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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION

INDUSTRIAL PRODUCTIVITY IMPROVEMENT
S# SRL / 96 / 801

PRODUCTIVITY SURVEY
SUBCONTRACT NO. 96 / 118P

DIAGNOSTIC REPORT COLOMBO STEEL MILLS PVT. LTD



NATIONAL INSTITUTE OF BUSINESS
MANAGEMENT
120 / 5, WIJERAMA MAWATHA
COLOMBO 7
SRI LANKA

COLSDIAG

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COLSDIAG

1.0 INTRODUCTION

The National Institute of Business Management was selected by UNIDO to execute a subcontract on Enterprise Diagnostics for the enterprises participating in the Restructuring Assistance programme. The Restructuring Assistance programme is a part of the UNIDO project on Industrial Productivity Improvement SI/SRL/96/801.

This report was based on the findings of a team consultants who studied the important functions of this enterprise and its operating environment.

2.0 BACKGROUND

Colombo Steel Mills Pvt. Limited was established in 1985 as a private limited liability company with foreign collaboration, to manufacture steel rods for the building industry. This was the first private company in Sri Lanka to enter into the steel rolling business.

The office of the company is situated at Batharamulla and the manufacturing plant at the Industrial Estate in Ekala.

Up to 1990 ship plate cut to size from scrap yards in Taiwan were used as the raw material. In As the ship breaking industry in Taiwan was shrinking, in 1990 the company shifted to using imported square billets as its raw material.

In 1993 the company installed machinery to semi-automate the plant. This development was considered to be unsuccessful and they intend to go back to the manual process.

The plant has been closed for over an year because of low output due to the labour not cooperating with the management. The management started production towards the end of 1996 with contract labour from Pakistan.

This company has an authorised capital of Rs.10,000,000/= and a issued capital of Rs.9,020,000/= . 51% Of the issued capital is owned by the local directors and 49% by the foreign directors.

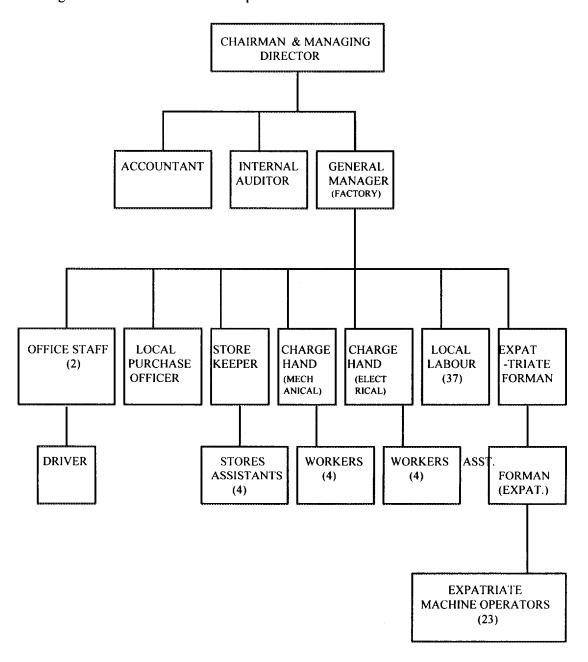
Mr. Dhatusena Senanayake is the CEO and Chairman and Managing Director of this company.

Details of the Board of Directors are as follows:

| NAME | STATUS | AREA OF ACTIVITY |
|-------------------------|---------------------------------|------------------|
| MR. D.W. SENANAYAKE | CHAIRMAN / MANAGING DIRECTOR | CEO |
| MRS. S.T. SENANAYAKE | DIRECTOR | |
| MS. S.J.W.M.M. TALWATTE | DIRECTOR | |
| MR. C.H. CHEN | EXPATRIATE DIRECTOR | |
| MR. C.H. KUO | EXPATRIATE DIRECTOR | |

3.0 ORGANISATION STRUCTURE

The organisation structure of the enterprise is as follows:



Brief descriptions of duties assigned to the key management personnel are as follows:

i. Mr. K. T. Sudhahar - General Manager (Factory)

Responsible for production, quality and maintenance. Co-ordinate sales purchases and inventory. Control of production costs and budgets. Forward planning of expansions and modernisations.

ii. Ms. L. Kulasekera - Internal Auditor.

Attending to labour maters. Proper maintenance of books of accounts and sales registers. Work related to EPF and ETF.

