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Mexico Panama Peru Puerto Rico South Africa UK Venezuela

Summer 2018



**QCDSM**  
LEAN BUSINESS EXPERTS

# The Next Step

**QCDSM establishes the practice of Continuous Improvement throughout the Supply Chain of any business based on Lean principles and with full employee participation. It is a Formal Quality Program for companies utilizing LEAN manufacturing and management principles.**

**Since 1989 we have had the privilege of working with a number of different companies on all five continents. The experience we have gained is remarkable. What is QCDSM and how can this system involve all your people in continuous improvement becoming the LEAN business culture of a company?**



*Editorial by Peter J Paola and Willem J Botha,*

**Our website contains much more information and we invite you to visit it: [www.qcdsm.com](http://www.qcdsm.com)**

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## The QCDSM System

The biggest challenge facing any company is involving all employees in the quest for lean management and manufacturing. While there are many other opportunities available, the QCDSM/SQCDM System (Quality, Cost, Delivery, Safety and Morale - Employee involvement) - is perhaps unique in its approach.

We have designed a methodology through which every employee is directly involved in being responsible for their own tasks and those of their area by providing them with a visual, hands-on methodology to manage their individual performance and that of their area.

The structure we put in place 'pushes down' responsibility to the 'shop floor' thus providing an opportunity for the different levels of management to 'manage' their own outputs and performance results. It applies to all departments in a company and in fact requires all departments to participate. Why?

Within the company, the Customer / Supplier relationship is focused on and measured, visually, daily and weekly. Of course it also measures the external customer/supplier relationship. In this way 'satisfying the customer' is the driving force of all activity.

But how demonstrate or convince the people of the company that this is at all possible? Presentations, conferences etc. are not very effective.

## The Try Z Seminar

What better way to demonstrate a system than to provide the employees with a hands-on practical experience in which they prove to themselves that the QCDSM/SQCDM Lean methodology actually works and that they, using their expertise and their own ideas and suggestions, can actually control the outcomes?

The Try Z (Trial Zero) Seminar, uses plastic model units – model cars – with 69 different nuts, washers, bolts, plastic plates et alia. This gives each person the opportunity of physically controlling the assembly of 15 units during 3 production runs to continually improve performance, quality and safety and assembly (production) time outcomes.

On the web site, ([www.qcdsm.com](http://www.qcdsm.com)) the section, 'The Try Z Seminar', contains examples, pictures and results of over 400 of these seminars since 1989.

## The Green Room Meeting

How does this process transfer to the practical, day to day management of a company? Simple! Through daily or weekly structured meetings using visual charts, standard throughout the company, and managed by the people of the area. This is a direct transfer from the TZ Seminar through which they were able to obtain remarkable improvements after each production run through their direct involvement.

**This methodology applies to all departments in a company, not only manufacturing.**

## The Company Structure

Every management level in the company establishes its own Green Room meeting thereby enabling them to concentrate on their specific responsibilities.

## What is involved?

If you decide to adopt this methodology, QCD Systems has two scenarios to provide the service.

1. We will set up a training intervention in your facility to not only conduct the Try Z Seminar, but also to assist you in establishing the Green Room meeting structure.
2. Using the internet, and apart from the Try Z seminar - must be on site, - we are able to assist you in setting up the Green Room meeting structure and once installed, continually monitor, encourage, train and assist with the day to day operation of the system.

There are a number of other training sessions enabling the system. For example we provide training on how to write and establish procedures, the backbone of continuous Lean management, which we call DPS' - (Detailed Process Sheets)

This would be fully explained once commissioned.

*We can provide you with .pdf copies of training materials and any literature you may need to ensure compliance with QCDSM/SQCDM. Please also visit the updated web site and read through the various tags.*

**Headquarters are in New Zealand.**

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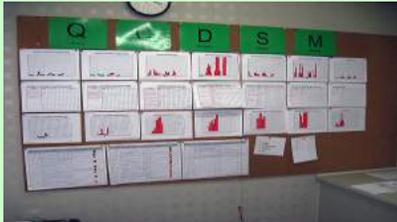
Web site

[www.qcdsm.com](http://www.qcdsm.com)

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## How does a company sustain its Lean journey?

