



## Microwave Electronic Components(MEC)

# Additional staff at no cost by becoming World Class

By implementing a “Five S” program Teledyne Microwave Electronic Components is on track to:

- Reduce time wasted looking for parts and equipment
- Increase annual production capacity by the equivalent of 19 additional employees
- Enabled quicker response time to clients enquiries
- Control product flow reducing potential for error.
- Simplify ISO documentation and procedures
- Empower line staff and improve morale.

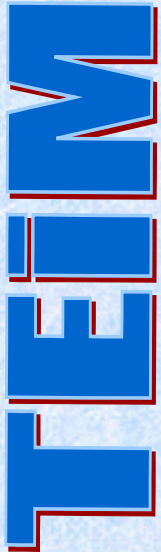
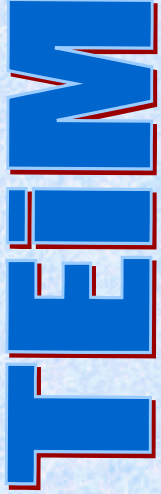
*“Teledyne’s Rancho Cordova facility has been making reliable quality products for more than 25 years. Our devices are used in situations where life and death depend on the correct operation. As a commercial company we know that it’s not enough to just provide quality products, we must be responsive to our clients timeframes and have systems in place that help minimize waste to keep us competitive. Adopting the Five S program we believe will demonstrate that Teledyne is not only a world class product supplier but a world class enterprise that values its customers and staff alike.”*

*–Bob Dippel, Director of Operations*

Teledyne manufactures electronic communication and propulsion products, and provides advanced engineering services to a variety of customers around the world. At the facility in Rancho Cordova California, Teledyne manufactures high and medium power traveling wave tubes (TWT’s) used in both satellite communications and radar defense systems.

### The Dilemma

For many years the facility at Rancho Cordova had been split across a number of buildings which was not conducive to an efficient operation. During 2003, the addition of 85,000 square feet gave the opportunity to operate under one roof. Teledyne was able to increase and modernize many of the services in the production areas, combine administrative functions and after many disjointed years, have a modern integrated facility. However, like many other companies, Teledyne had accumulated equipment, supplies and tools that were not always placed where needed or most appropriate. Valuable production time was spent tracking down information, equipment and the status of work in process was an issue that Teledyne wanted to resolve.



## The Solution

Teledyne has numerous facilities throughout the country and the management at MEC were aware that some of their facilities had been able to reduce the amounts of non-value added time by operating as a “Lean” or “World Class Enterprise.” The MEC management felt that the time was right for the Rancho Cordova facility to begin implementing some of the World Class tools that would enable them to reduce or eliminate non-value added time. The management designated a number of key employees to investigate the best implementation program beginning with a “Five S” program.

Five S is one of the Lean tools used to help identify and eliminate waste and reduce non-value added activities. The five S’s are one of the foundational tools first used by Toyota. The western world now commonly uses the English translations of those words i.e.

**Sort                      Shine                      Set in order      Standardize      Sustain**

Teledyne’s team understood the concepts but had conflicting information on implementation methodologies. While researching the best way forward the Teledyne team attended a World Class manufacturing workshop co-sponsored by SMUD the local electricity utility and the Sierra College Center for Applied Competitive Technologies. At this workshop presented by TEiM, the Teledyne staff learned about all of the concepts of a World Class Enterprise and recognized that the implementation of a Five S program would be an ideal starting point. They also recognized the need for experienced coaches to help them quickly develop a structured implementation and audit process coupled with an grass roots education program, that would allow the implementation to succeed and be sustainable.

Coaches from TEiM visited the Rancho facility and developed an education and training program designed to help Teledyne achieve its goals.

During a two phase training effort all Teledyne MEC employees were trained in the concepts of Five S, and a cross functional team additionally trained to develop and implement a Five S audit program.

The staff training featured a simulation developed by TEiM that demonstrated the benefits Five S, and how it would allow the employees to work smarter not harder. They were exposed to the Five S mantra, “A place for everything and everything in its place.” The program is now in place all MEC employees are actively involved in reducing time wasting activities. The facility is improved and the staff are embracing the concepts of working smarter, not harder

“We chose to take advantage of TEiM’s experience and knowledge to bring us up to speed quickly. Without TEiM I know we would have taken a much longer time to implement and therefore not reaped the benefits as soon. I am confident that because of the great foundation instigated by TEiM will be able to sustain and continue to improve. The ROI has been well worth it.”

-Kevin Arnold Clean Room Manager

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