tab and you will see the input form displayed with 3” increments.



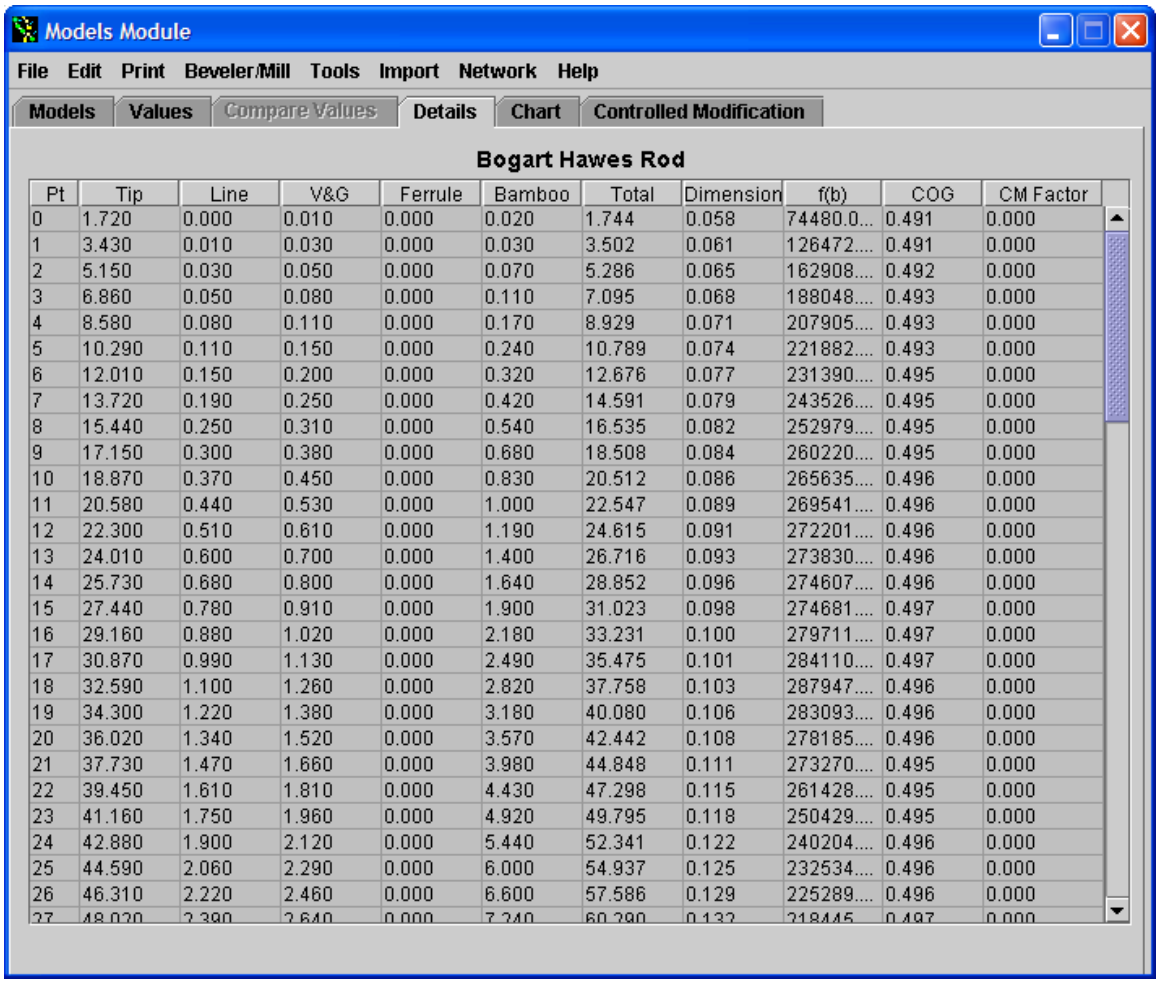
Now you can enter the taper values using 3” increments using this tab:



Now click Save Edits. If you click on the Chart tab you will be prompted to save them by a pop-up window. Click yes. The taper was entered in 3” increments. But carefully note that Rod Dimension Chart uses 5” increments for its charts. That means that RodDNA has already converted your taper to be displayed at other station increments:

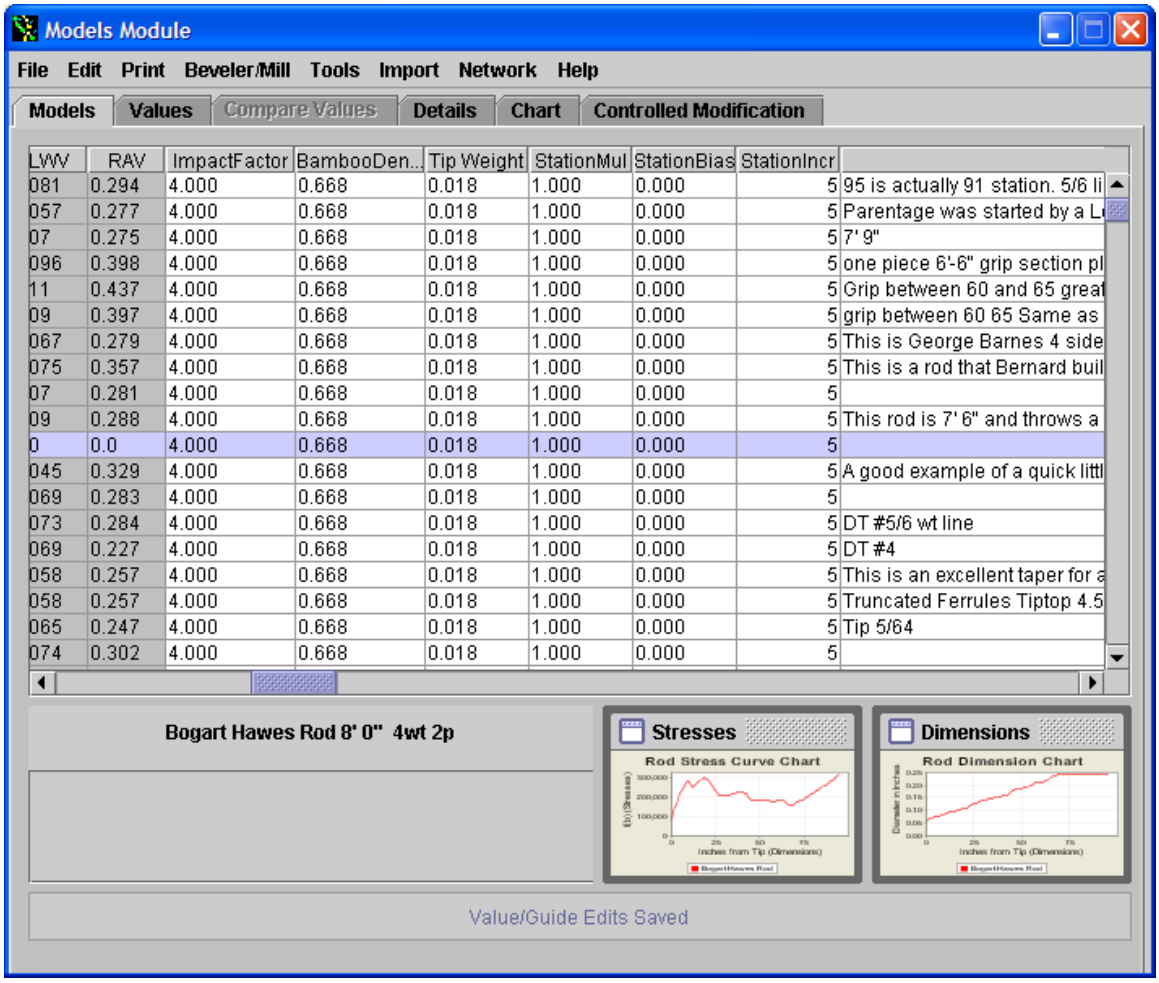


Actually RodDNA converts all tapers to 1” increments. To see this, click on the Details tab.

