WORLD CLASS LEAN BUSINESS SELF ASSESSMENT AND ADJUSTMENT MATRIX

World Class Lean Business is a competitive strategy involving continuous improvement of products, processes, and services to enhance quality, reduce cost, improve productivity, and increase total customer satisfaction (Note: Each company customizes according to their particular busines

	SET-UP REDUCTION	EMPLOYEE INVOLVEMENT	GROUP CELL TECHNOLOGY	"FOCUS" FACTORY JIT	"PULL" SYSTEM KANBAN	UNIFORM SCHEDULING	QUALITY @ THE SOURCE	SUPPLIERS RELATIONS	CUSTOMER RELATIONS	MAINTENANCE	ORGANIZATION HOUSEKEEPING	MASTER STRATEGIC PLAN	PERFORMANCE METRICS	PROJECT MANAGEMENT
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A	FIRST PIECE GOOD EVERY TIME	CONTINUING EDUCATION PROGRAM AVAILABLE & IN USE	USED IN CONJUNCTION WITH THE "PULL" SYSTEM	USED IN CONJUNCTION WITH THE "PULL" SYSTEM & GROUP CELL TECHNOLOGY	USED IN CONJUNCTION WITH "UNIFORM" SCHEDULING	AN AGGRESSIVE & CONTINUOUS IMPROVEMENT PROCESS USED TO MINIMIZE NON-VALUE ADDED ACTIVITIE	QUALITY MEASURED IN PARTS/MILLION VERSUS PIECES (6s)	PROVIDE COST CONTAINMENT HELP TO PREVENT LARGE PRICE INCREASES	LEAD TIME TO CUSTOMER IS JUST-IN-TIME	PREDICTIVE MAINTENANCE (SPC) APPLIED TO CHANGE A PART BEFORE QUALITY PROBLEM OCCURS	HOUSEKEEPING PROGRAM TIED INTO THE CONTINUOUS IMPROVEMENT PROGRAM	"LEAN" PRODUCTION METHODS FULLY INSTALLED	ALL METRICS FOR KEY BUSINESS PROCESSES INTEGRATED TO GIVE ONE OVERALL INDICATOR	PROJECTS CONTINUOUSLY REVIEWED FOR CONTRIBUTION TO STRATEGIC PLANS
	3	3	3	3	3	3	3	3	3	3	1	2.5	1	2.5
B	RUN EVERY PART EVERYDAY	EMPLOYEE CROSS-TRAINING PROGRAM AVAILABLE & IN USE	95% OR GREATER VALUE ADDED TIME IN ALL GROUP CELLS	INTEGRATED FEEDER DEPARTMENTS	REDUCED CYCLE TIME KNOWN & USED WHILE SCHEDULING THE SHOP	RESOURCES MATCH WITH THE DEMAND ON THE COMPANY	MARKETING QUALITY OVER PRICE	VENDORS HAVE ELECTRONIC ACCESS TO INVENTORY LEVELS OF PARTS THEY SUPPLY	CUSTOMERS TRANSMIT ORDERS ELECTRONICALLY	TOTAL PRODUCTIVE MAINTENANCE SYSTEM UTILIZED	UPPER MANAGEMENT SUPPORTS AND ENFORCES HOUSEKEEPING	20-40% ADDITIONAL SPACE SAVINGS ACHIEVED	PROCESS CONSTANTLY REVIEWED FOR ADDITION/DELETION OF KPIs	PROJECT DELIVERABLES LINKED TO FINANCIAL REPORTING, WHERE POSSIBLE
	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.75	2	0.75	2
