**INTRODUCTION**

Capital budgeting is a required managerial tool. One duty of a financial manager is to choose investments with satisfactory cash flows and rates of return. Therefore, a financial manager must be able to decide whether an investment is worth undertaking and be able to choose intelligently between two or more alternatives. To do this, a sound procedure to evaluate, compare, and select projects is needed. This procedure is called capital budgeting.

**Capital budgeting** (or investment appraisal) is the planning process used to determine whether a firm's long term investments such as new machinery, replacement machinery, new plants, new products, and research development projects are worth pursuing. It is budget for major capital, or investment, expenditures.

Many formal methods are used in capital budgeting, including the techniques such as

* Net present value
* Profitability index
* Internal rate of return
* Modified Internal Rate of Return
* Equivalent annuity

These methods use the incremental cash flows from each potential investment, or *project*. Techniques based on accounting earnings and accounting rules are sometimes used - though economists consider this to be improper - such as the *accounting rate of return,* and "return on investment." Simplified and hybrid methods are used as well, such as ***payback period***

# CAPITAL IS A LIMITED RESOURCE

In the form of either debt or equity, capital is a very limited resource. There is a limit to the volume of credit that the banking system can create in the economy. Commercial banks and other lending institutions have limited deposits from which they can lend money to individuals, corporations, and governments. In addition, the Federal Reserve System requires each bank to maintain part of its deposits as reserves. Having limited resources to lend, lending institutions are selective in extending loans to their customers. But even if a bank were to extend unlimited loans to a company, the management of that company would need to consider the impact that increasing loans would have on the overall cost of financing.

In reality, any firm has limited borrowing resources that should be allocated among the best investment alternatives. One might argue that a company can issue an almost unlimited amount of common stock to raise capital. Increasing the number of shares of company stock, however, will serve only to distribute the same amount of equity among a greater number of shareholders. In other words, as the number of shares of a company increases, the company ownership of the individual stockholder may proportionally decrease.

The argument that capital is a limited resource is true of any form of capital, whether debt or equity (short-term or long-term, common stock) or retained earnings, accounts payable or notes payable, and so on. Even the best-known firm in an industry or a community can increase its borrowing up to a certain limit. Once this point has been reached, the firm will either be denied more credit or be charged a higher interest rate, making borrowing a less desirable way to raise capital.

Faced with limited sources of capital, management should carefully decide whether a particular project is economically acceptable. In the case of more than one project, management must identify the projects that will contribute most to profits and, consequently, to the value (or wealth) of the firm. This, in essence, is the basis of capital budgeting.

**INDUSTRY PROFILE**

**About the industry**

India, in 1994 has become the 4th largest producer of cement in the world. This impressive record owes its origin to the progressive policies of the government since late 70s and enabled on assured 12% post tax return on net worth (70). It economy refers of July 91gave a further fillip by abolishing the licensing system for setting up cement plants. Since then, innumerable technological development look place in cement production enabling cost reduction and mass production. The kilns of the late 70,s were replaced by dry kilns which reduced the fuel cost by 30%. Thermal efficiency was improved by instilling pre-heaters, followed by the addition of pre-calcinatory. Optimal usage of fuel and power we achieved through computerization and quality control or raw materials.

In a developing country like India, the requirement of housing and infrastructure is high and so the demand elasticity of the cement with respect to G.D.P of 1.6% is also high.

**Cement Industry in India**

South India Industries Limited. Madras, produced cement for the first time in India in1904. This unit, which had an installed capacity of 30 tones/day since the partial decontrol in 1989. The cement industry has witnessed spectacular progress mainly due to the force economic liberalization and the jettisoning of price controls and capacity restriction.

The foundation of a stable Indian cement industry was laid in 1914 2h3n Indian Cement Company Limited started manufacturing cement at Probated in Gujarat. By the end of March 1988 there were 20 large and 136 small cement plants with a total installed capacity of 57 million tones.

**Step by step company growth**

1994 Setting up of Mini Blast Furnace with 90,000 TPA capacity

1995 Setting up a 250 TPD Mini Cement Plant

1997 Setting up of LKCL for manufacture of 40,000 TPA castings

and 35,700 TPA D I Pipes

2002 Strategic Alliance with Electrosteel Casting Limited

2002 Infusion of Rs.2200 lakhs to the equity and financial restructuring

2003 Merger of LKCL with LIL for synergy

2003 Capacity of Pig Iron was increased to 90,000 TPA to 150000 TPA.

2004 Capacity of DI Pipes was increased to 90,000 TPA.

2005 Commissioning of 150,000 TPA coke oven plant.

2005 Setting up of Captive Power Plant of 12 MW by using the waste heat

recovered from the coke oven plant.

