

Skills Productivity Competitiveness Profitability

<1> The Customer.

The Host
GKN Aerospace specialises in the design, testing, manufacture and assembly of a diverse range of aerospace composite and metallic structures, transparencies and components at their factories in Cowes, Luton, Portsmouth and Kinas Norton.

The Supplier
Gardner Aerospace-Basildon, Ltd produces a high variety of aerospace components in its 800 m² production facility, 500 m² Treatments and NDT and 400 m² repair station. 125 employees generated £10.8m turnover for year ended August 2007.

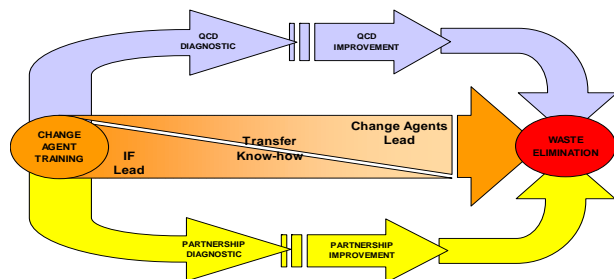
<2> The Customer's Need.

The Host
As a key supplier Gardner was invited to join GKN's National Supply Chain Group. GKN's need was for Gardner to improve its on time delivery to achieve >95% Delivery Schedule Achievement to lift their Bronze performance to Gold.

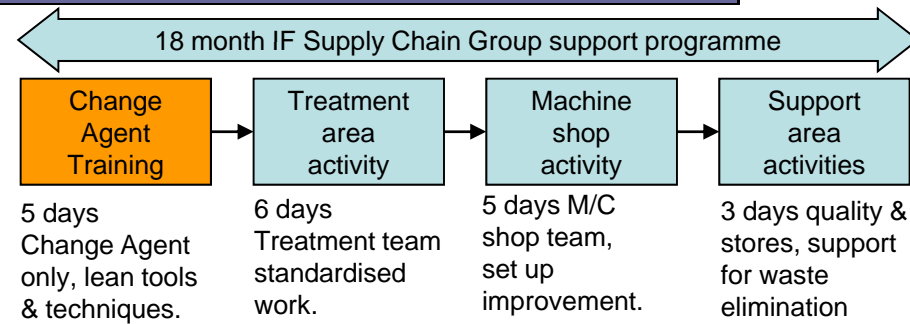
The Supplier
Gardner identified its treatments area as the best place to start the activity with a target to improve process lead time. This was to be followed by set up improvement in the machine shop. No measures were in place.

<3> The IF Solution.

Supply Chain Groups provided a structured framework approach bringing together customers and suppliers from different tiers in the Supply Chain. Developed by Industry Forum, the 3 pronged approach enables individual businesses to see real gains in Quality, Cost, Delivery (QCD), and to improve the level of partnership between companies, alongside the development of improvement skills capability within each company.




<4a> Overview of Activity Structure.



<4b> Description of Skills to Profitability Link

Treatment Area
Measure selected : Process lead time. Data was captured and Visual Management used to progress work through the area.

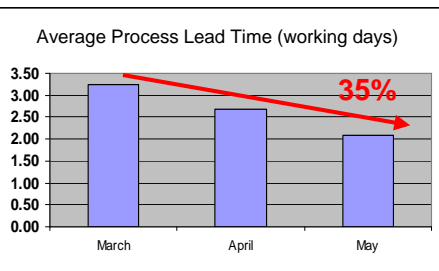


Workplace organisation used to eliminate wasted time looking for material, tools and consumables.

Standardised work identified waste due to walking and anodiser idle time. New layouts reduce both.

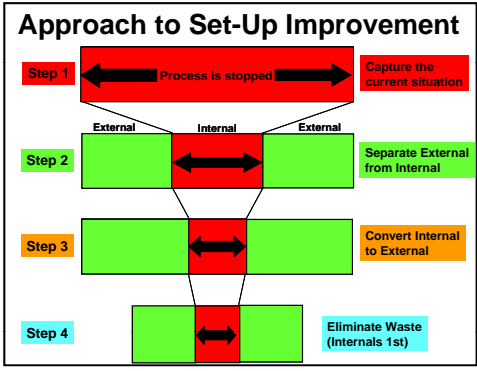
The combined effect reduced the process lead time by 35%

Average Process Lead Time (working days)



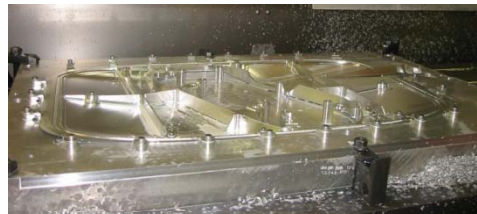
A further benefit was that the work in progress in the treatment area was reduced by 11513 parts over a 3 month period.

Machine Shop Area
Measure selected : change over time Data captured by video recording



Visual Management was used to identify next job to set up.

Standardised work identified waste due to walking and transporting fixtures, this was resolved by creating fixture storage near the machine. A solution to swarf and coolant removal was also developed to save time.



The combined effect reduced the set up time by 55%

<5> Return on Stakeholders' Investment.

Seven Measures of QCD Competitiveness

	Quality	Cost	Delivery
Not Right First Time	●	●	●
Delivery Schedule Achievement	○	●	●
People Productivity	●	●	●
Stock Turns	○	●	●
Overall Equipment Effectiveness	○	●	●
Value Added Per Person	●	●	●
Floor Space Utilisation	●	●	●

● Primary impact on the process ○ Secondary impact on the process

Measure	Before	After	Improvement
Not Right First Time (PPM)*	13062	7191	45%
Delivery Schedule Achievement (%)	40%	100%	60%

* Partnership activity addressed quality issues

Other Measures against customer need	Before	After	Improvement
Process Lead Time (days)	3.24	2.09	35%
Changeover time (minutes)	55	25	55%
GKN vendor rating (Grade)	Bronze	Gold	Recognised

Financial Benefits
Estimating the value of the 11000 components 'liberated' from the treatments area, conservatively, at £10 each gives a one off cash benefit of £110,000.

The setup reduction of 30 min. per set up yields 1 hour per part as there are two operations. This yields 10 hours per week evaluated at £35 per hour, an additional £350 per week or £17500 pa. This can be repeated on other parts.

Upskilling for Sustained Continuous Improvement
The Change agent and team leaders are now cascading the know how to more personnel by rolling out the activity to other areas.

Company Testimonial
"The main thing was that all the people involved bought into it with enthusiasm and motivation. They made good improvements and savings. By continuing to improve productivity like this we can go on making ourselves and our customers even more competitive and profitable, securing all our futures."
Mark Pittman (M.D)