POINT 6 OF THE AGENDA

LOSS OF PROFIT RISKS

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Loss of Profits can be presented simply as a matter of protecting corporate assets and earnings. Statistics show that the average Loss of Profits loss is several times larger than the average machinery breakdown loss, but less frequent. As such Loss of Profits loss potential should be analyzed separately from Machinery Breakdown loss potentials, then combined where appropriate to prioritize exposures. Essentially, the following approach can be used to establish significant Loss of Profits potential losses:

1. Analyze business operations between plants within a division, suppliers, and customers. This can be expanded to corporate a level if divisions are interdependent. This should be summarized on a flow chart with material/service flow quantities and percentages indicated. Suppliers and receivers facilities outside the company should also be noted.

2. Loss of Profits values should then be developed at least for each division within a company and allocated to major facilities. The non variable expenses (fixed and continuing) are relatively easy to develop. These values can be collaborated against similar facilities and in house guidelines. Key locations can then be identified for further analysis.

3. Production/operation flows should then be analyzed for key equipment, systems, and service exposures that present a high frequency loss potential or extended shutdown potential. Quite often nuisance interruptions such as repetitive electrical breakdowns or key piece of equipment failure with extended repair/replacement time is overlooked or not readily apparent to operating management.

4. Once these key exposures are identified, the total interdependency, up and downstream should be measured and added to the location exposure.

5. The Loss of Profits specialist then develops various mitigation options in conjunction with the client such as:

   . Use of alternate facilities or equipment (owned or leased).
   . Contingency plans.
   . Stock piling raw materials, in process, or finished goods.
   . Temporary reduction in finished goods inventory.
   . Increase redundancy of equipment.
   . Upgrade protection, control, and instrumentation to reduce loss/outage frequency.

INTRODUCTION

This report suggests how to sell Loss of Profits for Engineering Insurances and make a profit. Loss of Profits insurance is a complex coverage as compared to property damage coverage. Most insurance companies that provide Loss of Profits coverage have specialists in this area to engineer, underwrite and adjust claims. Forms and approach vary throughout the world. Likewise, market demands and buyer knowledge of Loss of Profits varies by country.

Opportunities seem to be developing as Insureds expand globally, insurance markets open and risk managers become more aware of coverages available. A sound approach is to identify customer needs as part of a risk management approach, develop risk management alternatives, and design coverages commensurate with risk.

The IMIA Report Advance Loss of Profits Insurance (6-32) issued in 1982 and revised in 1983 addressed the delay in Loss of Profits following a CAR/EAR loss. Swiss Re recently published a comprehensive treatise entitled *Business Income Protection* which included a historical review of Business Income insurance, exposure analysis, available coverages/forms, and underwriting considerations.

DISCUSSION

Loss of Profits coverage for Engineering Insurers is well established in the United States, Canada, and to a lessor extent the United Kingdom. Other countries such as Finland have insurance companies that specialize in Loss of Profits insurance only for their industrial base sector. Those countries also have strong Engineering Insurance markets with broad coverages, large limit capacity, and integrated with other property coverages. As such these risk managers treat Engineering Insurance Loss of Profits the same whether from peril of fire or machinery breakdown. These risk managers are sophisticated buyers that want their exposures properly analyzed, alternatives developed, and cost effective loss management solutions provided. Loss of Profits for them then becomes the right amount and kind of insurance at an acceptable price.

Loss of Profits markets are less developed in most other countries as shown by comparison of IMIA statistics. Machinery Breakdown coverage is typically not as broad and management tends to treat machinery breakdown more as an operating expense item. The Loss of Profits aspect is viewed as inefficiency until a major loss occurs. It becomes more difficult to quantify these losses corporately when a company has facilities in different countries. With our machinery and process background and knowledge of repair/replacement methods technical insurers are well suited to identify these exposures and costs.

Each policy will respond differently depending on the type of policy and endorsements attached to it. Loss of Profits is referred to by various names as shown below:

Business Interruption
Business Income
Gross Earnings
Net Profit
Combined Business Interruption and Extra Expense 4.1
Gross Profits
Profits
Use and Occupancy
Consequential Damage

Each of these forms is basically designed to cover Lost Profits and to pay for continuing expenses during a shutdown or interruption of business. These forms may include or provide by separate endorsement the following extensions.

