There are many books on how to dry lumber for quality and profit and they are very helpful in understanding that the simple things that we do at the kiln are the most valuable. For example, lets start at the stick plant. By using well manufactured tickers that are the same thickness and length, we can produce nice straight lumber inside the kiln. The stickers should also line up with each other all the way down to the cart support bars so this will give plenty of support for the loads above. When choosing a sticker size, one must balance maximum air flow (thicker stickers) and maximum kiln capacity (thinner stickers). Also, by using 2-in spacers instead of 4-in spacers, you can put more lumber inside your kilns and have a smaller area for which air can travel through helping the rest of the load get more air, heat and humidity that it needs to dry the lumber. Now on to the kiln. The integrity of the kilns are very important, good baffling is a must to help air, heat and humidity be forced through the stickers.

Checking mud legs and condensate lines for plug ups. Check kiln doors to make sure that they are not at the bottom of the door hooks, they should be somewhere in the middle of the hooks to push the door up against the frame, this will help provide a better seal for the doors. Keep an eye on your thermocouples, make sure that they are maintained and installed correctly. There is a five step procedure on how to replace and to install thermocouples. Check for leaks and damaged kiln panels, repair and replace as needed. Vents also need our attention, be sure that linkage is not worn out and is adjusted correctly, this will help provide more control over the wet bulb and enable a tighter depression when vents are opening and closing correctly. Be sure that your roofs don’t leak, repair as needed and check that your gutter system is in good repair and is directing the water off the roofs away from the kilns. There are many more simple things that we can do to help us in the quality and profit of lumber drying, just keep it simple.
Sticking QA

Nice straight stickers produce nice straight lumber. Bottom unit, second layer has no sticker causing the board to bow down and shape itself to a disfigured form during drying. This leads to downgraded lumber, skip and lower values at the planer.

Sticking QA

Stickers are very important to effectively drying lumber. Stickers must be properly placed, in line, or it will lead to downgraded lumber at the planer.

Sticking QA

These stickers are not in line with each other causing lumber to bow and bend. This lumber will take this shape permanently and cause skip, crook and bow which all lead to value and recovery loss at the planer.

Sticking QA

Some of these stickers are not in line effecting boards on several layers around the misplaced sticker. All stickers are in line except one - again causing boards to be bent out of shape.

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Sticking QA

These stickers are all well placed and in line making straight lumber.

Sticking QA

Stickers on the top loads are not lined up with stickers in bottom loads again causing disfigured lumber.

Sticking QA

Bottom load, second layer has sticker missing. This creates disfigured lumber and excludes air from passing through the unit in this area which means the lumber will not dry uniformly.

Stickers not aligned causing disfigured lumber.
Here is a way to get stickers that are on edge to lay down.
Baffles

Mud legs & condensate lines.

A good door hook makes a better seal.
Thermocouples

Fix any leaks you might have.
Vent actuators & linkages operate properly

Vent lids open & close correctly

LEAKING ROOFS.

Gutter system is in good repair and is directing the water away from the kilns.