**VISION & MISSION**

We aim to be world class, committed to customer satisfaction and to encourage the spirit of leadership amongst our dedicated team by creating a healthy environment for continuous growth, profit and prosperity.

We are in the business of manufacturing pipes for conveying safe drinking water and other fluids for domestic and overseas markets.

We will maintain our dominant position in the domestic pipe market and enhance our presence in the overseas market by setting up multi- location units as per business potential.

**SRIKALAHASTHI PIPES LIMITED GROUP OF COMPANIES**

1. SRIKALAHASTHI PIPES LIMITED INDUSTRIES OF LIMITED **(LIL)**
2. SRIKALAHASTHI PIPES LIMITED CONSTRUCTIONS LIMITED **(LCL)**
3. SRIKALAHASTHI PIPES LIMITED KONDAPALLI POWER LIMITED (**LKPL)**
4. SRIKALAHASTHI PIPES LIMITED KALAHASTI CASTINGS LIMITED **(LKPL)**
5. SRIKALAHASTHI PIPES LIMITED GLOBAL SYSTEMS LIMITED **(LGSL)**
6. SRIKALAHASTHI PIPES LIMITED PROJECTS LIMITED **(LPL)**

**TOTAL QUALITY CONTROL**

A central control room, with a mainframe computer, controls all plant activities. From the mining of limestone to the final packing, vigorous checks are conducted at every stage to ensure the highest quality control.

**Salient features of cement:**

1. High strength and great durability
2. A very perceptible saving in costs (up to 20% to 25%) due to low setting time
3. Suprior quality of the cement resulting in a better overall finish.
4. Strong bonding with aggregates.

**Dedication**

It is mission of Srikalahasthi pipes limited cement to provide the best quality cement to every customer. It is a continuous, ongoing effort on the company’s part to constantly improve the quality of its products. Moreover the company is constantly growing to meet the needs of changing market.

**Important customers**

* AP State Housing Corporation
* AP Transco
* Telugu Ganga Project
* AP Genco
* TTD Trirumala
* Gannon Dunkerly & Co Ltd
* Indian Railway Construction Co Ltd
* Indian Home Pipes Ltd
* APco Concreate Blocks
* C.P.W.D
* Progressive Constrictions
* Bangalore sports Complex
* APMCs Karnataka
* Bhandri Builders/ Ranka & Ranka
* Engineers Syndicate
* All government departments of Karnataka

**Share Capital**

The authorized capital of the company 53000000Equity shares of Rs10 each. The issued and capital of the company is 39763595 Equity shares of Rs 10 each.

**Future Prospects**

The government in demand for cement continuous to rise the government thrust on development on infrastructure projects and housing in India, it is expected that there will be a growth in the areas of Housing,, road construction and other infrastructure. The government ambitious road development programmer is progressing a head of schedule and this will not only contribute towards a larger demand for cement, but will auger well for the development of the economy as a whole

**Report on subsidiary companies**

**Sri Industries Limited**

Wholly owned subsidiary company, has commenced commercial generation in its 17.4 M.W.Power project based on natural gas on JUNE 1st 2001 been stabilized. The power generated is being supplied to PCIL and the balance un-utilized power is being supplied to M/S .Chaanakya Cement Limited.

**M/S.Chanaya Cement Limited**

A 0.8 million tones cement plant, another wholly owned subsidiary company has commercial production on 28th 2002. The quality of the cement was well accepted in the market.

**Cement Industry in India**

South India Industries Limited. Madras, produced cement for the first time in India in1904. This unit, which had an installed capacity of 30 tones/day since the partial decontrol in 1989. The cement industry has witnessed spectacular progress mainly due to the force economic liberalization and the jettisoning of price controls and capacity restriction.

The foundation of a stable Indian cement industry was laid in 1914 2h3n Indian Cement Company Limited started manufacturing cement at Porbader in Gujarat. By the end of March 1988 there were 20 large and 136 small cement plants with a total installed capacity of 57 million tones.

In 1936, all the Cement companies (with exception of Song Valley Portland Co. Ltd.) merged to form the Associated Cement Companies Ltd., this facilitated cost education ads as well as uniformity in quality. By 1947 the installed capacity of the industry rose to 2.2 million tones per annum.