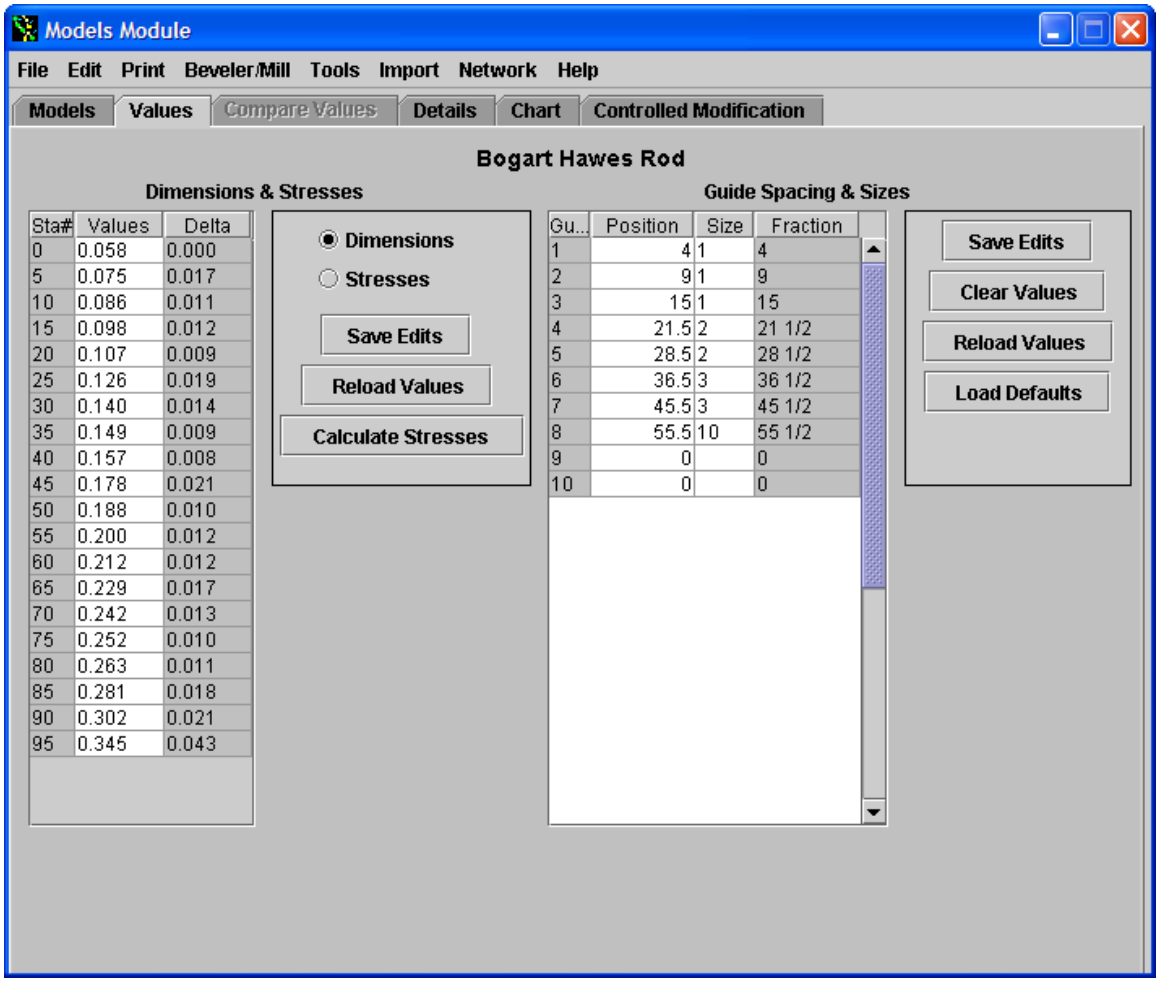


Pt	Tip	Line	V&G	Ferrule	Bamboo	Total	Dimension	f(b)	COG	CM Factor
0	1.720	0.000	0.010	0.000	0.020	1.744	0.058	74480.0...	0.491	0.000
1	3.430	0.010	0.030	0.000	0.030	3.502	0.061	126472....	0.491	0.000
2	5.150	0.030	0.050	0.000	0.070	5.286	0.065	162908....	0.492	0.000
3	6.860	0.050	0.080	0.000	0.110	7.095	0.068	188048....	0.493	0.000
4	8.580	0.080	0.110	0.000	0.170	8.929	0.071	207905....	0.493	0.000
5	10.290	0.110	0.150	0.000	0.240	10.789	0.074	221882....	0.493	0.000
6	12.010	0.150	0.200	0.000	0.320	12.676	0.077	231390....	0.495	0.000
7	13.720	0.190	0.250	0.000	0.420	14.591	0.079	243526....	0.495	0.000
8	15.440	0.250	0.310	0.000	0.540	16.535	0.082	252979....	0.495	0.000
9	17.150	0.300	0.380	0.000	0.680	18.508	0.084	260220....	0.495	0.000
10	18.870	0.370	0.450	0.000	0.830	20.512	0.086	265635....	0.496	0.000
11	20.580	0.440	0.530	0.000	1.000	22.547	0.089	269541....	0.496	0.000
12	22.300	0.510	0.610	0.000	1.190	24.615	0.091	272201....	0.496	0.000
13	24.010	0.600	0.700	0.000	1.400	26.716	0.093	273830....	0.496	0.000
14	25.730	0.680	0.800	0.000	1.640	28.852	0.096	274607....	0.496	0.000
15	27.440	0.780	0.910	0.000	1.900	31.023	0.098	274681....	0.497	0.000
16	29.160	0.880	1.020	0.000	2.180	33.231	0.100	279711....	0.497	0.000
17	30.870	0.990	1.130	0.000	2.490	35.475	0.101	284110....	0.497	0.000
18	32.590	1.100	1.260	0.000	2.820	37.758	0.103	287947....	0.496	0.000
