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TEA FACTORY FIRE RISK MANAGEMENT

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**Dissertation submitted in partial fulfillment of the requirements for the degree of
Master of Science industrial Automation.**

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The above candidate has carried out research for the Masters dissertation under my supervision.

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ABSTRACT

In average, 2-3 no of total fire loss claims have been recorded at tea factories in Srilanka every year. As an Insurance Engineer, we have been experienced that financial losses were considerable high amount as result of fire losses. The objective is to determine cause of the tea factory fires and manage tea factory fire risk. I have analyzed tea factory claims which were intimated from 2005-2009 at Srilanka insurance. Then Identify cause of the damage for each and every fire case and find out most vulnerable area/machine in the tea factory. Then carried out technical comparison of the effected dryers agianst the new dryer units at the current market. then propose optimal solution for identified area to avert fire risk in the tea factory. finally I have performed cost benefit study regarding my solution against Insurance premium. It has been highlighted that fires which were driven from dryers are most disasters & caused heavy financial losses according to the study. Also fire risk is high in old dryer units compared to new dryer units available at the market due to its superior construction and safety aspects. My conclusion is that Infrared detector coupled with auto alarm system is very good fire risk management solution for tea factory. According to the cost benefit analysis more than 150 million value tea factories will receive cost benefit soon after they installed I.R detector system. But below 150 million sums insured tea factories also have a gradual cost benefit but intangible nature of saving as result of installation of proposed system is enormous as one fire means huge financial loss.



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TABLE OF CONTENTS

Acknowledgement	iv
Abstract	v
Contents	vi
List of Tables	vii
List of Figures	vii
1. Introduction	
1.1 Introduction	01
1.2 Tea production process	01
2. Literature survey	
2.1 Literature review	05
2.2 Fire case studies	15
2.3 Analysis of case studies	21
3. Affected System V.S New Systems	
3.1 Conventional tea heater & dryer	23
3.2 New dryers & heaters	29
3.3 Fire vulnerability of old system	33
3.4 Suitability of new systems	36
4. Tea Factory Insurance Warranties	
4.1 Tea factory warrantees	37
4.2 Technical optimal insurance solution	47
5. Fire Risk Assessment	
5.1 Fire risk assessment	48
5.2 Risk conclusion	57
5.2 Risk assesment-Example-2	59
6. Fire Risk Management	
6.1 Suitable fire detection system for dryer	63
6.2 Recommendations	77
6.3 Lightning surge protection	78
6.4 Cost Benefit Analysis	83
7. Conclusion	91
References List	92
Annexure	93

LIST OF TABLES

	Page
Table 2.1 Summary cause of damages	20
Table 3.1 Conquest dryer specifications	31
Table 3.2 Tempest dryer specifications	34
Table 3.3 Comparison of old system & new system	36
Table 5.1 Risk classification	57
Table 6.1 Ignition Temperature of tea	66

LIST OF FIGURES

	Page
Figure 1.1 Through unit	02
Figure 1.2 Tea roller	02
Figure 1.3 Tea dryer	03
Figure 1.4 Sifting machine	04
Figure 1.5 Color sorter	04
Figure 2.1 Tea factory claim list	06
Figure 2.2 Damage power generator	10
Figure 2.3 Damage stator	10
Figure 3.1 Side view of dryer	24
Figure 3.2 Front section of dryer	24
Figure 3.3 Process air flow diagram	27
Figure 3.4 Internal tubes of heater	28
Figure 3.5 External heater arrangement	28
Figure 3.6 Conquest dryer	29
Figure 3.7 Tempest dryer	32
Figure 6.1 Spark detection Vs I.R detection	68
Figure 6.2 I.R.L 800 spark detector	74
Figure 6.3 I.R detector installation	75
Figure 6.4 Auto alarm buzzer	76
Figure 6.5 Fire hose reel	77
Figure 6.6 Lighting conductor	84