After partition, five cement-producing units in the country went to Pakistan and the total installed capacity of the eighteen units that remained in India was 1.5 million tones/annum. This increased to 3.8 million tones/annum 1950-51.

**What is cement?**

Cement is a mixture of limestone, clay, silica and gypsum. it is a fine powder which mixed with water sets to a hard mass as a result of hydration of the constituent compounds. It is the most commonly used construction material.

**How is Made Cement?**

The manufacturing process of cement consists of mixing, drying and grinding of limestone, clay and silica into a composite mass. The mixture is then heated and burned in a pre-heater and kiln and then cooled in an air cooling systems of form clinker, which is the semi-finished from. This clinker is cooled by air, subsequently grinded with gypsum to form cement.

Limestone is the key raw material and normally, 1.2-1.5 tons are needed for every ton of cement. The quality of the limestone significantly affects the operating efficiently of the units. Under normal conditions, to produce 1 ton of cement, 0.25 ton of coal, 120 kWh of power and 0.05 ton of gypsum is required.

The raw materials required for the manufacture Cement are:

* Limestone
* Shale
* Gypsum
* Sand
* Iron Ore
* Nickel
* Titanium
* Chromium
* Bauxite
* Clay
* Quartz

# Types of Cement in India

The **types of cement in India** have increased over the years with the advancement in research, development, and technology. The Indian cement industry is witnessing a boom as a result of which the production of different kinds of cement in India has also increased.

By a fair estimate, there are around 11 different types of cement that are being produced in India. The production of all these cement varieties is according to the specifications of the BIS.

Some of the various types of cement produced in India are:

* Clinker Cement
* Ordinary Portland Cement
* Portland Blast Furnace Slag Cement
* Portland Pozzolana Cement
* Rapid Hardening Portland Cement
* Oil Well Cement
* White Cement
* Sulphate Resisting Portland Cement

**The major companies producing Portland Blast Furnace Slag Cement in India are:**

* J K Cement
* Grasim Industries and Ultra Tech
* ACC
* India Cement Ltd
* Gujarat Ambuja Cement Ltd

In India, the different types of cement are manufactured using dry, semi-dry, and wet processes. In the production of Clinker Cement, a lot of energy is required. It is produced by using materials such as limestone, iron oxides, aluminum, and silicon oxides. Among the different kinds of cement produced in India, Portland Pozzolana Cement, Ordinary Portland Cement, and Portland Blast Furnace Slag Cement are the most important because they account for around 99% of the total cement production in India.

**COMPANY PROFILE**

The name Srikalahasthi pipes limited has been derived from the promoter of the Group **Shri. Lagadapati Amarappa Naidu.** The Srikalahasthi pipes limited group is a diversified multi faced conglomerate with the business interests in Pig Iron, Cement, Power, Graded Castings, Spun Pipes, Information Technology and Infrastructure Development. Young technocrats with exceptional entrepreneur skills promote the Srikalahasthi pipes limited Group with a mission and a great vision and the top agenda to put the group on the global corporate may be during the next 10 years.

**"Economy builds the nation and industry builds the economy"**

SRIKALAHASTHI PIPES LIMITED industries limited are one of the best mini-blast furnace pig iron manufacturing units in our country and it was 5th plant under TATA - KORE technology. The company was incorporated on 1st November 1991 under company's act-1956, in the name of SRIKALAHASTHI PIPES LIMITED FERRO LTD.,

THE COMPANY started construction work in august 1993. The entire construction work was completed in a record time of 12 months. This was achieved by teamwork of SRIKALAHASTHI PIPES LIMITED collective and the best efforts of the contractors. With this achievement the company started commercial productions in September 1994.

**Administration**

The general administration of the company is carried out by managing director, and general managers of finance. Commercial, operations, materials, purchase, human resource and administration.

The chairman and managing director are holding Overall control on administration in all aspects, with the help of Vice-President and-other General Managers. The board consists of five member's directors, Vice-Chairman, a Managing Director and a Company Secretary

**The name SRIKALAHASTHI PIPES LIMITED Ferro limited was changed to SRIKALAHASTHI PIPES LIMITED INDUSTRIES L1MITDED ON JULY 6th, 1994.**

Srikalahasthi pipes limited Industries Limited is located in between Tirupathi and Srikalahasti with an access of about 30kms from Tirupati and about Rachagunneri village, Srikalahasti Mandal of Chittoor district Andhra Pradesh is as follows

* Cheap availability of required land.
* There is more water resource.
* The distance between the harbor and present work spot is less.
* Proximity to raw materials.
* Proximity to marketing.
* Nearer to the railway sidings.
* Well connected to the road, rail and port.
* Availability of labour.

