

# Invest in People

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## Use Performance Measures

- Cross Training Chart
- Safety Cross
- Cell Lean Implementation Chart
- 5S Audit
- Number of Improvement Projects Completed



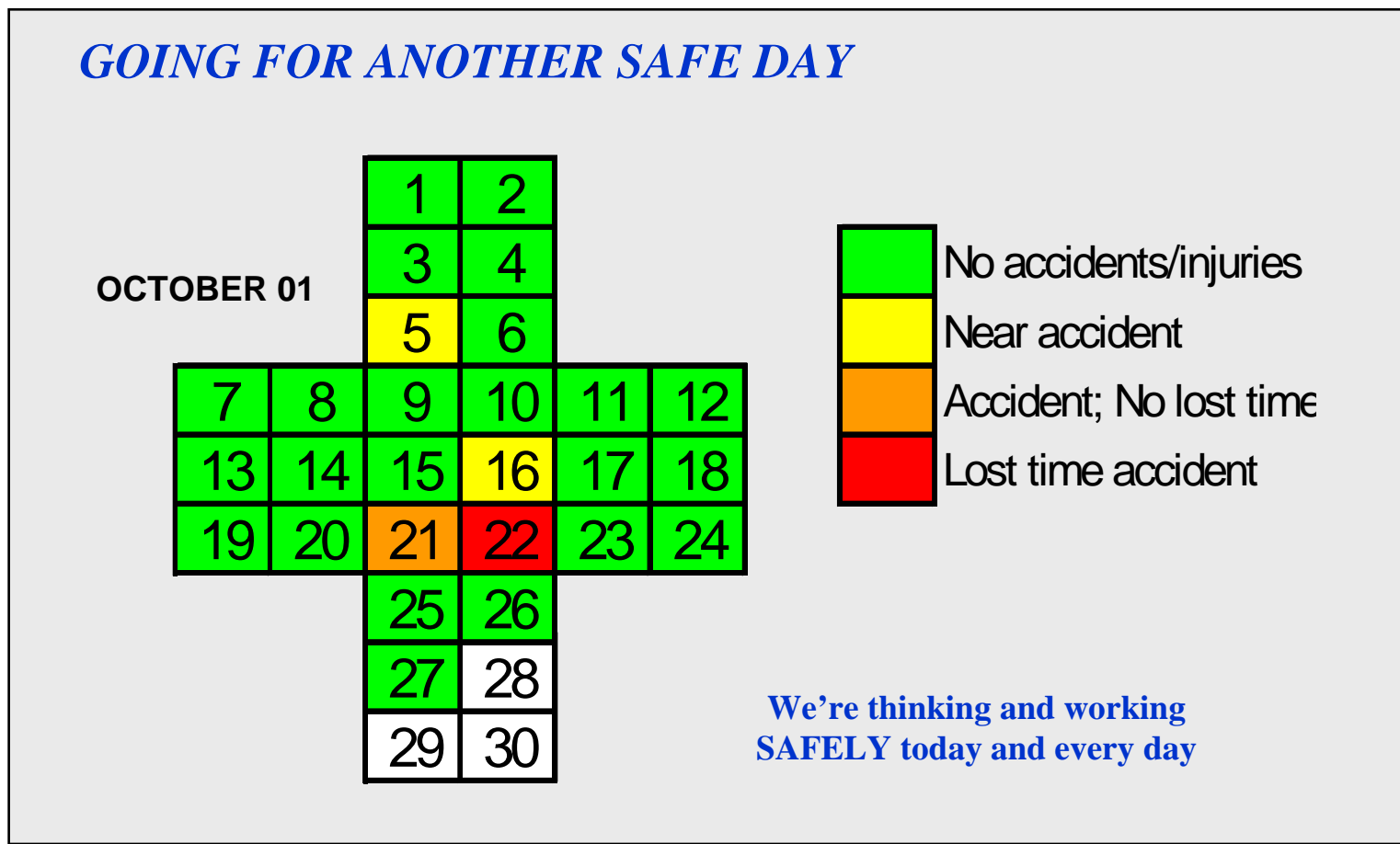
# Example Cross Training Chart

	Jim	Jose	Alice	Raoul
Load FTM machine	●	●	○	■
Unload FTM machine	●	●	○	■
FTM maintenance	●			●
Pressure test	○	●	○	●
Pressure calibration	○			○
Finishing	●	●	●	■
Packing	■	●	●	■
Documentation				●
Lean 101	■	●	●	■
5S	●	●	●	●
SPC Charting				●
Teamwork	●	●	●	●
Safety	●	●	■	●
Problem Solving				●

