HOW SIGNIFICANT HAS THE INTRODUCTION OF TOTAL QUALITY MANAGEMENT BEEN IN SUPERKING TYRES LTD. TO IMPROVE THEIR PROFITABILITY?

NAME: AAGMAN DEWAN

WORD COUNT: 3520

ABSTRACT: 134

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Superking tyres a leading tyre manufacturer in Sahibabad, was facing increasing tyre tyre rejection and increasing production costs. This was primarily on account of the traditional quality control method followed by the company.

In the year 2014, the company decided to implement TQM through a 3 stage process by reducing rejection rates, appointing Internal auditors and improving consumer satisfaction.

All the three stages together ensured increased profitability for the company from 2013 to 2015 and thus my Reearch Question is "How significant has the introduction of Total Quality Management been in Superking tyres ltd. to improve their profitability?"

I analysed the effectiveness of TQM using tools such as Lewin's force field analysis amd SWOT analysis which further enabled me to conclude that the implementation of TQM was a favourable decision for the company.

WORD COUNT - 134

AAGMAN DEWAN

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I would like to thank and acknowledge Mr. ML Dhawan the owner of Superking tyres for sharing such confidential business information with me and for providing me with all the necessary documents.

Introduction

Superking tyres ltd. was established in the year 1982 at Sahibabad, with a small venture for making Implement Tyres and tubes. Gradually, with the help of technological advancements, high quality materials and latest machinery, SUPERKING started growing. Now, it produces Tyres and tubes for various applications such as Two wheelrs, Cars, Van, Jeep, Utility vehicles, Go Kart,etc. It has developed markets not only in India but globally too. It is exporting tyres to USA, Germany, Poland, Turkey, Mala.ysia, etc. Superking boasts of many awards with the major ones being the CAPEXIL export award for five consecutive years (2011-2015) and the AIRIA product award.¹

While new firms are emerging fast the competition is tough as ever. Superking tyres had been facing reduced profits and decreasing sales for 3 consucutive years so they decided to implement total quality management as a strategy in the year 2014, to overcome the losses and to find leaks in the firm's operation process. ²

Total Quality Management can be defined as "The continuous process of reducing or eliminating errors in manufacturing, streamlining supply chain management, improving the customer experience and ensuring that employees are up-to-speed with their training." Total quality management aims to hold all parties involved in the production process as accountable for the overall quality of the final product or service. The strategy stated above can be best exemplified through the essay on Superking tyres ltd.

Superking tyres thus created a three step plan under TQM to improve their performance as well as profitability. The three steps are as given below

- 1. Reducing the rejection rate of tyres
- 2. Appointing internal auditors
- 3. Improving consumer satisfaction levels

These 3 measures played a major role in impacting the profitability and sales at Superking Tyres. Thus, through this essay I aim to answer the question "How significant has the introduction of Total Quality Management been in Superking tyres ltd. to improve their profitability?"

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¹ "Agricultural Tractor Tyres Supplier, Agricultural Tractor Tyres Exporter, Delhi." *Agricultural Tractor Tyres Supplier, Agricultural Tractor Tyres Exporter, Delhi*. Web. 22 Nov. 2015.

² Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process.

³ "Total Quality Management (TQM) Definition | Investopedia." *Investopedia*. 2010. Web. 15 Jan. 2016.

Each of the 3 measures stated above have been analyzed below in much details of both the pre and post TQM period to understand the effectiveness of each of the measures.

1. Reduction In rejection rates

Prior to the Implementation of TQM⁴, Superking followed the traditional quality control⁵ methods. This would mean that the company had an appointed quality control inspector who would check the quality of the products at the end of the production process and if the quality standards were not met, he would reject the entire lot of tyres.

The quality parameters for tyres were predecided and available with the quality inspector alone and not shared with the employees engaged in production.

The acceptable quality norms for the tyres were as follows:

Tyre weight - 6 kg with an allowed standard deviation of ± 0.2 Tread weight - 3.3 kg with a standard deviation of ± 0.1 Tyre width - 260 mm with a standard deviation of $\pm 0.5^6$

If the lot of tyres did not meet the above specifications then the entire lot would be rejected by the QC inspector. This not only resulted in huge losses to the company but also impacted the motivation levels of the employees at the shop floor negatively.

However, post Implementation of TQM in 2014, there was a major revamp to the entire process of quality check on the shop floor. Now all the employees at the shop floor were made aware of the quality requirements and trained to conduct quality checks at the beginning, in the middle and at the end of the production process. ⁷

There were certain other changes also made to the process of quality checks conducted in order to reduce the rejection rates of tyres as given below:

• Introduction of separate two roll mills ⁸— before the implementation of TQM a common two roll mill was used for every compound of tyre which led

⁴ Hoang, Paul. "Total Quality Management." *Business and Management*. 3rd ed. Victoria, Australia: IBID, 2014. 501. Print.

⁵ Hoang, Paul. "Quality Control." *Business and Management*. 3rd ed. Victoria, Australia: IBID, 2014. 496. Print.

⁶ Appendix 10: Quality Control Cards introduced by Superking

⁷ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

 $^{^{\}rm 8}$ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

to mix ups between different compounds of tyres and it was noticed that tyres of 444 compound were present in the 408 compound tyres and thus these tyres were rejected by the QC inspector. There was no clear process of seggregation of compounds followed.

However, after the addition of new two roll mils, post implementation of TQM the mix ups were no more taking place as separate two roll mills were used for every compound of tyres.

• **Different colour indication for every tyre tread**⁹ – before the implementation of TQM all the treads were kept together without any indication about the casing compound of the tyre tread, this lead to wrong tyre treads being used in the tyre.

However, post TQM they decided to give colour coding to each type of tyre and these were kept according to their colour codings. This helped reduce the mix-ups between tyre treads thereby reducing the scrap.

- Quality Control Cards ¹⁰— Control cards were introduced post TQM at every step of the production process in order to ensure that the tyre matches the required standards. Only if the tyre matches the required standards is it allowed to move ahead to the next step of production¹¹. This helped bring down the rejections of products at end stage drastically.¹²
- Cut Tyre Analysis ¹³— It was discovevered that superking was shipping tyres with higher weights than required, this lead to increased costs as more material was being used and thus reducing profits. After the implementation of TQM they introduced a system called the cut tyre analysis which allows them to check the weight of the tyre before it is packed and shipped. This ensure that the tyre was made of best quality with the least material used, thus reducing costs.