SRIKALAHASTHI PIPES LIMITED industries are importing coke from china, Japan and Australia because; there is scarcity of prime cooking coal, which is the raw material for producing coke. The coke, which is imported, comes to Chennai port. This is approximately 100km away from the site. And from there is brought to site, and also fluxes. Which are required to produce pig iron like Limestone, Dolomite, Quartzite and Manganese, are available in nearby districts.

**Srikalahasthi pipes limited industries limited**

Established in the year of 1993. An ISO 9002 Company, it had setup a state of the art integrated manufacturing facility for Pig Iron through mini-blast furnace route conforming to the latest international technology with initial capacity of 1,00,000 TPA. Its quality products of S G-Grade pig iron are being supplied to foundries in the south. As a forward integration, it has utilized the slag produced in the Pig Iron are being supplied to foundries in the south.

As a forward integration, it has utilized the slag produced in the Pig Iron manufacturing process to install the cement plant is being met through a 2.5 mw co-generation power plant. Due to severe completion and survival, company has increased the production capacity from 90,000 TPA to 1, 50,000 TPA from 2003.

**It reduction in Green House Gases Will contribute to our battle against global warming.**

* **Pig iron Project was conceived in 1992. Commercial production started in September 1994 .Capacity:- 90,000 TPA at inception.**
* **Cement Division started commercial production in 1996.**
* **Spun Pipe Project conceived in march 1998 and commercial production commenced in January 2000. Capacity:- 60000 TPA at inception.**
* **ECL joined as strategic partner in 2002/LKCL Merged with LIL in 2003**
* **New 1,50,000 TPA Coke Oven Plant Commissioned in 2005.**
* “ An integrated industrial complex for manufacture of DI Pipes ”

**Expansion/New Projects after Take-over: Investment Rs. 175 Crs**.

* Spun Pipe Division : Capacity increased from 60,000 TPA to 90,000 TPA
* Pig Iron Division : Capacity increased from 90,000 TPA to 1,75,000 TPA
* Coke Oven Division: New Plant with a Capacity of 1,50,000 TPA
* 12 MW Capacity : Power Plant Expected Commissioning by End May'07

**SPUN:**

Pre-analyzed liquid metal from Blast Furnace is taken in to Induction Furnace. The metal is superheated to a temperature of about 1520 o C and adjusted for chemical composition by addition of Steel Scrap and Ferro Silicon. The adjusted metal is taken into a converter for treatment to convert into SG iron. The adjusted from converter is transferred to Spinning Machines through ladles. The metal is poured to unlined water-cooled metallic moulds through a runner. The mould is kept at a slightly inclined position and rotated at high speed. The uniform flow of metal and uniform travel of the mould is ensured through flow control valves to achieve the uniformity in the thickness. Due to the centrifugal force the metal is held against the mould wall and the solidification of metal takes place due to water-cooling of mould. The pipe cast through above process known as DELVAD Process is heat-treated to achieve the requisite physical properties and microstructure. After heat treatment the pipes are coated externally with Zinc and then the pipes are finished before testing them with hydrostatic pressure. The tested pipes are lined internally with cement and then cured in the stream chamber. The lined pipes are ground and washed with water before sending them for bitumen painting. The pipes are preheated before bitumen coating on external surface. The coated pipes are sent to dispatch yard after marking.

**PIG IRON**

“Blossoming of a fiery bud!” exclaimed Dr. Shankar Dayal Sharma, the then President of India while inaugurating the Pig Iron Plant of SRIKALAHASTHI PIPES LIMITED Industries Limited in September 1994. And the bud has indeed blossomed!

Commissioned in a record time of 11 months, SRIKALAHASTHI PIPES LIMITED Industries Limited, a 90,000 tones per annum Pig Iron Plant, surpassed its rated capacity just after two years of commissioning. Later it transformed the slag-a waste by-product, into productive Slag Cement with setting-up of Cement Plant. The Pig Iron Plant capacity was upgraded to 1,50,000 tones per annum in the year 2003.

“What represented the finest facet of India's youthful techno-entrepreneurial strength has today evolved to become the future of growth of Indian

**SRIKALAHASTHI PIPES LIMITED CEMENT**

Srikalahasthi pipes limited Cement is the result of a unique blend of slag and clinker with the following destructive characteristics.