○ *Trained*  
 ● *Certified*  
 ■ *Trainer*

Training  
Schedule

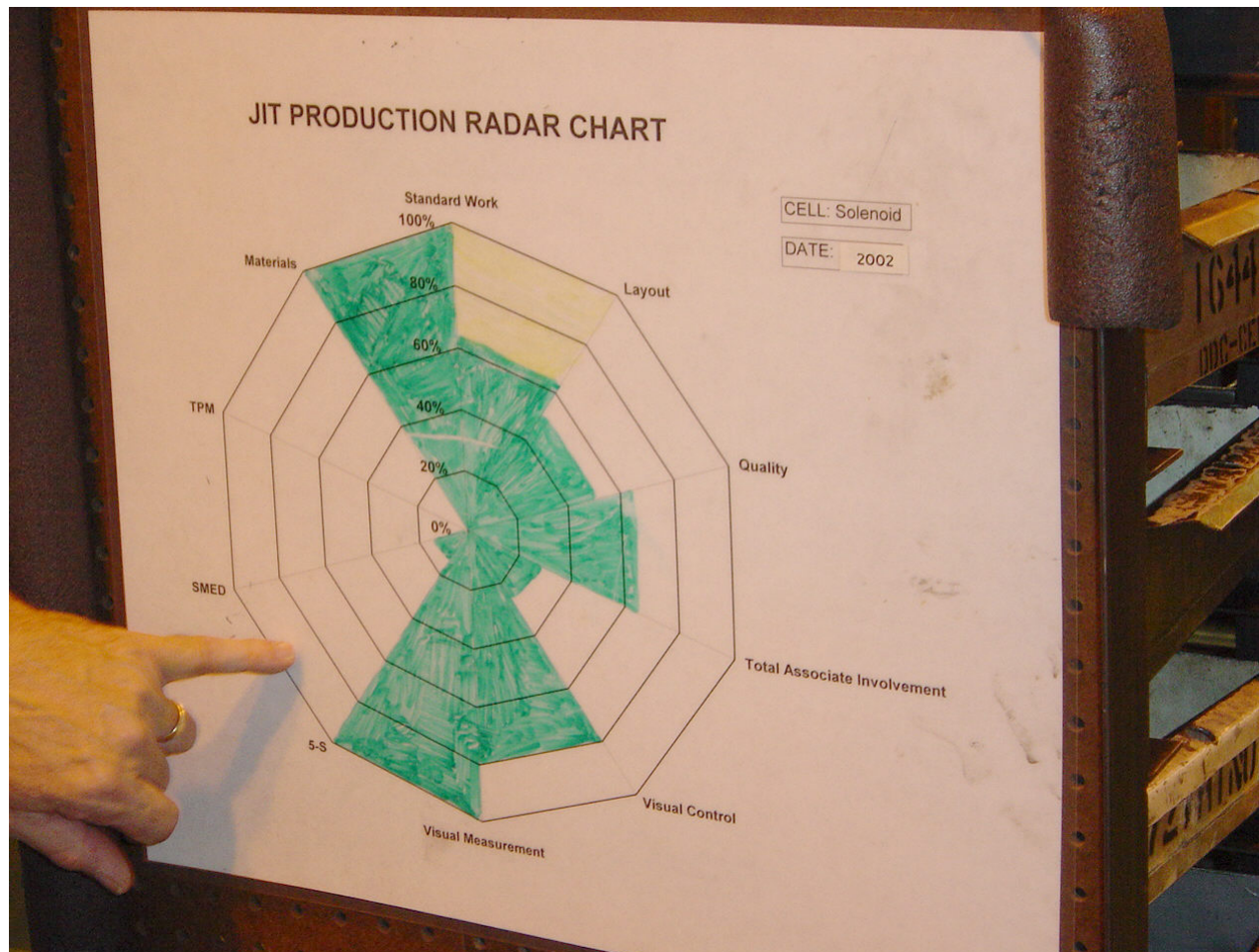
# Example Safety Cross



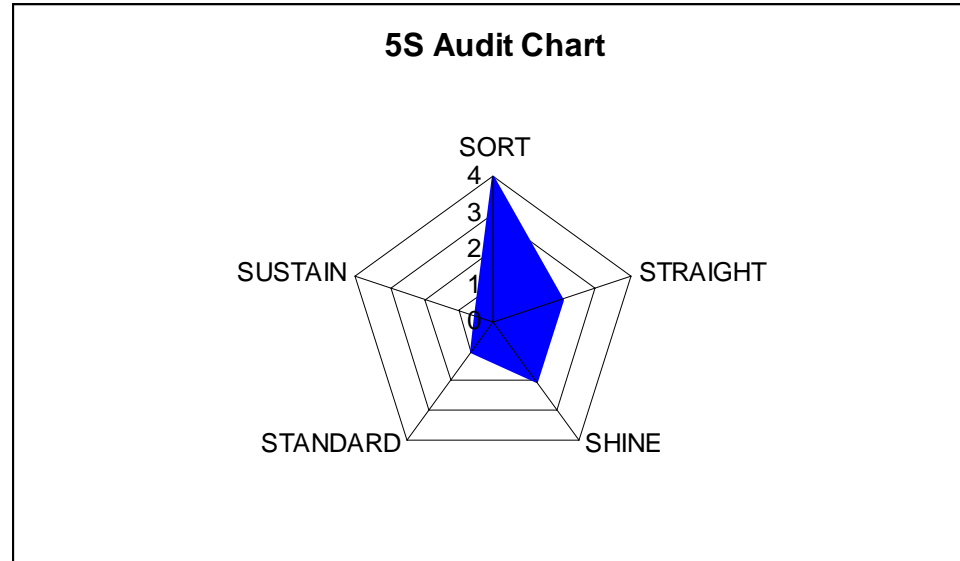
# Example Cell Lean Implementation Chart

<b>Standardized Work</b>	SW combo & SW sheet displayed	Tak time is properly calculated	Standard WIP in place	Operator loading charts at mouth of cell	Playbooks created for several cell loads	Cell manned as loading chart indicates		
	17%	33%	50%	67%	83%	100%		
<b>Layout</b>	U Shaped Cell	Product flows counter clockwise	No barrier to operator flow	Proper tool presentation	Unobstructed view from the mouth of the cell	Equipment adjusted to operator height		
	17%	33%	50%	67%	83%	100%		
<b>Quality</b>	Pictorial method sheets	Sample product with critical-to-quality characteristics	PPM or FTT measured	Poka Yoke	Jidoka			
	20%	40%	60%	80%	100%			
<b>Total Employee Involvement</b>	Multi-skilled operators	Operator cross training matrix in cell	Training plan in place	Communication board in cell	Operators update visual management boards	Universal skilled operators	Cell members conduct problem solving meetings	
	14%	29%	43%	57%	71%	86%	100%	
