

SECONDARY MANUFACTURING

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I appreciate being invited to address this group. As I told Butch, when he asked me to speak, "I am not sure what I can share with a technical group like this that will be beneficial to your success," but he reassured me that secondary remanufacturing and the marketing of the products would be of interest to you. I know very little about drying lumber, but I do know a little about its effects upon the secondary manufacturing industry.

My goals are to:

1. To give you a greater understanding as to the importance of what you do as dry kiln operators and its impact upon the secondary manufacturing industry.
2. I want to give you real dollars and cents impact of your work upon secondary remanufacturers.
3. I want to have some fun in the process, which fits in with your chosen location for the meeting.
4. Finally, my goal today is not to promote my products or my company, but our industry which has come under fire from every possible direction in the last ten years. Each of us plays a part in the overall success of our industry and our combined efforts will help sustain a more healthy industry.

My chosen field of study in college was secondary education. Consequently, the transfer of information has always been of interest to me. Some time ago, I began compiling interesting marketing slogans that would more accurately convey some corporate philosophies.

We're cheating the other guy and passing the savings on to you.
You can buy better lumber but you can't pay at a higher price.
Promise them anything — ship 'em what you've got.

In your business, fancy slogans and catchy words are not the important elements. Rather, it is to use an over-used word, the quality of your product that communicates your philosophies of doing business.

Quality, as defined in Webster's Dictionary is a "Degree of Excellence."

- In itself neither good nor bad
- Depends upon where in the spectrum of quality your product lies.

As a lumber remanufacturer, our success has always depended upon the success of our customers. A healthy customer who makes a profit is more able to pay a greater price for his raw material. It is our job as a producer to find out where

in that spectrum of quality our product needs to be to insure our customer's success. Often times their success depends upon getting a product that is further up the quality spectrum than is required by the association grading rules.

To better give you a feeling for the economic and marketing impacts, I would like to run you through a real example we had a few years ago.

PRODUCT: 2 x 5 VG KD Douglas Fir Cutstock MC 10-12, MAX 15%

PROBLEM: Our customer who operated a door plant in a dry climate was experiencing a problem of splitting cutstock, increased panel fall down, and doors being rejected for split panels in the Phoenix, Arizona market. They wanted to know what we could do?

INVESTIGATION: We found the wood from this mill met the grade rules and was dried to specifications. However, we also found that our lot study showed a very poor return in cutstock yields (Figure 1).

Inbound BF	101,288	% of Inbound	73.80%
Outbound BF	74,751	% of Inbound	26.20%
Value Inbound	\$90,143.03		
Labor to Cut	6,093.76	\$60/MBF	
Freight	1,875.00		
	\$98,111.79	or \$968.64/MBF	
Value Out	\$107,646.94	or \$1,062.78/MBF	
Profit	\$9,535.15	or \$94.14/MBF	

Breakdown in percentage of inbound by product.	
1. Stiles	12.80%
2. Rails	20.55%
3. Rip Rails	12.49%
4. Bar Stock	7.53%
5. Clear Block	12.25%
6. Core Block	4.41%
7. Strips	.59%
8. #3 Grade	1.38%
9. Scant	1.80%

FIGURE 1. Cutstock yields for lot #025 dried to 8 to 10%, maximum 12%, moisture content. Size was 2x5 Douglas-fir.

Inbound BF	56,585	% of Inbound	70.91%
Outbound BF	40,124	% of Inbound	29.09%
Falldown BF	16,461		
Value Inbound	\$55,106.44		
Labor to Cut	3,904.37	\$69/MBF	
Freight	452.68		
	\$59,463.49	or \$1,050.87/MBF	
Value Out	45,641.51	or \$806.60/MBF	
Profit	< \$13,821.99 >	or < \$244.27 >	

Breakdown in percentage by product.		
1. Stiles	3.28%	-74%
2. Rails	17.5%	-15%
3. Rip Rails	4.70%	-62%
4. Bar Stock	14.30%	+905
5. Clear Block	17.64%	+44%
6. Core Block	8.95%	+103%
7. Strips	1.30%	+120%
8. #3 Grade	1.44%	+4%
9. Scant	1/80%	-0-

FIGURE 2. Cutstock yields for lot #172 dried to 10 to 12%, maximum 15%, moisture content. Size was 2x5 Douglas-fir.