* Progressively increasing later stage strength.100% no leakage & no honey combing on application.
* Low heat of hydration, very low pore volume in concrete, high impermeability, resulting in structures of high strength & long life.
* Crack free structure & walls, result of low thermal stresses and absence of differential volume change. Super resistance to sulphate in concrete, resultant low corrosion, less alkali aggregate reaction, and final outcome of long lasting super finish surfaces.
* East workability with high concentration of fines.
* Wide range application from domestic to industrial, piling foundation, marine constructions, coastal area buildings, roads, bridges and any for all other special purposes.

**COKEOVEN**

**ENERGY RECOVERY COKE OVEN PLANT**

Srikalahasthi pipes limited Industries Limited is engaged in manufacturing of the ductile iron pipes manufactured through a spinning process from 1999, with a capacity of 1,00,000 tons/year. To meet the pipe plant requirement of hot metal Srikalahasthi pipes limited operates a mini blast furnace with a capacity of 1,65,000 tons/year

Previously, Srikalahasthi pipes limited use to import coke from Japan and China to meet the requirement of the mini blast furnace but then due to the steep rise in the coke prices in the international market it was very difficult to maintain the cost of hat metal produced.

Thus it was decided to install a coke manufacturing facility to meet the in-house coke requirements. The company was attracted by the low cost of the non-recovery type of coke ovens with its easy compliance with the pollution

control norms without any major investments. Now the company operates a coke oven plant with a set of 68 ovens based on the Dasgupta Technology. The plant was commissioned in May 2005 and is producing to the rated capacity of 1,25,000 Tons/year.

**POWER PLANT**

Srikalahasthi pipes limited Industries Limited (LIL) has installed a 12MW captive power plant (CPP) whose input would be hot waste gases from non-recovery type Coke Oven as source of energy to generate electricity of 79.2 MU annually.

**CPP auxiliaries like**

* Water Treatment Plant
* Cooling Tower & cooling water system
* DG Sets – 2 x 600KVA
* Compressors- 2 Nos
* Hot Gas Dampers(4 nos) with cooling system
* Generation of Power : Approx. 10 MW
* Use of Power
* CPP Auxiliaries : 1.0 MW
* In house consumption : 9.0 MW

Power Will be used for running Coke Ovens, Cement Division, MBF Division, Spun Division.

So, we would displace 9.0 MW from Southern Power Distribution Co. Ltd. Grid. Therefore reduction in CO2 emission due to this project approx : 28028 Tonnes / annum. In case of Grid feeding : 49082.6 Tonnes/annu

**Brief History of Lil since Incorporation till Date**

Srikalahasthi pipes limited Industries Limited (LIL) was incorporated on 1st November 1991 by Srikalahasthi pipes limited Group of Companies to manufacture Pig Iron using Korf (German) technology and Cement. The unit is located at Rachagunneri Village on Tirupati ­Srikalahasti road, which is about 30Kms from Tirupati and 10Kms from Srikalahasti. The installed capacity of Pig Iron was 90,000 TPA and with similar capacity 90,000 TPA for cement

Due to the poor demand and other reasons, the operation of the cement unit of the Company was suspended and the unit was reengineered for producing a different product mix having potential in South India.

As a measure of forward integration project for adding value to the Pig Iron manufactured by the Company, LIL floated an another company named Srikalahasthi pipes limited Kalahasti Castings Limited (LKCL) on 4th March 1997 to manufacture iron castings and spun pipes in the same campus of the Company with an annual capacity of 40,000 TPA and 35,700 TPA respectively.

However, due to falling Pig Iron prices, increase additional capacity in the industry, competition and the technical and financial assistance, the operations of both LIL and LKCL were affected and the Company was exploring financial and technical strategic alliance with Indian 1st Foreign Partner.

During the same time Mrs. Electrosteel Castings Limited, was also looking for additional capacities for producing spun pipes. Considering the synergies involved, Srikalahasthi pipes limited Industries Limited entered into a strategic alliance partnership during December 2002, with MIs. Electro steel Castings Limited (ECL), Calcutta a. leading manufacturer of CI, Pipes and DI pipes. This was win-win situation for both L1L and ECL.