 $^{^{9}}$ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

¹⁰ Appendix 8: Quality Control Cards introduced by Superking

¹¹ Hoang, Paul. "Production." *Business and Management*. 3rd ed. Victoria, Australia: IBID, 2014. 478+. Print.

¹² Appendix 4: Objectives and Targets Document

¹³ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

- New Cloth sheets ¹⁴- Cloth sheets of non-corrosive metals have now been implemented on the floor to keep the tyres from trapping lesser dust, thus improving their quality and durability. Earlier there was no layer of protection from ground and the tyres were directly in contact with the dust particles on the ground which took a toll on their quality.
- 3D Tyre Inspection Laser ¹⁵— Before the implementation of TQM the dimension of the width were checked manually just to get a general idea of the tyres specifications just by touching it. This wasn't very accurate and it took a lot of time for the employees to perform this task on each and every piece of tyre so post the implementation of TQM superking installed 3D Inspection lasers to keep track of the tyre specification. The 3D vision system uses software to search for light-to-dark transitions created by the laser line as it scans the object. A 3D image is created from combining the results of determining the width and height of the laser line as it scans the object, using smart 3D vision systems to inspect tires during the component preparation, tire assembly, and the finishing processes ensures the quality and consistency of the finished tire.
- Introduction of Process Flow Charts ¹⁶— Post TQM, process flow charts were introduced to streamline the quality checking process. A process flow chart was stuck on every stage of the production process so that the employees know what they are supposed to do. They follow the Bureau of Indian standards (BIS) section 63¹⁷. This standard is now available with every employee so that they can check the quality requirements at every stage of production and if found deviating from the same, they have now been authorized to raise an alarm and then reject the same. This has helped in reducing the costs drastically as it is better to reject products during the process instead of post the completion of the entire process due to the value addition being made to the product. ¹⁸

Superking tyres thus now moved from the traditional quality control systems to quality assurance by following the desired BIS standards and by involving and engaging workers at all stages of production slowly had a successful transition to the process of TQM . This in turn resulted in improved motivation of workforce as well.

¹⁴ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

¹⁵ Appendix 8: A picture of The 3D laser system used by Superking

¹⁶ Appendix 7: Appendix 9: PROCESS FLOW CHART

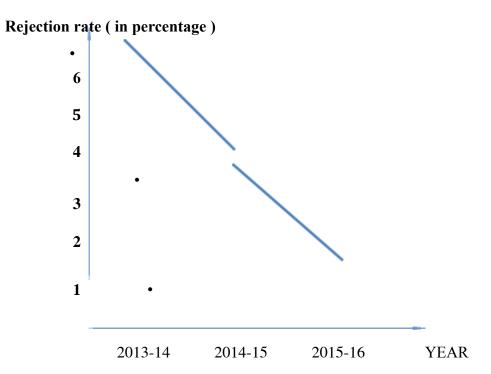
¹⁷ **Appendix 3: ISO Certification Document**

 $^{^{18}}$ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

Post implementation of the above changes, it is now clearly seen that the rejection rates which were as high as 6.2% in 2013 have now come down to 1.10% in 2015 as depicted in the graph below.¹⁹

FIGURE 1

Reduction in Rejection Rate Graph²⁰



2. Appointing Internal Auditors and Introduction of Weekly And Qauterly Meetings

• Review of objectives and targets with individual employees

Setting objectives towards the achievement of targets is a standard practice followed by any organization.

Superking too followed the practice of setting objectives and targets for their employees since the beginning and they expected their employees to achieve the targets.

An objective and targets document was created for this purpose²¹ and the supervisor would note the progress of an employee towards acheivement of

¹⁹ Appendix 4: Objectives and Targets Document

²⁰ Appendix 4: Objectives and Targets Document

²¹ Appendix 4: Objectives and Targets Document

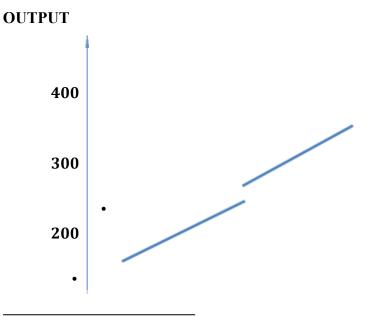
the target on that sheet. However this document just served the purpose of record keeping and was never reviewed with the employees. The employees thus never got to know the mistakes and areas that called for an improvement.

Post implementation of TQM, this document is reviewed by the supervisor on a monthly basis with the individual employees. This has improved the employees motivation as earlier when the products were rejected the employees did not get any feedback on what they were doing wrong, thus leaving them demotivated but now after the review meeting with the employees they know what to improve upon and so they feel motivated.

Also, If the employees achieve their targets their names are posted on the office board for recognition as best employee and by doing this the employee motivation has improved drastically which inturn has helped improved the quality of production as well. This proves Herzberg's motivational theory²² which clearly states that when 'motivators' such as recongition are met in an organization, the employee is further motivated to perform to his best ability. This increases their productivity²³ and efficiency which can be clearly seen through the increase in production graph drawn below.

FIGURE 2

Increase In Production Graph²⁴



²² Hoang, Paul. "Herzberg." *Business and Management*. 3rd ed. Victoria, Australia: IBID, 2014. 176. Print.

²³ Hoang, Paul. "Productivity." *Business and Management*. 3rd ed. Victoria, Australia: IBID, 2014. 478. Print.

²⁴ Appendix 4: Objectives and Targets Document

2013-14 2014-15 2015-16 **YEAR**

As is clearly seen from the graph, the production figures increased from 135 units to 325 units from the year 2013-14 to 2015-16 clearly indicating an increase in productive efficiency post implementation of TQM in 2014.