C	ALL MACHINE SETUPS IN SINGLE MINUTES (SMED)	ACTIVELY SUPPORT SMALL GROUP IMPROVEMENT ACTIVITIES	OUTPUT MEETS "EXACT CUSTOMER DEMAND"	MINIMAL AMOUNT OF WORK IN PROCESS "LESS THAN 2 DAYS." CYCLE TIME GREATLY REDUCED	DISCIPLINE OF "PULL" SYSTEM USED AND REINFORCED BY UPPER MANAGEMENT	WORK IN PROCESS & CYCLE TIME REDUCED BY 90%	STATISTICAL PROCESS CONTROL (SPC) IS USED TO IDENTIFY OUT-OF-TOLERANCE OPERATIONS	REDUCED VENDOR BASE BY 50% OVER THE LAST 5 YEARS	CUSTOMER ORDERS PACKAGED IN CONTAINERS READY FOR IMMEDIATE USE	FORMALIZED MAINTENANCE SYSTEM MANAGING COST	FRONT OFFICE AREAS ARE HELD ACCOUNTABLE TO HOUSEKEEPING ISSUES AS WELL AS SHOP FLOOR	SUB-PLANTS FUNCTIONING AS FULLY AUTONOMOUS BUSINESS UNITS	METRICS RELATED DIRECTLY TO FINANCIAL REPORTING & INTEGRATED TO STRATEGIC PLANNING	LINKAGE BETWEEN OBJECTIVES & PLANNED ROI MAINTAINED UNTIL OBJECTIVE/ROI REACHED OR EXCEEDED
	2	2	2	1.5	2	2.25	2.5	2.5	2.5	2	0.75	1.5	0.75	2
D	SETUPS ARE PLANNED FOR & NO SCRAP ALLOWANCES BUILT-IN	EMPLOYEES AUTHORIZED TO STOP PRODUCTION IF A QUALITY PROBLEM EXISTS	NO WORK-IN-PROCESS - ELIMINATION OF QUEUES	BUILD TO "EXACT CUSTOMER DEMAND"	PRODUCTION CONTROL MANAGES THE "PULL" SYSTEM BETWEEN CELLS	CYCLE TIMES & CREW SIZES COMPUTED TO ALLOCATE RESOURCES PROPERLY TO MEET TAKT TIMI	FORMAL INCOMING & IN-PROCESS INSPECTION ELIMINATED	TRANSMIT VENDOR ORDERS ELECTRONICALLY	CUSTOMER'S QUALITY PARAMETERS KNOWN AND MET CONSISTENTLY	MACHINES ALWAYS READY FOR PRODUCTION	HOUSEKEEPING AND RELATED FACTORS EVALUATED AND POSTED	MAJOR REDUCTIONS IN MATERIAL HANDLING AND MOVEMENT EVIDENT	KPIs INTEGRATED WITH PERFORMANCE APPRAISAL SYSTEM	EVA USED TO DETERMINE GO/NO-GO FOR PROJECTS
	1.5	1.5	1.5	1.5	1.5	2	2	2	2	2	0.75	1	0.75	1.5
E	STANDARDIZED TOOLS & FIXTURES USED. I.e. FIX STOPS, PRESET TOOLING, QTR. TURN BOLTS, ETC.	WORKERS ENCOURAGED TO MAKE DECISIONS (EMPOWERMENT)	WORK BALANCED AND SIMPLIFIED TO MINIMIZE WASTED MOTION	PRODUCTIVITY AND QUALITY MAXIMIZED - IMPROVEMENT FROM BASE GREATER THAN 25%	MACHINE CENTERS CAN PERFORM SETUPS IN SINGLE MINUTES	SYNCHRONIZED DEMANDS	A "ZERO DEFECT" POLICY IN PLACE AND ADHERED TO	UTILIZE VENDOR CERTIFICATION PROGRAM, I.e. ISO	MOVING FROM MAKE-TO-STOCK TO MAKE-TO-ORDER PRACTICE	PREVENTATIVE MAINTENANCE BY MACHINE SCHEDULED BY THE PRODUCTION CONTROL DEPT.	HOUSEKEEPING PROGRAM AUDITED ROUTINELY	ACTIVITY BASED COSTING PILOT IN PLACE	METRICS ANALYZED TO IDENTIFY OPPORTUNITIES FOR IMPROVEMENT	CONTINUOUS REVIEW OF PROJECTS FOR VALUE-ADDED vs. RESOURCES vs. OTHER WORK IDENTIFIEI