After takeover, a financial re-engineering and re-structuring of LIL was undertaken by ECL by implementing the following

* Immediately after take over an amount of RS.2200 lakhs was infused as share capital of the Company by Mis ECL to strengthen the equity base of the company.
* During 2002, the capacity of Pig Iron was increased from 90,000 TPA to 150,000 TPA. With effect from 1st April, 2002 LKCL was merged with the company to take advantage of the close synergy in the business of the two companies, since a large part of Molten Iron/Pig Iron is consumed by LKCL for manufacture of 01 Pipes.
* After the merger, the share capital of LIL, the paid up share value of RS.101- was reduced.
* To RS.2.50 per share and accordingly one share of RS.101- each fully paid up in LIL.
* Was issued to all the existing shareholders for every 4 shares held by them. Using 2003, the capacity of the 01 pipe was increased to 90,000 TPA.
* During 2004, the company took the step of backward integration by setting up 150,000 TPA coke oven plant in the same complex, which was commissioned in June 2005. During 2005, the company started setting up of a Captive Power Plant of 12 MW by using the waste heat recovered from the coke oven plant which is expected to be commissioned by March 2006.
* An additional amount of RS.25crores is being spent on other capital works like revamping of bitumen coatings machine, balancing equipment and facilities for production of higher diameter DI pipes etc. to increase the capacity of 01 pipe from the present 90,000 TPA to 120,000 TPA by 2006-07.
* The above has resulted in the company witnessing a profitable years after a gap of 8 years during the years ended 31st March, 2003, 2004 and 2005 and a dividend of 10% was declared for the years ended 31 st March 2004 and 2005 to the shareholders.

**ADDRESS OF BRANCH OFFICES**

****

**Step-by-Step Company's Growth**

1991 - Incorporation of Srikalahasthi pipes limited

1994 - Setting up of Mini Blast Furnace with 90,000 TPA

Capacity

1995 - Setting up a 250 TPO Mini Cement Plant

1997 - Setting up of LKCL for manufacture of 40,000 TPA

castings and 35,700 TPA 01 Pipes.

2004 - Strategic Alliance with Electrosteel Casting Limited

2006 - Infusion of RS.2200 lakhs to the equity and financial

restructuring

2009 - Merger of LKCL with L1L for synergy

2010 - Capacity of Pig Iron was increased to 90~000 TPA to

150000 TPA.

2012 - Capacity of 01 Pipes was increased to 90,000 TPA.

2013 - Commissioning of 150,000 TPA coke oven plant.

2013 - Setting up of Captive Power Plant of 12 MW by using

the waste heat recovered from the coke oven plant .

2014 - Merger of LKCL with LIL for synergy.

2014 - Setting up the capacity of spun division

**Committee of SRIKALAHASTHI PIPES LIMITED Executives and Directors (COLEAD)**

COLEAD is the apex review and decision-making body of SRIKALAHASTHI PIPES LIMITED Group.

|  |  |  |
| --- | --- | --- |
|  | L Madhusudhan Rao | **Chairman**, SRIKALAHASTHI PIPES LIMITED Group of Companies |
|  | G Bhaskara Rao | **Vice Chairman,** SRIKALAHASTHI PIPES LIMITED Group of Companies |
|  | L Sridhar | **Director,** SRIKALAHASTHI PIPES LIMITED Group |
|  | G Venkatesh Babu | **Joint Managing Director,** SRIKALAHASTHI PIPES LIMITED Group |
|  | J Suresh Kumar | **Chief Financial Officer,** SRIKALAHASTHI PIPES LIMITED Group |
|  | P Panduranga Rao | **Director and Chief Executive Officer** SRIKALAHASTHI PIPES LIMITED Kondapalli Power Private Limited  and ABAN Power Company Limited |
|  | D V Rao | **Director and Chief Executive Officer** SRIKALAHASTHI PIPES LIMITED Green Power Private Limited |
|  | K Raja Gopal | **Director and Chief Executive Officer** SRIKALAHASTHI PIPES LIMITED Amarkantak Power Private Limited |
|  | D N Reddy | **Director - Operations**, SRIKALAHASTHI PIPES LIMITED Infratech Limited |
|  | KK V Nagaprasad | **Director and Chief Executive Officer** Rithwik Energy Systems Limited and  Clarion Power Corporation Limited |
|  | V Sreenivas | **Director - Corporate Affairs** SRIKALAHASTHI PIPES LIMITED Group Limited |
|  | MN Ravi Shankar | **Executive Director** SRIKALAHASTHI PIPES LIMITED Electric Utility Limited |

**ORGANISATION CHART OF SRIKALAHASTHI PIPES LIMITED**

Managing Director

Vice President

Vice President

General Manager

General Manager

Pig Iron Division

Cement Division

Pig Iron Division

Cement Division

Marketing

Deputy General

Manager-CD

Chief Executive.BF

Chief Executive.BF

Deputy General

Manager-CD

Commercial

Personal

&

Administration

Finance

Commercial

Personal

&

Administration

Finance

Manager

Senior Manager

Manager

Senior Manager

Sr.Mgr.