- **Management review meeting initiated** ²⁵: A management review meeting (MRM) has been initiated post TQM. It is held every 4 months where all members of the management review committee get together to discuss the planned agenda of the business. The general agenda of MRM meetings are as follows: ²⁶
 - a. Follow up action from previous review meeting
 - b. Review of internal audit reports
 - c. Customer feedback and complaints
 - d. Process performance and product conformity
 - e. Status of preventive and corrective actions
 - f. Change that could affect the quality management system
 - g. Recommendation for improvement
 - h. Quality policy and objectives
 - i. Resource requirement
 - j. Other business points.

3. Consumer Satisfaction

Edwards Deming who is known as the father of modern quality movement once said reducing variation and improving quality is a never-ending cycle of design, production and delivery, followed by surveying customers and then starting all over again. ²⁷

Superking tyres is an ISO certified company. Being an ISO certified company is definitely an added advantage to any business. The following are some of the advantages to a business by being ISO certified:

Some of the benefits to your organization:²⁸

²⁵ Appendix 2: Extracts from Management review meeting document

²⁶ Appendix 2: Extracts from Management review meeting document

²⁷ "Total Quality Management." Web. 22 Dec. 2015.

²⁸ "ISO 9001 - Benefits of ISO 9001certification, ISO Accreditation." *ISO 9001 - Benefits of ISO 9001certification, ISO Accreditation*. Web. 13 Feb. 2016.

- Provides senior management with an efficient management process
- Sets out areas of responsibility across the organization
- Mandatory if you want to tender for some public sector work
- Communicates a positive message to staff and customers
- Identifies and encourages more efficient and time saving processes
- Highlights deficiencies
- Reduces your costs
- Provides continuous assessment and improvement
- Marketing opportunities

Some of the benefits to your customers:

- Improved quality and service
- Delivery on time
- Right first time attitude
- Fewer returned products and complaints
- Independent audit demonstrates commitment to quality

Being an ISO certified company²⁹ it is mandatory for Superking to use customer feedback forms 30 as it is one of ISO's requirements. Though Superking focussed towards improving their quality processes, they gave very little importance to aspects of customer satisfaction earlier. 31

However, post TQM, the importance of customer satisfaction was emphasized at the company and strict measures were taken towards improving the same. Some of the measurs taken in this direction were as follows:

- Hiring a proffesional tele-marketer ³²– prior to the implementation of TQM customers complained that their calls went unattended, some complained that the staff was very rude and misbehaved over the phone. However after hiring the tele-marketer all the consumer complaints were recorded and were reported and responded in a day's time. This played a major role in increasing consumer satisfaction.
- Introduction of support services ³³– Post TQM, dedicated personnel have been deputed to provide all the necessary support post sale of products. The

³⁰ Appendix 6: Customer Feedback Forms

²⁹ Appendix 3: ISO Certification Document

³¹ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

³² Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

³³ Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

customer thus now has a dedicated department to approach in the event of any complaints. Quick resolution of complaints has helped improve the relationship between the company and the customers and this inturn has improved the customer loyalty as well.

With all these changes in the employees mindset and the structural changes brought into the organization, the customers are much more satisfied with the firm than before and this is clearly reflected in the positive customer feedback that is received from customers post implementation of TQM.

Below is a table that clearly depicts the increased consumer satisfaction levels from 2013 to 2014 ie Pre to post TQM period.

A comparsion of customer feedback forms received by Superking tyres by the same consumer for 2013-15

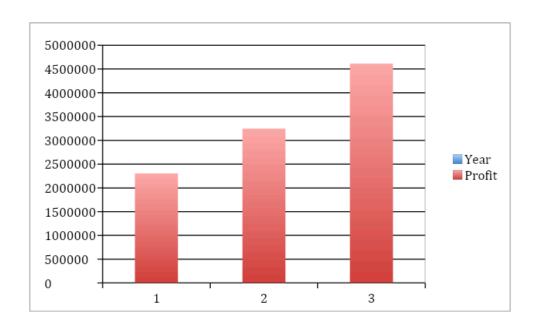
					Feed	back collecte	d from Anand	tyres in 201	<u>[4[1]</u>
Activities	Excellent	Very Good	Good	Poor	Activities	Excellent	Very Good	Good	Poor
Respons		,			1. Respons		, and		
To your					e To your				
nquiry					Inquiry				
. Respons					2. Respons				
to					e to				
cceptance					acceptance				
f order					of order				
. Supply					3. Supply				
f material					of material				
s per					as per				
chedule					schedule				
Onallier					4.				
. Quality f product					Quality of				
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ondition					condition				
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ackaging					packaging				
					6. Reasona				
teasonabili					bility of				
y of price					price				
. Response					7. Respons				
fter					e after				
elivery					delivery				
Satisfacti					8. Satisfact				
n with					ion with				
verall					overall				
erforman					performan				
e	l		l	1	ce		I	I	1

In 2013 the feedback from anad tyres was mostly ranging from good to very good, however post TQM in 2014 from the same consumer , we can clearly see that most of the criterions were ranging between very good to excellent. Increase in consumer satisfaction levels since the implementation of TQM can be clearlty seen in the above comparative table.

Thus the 3 major measures adopted by company post TQM thus resulted in improved profitability for the company as depicted in the table and graph graph:

FIGURE 3³⁴
PROFITABILITY TABLE FROM 2013-2015

YEAR	PROFITS (in RS.)
2013	2,300,140
2014	3,243,860
2015	4,612,754



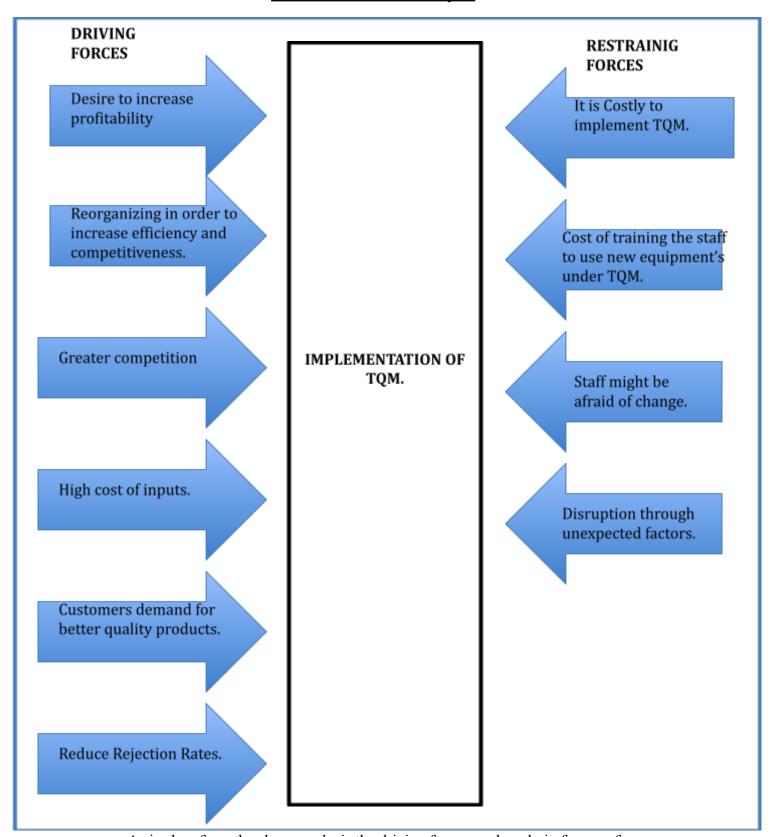
Thus as is clearly seen from above graph the profitability at superkings registered a significant increase post implementation of TQM from Rs. 2,300,140 to Rs. 4,612,754. This clearly indicates that this step taken by the company yielded profitable results.

In order to further guage the effectiveness of the strategy to implement TQM at Superking tyres ltd. I used Lewin's force field analysis to determine the driving and restraining forces for this change.

15

³⁴ Appendix 1: Profit and Loss statement

Lewin's Force Field Analysis



As is clear from the above analysis the driving forces are largely in favour of implementation of TQM.

I further conducted a SWOT analysis to understand the strengths and weaknesses that are currently prevalent in the company post implementation of TQM and also to understand the opportunities and threats that are likely in future, to arrive at a conclusion on whether implementation of TQM at Superking tyres was indeed beneficial for the company.

S.W.O.T ANALYSIS

Strengths

- Superking is an established brand name in the domestic market so it has an edge over it's new competitors.
- Latest technology is used by Superking to ensure efficient production process.
- Efficient and qualified managers
- Efficient and productive labour force

Weaknesses

- High cost of raw material such as rubber and crude oil
- Lesser sales promotion activities as compared to competitors

Opportunities

- The automobile industry is growing with time in India so an increase in sales is expected.
- Increase in income level
- Focus from the government in improving the road infrastructure
- Increase in income level
- Rising living standard
- Women drivers have increased
- Rising rural demand
- Rise in the working and middle class income.

Threats

- Continuous increase in price of rubber, rubber accounts for one third of total raw material costs.
- Cheaper imports of Tyres, especially from China, selling at very low prices, havebeen a challenge for Superking.
- China now constitutes around 5% of market share.
- High Inflation rate.
- Smaller players that do not fulfil international standards
- Lower GDP rate
- High raw material costs have become a burden on the firm as they cannot pass on the entire cost on the consumer due to the highly competitive nature of the industry.

Conclusion

Through this essay I tries to analyze"How significant has the introduction of Total Quality Management been in Superking tyres ltd. to improve their profitability?" by outlining the impact total quality management has had on Superking tyres profitability.

The Introduction of TQM can be a right decision only if it is implemented at the exact time when the business needs it. As we know TQM is a costly method because major changes to the production processes are required, these are costs to the business and if TQM did not work for Superking it would have been a very costly decision for them leaving them in huge losses. Therefore, proper implementation of TQM was necessary for Superking. The Introduction of TQM cost a lot of money to Superking. This extra overhead cost might have distorted their cash flow if the strategy did not work as planned. The money used in the implementation of TQM could have been used for other purposes, which might have proved to be more profitable for Superking.

In terms of risk factor, implementing TQM was a risky decision as it was very costly and if the strategies used under TQM failed Superking would maybe have to cut down on their operation, they might have lost their market position, they might not even have the money for the daily expenses if TQM failed.

Through this report, I tried to evaluate the effectiveness of TQM at Superking by analyzing the 3 major measures taken by the business in this direction to improve profitability. I analyzed the measure under the heads of reduction in rejection rate, appointment of internal auditors, and increase in consumer satisfaction. The analysis clearly revealed that the rejection rate fell from 6.2% to 1.1%, production increased from 135 units to 325 units and consumer satisfaction registered a significant improvement.

I analyzed each aspect under TQM namely reduction in rejection rate, appointment of internal auditors, and increase in consumer satisfaction. The analysis clearly revealed that the rejection rate fell from 6.2% to 1.1%, production increased from 135 units to 325 units and consumer satisfaction registered a significant improvement. The strategy to implement TQM was very beneficial for the company and resulted in increase profitability from Rs. 2,300,140 in 2013 to Rs. 4,612,754, which is a remarkable increase of 100.542%.

To further attest the facts, I also used tools such as Lewin's force field analysis and SWOT to arrive at a final conclusion. Post analysis of the tools, I can definitely conclude that this decision to implement TQM was a profitable one for Superking tyres.

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Appendices

Appendix 1: Financial Data of Superking tyres

PROFIT And LOSS Statement for 2013

SUPERKING MANUFACTURERS (TYRI Statement of profit and loss account for the year	E) PVT. LTD. ended 31st March 2013	
	Note	31st March 2013 (Rupees)
I. INCOME		
1 Revenue from operations (gross)	22	625,316,545
2 Less : Excise duty 3 Revenue from operations (net)		40,275,255
		585,041,290
II. OTHER INCOME	23	23,076,953
III. TOTAL INCOME (I + II)		608,118,242
IV. EXPENSES		
4 Trading Purchase		18,798,734
5 Cost of materials consumed	. 24	463,722,190
6 Changes in inventories 7 Other Manufacturing Expenses	25 26	(8,659,828)
8 Employee benefits expense	27	76,722,438
9 Other expenses	28	8,854,065 24,677,800
Total		
Total		584,115,398
V. PROFIT BEFORE INTEREST , TAX, DEPRECIATION (III-IV)		24,002,844
10 Finance costs 11 Depreciation	29 14	11,463,869
VI. PROFIT/(LOSS) BEFORE PRIOR PERIOD ITEMS AND TAX	14	8,535,596
		4,003,380
12 Prior Period Expense		(<u></u>
PROFIT/(LOSS) BEFORE TAX		4,003,380
VII. TAX EXPENSE		
13 Current tax		2,059,375
14 Income Tax Adjusted 15 Deferred tax Asset		(356,135)
III. PROFIT/(LOSS) FOR THE YEAR (VIII - IX)		
		2,300,140
IX. EARNINGS PER EQUITY SHARE	30	
15 Basic 16 Diluted		33.07
		33.07
For SUPERKING MFRS. (TYRE) PVT. LT	D.	
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Direc	tor	
13. 12. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