A summary of the backgrounds of some the key managers are as follows:

| NAME | AGE | SEX | DESIGNA TION | YRS. @ FIRM | OL | AL | DEGREE | OTHER ACADEMI C QUALI FICATIO NS | TRAININ G |
|------------------|-----|-----|---------------------------------|----------------|----|----|--|--|--------------|
| K T SUDHAHAR | 41 | М | GENERAL MANAGER (FACTORY) | 0.25 | 8 | 4 | BACHELOR OF BUSINESS ADMINISTRA TION (MADURAI UNI - INDIA) | | |
| L KULASEK ERA | 55 | F | INTERNAL AUDITOR | 9 | 8 | 4 | | DIPLOMA IN COMMERCE - CEYLON TECHNICAL COLLEGE | |

4.0 MANNING POLICY AND PROJECTED MANPOWER REQUIREMENTS

Manual rolling mills are common in India and Pakistan. Therefore experienced rolling mill operators can be easily found in these countries.

From the past experience this company has had, they feel hiring expatriate mill operators would increase the capacity utilisation of the mill closer to the maximum.

Therefore a labour contractor from Pakistan is supplying the rolling mill operators. The contractor is paid on the basis of output and he in turn settle the dues to the expatriate mill operators. The EPF and ETF of the expatriate workers are settled by the Company.

The projected manpower requirements to operate the mill on a single 12 hour shift are as follows:

| CATEGORY | NUMBER | TYPE |
|--|--------|------------|
| ROLLING MILL (HOT ROLLING) & FURNACE OPERATORS | 23 | EXPATRIATE |
| ROLLING MILL OPERATORS (COLD TWISTING) | 2 | LOCAL |
| MECHANICAL & ELECTRICAL MAINTENANCE WORKERS | 8 | LOCAL |
| YARD WORKERS | 35 | LOCAL |
| TOTAL | 68 | |

5.0 PRODUCT AND PRODUCTION QUANTITIES

This mill is capable of rolling round bars or any other sections of steel from 60 mm. x 60 mm. to 80 mm x 80 mm billets. However it is tooled to produce only round mild steel bars needed by the building industry.

The popular sizes of bars produced are as follows:

10 mm

12 mm

16 mm

20 mm

25 mm

The bars are sold to the market as plain round bars or cold twisted steel.

Quantities and the approximate value of steel produced during the past three years are as follows:

| 199 | 93 / 94 | 199 | 94 / 95 | 199 | 95 / 96 |
|----------------|---------------|---------------|---------------|---------------|---------------|
| Quantity - MT. | Value | Quantity - MT | Value | Quantity - MT | Value |
| 877,16 | Rs.25.567.703 | 2146 | Rs.63.729.132 | 435 | Rs.11.526.253 |

quantity produced in metric tons



The above quantities were quite insufficient for the mill to operate economically. This led to the temporary closure of the mill and adopting a strategy of giving a labour contract to a

Pakistani contractor.

With contract labour from Pakistan the management expect to achieve an annual output in

the region of 5400 Metric tons.

6.0 MARKET AND MARKETING STRATEGY

The final product is used by the building industry. Significant proportion of steel required by

the building industry is imported.

Compared to the total requirements of building steel this company's output is not very

significant.

This mills expected optimum output is only 9% of the privatised steel mills 1994 output.

The steel market in Sri Lanka is essentially a buyers market. The short term price

fluctuations are determined by supply and demand in the local market. The long term prices

are based on government taxes and world market prices. Some times the prices tend to take a

dip below cost when liquidity of the wholesalers are effected.

Sri Lankas per capita annual steel consumption is estimated to be in the region of 10 Kg. The

world consumption levels are much higher and there fore this figure is expected grow in the

future.

This enterprise convert most of its plain steel bar production into cold twisted steel. Only

two other enterprises produce cold twisted steel locally one of them is the privatised steel

company.

The CEO handles the marketing function. The companies products are marketed through

selected wholesalers. The sales commissions vary between 2% for credit sales and going up

to 4% for cash sales.