<b>Visual Control</b>	Andon board tracking production quantity	Aisle, equipment, & materials markings	Material locations & containers labeled	Andon lights or similar production stop indicator	Defective products area	Color coded process map of the cell		
	17%	33%	50%	67%	83%	100%		
<b>Visual Measurement</b>	Production control board	Day by the Hour report	Cell performance measurement board	Problem solving & improvement projects	"Newspaper" of improvement projects			
	20%	40%	60%	80%	100%			
<b>5S</b>	No unnecessary items	A "home" for each item	Daily 5S activity checklist & schedule	Cell free of debris, oil, etc.	Item locations set by frequency of use	No enclosed or nonvisible cabinets	Equipment modified to reduce cleaning	Cross-cell or management audits
	13%	25%	38%	50%	63%	75%	88%	100%
<b>SMED</b>	Change over times tracked	Document change-over process	Internal converted to external	Internal tasks minimized	External tasks minimized	Changeover within takt time		
	17%	33%	50%	67%	83%	100%		
<b>TPM</b>	OEE tracked	Maintenance performed off-shift	Schedule for preventive or predictive maintenance	Autonomous maintenance				
	25%	50%	75%	100%				
<b>Materials</b>	Basic level loaded material presentation	Point of use materials	Adjacent storage (grocery store)	Schedule level loaded within lead time	Kanban & sequencing	True mixed model scheduling		
	17%	33%	50%	67%	83%	100%		