Prod

Quality

Control Division

Mechan-

ical

Electri-

cal

Inst-

rument

P.P

Adm

Mgr

Sr.Mgr.

Dy.Mgr.

Sr.Chemist

Assistant General Manager

Assistant General Manager

Production

Production

Mechanical

Electrical

Quality control

Sr.Engr

Sr. chemistrys

CD

Sr.Mgr.

Dy.Mgr

Manager Marketing

PID

DGM-Marketing

CD

PIDD

DGM-Marketing

**RESEARCH METHODOLOGY**

**Sources**

The data have been collected from both the primary and secondary sources. The data was collected from the officials of the organization.

The data collected related to the study was from the two sources.

1. Primary data
2. Secondary data

**a. Primary Data:**

Primary data is the information collected directly without any references. In this study it was mainly through interviews with concerned officers and staffs either individually or collectively some of the information had been verified or supplemented with personal observations.

**The data includes**

Conducting personal interviews with the officers of the financials department.

Guidelines and necessary information taken from my guide.

By using primary methods collected the primary information or data.

* Observation method
* Survey method
* Interview method.

**b. Secondary Data:**

It was collected from already published sources. This includes magazines and other internal records.

**The data includes:**

* By referring to the books in the company.
* By collecting data from the websites.
* By collecting data from company annual reports.

**OBJECTIVES OF THE STUDY**

* To analyze the net present value of the SRIKALAHASTHI PIPES LIMITED.
* To analyze the present & previous position of the organization before implementing the project.
* To offer suggestion to the SRIKALAHASTHI PIPES LIMITED to improve financial performance.
* To estimate the expenditure involved.

**LIMITATIONS OF STUDY**

* The data mostly consists of secondary information.
* Study is concentrated only on financial aspects of the company.
* Study is limited only to micro level.

**SCOPE OF THE STUDY**

The scope of study is limited to collecting financial data published in annual reports of the company with reference to the objectives stated above and an analysis of data with a view to understand the solutions by applying various Appraisal Methods in Capital Budgeting.

Payback period, Net present value, Internal Rate of Return methods used for different budgets titles.

**REVIEW OF LITERATURE**

**Concept of Capital budgeting**

Financial management is one of the important functions in the area of management. The aim of every firm first maximize the wealth of the shareholders and reputation of the company There exist no inseparable relationship between the financial functions and other mangers to achieve its goals and objectives, which are related to the company’s investment and financial decisions.

The analysis of the past information helps us to forecast the future accurately since financial statements provide valuable and genuine information concerning the past. Hence financial analysis will help us to analyze the present position and fix future goals. The financial decision making authority vests in the hands of management. Management should be particularly interested in knowing financial strength and weakness of the firm. Capital budgeting is the important tool in the hand of management to detect the efficiency of the investment which the firm is going to invest on the new projects. There are so many techniques to measure the efficiency of the project

**Meaning of capital budgeting**

The long term investment decision of the firm is generally known as the capital budgeting or capital expenditure decision. Capital budgeting decision may be defined as the firm’s decisions to invest its current fund most efficiently in the on germ assets anticipation of an expected flow of benefits over series of years.

1. The exchange of current funds for future benefits.
2. The funds are invested in long term assets.
3. The future benefits will occur to the firm over a series of years.

**OBJECTIVES OF CAPITAL BUDGETING**

* It determines the capital projects which work can be started during the budget period after taking into account their urgent and the expected rate of return on each project.
* It estimates the expenditure that would have to be incurred on capital projects approved by the management together with the source from which the required
* Founds would be obtained.
* It restricts the capital expenditure on projects within authorized limits.

**Cases of capital budgeting decisions**

A business organization has to face quite the problem of capital investment decisions capital investment refers to investment in projects whose results would be available only after a year. The investments in these projects are a quite heavy and to be made immediately but the returns will be available only after a period to time’s following are same of the case’s where heavy capital investment may be necessary.

**Replacements**

Replacements of fixed assets may become necessary either on account of their being worm out or becoming outdated on account of new technology.