The CEO is concern about having to increase credit sales when the production reaches the

500 Metric Tons per month region.

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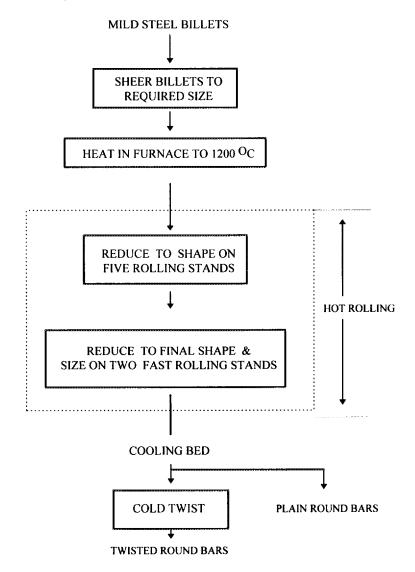
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7.0 PRODUCTION

7.1 PRODUCTION PROCESS

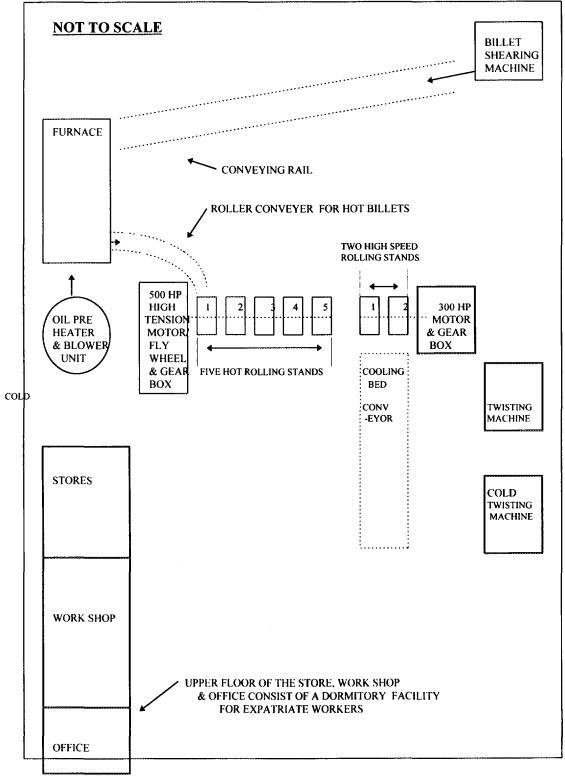
The production process is a hot rolling process. The billets are heated in an oil fired furnace and hot rolled to the required sizes. The rolling take place between 1200 and 700 °C. Since cold twisted steel commands a premium price the cold plain bars are converted into twisted bars. Twisted bars can fetch around Rs. 750/= per metric ton more than plain bars.

An outline of the production process is as follows:



7.2 FACTORY LAYOUT

An outline of the location of the important machinery is given below.



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7.3 PRODUCTION CAPACITY

The rated capacity of the mill is 1000 metric tons per 12 hour shift producing 26 days of the

month.

Present target is set at 500 to 600 metric tons per month working a 12 hour shift.

The capacity is constrained by the furnace capacity. If this constraint is removed the rated

capacity of the mill could be increased to 1500 metric tons per month working for 26 days on

a 12 hour single shift.

From our observations of the current outputs using Pakistani labour production will get

stabilised around 450 metric tons per month.

8.0 RAW MATERIALS

The raw materials are mild steel rectangular billets. They are imported mainly from India and

Russia. These two sources are preferred because of the low price. However the delivery lead

times are erratic and high costs have to be maintained on buffer inventories.

9.0 COMPUTER USAGE

The company uses a single 386 DX machine at their head office. The software being used

was developed by an external consultant. This firm does not have the capacity to perform

routine modifications to the software.

The routine outputs obtained are:

ROUTINE OUTPUTS

GENERAL LEDGER

PRODUCTION CONTROL

INVENTORY CONTROL

PETTY CASH CONTROL

PAY ROLL PROCESSING

10.0 CONCLUSIONS

- 1. Since the production started recently after a long shut down the output and management activities haven't still reached a steady state.
- 2. The internal management controls required to monitor maintenance performance and maintenance productivity, control Inventories of raw materials, evaluate and optimise performance of suppliers etc. are still not in place.
- 3. CEO's concerns about the market are unlikely to be as bad expected.

11.0 RECOMMENDATIONS

1. Take immediate action to put the controls in place by proper allocation of duties and recruiting people with skills to manage the factory administration under the guidance and the leader ship of the factory manger.

12.0 FINANCIAL REVIEW

12.1 Financial Performance

12.1.1 PROFITABILITY

In the financial year 1995/96 Colombo Steel Mills (Pvt.) Ltd. (CSML) was able to record a turnover of only Rs. 16.2 Mn. as compared to Rs. 63.7 in the previous financial year, 1994/95. The examination of the turnover for the two years prior to 1994/95 indicates an irregular pattern.