Lot #025 had been dried to 8% to 10%, maximum 12% MC and showed a profit of \$94.14/MBF when cut.

Lot #172 was dried 10% to 12%, maximum 15% MC. The recovery was much lower, and more importantly, there were fewer stiles and rails, and more bar stock and block.

For the investment of drying the wood a little dryer than required, paid big dividends to us. We increased our return \$338/MBF or \$34,235 for Lot #025.

Now, let's go back to what I said earlier about the customer's success. What was the dollar difference at their end?

They purchased 20,000 of rail stock:

1. They claimed a 5.5% increase in rail splits after the stock had been in the warehouse only a few days.

$$20,000 \text{ BF} \times .055 = 1,100 \text{ BF falldown increase}$$

$$1,100 \text{ BF} \times \$1,700 = \$1,870 + \text{labor}$$

2. They claimed another 5% falldown increase in their panel line.

$$18,900 \text{ ft} \times .05 = \$1,000 \text{ BF}$$

$$1,000 \text{ ft} \times \$1,700 = \$1,700.00$$

$$\text{Labor to rip bad panels} = \begin{array}{r} \$ 213.75 \\ \$1,913.75 \end{array}$$

3. They claimed a 2% failure in the field of doors with split panels. There were 866 doors made with this wood. Seventeen (17) doors failed. Costs for inspection, replacement, and return of doors came to \$450 each.

$$17 \times \$450 = \$ 7,650.00$$

What was the total dollars lost to the industry at this point on Lot #172?

56,585 BF at cutstock plant	x \$ 338	= \$ 19,126
1,100 BF cutstock falldown	1,700	1,870
1,000 BF Rip labor Panel falldown	1,700	1,700 214
17 Doors Door rejects	450	7,650
	TOTAL	\$30,560 or \$541/MBF on Lot #172

This is a very simplified example, and many factors were not considered, but it gives you a feeling for the impact to the industry. At a time when steel fiberglass and moulded doors have made such large inroads into the wood door business, it only multiplies the problem to send a poor performing product into the field. The success of our customers is vital to each of us.

So far, I have only discussed the function of drying wood for the application and the success of our business partners. But we also need to look at where the opportunities are for people who serve the remanufacturing business. The best way for me to do that is to discuss what has happened at our plant.

1. For twelve (12) years, we cut old growth Douglas-fir and hem-fir shop lumber into door and window components.
2. The impact of the Endangered Species Act and America's growing reservationist policies have drastically reduced available raw material, as well as, increased its cost through the control of supply, component prices; therefore increased and finished products costs have escalated.
3. America's love affair with painted wood work combined with an aggressively priced MDF market have undercut demands for clear wood products.
4. Steel, fiber glass, and moulded doors are now the norms for homes up to \$500,000.
5. Imports from New Zealand, Chile, Mexico, South Africa, etc., have put more pressure on an over-supplied market.
6. We have turned to a market we can source locally from second growth stands. Cutting low-grade commons for finger-jointed structural markets. Eighty percent (80%) of what we now cut is economy and utility dimension.

What Are Our Needs Now

Kiln operators can also provide other services for us:

1. Sorting of *DRY* wood to pull out what needs redrying.
2. Ripping of wide width lumber. Hopefully, for grade.
3. Ability to successfully dry lumber from vastly different age groups and geographic regions.
4. Deal with increasingly smaller lots of wood. Instead of 120,000 foot lots of one item, we often deal with 20,000 lots. The mixing of kilns is much more common.
5. We now live in an age of information overload. Computers allow us to collect and examine vast quantities of information. But in our *lean and mean, just in time* world, we sometimes don't have the manpower to deal with the information detailed breakdowns of recoveries and tallies, etc., allows us to be better consumers of lumber. Quick access to the information is vital and often times more important than cost.

We can no longer take the attitude of *promise them anything - ship 'em what you've got*. We must be partners in the business, working together with more cooperation than ever to ensure our livelihood for the future. Your ability to provide the services we need may well mean our success or failure.

Remanufacturing covers a very diverse group of companies and products. Included are Pine Moulding Plants, Alder Panel Plants, Cedar Fencing Plants, FJ Stud Mills, Door Cutstock Plants, plants serving the Japanese, German, Korean, etc., markets. There is no way to put them all in a bottle and pour out a common theme other than high levels of service, quality and teamwork are required for them to succeed. It will be harder than ever with the competition we face today.