Rose City Spine vs Deflection Chart

AMO

| deflection | spine # | deflection | spine # | deflection | spine # |
|---|---|---|---|---|---|
| 1.300 | 20 | 0.566 | 46 | 0.366 | 71 |
| 1.248 | 21 | 0.555 | 47 | 0.361 | 72 |
| 1.196 | 22 | 0.543 | 48 | 0.357 | 73 |
| 1.144 | 23 | 0.532 | 49 | 0.352 | 74 |
| 1.092 | 24 | 0.520 | 50 | 0.347 | 75 |
| 1.040 | 25 | 0.511 | 51 | 0.343 | 76 |
| 1.005 | 26 | 0.501 | 52 | 0.338 | 77 |
| 0.971 | 27 | 0.492 | 53 | 0.334 | 78 |
| 0.936 | 28 | 0.482 | 54 | 0.329 | 79 |
| 0.902 | 29 | 0.473 | 55 | 0.325 | 80 |
| 0.867 | 30 | 0.465 | 56 | 0.321 | 81 |
| 0.842 | 31 | 0.457 | 57 | 0.317 | 82 |
| 0.817 | 32 | 0.449 | 58 | 0.314 | 83 |
| 0.793 | 33 | 0.441 | 59 | 0.310 | 84 |
| 0.768 | 34 | 0.433 | 60 | 0.306 | 85 |
| 0.743 | 35 | 0.426 | 61 | 0.303 | 86 |
| 0.724 | 36 | 0.420 | 62 | 0.299 | 87 |
| 0.706 | 37 | 0.413 | 63 | 0.296 | 88 |
| 0.688 | 38 | 0.407 | 64 | 0.292 | 89 |
| 0.669 | 39 | 0.400 | 65 | 0.289 | 90 |
| 0.650 | 40 | 0.394 | 66 | 0.286 | 91 |
| 0.636 | 41 | 0.388 | 67 | 0.283 | 92 |
| 0.621 | 42 | 0.383 | 68 | 0.280 | 93 |
| 0.607 | 43 | 0.377 | 69 | 0.277 | 94 |
| 0.592 | 44 | 0.371 | 70 | 0.274 | 95 |
| 0.578 | 45 | | | | |

.500 is deflection in thousands of an inch with a 2 lb weight.

spine is calculated by dividing 26 by deflection.

Thus an arrow with .500 deflection is 52 pounds in spine.

21st Century Longbows chart

| deflection | spine # | deflection | spine # | deflection | spine # |
|---|---|---|---|---|---|
| 0.866 | 30 | 0.553 | 47 | 0.406 | 64 |
| 0.852 | 30.5 | 0.547 | 47.5 | 0.403 | 64.5 |
| 0.838 | 31 | 0.541 | 48 | 0.400 | 65 |
| 0.825 | 31.5 | 0.536 | 48.5 | 0.397 | 65.5 |
| 0.812 | 32 | 0.531 | 49 | 0.394 | 66 |
| 0.800 | 32.5 | 0.525 | 49.5 | 0.391 | 66.5 |
| 0.788 | 33 | 0.520 | 50 | 0.388 | 67 |
| 0.776 | 33.5 | 0.515 | 50.5 | 0.385 | 67.5 |
| 0.765 | 34 | 0.510 | 51 | 0.382 | 68 |
| 0.753 | 34.5 | 0.505 | 51.5 | 0.380 | 68.5 |
| 0.743 | 35 | 0.500 | 52 | 0.377 | 69 |
| 0.732 | 35.5 | 0.495 | 52.5 | 0.374 | 69.5 |
| 0.722 | 36 | 0.491 | 53 | 0.371 | 70 |
| 0.712 | 36.5 | 0.486 | 53.5 | | 70.5 |
| 0.703 | 37 | 0.481 | 54 | 0.366 | 71 |
| 0.693 | 37.5 | 0.477 | 54.5 | | 71.5 |
| 0.684 | 38 | 0.473 | 55 | 0.361 | 72 |
| 0.675 | 38.5 | 0.468 | 55.5 | | 72.5 |
| 0.667 | 39 | 0.464 | 56 | 0.356 | 73 |
| 0.658 | 39.5 | 0.460 | 56.5 | | 73.5 |
| 0.650 | 40 | 0.456 | 57 | 0.351 | 74 |
| 0.642 | 40.5 | 0.452 | 57.5 | | 74.5 |
| 0.634 | 41 | 0.448 | 58 | 0.347 | 75 |
| 0.626 | 41.5 | 0.444 | 58.5 | | 75.5 |
| 0.619 | 42 | 0.441 | 59 | 0.342 | 76 |
| 0.612 | 42.5 | 0.437 | 59.5 | | 76.5 |
| 0.605 | 43 | 0.433 | 60 | 0.338 | 77 |
| 0.598 | 43.5 | 0.430 | 60.5 | | 77.5 |
| 0.591 | 44 | 0.426 | 61 | 0.333 | 78 |
| 0.584 | 44.5 | 0.423 | 61.5 | | 78.5 |
| 0.578 | 45 | 0.419 | 62 | 0.329 | 79 |
| 0.571 | 45.5 | 0.416 | 62.5 | | 79.5 |
| 0.565 | 46 | 0.413 | 63 | 0.325 | 80 |
| 0.559 | 46.5 | 0.409 | 63.5 | | |