PROFIT And LOSS Statement for 2014

SUPERKING MANUFACTURERS (TYRE) Statement of profit and loss account for the year of	KING MANUFACTURERS (TYRE) PVT. LTD. and loss account for the year ended 31st March 2014							
	Note	31st March 2014 (Rupees)						
. INCOME								
1 Revenue from operations (gross)	22	618,364,374						
2 Less : Excise duty		36,609,367 581,755,007						
3 Revenue from operations (net)		361,733,007						
I. OTHER INCOME	23	14,048,404						
II. TOTAL INCOME (I + II)		595,803,411						
II. TOTAL INCOME (I + 11)								
V. EXPENSES		18,548,070						
4 Trading Purchase 5 Cost of materials consumed	. 24	415,007,606						
6 Changes in inventories	25 26	12,841,092 85,659,008						
7 Other Manufacturing Expenses	26	10,252,785						
8 Employee benefits expense 9 Other expenses	28	27,333,296						
		569,641,857						
Total								
V. PROFIT BEFORE INTEREST , TAX, DEPRECIATION (III-IV)		26,161,554						
10 Finance costs	29	11,715,970						
11 Depreciation	14	9,456,343						
/I. PROFIT/(LOSS) BEFORE PRIOR PERIOD ITEMS AND TAX		4,989,241						
12 Prior Period Expense								
PROFIT/(LOSS) BEFORE TAX		4,989,241						
/II. TAX EXPENSE								
		2,022,700						
13 Current tax 14 Income Tax Adjusted		80,187						
15 Deferred tax Asset		(357,506)						
III. PROFIT/(LOSS) FOR THE YEAR (VIII - IX)		3,243,860						
	30							
IX. EARNINGS PER EQUITY SHARE		20.50						
15 Basic		32.50 32.50						
16 Diluted								
120	TD							
For SUPERKING MFRS. (TYRE) PVT. L	IU.							
De Dela R. Del	all a							
Direc	ctor							
Dile								
		E .						

PROFIT And LOSS Statement for 2015

SUPERKING MANUFACTURERS (TY Statement of profit and loss account for the ye		
	Note	31st March 2015 (Rupees)
I. INCOME		
Revenue from operations (gross) Less': Excise duty	22	649,180,056 42,083,547 607,096,509
3 Revenue from operations (net) II. OTHER INCOME	23	5,543,774
	25	612,640,283
III. TOTAL INCOME (I + II)		012,040,283
IV. EXPENSES 4 Trading Purchase		24,656,722
5 Cost of materials consumed	24	410,663,996
6 Changes in inventories	25	27,640,760
7 Other Manufacturing Expenses 8 Employee benefits expense	26 27	79,066,489 12,752,761
9 Other expenses	28	35,223,901
Total		590,004,629
V. PROFIT BEFORE INTEREST, TAX, DEPRECIATION (III-IV)		22,635,654
10 Finance costs	29	7,235,792
11 Depreciation	14	9,380,458
VI. PROFIT/(LOSS) BEFORE PRIOR PERIOD ITEMS AND TAX		6,019,404
12 Prior Period Expense		-
PROFIT/(LOSS) BEFORE TAX		6,019,404
VII. TAX EXPENSE		
13 Current tax		1,406,650
14 Income Tax Adjusted 15 Deferred tax Asset		
VIII. PROFIT/(LOSS) FOR THE YEAR (VIII - IX)		4,612,754
IX. EARNINGS PER EQUITY SHARE	30	
15 Basic		33.07
16 Diluted		33.07
For SUPERKING MFRS. (TYRE) PVT. LTD.	
	-all	
	Director	

Appendix 2: Extracts from Management review meeting document

F-MR-07 Rev 00

SUPERKING MANUFACTURERS (TYRE) PVT. LTD., SAHIBABAD

MINUTES OF MRM MEETING

To, All Members of MRM

MRM NO - 24 Members Present:

Mr. M.L.Dhawan MD
Mr. Puneet Dhawan, Director
Mr. Avinash Tripathi
Mr. C P Singh MR
Mr.V.Ganesh

Mr.Sanjay Malhotra

Mr. Ram Babu

Mr. S.Das Gupta Mr. Mool Chand Mr. Prasanlal Mr. Subhash Suresh

The management review meeting No. 24 was held on 20/06/2015 at 3.00 PM in the office of the Plant Head and following points were discussed.

S. No.	Point Discussed	Action Required	Responsibility	Target Date
1.	Review of actions Of previous meeting.	Installation of cushion calendar for hot SQ application and fillring & flipping machine and over head hoist in E-line in curing press are kept in abeyance for time being.	Plant incharge/ Mgr.prod/ Mgr.Engg	
2.	Result of Internal audit No. 22	Last internal audit was conducted in 25 and 26 May 2015. Total No. of NC was raised 6. All have been closed subsequently.	GM.(Tech.)/ MR.	Completed
3.	Customer Feedback and complaint	Feed back on (C.S.I) reduction of customer complaint (Domestic) on tyre performance is received in regular basis. Refer CA & PA and customer complaint register. MD is also discussing overseas customer complaint and CA as and when complaint received.	Mgr. (Mkt)/Mgr. (Prod.) & GM.Tech.	On going