19	34.300	1.220	1.380	0.000	3.180	40.080	0.106	283093....	0.496	0.000
20	36.020	1.340	1.520	0.000	3.570	42.442	0.108	278185....	0.496	0.000
21	37.730	1.470	1.660	0.000	3.980	44.848	0.111	273270....	0.495	0.000
22	39.450	1.610	1.810	0.000	4.430	47.298	0.115	261428....	0.495	0.000
23	41.160	1.750	1.960	0.000	4.920	49.795	0.118	250429....	0.495	0.000
24	42.880	1.900	2.120	0.000	5.440	52.341	0.122	240204....	0.496	0.000
25	44.590	2.060	2.290	0.000	6.000	54.937	0.125	232534....	0.496	0.000
26	46.310	2.220	2.460	0.000	6.600	57.586	0.129	225289....	0.496	0.000
27	48.020	2.390	2.640	0.000	7.240	60.290	0.132	218445....	0.497	0.000

So now we will complete the Number Magic for this taper. Click on the models tab and scroll back to the StationIncr Column and change the “3” that we put there earlier back to a 5.



Now click on the Values tab and you will notice that RodDNA has converted the taper to be displayed in the Values tab on 5” stations. This will allow you to have all your tapers displayed with the same station settings regardless of how you inputted it.



This completes the Number Magic – Part 2 article and now rodmakers have two different but powerful ways of inputting taper data depending on the source of the taper information. Regardless, the rodmaker can input and normalize the display of all his tapers. I encourage you to further explore this capability for RodDNA to work its Number Magic for you.