

# Qual Case Study 02

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Annual saving	£	38,700	ROI	19:1
Client details	Employees	94	Engaged	6
Project Details	Process review	2 days	Install / review	1 day
Improvement	714%	reduction in assembly cost		
Improvement	392%	reduction 1 piece assembly time		

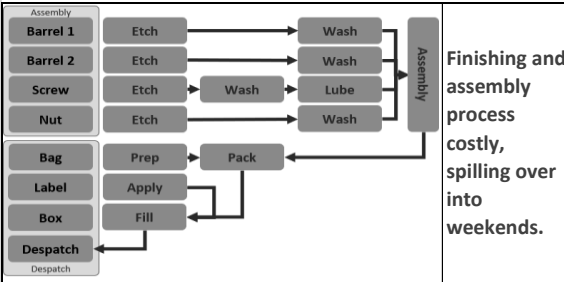
## 1 - Describe the problem

Defects	D	30% in lube process	<b>8-Wastes</b>
Overproduction	O	N/A	
Waiting	W	Bottlenecks waiting for process	
Non-utilised talent	N	Potential to generate improvement ideas	
Transport	T	In-between processes	
Inventory	I	Poor stock control during assembly	
Motion	M	Between and during processing	
Excess-processing	E	Additional processing - crept in	

## 5 - Implement the solution

No.	Detail / Actions	Owner	Date
1	Assembly fixture designed and built	AA	--/--/--
2	Assembly fixture modified - MKIII currently	BB	--/--/--
3	Line re-laid - flow improved	CC	--/--/--
4	One piece flow implemented	DD	--/--/--
5	Benches relocated to improve ergonomics	EE	--/--/--

## 2a - Describe the process - current state



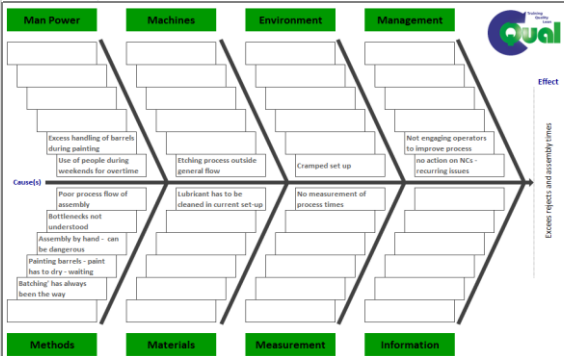
## 2b - Describe the achievable - future state

Redesign process to improve lead time. Build in 'one-piece-flow'. Initial target to remove 33% of assembly processing time. Potential to impact 'overtime' hours requirement'.

## 6 - Review and evaluate the results

1	1 piece assembly processing time was:	102.00	secs
1	After improvements, time is:	26.00	secs
	Resulting in a reduction in assembly time of:	74.5%	%
2	Bottleneck has now moved to packing area.*		
3	Annual labour cost to produce 12 batches of assemblies was:	£	45,000
4	After improvements, cost is:	£	6,300
5	The new assembly fixture is designed to spot errors prior to production and thus eliminate mistakes. <b>Result = Zero customer complaints.</b>		
6	* Packing area has since been incorporated into assembly line to allow 'real time' pack. Resulting in further improvements.		

## 3 - Identify the root cause(s)



Management thinks they have set the process up the best they can. 'Overtime' seen as a 'good way' to get the job done as it doesn't interfere with weekly schedules. We've always done it this way. Batching.

## 4 - Develop a solution

1	Team to identify and provide solutions to bottlenecks.
2	Redesign layout to improve 'workflow'.
3	Design fixture to speed eliminate some waste from process whilst improving safety.
4	

## 7 - Reflect & act on improvement process. Standardise.

1	There are similar process that would benefit from a review
2	Bottleneck has now moved to packing area, requires a review. *
3	Clear working procedures to be written.
4	Fixture TPM required including identifying critical spares.

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