	1	1.5	1	1	1.5	1.75	2	2	2	2	0.75	0.75	0.75	1.5
F	WHEELS AND ROLLERS USED TO MOVE FIXTURES & EQUIPMENT	STAFF, SUPPORT GROUPS CLOSE TO OR ON SHOP FLOOR	EQUIPMENT PRE-SET	FLOOR LAYOUT MINIMIZES WASTED MOTION & TRAVEL TIME	PROCESS SIMPLIFIED TO ALLOW FOR EASY APPLICATION OF "PULL" SYSTEM, I.e. TRIGGER CARDS	BUILD TO "EXACT CUSTOMER DEMAND"	REWORK & PARTIAL BUILDS ELIMINATED	VENDORS SCHEDULE FOR DAILY DELIVERIES	MARKET DEDICATED PLANT CAPACITY	A 95% OR HIGHER ON-TIME RESPONSE TO ALL WORK ORDERS	DISCIPLINED USE OF ALL STAGING AREAS FOR TOOLS, EQUIPMENT, MATERIAL & FIXTURES	MAJOR REDUCTIONS IN MATERIAL HANDLING AND MOVEMENT EVIDENT	DATA SHARED WITH ALL EMPLOYEES @ SUMMARY LEVEL	LACK OF SKILL SETS IDENTIFIED & PLAN TO IMPROVE IMPLEMENTED
	1	1.5	1	1	1	1.5	1.5	2	1.5	1	0.75	0.75	0.5	1.25
G	SETUP REDUCTION PROGRESS MONITORED & TRACKED	FLEXIBLE WORKFORCE	OPERATOR CAPABLE OF DOING ENTIRE PROCESS WITHIN CELL	HOURLY TARGETS ESTABLISHED, VISIBLE & MONITORED	STANDARD LOT SIZES USED (CONTAINER QUANTITY)	MIX MODEL SCHEDULING ENFORCED	WORKFORCE & SUPERVISION HAVE A "STOP & FIX NOW" MENTALITY	PROVIDE FREE TECHNICAL ASSISTANCE	ON-TIME DELIVERY IS 95% OR GREATER "CONSISTENTLY"	ALL MAINTENANCE WORK ORDERS ARE PHASED, ESTIMATED & SCHEDULED FOR COMPLETION	BROOMS, DUST PANS & OTHER HOUSEKEEPING TOOLS EASILY ACCESSIBLE TO THE EMPLOYEES	PROCESS BASED ORGANIZATION DEFINED	WORKERS USE METRICS IN DECISION MAKING	CAPACITY RESOURCE ANALYSIS & RESOURCE PRIORITIZATION ROUTINE
	0.5	1	1	1	1	1.25	1	1	1.5	0.75	0.75	0.75	0.5	1
H	INTERNAL VS. EXTERNAL ACTIVITIES KNOWN AND CLEARLY ADHERED TO	PROBLEMS RESOLVED WITHIN A SHORT PERIOD OF TIME OF BEING IDENTIFIED	PRODUCE ONE @ A TIME	"A" (STAR) PRODUCTS FAMILY KNOWN & DEDICATED TO A SINGLE FAMILY	MATERIAL HANDLING - CARTS WITH WHEELS	USED IN CONJUNCTION WITH THE MRP SYSTEM WHICH IS DRIVEN BY ACCURATE BILLS	QUALITY TARGETS/SPECIFICATIONS ESTABLISHED, VISIBLE & MONITORED	REFUSE TO ACCEPT EARLY DELIVERIES OR DEFECTED PARTS	PROVIDE FREE TECHNICAL ASSISTANCE	CONSTANT EMPLOYEE PARTICIPATION IN PRODUCTIVE MAINTENANCE PROGRAM	CONSTANT EMPLOYEE PARTICIPATION IN HOUSEKEEPING	OPTIMAL FACILITY PLAN DEVELOPED & SUB-PLANT STRUCTURES IDENTIFIED	KPI'S TRACKED AT CORRECT FREQUENCY FOR INDIVIDUAL & TEAM	INDIVIDUALS MADE RESPONSIBLE & ACCOUNTABLE FOR ACHIEVING TARGETS
