

# Measuring Your Production: What to Track & Why

Chad Pagels, Zeeland Truss and Components  
Ben Pagel, BEP/Lyman – ABC Truss



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# Measuring Your Production: What to Track and Why

Ben Pagel, Network Manager, BEP/Lyman – ABC Truss  
Chad Pagels, General Manager, Zeeland Truss & Components

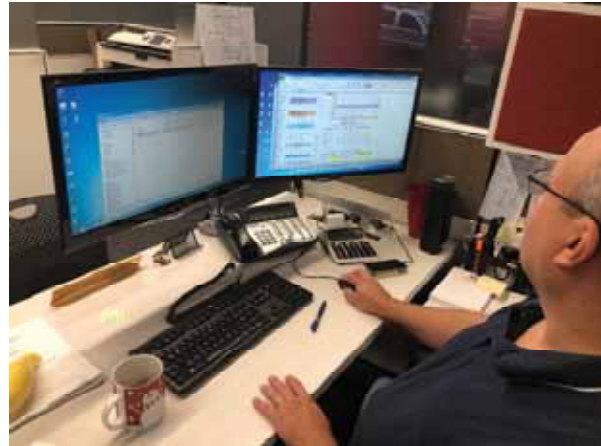
## Summary

- What are we tracking?
- Why do we track metrics?
- How are we tracking?
- Information sharing

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## What Are We Tracking?

- Dollars
- Board footage
- Hours (direct/indirect)
- Pieces
- Recuts
- Setups
- Hours cut ahead



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## What Are We Tracking?

- Dollars
- Lineal feet
- Pieces
- Joints
- Board feet
- Time



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## What Are We Tracking?

- By station
- By shift
- Saw
- Picker
- Indirect personnel



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<i>Truss Plant</i>		<b>Summary of Daily Production</b>					
		<b>PICKER TOTALS</b>			<b>SAW TOTALS</b>		
Day	DATE	MHR	BDFT	BDFT/MHR	MHR	BDFT	BDFT/MHR
Mon	12/23/19	0.00	0		0.00	0	
Tue	12/24/19	0.00	0		0.00	0	
Wed	12/25/19	0.00	0		0.00	0	
Thu	12/26/19	0.00	0		0.00	0	
Fri	12/27/19	0.00	0		0.00	0	
Sat	12/28/19	0.00	0		0.00	0	
<b>Weekly Total</b>		<b>0.00</b>	<b>0</b>		<b>0.00</b>	<b>0</b>	

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FLOOR TOTALS					ROOF TOTALS		
MHR	BDFT	LFT	BDFT/MHR	LFT/MHR	MHR	BDFT	BDFT/MHR
0.00	0	0			0.00	0	
0.00	0	0			0.00	0	
0.00	0	0			0.00	0	
0.00	0	0			0.00	0	
0.00	0	0			0.00	0	
0.00	0	0			0.00	0	
<b>0.00</b>	<b>0</b>	<b>0</b>			<b>0.00</b>	<b>0</b>	

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Year to Date --->		0.00	0	0.0
INDIRECT HRS TOTALS		GRAND TOTALS		
MHR		MHR	BDFT	BDFT/MHR
0.00		0.00	0	
0.00		0.00	0	
0.00		0.00	0	
0.00		0.00	0	
0.00		0.00	0	
0.00		0.00	0	
<b>0.00</b>		<b>0.00</b>	<b>0</b>	

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	Truss ID	Description	Span	Slope TC	Price	Qty Built	Qty Ordered	Built
T93889	VH	VH 6/12 DWN	03-11-02	5.999999		0	1	N
T93889	w	W 6/12 BEV	03-10-04	6		1	1	Y
T93889	W1	W1 6/12 BEV	04-10-04	6		1	1	Y
T96924	A	A Gable	30-00-00	5		0	2	N
T96924	B	B Common	30-00-00	5		0	17	N
T93993	A	A Gable	14-00-00	5.999999		10	10	Y
T93993	A1	A1	14-00-00	5.999999		1	1	Y
T94005	A	A	28-00-00	4		8	8	Y
T94005	A1	A1	28-00-00	4.000002		1	1	Y
T94045	A	A	23-11-00	4		10	10	Y
T94045	A1	A1	23-11-00	4		2	2	Y
T94140	A	A	30-00-00	4		0	15	N
T94140	B	B	30-00-00	4		0	2	N
T94140	C	C	08-00-00	4		0	6	N