Additional Extra Expense
Rental Income
Service Interruption
Contingent Time Element
Ordinary Payroll 4.2
Leasehold Interest
Commission and Profits
Tuition Fees
Rental Income
Leasehold Interest
Commissions and Profits

Considering the various forms and customers, it is no wonder we confuse the buyer. In addition, consider the global company that tries to consolidate their insurance program from various local polices to a uniform master form. Many buyers think of Loss of Profits insurance as the financial loss sustained by the business operation. Unfortunately, it is not that simple. First, these policies typically exclude loss or damage from:

Nuclear Reaction/Radiation
Hostile or Warlike Action
Delay or Loss of Market 4.3
Idle Periods
Remote Loss

. Expediting repairs/replacement.
. Purchase of goods/services for resale from alternate supplies.
. Preplanning catastrophic failure purchasing critical spares beforehand.

6. The analysis should then be confirmed with qualified personnel of the client and adjusted as appropriate. A cost/benefit analysis should then be developed for each recommended alternative. Most insurance companies have data bases to predict frequency and severity of various loss events.

7. Reanalysis should be made on an ongoing basis, updated at least annually. Verification and adjustments should be made following actual loss events.

Accuracy of the analysis is dependent on the expertise of the Loss of Profits specialist and creditability of the data. The latter should be corroborated with production, operations, accounting and engineering personnel of the client.

This approach not only provides a valuable risk management service to business, but identifies those Loss of Profits exposures that are best handled with insurance. Coverage can then be designed to the needs and at a cost affordable to the business. The analysis will sell itself and the opportunity to provide insurance.

Loss of Profits coverage for Engineering Insurance is available in most countries though limited for certain types of business operations. For example, only nominal limits are available for Extra Expense and Expediting Expenses at electric utility plants. Experience has shown that Loss of Profits insurance can not be controlled on electric utility in the United States and Canada nor are the clients willing to pay the premium commensurate with the risk. Various forms and approaches have been developed based mostly on the UK Gross Profits System or the US Gross Earnings. Both versions were developed as endorsements to the property policy and cover the actual loss sustained. The UK Machinery Breakdown form tends to follow named equipment and the US Machinery Breakdown form provides broad equipment groups. The latter has now been integrated into most F&EC/DIC property forms. The Valued Form or "per diem" approach was also developed in the UK and is now available in most countries. Use is limited in part due to the unknown exposures and potential morale hazard. Some insurers have developed Loss of Profits forms with their own terms and conditions separate from the property policy such as in Germany. However, these Loss of Profits forms all have clauses to warrant that machinery breakdown insurance is provided, sometimes by a different insurance company.

Now let us review several scenarios:

- A business that generates revenues between points "A" and "B" is making a profit or is said to be "in the black".

- A business that generates revenues below point "B" is operating at a loss or said to be "in the red". There companies still have "Loss of Profits" potential from fixed and continuing expenses.

- Some businesses operate on a non profit basis, or point "B". These businesses must generate enough income to cover their variable expenses and fixed expenses to provide service or product on an ongoing basis. Examples of these businesses are public schools, universities, and hospitals.

- Some business have broad and redundant distribution facilities that will not lose sales, but will incur Extra Expense to meet customer orders. This type of loss generally falls between points "A" and "B".

- Some businesses, such as speciality mining risks likewise will not lose sales because they monopolize their industry and as such will incur Extra Expense only.

- Finally, some business may want to incur Extra Expense beyond point "A" to satisfy and retain customers.

Each of these elements must be understood by the buyer before we can establish a need. We confuse the buyer sometimes with insurance terminology as shown in the exhibit on the next page.

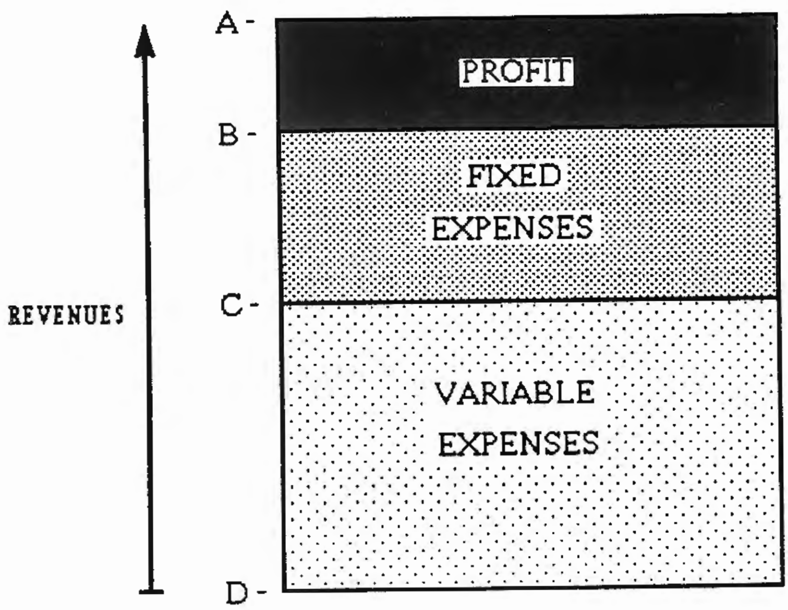
Furthermore, Loss of Profits insurance is not designated to cover variable expenses or non continuing expenses such as the following:

Raw Materials
Fuel & Power for Production Equipment
Packaging Materials 5.1
Commissions
Discounts to Customers
Returns of Unacceptable Products

In reality there are other non recoverable losses, such as listed below:

Loss of Market/Customers
Loss of Research/Product Development
Loss of Key Employees Who Do Not Return to Work 5.2
Loss Due to Self Retention
Involuntary Conversion of Assets to Cash
Increased Insurance Costs Due to Poor Loss Experience

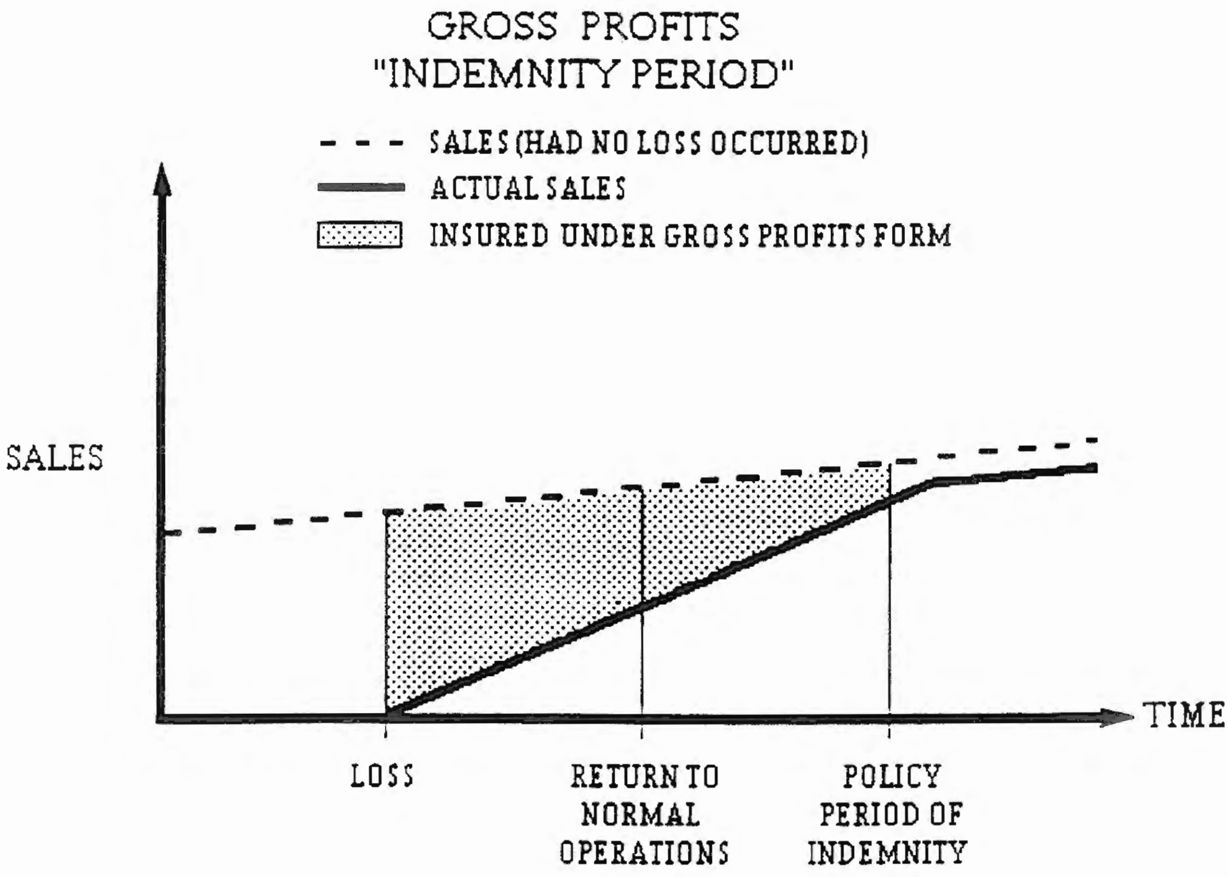
The model shown below can be used to visualize Loss of Profits exposure. The terms should then be expanded and translated into terms understood by the client.