The physical place for the 1<sup>st</sup> level meetings is the critical first step after the Try Z seminar. The charts that are set up provide the environment for good meetings but the **standardization of the arrangement of the charts** is what is key to fruitful and good meetings.



The above chart arrangement is an example of a template for the Green Room wall set-up. Left to Right – Q. C. D. S. M with the Daily, Matrix and YTD charts under each category.

The purpose of the standardization of the wall charts ensures that the leaders of the 1<sup>st</sup> level meetings are able to conduct a well run, informative, 10-15 minutes meeting.

The written DPS for these meetings is the **Agenda**. Without the Agenda, the meetings lose focus and purpose. **We cannot stress enough the importance of using these agendas.**

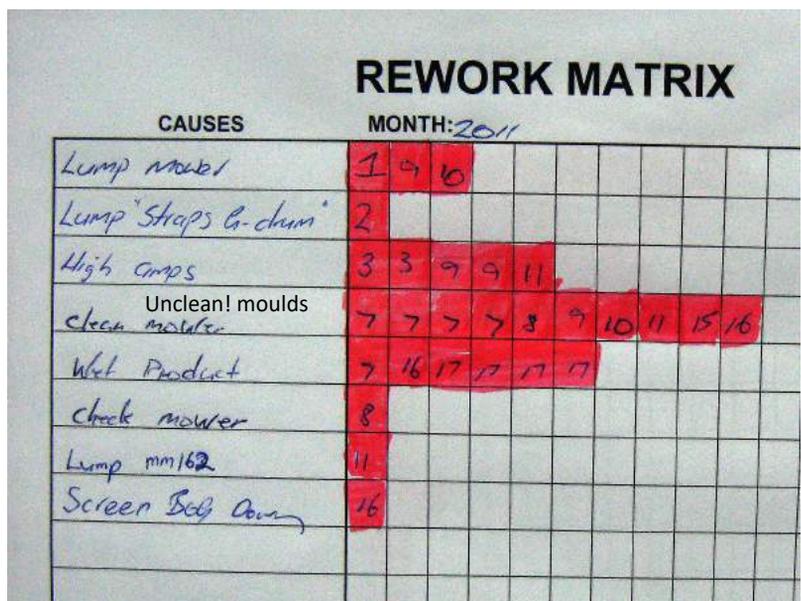
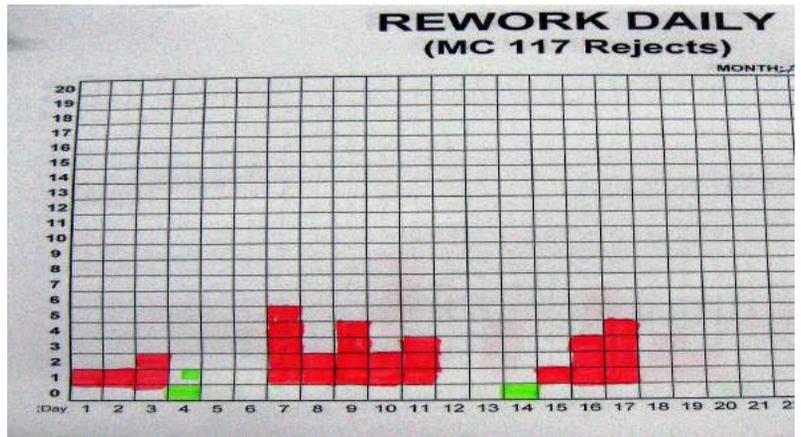
If properly trained, the leaders will impart good information with leading questions. This will encourage the participation of the people and will result in an effective meeting.

(1<sup>st</sup> Level) Standing in front of the charts being discussed, and pointing to the information shown on each chart, is very important at the 1<sup>st</sup> Level to assist the attendees to link their performance to the daily/weekly results recorded on the charts.

The **MATRIX** chart is the most important chart in the 1<sup>st</sup> Level meeting – see across. This chart reveals the actual situation/s that have occurred and becomes the focus for questions, explanations and the generation of ideas and suggestions.

AMCOR Rigid Plastics, South America - the Cali and San Salvador facilities - wanted to apply QCDSM in a slightly different way. They wanted Safety to lead the way and for the M, instead of Morale, they wanted Motivation. This rearrangement in no way affects the overall process. – SQCDM.