# Example Cell Lean Implementation Chart



# 5S Self-Audit



	S1	S2	S3	S4	S5
	SORT	STRAIGHT	SHINE	STANDARD	SUSTAIN
13-Jan	1.5	1.5	1	0	0
20-Jan	2	1.5	1	0	0
27-Jan	2	1.5	1.5	0	0
03-Feb	2	2	1.5	0.5	0
09-Feb	2.5	2	1	0.5	0
16-Feb	3	1.5	1.5	0.5	0.5
23-Feb	3.5	2	1.5	1	0.5
02-Mar	4	2	2	1	0.5
09-Mar					
16-Mar					
23-Mar					
30-Mar					

# 5S Audit

**STD 5C'S CHECK SHEET**

**PURPOSE: TO INVOLVE AND HAVE EVERYONE PARTICIPATE IN MAINTAINING 5C'S**

	DATE	2/6	2/7	2/8	2/9	2/10	2/11	2/12	2/13	2/14	2/15	2/16	2/17	2/18	2/19	2/20	2/21	2/22	2/23	2/24	2/25	2/26	2/27	2/28	
1. IS DIRT & SCRAP CONTAINED AT SOURCE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2. ARE SCRAP AND DEFECTS IN PROPER PLACE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3. IS THE AREA FREE OF FOOD AND OPEN CONTAINERS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4. IS THE BROOM & DUSTPAN IN PROPER PLACE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5. IS EQUIPMENT CLEAN		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6. ARE FLOORS AND AISLE CLEAN AND CLEAR		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7. NOTHING ON TOP OF CABINETS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8. NOTHING UNDER TABLES		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9. ARE ALL MATERIALS LABELED		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10. ONLY 24HR. WORK ON TABLE/DESK		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11. IS ANY WASTE (TRASH ENTERING AREA		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

k quality/quality forms 2/28/00  
Rev 1

# Number of Improvement Projects Completed

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	02-Mar	13-Jan	20-Jan	27-Jan	03-Feb	09-Feb	16-Feb	23-Feb	02-Mar	09-Mar	16-Mar	23-Mar	30-Mar
<b>Completed</b>	2	3	3	2	0	3	1	1					
<b>Cum</b>	2	5	8	10	10	13	14	15					
<b>In-Progress</b>	4	5	6	5	4	5	5	4	0	0	0	0	0
<b>Jim</b>	1	1	2	2	1	1	1	0					
<b>Jose</b>	2	2	2	1	1	2	2	2					
<b>Alice</b>	0	1	1	1	1	1	1	1					
<b>Raoul</b>	1	1	1	1	1	1	1	1					

Chart is accompanied by a board showing information about the projects.  
Process maps, analysis charts, before & after photo's.

# Cell Measurement Board

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