Director

and Product conformity	required to improve the Mfg. Process and Product Performance.	Mgr.Engg./ Plant	
	(a) Use of readymade tread cement(Mfg. Ind pg) found very effective in process and has been introduced.	Mgr.Engg./ Plant incharge	On going
	(b) Whenever any size will be picked up first tyre will be made under follow up from extruder to curing and after proper inspection it will released for further production. If needs first tyre section will be analysed.	Mgr.prod/ Mgr.Eng/ Plant incharge	On going
	There is need to improve the process in the following area. Mixing:		
	There has been acute shortage of man power in Mixing Dept. since April 15, which results in loss of compound production. On an average 12-14 workmen are coming against optimum requirement of 2.5. All out efforts are being made to improve attendance. Likely to improve once monsoon sets in.	Mgr.prod	July 2015
	cement is being applied	Mgr.prod/	On going
		(a) Use of readymade tread cement(Mfg. Ind pg) found very effective in process and has been introduced. (b) Whenever any size will be picked up first tyre will be made under follow up from extruder to curing and after proper inspection it will released for further production. If needs first tyre section will be analysed. There is need to improve the process in the following area. Mixing: There has been acute shortage of man power in Mixing Dept. since April 15, which results in loss of compound production. On an average 12-14 workmen are coming against optimum requirement of 2.5. All out efforts are being made to improve attendance. Likely to improve once monsoon sets in. Extruder: - Cushion calendar installation is kept in abeyance. Instead readymade tread	(a) Use of readymade tread cement(Mfg. Indøg) found very effective in process and has been introduced. (b) Whenever any size will be picked up first tyre will be made under follow up from extruder to curing and after proper inspection it will released for further production. If needs first tyre section will be analysed. There is need to improve the process in the following area. Mixing: There has been acute shortage of man power in Mixing Dept. since April 15, which results in loss of compound production. On an average 12-14 workmen are coming against optimum requirement of 2.5. All out efforts are being made to improve attendance. Likely to improve once monsoon sets in. Extruder: - Cushion calendar installation is kept in abeyance. Instead readymade tread cement is being applied

Production:- Production has been low the for the last few months due to less demand in export market. Likely to be improved soon. More emphasis will be given to motor cycle and three wheeler tyres which are in high demand at present	Mgr.pród/ Mr.C.P Singh	On going
QC: - Tyre building specification display is Insured. Same to be followed in curing gradually. Top priority is to be given on tyre weight control. Specification to be revised / reviewed as and when required.	GM (Tech)/. Plant Head	On going
PAT; -Training as per schedule is given by internal faculty. ENGG & MAINT:- Installation of three number of curing press (36", 40"	MR/All Functional Heads Mgr.(Engg)/ Plant incharge	On going
& 52") are in progress on top priority to meet demand of 2,3 wheeler and rear tractor tyres in the market.	monarge	
MKT: -In view of low demand in export market maximum thrust is to be given to produce two & three wheeler Tyres for quick realisation of money from Local / Domestic sale.	MD/Director' s / Plant Head	On going
FOR SUPE	RKING MFRS. (TYP	E) PVT. LTD.
		Director

			Coordination meeting between head office (Mr. C.P Singh & plant Mr. Avinash Tripathi & JaiSingh) is being held on regular basis.	Concerned persons	On going
			PUR :- Raw material inventory is satisfactory & No shortage.	Director/ Plant Incharge.	On going
			DESPATCH:- Orders are being dispatched as per scheduled given by Head Office.	Mr.C P Singh/ Avinash Tripathi/ Plant Incharge	On going
	5.	Status of corrective and Preventive action.	Process checks are recorded in control card, CA & PA in the format F-MR-13 Rev 00 & F-MR-14 Rev 00	MR/ Functional Head	On going
0	6.	Change that could effect the quality management system	At present No change is required in Quality Management System.	MR / GM (Tech)	
	7.	Review of Quality Policy & Objectives	Objective and target is reviewed every month and necessary action is taken where these are not achieved. Reduction of Scrap & seconds are being	Mgr.(prod) / All functional heads	Ongoing
			monitored regularly in view of less demand of big size tyres in export market production target is revised to 200MT/Month and to be reviewed later on		
			For Superk	ing (T.) Pv	t. Lts

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		1			
	8.	Recommendation for Improvement & the effectiveness of Quality Management system & its process	The graduate Engineers appointed in prod, tech& qc are working satisfactorly. Adherence to specification and process must be followed	MD./CEO/M gr.Engg/Mgr. Prod.	Completed
***	9.	Resource Requirement	In view of high demand of motor cycle tyres in both domestic and export market, procurement of auto/semi automatic tyre building m/c will be considered in near future.	MD/Plant Head /GM Tech/Mgr Engg	April 2015
	10.	Any other points	Since no other point was raised the meeting ended with hearty note of thanks to the chair .		
	MR		or Superking M. (T.) Pvt. Ltd.	g / Date	
	MR			g / Date	
	MR			g / Date	
	MR			g / Date	
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Director

