

RockBats
 Technical Note
 RB-TN-E
 (proprietary)



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December, 2006

Specifications for converting Hard Maple logs into baseball bat quality billets

When processing square 3x3 billets from logs, RockBats needs 3x3x40 billets that are clear (no knots), and have straight-grain throughout the whole length. End sealing the green billets helps reduce checking.

To improve the straight-grain quality of the 3x3 squares, we recommend sawing **PARALLEL TO THE BARK**. To produce billets with perfect straight grain, the sawyer must follow the annual rings of the wood... always taking care to not cut across the natural growth rings (Figure 1).



Figure 1. A log with excessive butt swell will be difficult to saw parallel to the bark when full length. To produce straight-grain billets out of the whole length, this 8-ft log may need to be cut into two halves, and each half processed parallel to the bark. In this example, the upper half of the log will produce higher-quality straight-grained billets than the lower half, because of the butt swell in the lower half. (**Note:** this log has already been slabbed on the sides, which will produce severely cross grained billets on those side faces)

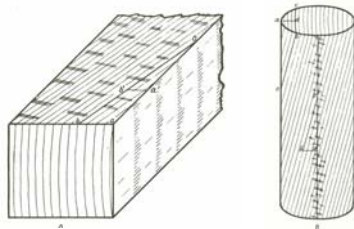


Figure 2. When a 3x3 billet is cut across the annual rings, and we convert it to a round, we see the grain on the quarter-sawn faces look like this.

Finally, avoid logs that have severe spiral-grain altogether.

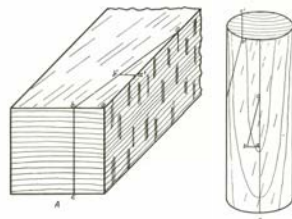


Figure 3. Even when spiral-grain logs are sawn parallel to the bark, the final billets may look nice, but they will have severe cross grain across the flat-sawn faces. This produces a very weak baseball bat billet.

Because we only need 3"x3"x40" green billets, there is opportunity to process lower-grade logs, and still produce these high-quality blanks from short log sections.