Rs. '000

| Year ended 31st March | 1996 | 1995 | 1994 | 1993 |
|---------------------------------|--------|--------|--------|--------|
| Sales | 16,182 | 63,729 | 29,946 | 63,436 |
| Gross Profit | 1,785 | 12,556 | 4,378 | 15,517 |
| Expenditure | | | | |
| Administration | 2,107 | 2,701 | 2,609 | 2,842 |
| Selling and Distribution | 2,116 | 8,460 | 3,642 | 8,170 |
| Finance Charges | 543 | 1,096 | 1,997 | 2,182 |
| Net operational Profit/ Loss | | | | |
| | -2,981 | 299 | -3,870 | 2,323 |

The inconsistent Sales pattern has resulted in the gross margin being irregular. The changes are however not in the same proportion. The erratic performance of the company has been due to stoppages of production mainly as a consequence of labour unrest.

Another major problem experienced was the shortfall of raw materials - billets. This also affected production.

Under such circumstances it is fruitless to consider the years during which a drastic reduction of activity has occurred. For the purpose of the study we feel that in 1994/95 there has been some reasonable activity to justify an analytical study.

Therefore we shall concentrate our attention on the year 1994/95.

The matters of significance may be identified as follows:

- 1. The gross profit achieved of approx. 20% is reasonable.
- 2. The material cost constitutes 75% of manufacturing costs. Therefore it is clear that the purchase price of raw materials would have a decisive effect on costs and thereby on pricing and profit.
- 3. Labour costs are less than 10% of manufacturing costs. Although this cost is not of significance as a consequence of labour disputes production /sales have been at a low ebb in certain years. This factor has had an adverse effect on the financial performance.
- 4. The cost of energy is not a vital factor as Electricity was 3.2 % and Furnace Oil 2.9 % of total cost.
- 5. With regard to Factory overheads which forms 7.8 % of total cost the major items are Depreciation and Machinery Maintenance.
- 6. The overhead Expenditure consists mainly of Selling and Distribution being 13.3 % of total cost. Administration and Finance costs are both below 5 % of costs.

12.1.2 FINANCIAL STRUCTURE

The capital structure and the Working Capital situation could be gauged by the examination of the Balance Sheets for the Years 1995/96 and 1994/95.

The balances of significance would give an indicator to the financial position as at present, in the absence of recent information.

Rs. '000

| Year ended 31st March | 1996 | 1995 | |
|----------------------------|--------|--------|---|
| Share Capital and Reserves | 11,566 | 14,138 | |
| Fixed Assets | 12,095 | 14,991 | ļ |
| Stocks | 4,680 | 7,084 | |
| Debtors | 306 | 2,297 | |
| Creditors & Accruals | 641 | 4,642 | |
| Directors Loans | 3,750 | 3,750 | |
| Bank Loans & Overdrafts | 2,398 | 3,315 | |

The Share Capital was Rs. 10 Mn in the 2 years with the Reserve being the balance on the profit and Loss account. The Reserve Account has been dwindling over the past 4 years due to the inconsistent performance.

'Fixed Assets' which is the major Asset has a total cost of Rs 26.285 Mn. as at 31st march 1996. The assets with larger values are:

| | Rs`000 | |
|-------------------|--------|--|
| Factory Buildings | 4,077 | |
| Plant & Machinery | 17,326 | |
| Motor Vehicle | 2,806 | |

The closing stocks in 1995/96 were mainly raw materials - Rs. 3.4 Mn. whereas in 1994/95 it was Finished Stocks - Rs. 4.2 Mn.

The Current assets and liabilities in 1945/95 were much higher than in 1995/96. This corresponds with the higher level of activity evident in the previous year.

12.1.3 CONCLUSIONS

- In the financial years 1992/93 and 1994/95 the company was able to reach reasonable sales levels which enabled the generation of net profits. Though not remarkable, such profits could be considered to be adequate in the light of the general performance during the past four years.
- 2. The trimming of costs should no doubt be an item of priority. The predominant cost component is raw materials namely Steel billets which are imported. Effective purchasing practices could possibly bring about cost savings. This aspect would need expertise in the trade and monitoring of raw material markets for availability and to keep track of price changes. Bulk purchasing though it may have price advantages, would need access to large sums of money. The capability of the company to finance such purchases would need to be assessed.
- 3. The overhead cost and Finance Charges are not very large except for Selling and Distribution. Turnover Tax and Defence Levy form the major costs being 90 %. As these move in parallel with the turnover it would be more realistic not to consider them as overheads.
- 4. Notwithstanding the matters mentioned above, the crux of the problem is obviously the lean turnover in certain years as a consequence of low production. All other factors could be circumvented if this principle problem could be overcome.