F-MR-06 Rev 00

SUPERKING MANUFACTURERS (TYRE) PVT. LTD., SAHIBABAD

MANAGEMENT REVIEW MEETING NOTICE CUM AGENDA

To, All members of MRM

Date - 15/6/2015

MRM No - 24

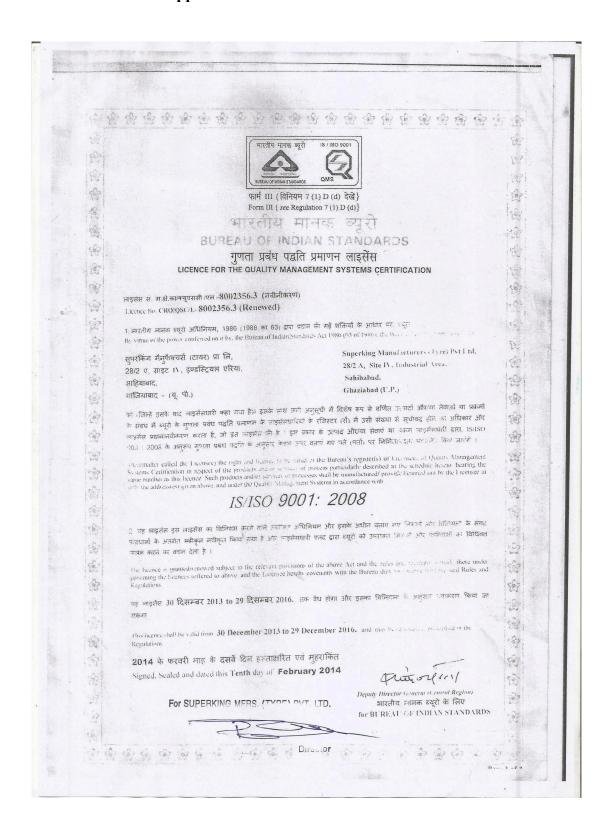
Dear Sir,

- 1) Follow-up action from previous management review
- 2) Results of internal audit
- 3) Customer feed back and complaints
- 4) Process performance and product conformity
- 5) Status of preventive and corrective actions
- 6) Change that could affect the quality management system.
- 7) Recommendation for improvement.
- 8) Quality Policy and Objectives.
- 9) Resource requirement.
- 10) Any other business.

(MANAGEMENT REPRESENTATIVE)

30

Appendix 3: ISO Certification Document



Appendix 4: Objectives and Targets Document

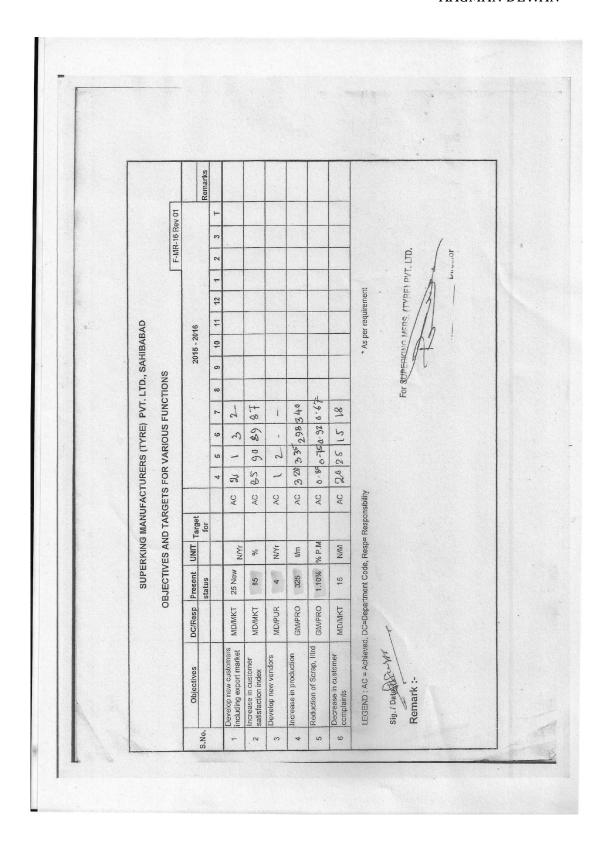
Objectives and Targets Document for year 2013-14

Objectives DC/Resp Present UNIT Target Status For Status Status			v 01	R-16 Re	F-MF					s	TION	FUNC	ous	VARI	FOR	RGETS	ID TAR	ES AN	BJECTIV	OI	
Develop new customers including export market MD/MKT 0 N/Yr AC 0 0 0 0 1 0 0 1 0 0 1 0 0 0 0 0 0 0 0		lemarks						14	13 - 20	20							Target	UNIT			Objectives
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Develop new vendors MD/PUR 0 N/Yr AC 0 0 0 0 0 0 0 0 0					0	0	0	1	0	0	1	.0	0	0	0	AC		N/Yr	0	MD/MKT	evelop new customers acluding export market
Increase in production GM/PRO 135 t/m AC 120 110 100 85 95 100 95 118 115 130 135 145				40	36	48	40	36	38	42	40	35	40	35	48	AC		%	40	MD/MKT	
Reduction of Scrap, Illrd GM/PRO 6.20% W.P.M AC 6.2 6 5.8 5.5 5.4 5.8 5.9 6.5 6.4 6.1 5.8 6.1						0		0						0	0	AC		N/Yr	0	MD/PUR	evelop new vendors
Decrease in customer complaints MD/MKT 55 N/M AC 48 52 58 60 53 60 57 65 70 58 46 52				145	135	130	115	118	95	100	95	85	100	110	120	AC		t/m	135	GM/PRO	
complaints MD/MK1 55 N/M AC 46 52 56 60 57 65 76 65 45 52				6.1	5.8	6.1	6.4	6.5	5.9	5.8	5.4	5.5	5.8	6	6.2	AC		% P.M	6.20%	GM/PRO	
* As ner requirement				52	46	. 58	70	65	57	60	53	60	58	52	48	AC		N/M	55	MD/MKT	
Sig. / Date Sig. / Date For SUPPOWER VEDS (TYPE) DVT. LTD. Director		1				יייי פון	(TVI	irro	21/21/20	SUPE	For					onsibility	= Respo	e, Resp	rtment Code	d, DC=Depar	Sig. / Date

Objectives and Targets Document for year 2014-15

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1	Develop new customers including export market	MD/MKT	10	N/Yr		AC	2	4	5	8	15	10	15	12	10	8	10	12		
2	Increase in customer satisfaction index	MD/MKT	65	%		AC	50	52	58	60	68	64	63	60	58	64	61	68		
3	Develop new vendors	MD/PUR	1	N/Yr		AC	1	2	1	0	1	1	2	0	0	1	2	0		
4	Increase in production	GM/PRO	225	t/m		AC	220	180	160	200	250	234	280	240	230	210	250	240		
5	Reduction of Scrap, Illrd	GM/PRO	3.20%	% P.W	1	AC	4.2	4	3.5	3.6	2.8	2.6	3	2.8	2.6	2.9	3	3.2		
6	Decrease in customer complaints	MD/MKT	22	N/M		AC	20	25	30	32	25	20	18	16	14	- 16	19	20		
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Objectives and Targets Document for year 2015-16