A further innovation, using the online approach, was to contact the companies 2 weeks prior to our arrival in order to coach them on how to begin to collect data for their future Green Room Meetings. They simply began to learn how to collect data for transfer onto the charts after our arrival. This proved to be very effective.



The Rework Daily chart, example above, posts data for the meetings. The 'picture' (Chart) which speaks a hundred words, indicates (top) that there is an issue with their product from different customers over a number of days. On this Matrix, (Rework Matrix) those issues are clearly defined by the number of times individual defects are reported on. The horizontal red bars against the individual issue records the number of times a particular defect has been reported on and the date it occurred. By being able to visualize and actually see the extent of the issues, the attendees of that meeting can now apply their experience and insights into developing ideas and suggestions on how to remedy this as they did in the Try Z seminar. Unfortunately, Production Meetings etc. held in most companies simply talk about the issues.

## How does a company sustain its Lean (QCDSM/SQCDM) journey?

A statement:

*“Every work area in a company is governed by the processes needed to complete the work in that area. Unwritten processes; incomplete processes; processes not properly trained etc.etc. lead to variations in the work and output. The purpose of procedures, therefore, is to establish standards so that consistent work is delivered. If people deviate from the processes, issues arise. “*

QCDSM/SQCDM relies on the fixed agendas to establish the process. The written DPS, the Agenda, delivers its purpose. What went right, what went wrong and what they, the people, can do to fix it, is visually displayed. Deviating from following the agenda will reduce the meetings to inconsequential results.

**THE NUMBER OF IDEAS GENERATED IS A MEASURE OF THE EFFECTIVENESS OF THE GREEN ROOM. SUGGESTIONS ARE RECORDED TO EITHER SOLVE OR IN VIRTUALLY EVERY CASE, TO MITIGATE THE EFFECT OF THE ISSUE UNTIL A REAL FIX IS AVAILABLE.**

The second part of the 1st Level Agenda sheet completes the meeting. It provides the opportunity for the attendees to become directly involved in their area through their work assignments.

The 2<sup>nd</sup> and 3<sup>rd</sup> level and above meetings need to continually stress the importance of written current DPS documents and the resultant ideas and suggestions offered by the people as a result of discussing the issues revealed on the charts.

This results in a motivated workforce taking control of their areas and will effectively result in continuous improvement and an increase in productivity and efficiency.

**We cannot stress strongly enough the importance of the use of the Agendas for each category of meetings.**



Examples of Green Rooms in various work areas.



Examples from Try Z Seminars



Ancor Try Z Cali Colombia April 2016



### COACHING, MENTORING, COMPLIANCE

ARE THE CHARTS UP TO DATE?
ARE THE ICC'S BEING GENERATED?
ARE SUGGESTIONS BEING OFFERED?
ARE NEAR MISSES BEING CHARTED?
IS THE TEAM RECEIVING ICC'S AND WHAT IS BEING DONE?
HAS THE NEED FOR DPS' BEEN IDENTIFIED?
IS THE LEADER STEERING THE TEAM TO RESOLVE PROBLEMS?
WHAT IS THE TEAM DOING TO ACHIEVE IT'S TARGETS?
WHAT ISSUES HAS THE TEAM BEEN UNABLE TO RESOLVE?
IS THE GREEN AREA MEETING FUNCTIONING AS TRAINED?
OTHER

# The Amcor Rigid Plastics, San Salvador Try Z experience 2016

**Defects Received Matrix**

CAUSES Admin DATES **Sept 2014**

Process Not followed	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
"	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
"	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Missing/Incomplete Paperwork	1	1	1	1	1	1	1	3	3	3	3	4	4	1	1	1	1	1	1	1
"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Parts Unavailable/Blowee Issue	1	1	1	1	1	1	1	3	3	3	3	5	5	5	5	5	5	5	5	5
"	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
"	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
"	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
"	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

The day/s of the month on which the issues occurred, sometimes more than once.