5.3

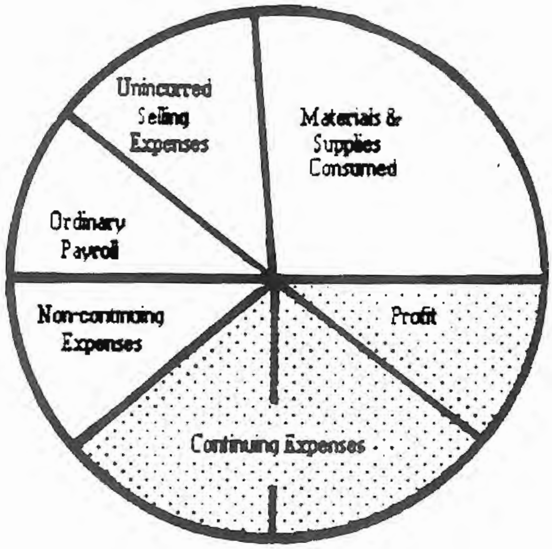
With the above in mind let's briefly review how the basic UK Gross Profits and US Gross Earnings form would respond to a Loss of Profits event. Please refer to the exhibits below:

> UK Gross Profits form generally has an indemnity period of one year and will include fixed expenses and net profits from loss of sales after return to normal operations. The indemnity period can sometimes be extended from one year to three years in some countries.
>
> US Gross Earnings form does not have a limit on the indemnity period, and does not include fixed expenses and net profits from loss of sales. The latter can be provided via Extended Period of Indemnity up to three years after return to normal operations in some countries.

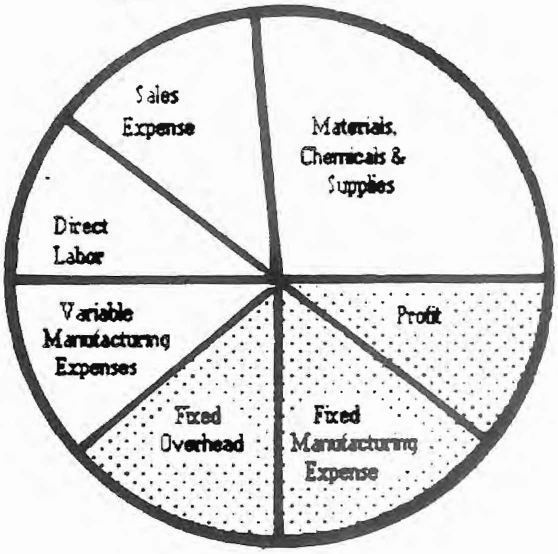


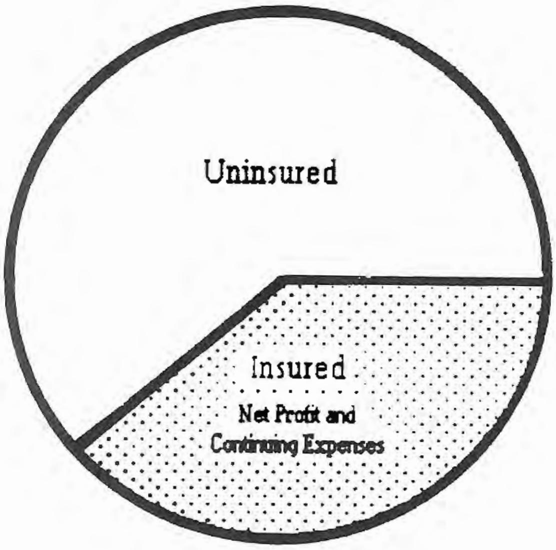
INSURANCE vs. ACCOUNTING TERMINOLOGY

INSURANCE TERMS



ACCOUNTING TERMS





The Loss of Profits specialist can identify and provide advice in the following area:

. Redundancy
. Spare Equipment/Parts
. Contingency Plans 10.1
. Predictive and Preventive Maintenance
. Instrumentation and Control Systems

In the event of a Loss of Profits loss, active claims involvement is important to minimize severity. This should include:

. Expediting Repairs/Replacement
. Close Monitoring with Focus on Critical Path Method
. Third Party Auditors 10.2
. Expert Consultants