<b>Station 11</b>			
<b>11 RollMaster</b>			
Team Members	Reg. Hours	Overtime Hours	Pay Rate
eShop Hours	0.000		
			Pay \$ Total
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
<b>Total \$ Production</b>		\$ -	
<b>Total Hours</b>			
<b>Dollars per Hour</b>			
<b>Total Joints Production</b>			Jnts/Hr
<b>Total Board Feet Production</b>			Bd.Ft./Hr
<b>Total Lineal Feet Production</b>			Lin.Ft./Hr
<b>Total Pieces Production</b>			Pcs/Hr
<b>Total Table Setup Man Min.</b>			
<b>Total Table Build Man Min.</b>			Set&Bld
<b>Unique Trusses / Total Trusses</b>			0



## Why Do We Track Metrics?

- Profitability
  - Great day or need improvement day
- Table and saw efficiency
- Direct vs. indirect time
- Complexity factors (pieces)
- Lumber quality
- Saw/picking team performance
- Complexity factors (setups)

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## Why Do We Track Metrics?

- Compare shifts, branches, stations
- Overall:
  - Spot trends
  - Set goals
  - Know what and where to improve
  - Determine if changes are making an impact

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## Why Do We Track Metrics?

“ YOU CAN'T MANAGE  
WHAT YOU DON'T MEASURE.

- W. Edward Deming



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## Why Do We Track Metrics?

- Compare tables, shifts
  - Determine training
- Equipment needs
- Are we improving?

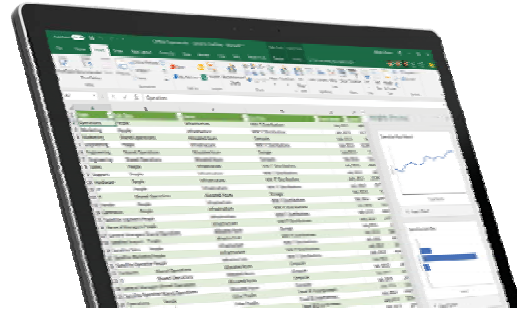


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## How Are We Tracking?

- Reports out of plant management software
- Supervisor data
- Payroll data into Excel with formulas



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## How Are We Tracking? – Shift Level

- Dollars
- Board feet
- Hours
- Board feet per
- Dollar per direct



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## How Are We Tracking? – Lost Hours

Total Hours	264	264	264	264	264	1,320
Lost Hours	15	13	18	43	19	108
Percent lost Hrs	-5.68%	-4.92%	-6.82%	-16.29%	-7.20%	-8.18%
Lost \$ per All In #	2,017	1,761	2,283	5,288	1,773	13,122