	0.5	0.5	0.5	0.75	0.5	0.75	0.75	1	0.75	0.75	0.75	0.75	0.5	0.75
I	REJECT "ECONOMIC ORDER QUANTITY" FORMULA - SMALL LOT PRODUCTION	PROVIDE A POSITIVE WORK ENVIRONMENT	"U" SHAPED CONFIGURATION	USED IN CONJUNCTION WITH AN AGGRESSIVE SETUP REDUCTION PROGRAM	STAGING AREAS FOR ALL WORK CENTERS CLEARLY IDENTIFIED & USED	USED IN CONJUNCTION WITH GROUP CELL, "FOCUS" FACTORY & "PULL" SYSTEMS	QUALITY PROBLEMS IDENTIFIED AND CORRECTED IMMEDIATELY	SPECIFY REQUIREMENTS CLEARLY FOR QUALITY @ SOURCE	RESPONSIVENESS TO CUSTOMER IS PRIMARY OBJECTIVE	FORMALIZED PREVENTATIVE MAINTENANCE SYSTEM ADHERED TO	ALL PINCH POINTS & RELATED SAFETY ISSUES CLEARLY VISIBLE & FREE OF DEBRIS	COST/BENEFIT ANALYSIS DEVELOPED	GOALS SET, COMMUNICATED & REPORTED AGAINST	MILESTONES, TIMELINES & BUDGETS ARE AGREED, COMMUNICATED & REPORTED AGAINST
	0.5	0.5	0.5	0.5	0.5	0.75	0.5	0.5	0.75	0.75	0.25	0.75	0.5	0.75
J	SETUP REDUCTION PROGRAMS BEING USED	SAFETY THE PRIMARY CONCERN	GROUP CELL TECHNOLOGY BEING USED	COMPANY UTILIZES FOCUS FACTORY CONCEPTS	"PULL" SYSTEM TECHNIQUE BEING USED	"UNIFORM" SCHEDULING TECHNIQUE BEING USED	VIEW QUALITY AS EVERYONE'S BUSINESS	LONG-TERM PURCHASE ORDERS USED	ON-TIME DELIVERY PERFORMANCE MONITORED	A MAINTENANCE WORK ORDER SYSTEM IN PLACE & BEING USED PROPERLY	GOOD HOUSEKEEPING DEMONSTRATED IN OFFICE, ON SHOP FLOOR & IN YARD	MIGRATION PLAN DEVELOPED & TIME PHASED	KEY PERFORMANCE INDICATORS (KPI) DEFINED & COMMUNICATED	PROJECT OBJECTIVES & DELIVERABLES ARE AGREED & COMMUNICATED
	0.5	0.25	0.5	0.25	0.25	0.75	0.5	0.5	0.5	0.5	0.25	0.5	0.25	0.5

THE TIME FRAME TO OBTAIN WORLD CLASS LEVEL IS: DETERMINE THE "AS IS" STATE AND ITS INDEX NUMBER, SUBTRACT FROM THE "TO BE" STATE INDEX NUMBER, AND THEN MULTIPLY THE RESULTANT BY 12 MONTHS. THIS CHART HAS BEEN FURTHER DEVELOPED BY NELSON O. WAX CMC, 1997.

For this project, it would take about 9 months to go from level J to level A in the operational category of Performance Metrics and Project Management would be 24 mos. (based on 1 PP):
Calculation: 1 - .25 = .75 times 12 = 9 months.
Calculation: 2.5 - .5 = 2 times 12 = 24 months.