Appendix 6: Customer Feedback Forms

Feedback Received From Anand Tyres in 2014

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	In order to further improve our products / s take to give your unblased feedback or on any of the blocks. Your feedback will be	n me todov	virig aspects	of our produ	we request cts / service	you to spare a es by tick mark		
	Activities	Excellent	Very	Good `	Poor			
			Good					
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	Response to acceptance of the order							
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	4. Quality of product	N	П		П			
	5. The condition of packaging	П						
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* .	6. Reasonability of Price		니	H	H			
	7. Response after delivery							
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Feedback Received From Dalce Tyres in 2015

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M/s		*				
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In order to further improve our products / time to give you unblased feedback on any of the blocks. Your feedback will be	on the follow	viriy aspects	of our produ	we request yourts / services	u to spare a by tick mark	
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		*	5	Director	•	
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Feedback Received From Anand Tyres in 2013

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	CUSTOMER FEI	ED BACI	(FORM			
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Dear Customer, Thanks for continued confi and exceed your requirement				ave always tri	ed to comply	
In order to further improve little time to give your unbia on any of the blocks. Your	ased feedback on the follo	wing aspect	s of our produ	we request your case / services	ou to spare a s by tick mark	
Activities	Excellent	Very Good	Good	Poor		
Response to your Inq	uiry					
2. Response to accepta	nce of the order					
3. Supply of material as	per schedule	V				
4. Quality of product		10				
5. The condition of pack	aging					
6. Reasonability of Price						
7. Response after delive	ery 🔲	U.				
8. Satisfaction with over	all performance					
Any other remarks						
20.4-2013			F	233		
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for	Supering M. (T.) Pvt.	Lta				
	Authorised Sign	//				
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Appendix 7: Interview With Mr. Arun Seghal on Changes made to quality control process

1. What were the problems that Superking was facing back till 2013?

Superking was facing high rejection rates, these were much higher than it's competitors. Consumer satisfaction was another issue that Superking was dealing with as most of our customers were not satisfied with our service even though they were satisfied with the product. The costs were increasing with each passing month but there was no improvement in profits.

2. Since a huge amount of tyres were being rejected did you take any measure to reduce these?

The organization in 2014 decided to implement TQM in order to improve the quality of the production process. The majoe steps taken to reduce Rejection rates were:

- Separate two roll mills were bought to avoid mix ups between the various compound of tyres
- Quality control cards were introduced in order to check idf the quality standards were being met or not.
- Cut Tyre analysis method was introduced to ensure that all the tyres were upto their spesification.
- New tyre friendly cloth sheets were used in order prevent tyres from dust particles.

3. How did Superking work on increasing it's consumer satisfaction?

Prior to the implementation of TQM little or no importance was given to consumers by superking. Consumer satisfaction is a firm's utmost priority in order to ensure that the customers becomes loyal to them. To increase consumer satisfaction Superking tyres hired a proffesional tele-marketer who was responsible for recording every customers complaint and making sure that their querries and complaints were taken care of.

We also introduced support services post the sale of the product which gave an indication to the consumers that Superking was confident about the quality of the product they were selling.

4. What were the necessary steps Superking took in order to increase employee motivation?

Prior to the Implementation employees were not much aware of the quality standards required by the company and when their products got rejected, there was no information provided by the quality inspector as to why the product was rejected. Now post the implementation of TQM all the quality standards were shared with the employees and were given the right to reject their products by themselves. This saved us money as the product was rejected by the employees in the middle of the production process instead of being rejected once the product was finished and this improved the employees

motivation as now they new what they were doing wrong. Superking also distributed stuck process flow charts near the various production processes so that the employees could have a look at them whenever in doubt. This saved time and increased employee motivation as rather than going to the quality inspector to discuss their problems employees could now refer to the process flow chart themselves

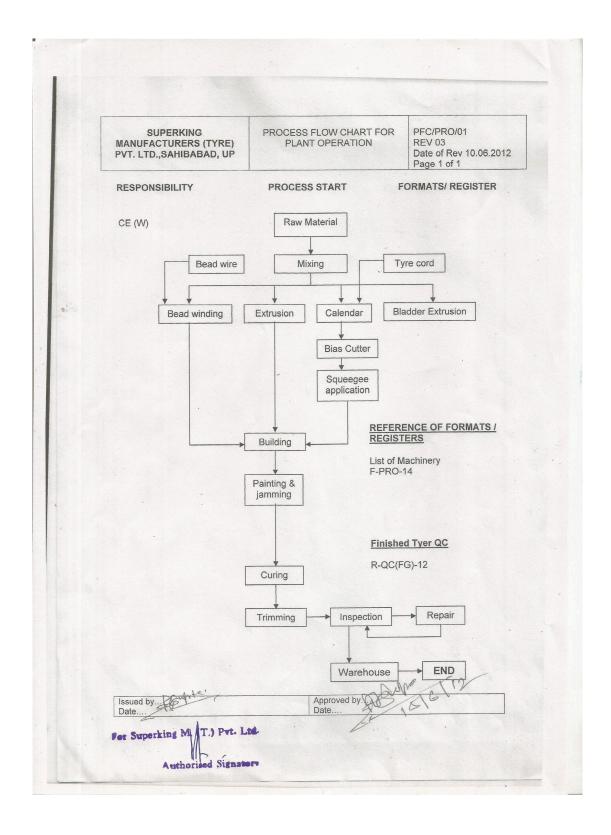
5. Has the implementation of TQM been profitable for Superking?

Prior to implementation of TQM in 2014 the company's profitability was much below the expected levels. and a dip in sales till 2012. Since the implementation of TQM Superking has been noticing reducing rejection rates every year. This has led to lowers costs for the organization, thus increasing the amount of profits earned by the organization. The profit and loss statement of Superking very evidently proves that the implementation of TQM has increased profits by a huge margin and thus it was a very profitable decision.

Appendix 8: A picture of The 3D laser system used by Superking



Appendix 9: PROCESS FLOW CHART



Drum OD 326 Width 285 (Ng) (Ng) PV. . TD., SAHIBABAD S VE PLY WIDTH VII PLY (mun) For Supervision M. (T.) Pvt. Ltd Authorised Signatory

Appendix 10: Quality Control Cards introduced by Superking