## How Are We Tracking? – Station Specific

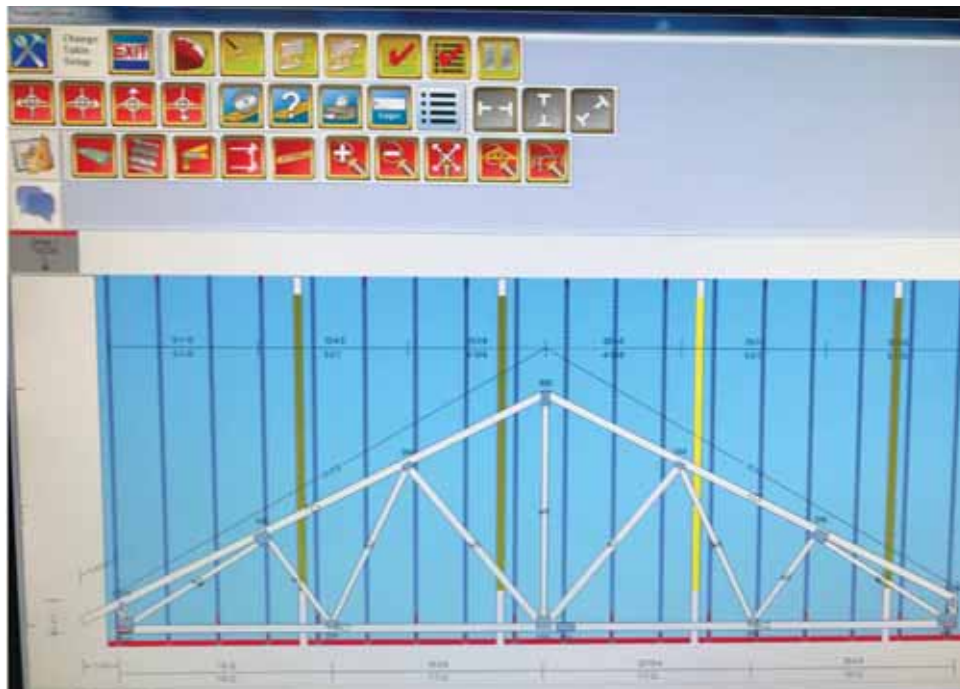
<u>STATIO</u>	<u>SHIFT</u>	<u>MHRS</u>	<u>QTY</u>	<u>BDFT</u>	<u>PCS</u>	<u>SETUPS</u>	<u>BDFT/MHRS</u>	<u>Pcs/Hr</u>
ALS	First	4.00	928	2,881	928		720	232
AutoMill	First	10.00	3,028	20,765	3,028		2,076	303
<b>Shift Total</b>			3,956	23,646	3,956			
ALS	Second	2.00	393	1,327	393		664	197
AutoMill	Second	10.00	2,118	13,953	2,118		1,395	212
<b>Shift Total</b>			2,511	15,281	2,511			

## How Are We Tracking?

- Tracking database
- Live tracking
  - Reports, change orders
- Scanner (pull system)
- Truss info at the station
- Re-cut info sent to saw from station



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## Information Sharing

- Daily email
  - Previous days numbers
  - Week total
- Daily huddle
- Weekly level 10 meetings
  - Roll-up of data
- Quarterly
  - Branch meetings
- Promotes “co-opetition”



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## Information Sharing

- Every plant
- Provide best practices
- Compare equipment
- What is possible?



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## Final Thoughts

- Production metrics provide an avenue to open and honest communication
- Quickly shows where improvements are needed
- If you don't track your production, you don't know if you are improving
- Tracking production consistently verifies how you are doing

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## Questions?

- Ben Pagel
  - Email: [bpagel@trussabc.com](mailto:bpagel@trussabc.com)
- Chad Pagels
  - Email: [chadp@zeelandlumber.com](mailto:chadp@zeelandlumber.com)

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## SBCA Resources

➤ For more resources on this topic, visit [www.sbcindustry.com](http://www.sbcindustry.com) and search for the below titles:

- [Webinar: Making Lean Work for You: Part 1](#)
- [Webinar: Making Lean Work for You: Part 2](#)
- [Webinar: Making Lean Work for You: Part 3](#)
- [Lean Manufacturing...Where to Start?](#)
- [Why Measure?](#)
- [Do You Know if a Product is a Winner or Loser?](#)

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## Learning Labs

### Wednesday

- 1 pm – Partnering with a National Builder
- 2:30 pm – Best Practices for Developing a Local Workforce
- 4:00 pm – Designing for the Code

### Thursday

- 12 pm – Knowing Your People to Keep Your People
- 1:30 pm – Safety
- 3 pm – Cybersecurity

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## Next Session

- 11:00 am - Measuring Your Production: Get the Most out of Your Metrics
  - Ben Pagel
  - Chad Pagels

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Please Fill Out Your Session Evaluation

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# How **BCMC** Contributes to Your Business Success



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**M**eetings with suppliers give insight into opportunities for further innovation.

**C**oming together for one week every October generates ideas and energy that drive the industry forward throughout the year.

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- Utilize software and machinery relationship to stabilize the manufacturing schedule – thus allowing for better planning and less variability
- Pick, cut, and deliver material to a build station with no hands touching the material
- Designed to address labor shortages, complex truss designs, material handling issues, and productivity demands

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