If an analysis were to be made of the cost of idle capacity, no doubt it would reveal that this would be the single largest cost, contributing towards the loss situation.

Every effort would need to be made to maintain minimum production levels. As labour unrest has been a key factor the company has taken steps to overcome this.

The procurement of billets at appropriate times is also vital.

The factory was shut down during a greater part of the financial year 1996/97. We were informed that production recommenced only in November 1996. Although a monthly target of 750 Metric tons has been the aim, only half this has been achieved during the first two months of operations. CSML is endeavouring to gradually increase output.

12.2 ORGANISATION AND MANAGEMENT OF FINANCIAL FUNCTIONS

12.2.1 FINDINGS

The Accountant of the company is on maternity leave at present and is not expected to resume duties. No formal Accounts section exists. The internal auditor attends to the accounting functions in addition to her other duties. She has over 20 years experience in accounting and related fields.

The books of accounts maintained include the Cash Book and the Ledger. Although entries are not made on a routine basis, it was explained that the daily production and the stock statements are maintained on a daily basis.

At present a formal accounts section does not exist at the factory.

It was explained that certain sales occur at the factory site, namely short lengths, scrap, etc. At times the proceeds are in the region of Rs. 30,000 to Rs. 50,000 per day. The company uses this money to make purchases for the site. The cash payments effected at the site are an average of Rs. 200,000 to Rs. 300,000 per month.

No proper procedures are in effect. The returns which indicate the details of collections and disbursements, are also received late.

The factory Production Manager also has a float of Rs. 10,000.

The Managing Director signified that the company expects to recruit an Accountant for Head office with intermediate level qualifications. He also stated that it is hoped to recruit a graduate with an accounting background, to be in charge of accounting functions at the factory.

12.2.2 CONCLUSIONS

- 1. The absence of an Accountant at the Head Office would lead to a laxity of controls. In a situation where production is suspended there would be some justification for dispensing with a full time Accountant. But when production re-commences it becomes imperative that proper accounting systems and controls are in place to ensure the regularity and security of the financial activity. An Accountant possibly at intermediate level would be required for this purpose.
 Such an officer could also be given the functions of Budgeting/forecasting and preparation of Management Information.
- 2. It transpired that even at the factory certain financial transactions occur. The collections being utilised to make disbursements without being banked in tact leaves room for abuse if proper controls are not in effect. The recruitment of an Accounts Officer to specifically supervise the financial operations is vital, with the contemplated increased activity. A person with adequate qualifications and preferably with at least 2 years exposure to an accounting environment is preferable. He could be placed at a junior supervisory level.

Such an Accounts officer could also be given the task of 'Costing'. This function assumes importance in a situation where a company faces competition to sell its products. The accounting and control of materials is another area which could come under his purview.

The Accounts Officer based at the factory should report and be responsible to the Accountant at Head Office for carrying out of instructions regarding financial and accounting policy. The incumbent would however function under the Factory management and should assist them in the day to day functions.

12.3 RECOMMENDATIONS

1. CSML should prepare a detailed budget for one year. This should embody the expected production, sales, and the financial implication. The budget should be realistic and preferably provide income / expenditure estimates on a quarterly basis.

After preparation and approval by the management, the Budget should be treated as a working guide for short term planning and comparison of actual performance.

A forecast of performance for a further two years, should also be prepared. This need not be as detailed as the Annual Budget.

- 2. The logistics concerning the supply of Billets should be concentrated on. The company should seek the most advantageous price from their suppliers.
- 3. The key factor influencing profitability has been production. The management should continue to address the problems which affect the operation of the plant.
- 4. An Accountant should be recruited to the head Office. He should posses at least intermediate level qualification and have three years experience after obtaining qualifications.

He should evaluate the system in operation presently and effect changes if necessary to ensure the application of accepted standards in financial management and accounting.

5. A junior supervisory Accounts Officer should also be recruited to be based at the factory. His areas of operation would include control of financial activity as well as Costing.

The team of consultants engaged in the preparation of this Background Dossier were:

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