The Issue/s

**TARGETS**

	PRODUCTION 1		PRODUCTION 2		PRODUCTION 3	
	TARGET	RESULTS	TARGET	RESULTS	TARGET	RESULTS
DEFECT FREE UNITS	13	0	13	12	13	13
PARTS INCORRECTLY FITTED	5	15	5	1	3	0
PRODUCTION TIME	3040	3142	3458	2719	1292	1871
PERFORMANCE TEST AV: 15 UNITS	3.6	2.9	4.0	4.47	4.5	3.7
NUMBER OF UNITS UNDER 3 POINTS	3	6	3	1	1	4

The all-important **MATRIX** chart is truly the 'eye-opener' for those attending the Green Room meetings. It is used to display, in a graphic and visual format, the actual issues which the department is experiencing and the number of times those issues are occurring daily/weekly/monthly for their customers. The clarity of this data assists with the problem resolution.

Take note of the performance data above by the Amcor, San Salvador Try Z group. Remember they had no experience in assembling these 15 plastic models of 68 parts each. After the first run they applied their experience and expertise to develop jigs and tools using ideas and suggestions, rewriting the DPSs and training the new operators – 6 new operators each run. The performance test required each unit to run down the track and pass all 5 bollards without knocking them over. They went from a 2.9 out of 5 average to 3 bollards knocked down. They had to devise a way to align the wheels so the unit scored a clear run, and passed all 5 bollards. Their final average was 3.7 (3.0 is standard.)

The translation of Lean management and manufacturing into a company depends very heavily on helping all the people of the company to understand and 'experience' the principles. Combining the Try Z learning experience with a hands-on involvement, results in many 'aha!' moments. Involving the people directly in the learning enables them to test their theories, present their ideas and to argue for them among their peers but more importantly to focus on the end goal the whole time. **This is what the Try Z Seminar experience taught them.**

In all the over 400 of these seminars we have conducted all over the world, this methodology has been proven to be the most effective when the principles need to be translated into the real life of the company. Having learned how to manage the efficiency and productivity of this little Try Z unit, the translation of the principles into their area of expertise becomes much easier.



**YES !! RESULTS**

PRODUCTION 1	PRODUCTION 2	PRODUCTION 3
5	5R	1L
1L	3L	5L
5R	5L	5
3R	5	5L
1L	5R	5L
0L	5	3L
	5R	5L
5	5L	1L
3L	5	5R
5L	5	5R
5L	3R	5L
1L	5	0L
1L	3	1L
5	5	5R
5	1L	5R
2.9	4.47	3.7

2.9 4.4 3.7  
3.0 is the Standard

The selection of pictures below represents the work of the groups in the Try Z seminar using the data collected from a previous production run to continuously improve their results.

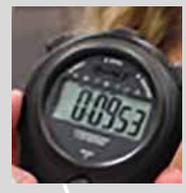
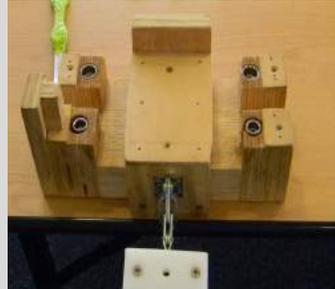
The purpose is to use 6 different operators for each of 3 production runs to build 15 units in 6 stations so as to obtain the minimum production time with maximum efficiencies and zero defects.

The three attempts at this task result in the removal of waste, the use of 5S principles, the generation of ideas and suggestions to continuously improve. The most important learning is after observations, to speak to their supply chain both customers and suppliers and to ensure that they not only get what they need, but provide what the next station needs. Below is the result for PowerBar holding the world record since 1999. 0/1066 = 0 Defects on 1066 secs for 15 units. The ultimate is 0/1000!

POWERBAR, BOISE, IDAHO		
WORLD RECORD HOLDER		
1/28/99		
127	57	0
2597	1846	1066

**Station 6 of the Try Z has become a bell-weather showing the excellent performance achieved with a well written DPS and utilizing a well designed jig. The Access Group AU holds the world record time.**

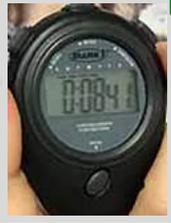
**From no jig to this Jig for St. #6**



1. Access St 6  
**9.53 seconds**  
World Record 2013

2. Access St 6, **9.41**  
Sept. 10<sup>th</sup> 2014  
David Chamberlain

3. Access St 6, **8.41secs**  
Sept. 19<sup>th</sup> 2014  
Present World Record  
George Moony





QCDSM

in action