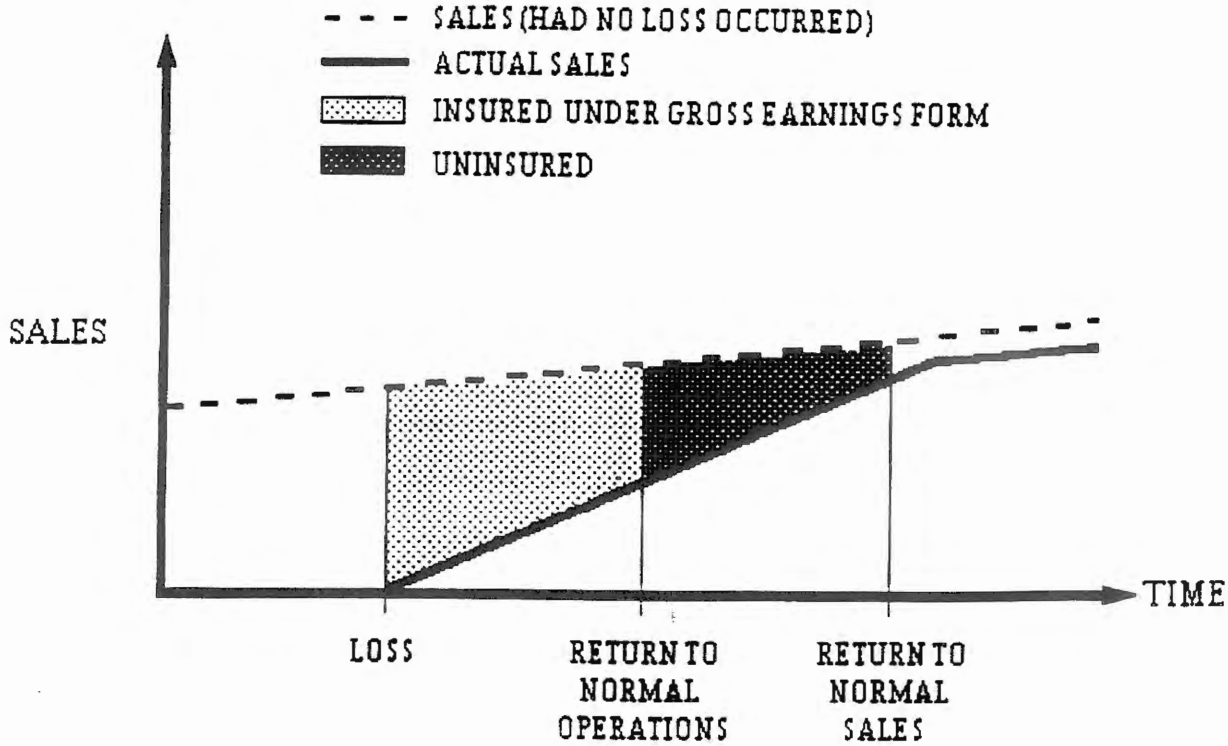
SUMMARY

Loss of Profits analysis and insurance can provide valuable alternatives to managing risks and preserving business earnings. The complexity of Loss of Profits includes:

Concentration of Assets
Increasing Dependency on Technology
Risk Bottlenecks
Facilities Operating at Full Capacity 10.3
Interdependency
Global Companies
Contingent Exposures
Single Source Suppliers
Increased Tax Liability

The National Center of Prevention and Fire Protection in Paris cited that 71% of business suffering on catastrophic loss go out of business within 3 years following the loss. Further analysis of this number shows that 43% of businesses fail immediately and another 28% within the following 3 years. The opportunity is there, we need only help the client identify the need and design coverage appropriate to the risk.

GROSS EARNINGS "INDEMNITY PERIOD"



From an underwriting standpoint the net 5 year loss ratio through 1990 below shows the differences between Machinery Breakdown and Loss of Profits loss ratios for a large group of US insurers.

	NET LOSS RATIO(%)		
OCCUPANCY GROUP	MACHINERY BREAKDOWN	LOSS OF PROFITS	
Textiles	27.5	53.9	
Mining	27.8	60.4	
Metal Preparation	29.6	85.5	
Metal Utilization	19.7	17.5	7.1
Forest Products	44.7	118.7	
Plastic	39.8	49.3	
Food	28.8	19.9	
Chemical	91.9	126.1	
Electric Utilities	79.2	125.3	

The above would indicate rate increases and/or deductibles are needed for Loss of Profits in the heavy industries; Metal Preparations, Forest Products, Chemical, and Electric Utilities. In regards to deductibles, these should be set above the maintenance event plus an increment for loss control incentive.