**Expansion**

A firm nay has to expand its productions capacity on account of high demand for its products as inadequate production capacity. This will need additional capital investment.

**Diversification**

A business may like to reduce its risk by operating in several markets rather than in a single market .In such an ever, capital investment may become necessary for purchase of new machinery and facilities to handle the new products.

**Research and development**

Large sums of money may have to be expended for research and development in case of those industries where technology is rapidly changing in case large sums of money are needed for equipment .These proposals will normally be included in the capital budget.

**Miscellaneous**

A firm may have to invest money in project which do not directly helps in achieving; profit. For example installation of pollutions control equipment many by necessary on account of legal requirement. Thus founds will be required for such purposes also.

**Importance of capital budgeting**

Capital budgeting decisions are among the most crucial and critical business decisions; special care should be taken in making these decisions on account of the following reasons.

**Involvement of heavy fund**

Capital budgeting decision require large capital outlay in is therefore absolutely necessary that the form should carefully plan its investment programmed so thus it may get the finance at right time and thus are put to most profitable use.

**Long term implications**

The firms will feel the effects capital budgeting decision over at long period and wither fore they have a decisive influence on the rate and directions for the growth of the firm.

**Irreversible decisions**

In most cases capital budgeting decisions are irreversible this is because it is very difficult to find a market for the capital assets

**Most difficult to market**

The capital budgeting decisions require assessment of future events, which are uncertain .It, is really a default risk to estimate the probable future event the probable benefit and costs accurately in quantitative term because of economic political social and technologic factors

**Process of Capital Budgeting**

The various steps involved in capital budgeting process depend upon large number of factors such as size of the concern, nature of projects, their numbers, complexities and diversities and so on. The following five steps are involved in the process of capital budgeting.

1. Project generation
2. Project evaluation
3. Project selection
4. Project execution
5. Follow-up

**1. Project Generation**

A continuous generation of capital expenditure proposals like proposals expanding the revenues and proposals reducing the cost is highly essential to make efficient and full use of funds of the concern. If the proposals expanding the revenues relate to the proposals to add new products and to expand the capacity in existing lines, the proposals reducing the costs are designed to bring savings in cost in existing lines without changing the scale of operations.

**2. Project Evaluation**

This process deals with judging the suitability of a project by applying various criteria. Thus the process of project evaluation involves estimating the costs and benefits in terms of cash flows, and selecting an appropriate criterion for judging the desirability of the projects.

**3. Project Selection**

This step deals with screening and selecting the projects. Usually, projects under consideration can be screened at various levels of management. But the final approval of them should be given by the top management.

**4. Project Execution**

After the projects are selected, the funds are to be allocated for them. Such a formal plan for the allocation of fund is known as capital budget. The top management or executive committee should ensure that funds are spent as per the allocation made in the capital budgets.

**5. Follow-up**

Follow-up deals with comparison of actual performance with the budgeted data. This will ensure better forecasting and also help in sharpening the technique of forecasting.

**The basic features of Capital Budgeting are:**

It is a many sides activity, it includes searching for new and more profitable investment proposals investigating engineering and marketing considerations to predict the consequences of accepting the investment and making economic analysis to determine the profit potential of each investment proposal, its basic features can be summarized as follows.

1. Potentiality of making large anticipated profits i.e., the possibility of anticipating future profits.
2. Involves high degree of risk. A high degree of risk is involved since future is uncertain.
3. Involves relatively long period between outlay and anticipated returns. There is a long gap between cash out flow and future cash flows.

On the basis of the above discussion it can be concluded that capital budgeting consists in planning the development of available capital for the purpose of maximizing the long term profitability of the firm.

Capital budgeting is also called as capital expenditure budget. Operating budget shows planned operations in the coming period where as capital budget deals exclusively with major investment proposals. It assesses economies of expenditure and investment.

**Types of Capital Budgeting Decisions**

Capital Budgeting refers to the total process of generation evaluating, selecting and following up on capital expenditure alternatives. The firm allocates or budgets financial resource to new investment proposals. Basically the firms may be confronted with three types of capital budgeting decisions.

* The accepts reject decision
* The mutual exclusive choices decision.
* The capital rationing decision.

**CAPITAL BUDGETING APPRAISAL METHODS**

It views of the significance of capital decision, it is absolutely necessary that the method adopted for appraisal of capital investment proposals is a sound one.

There are several methods for evaluating and ranking the capital investment proposals. In case of all these methods the main emphasis is on the return which will be derived on the capital invested in the projects.

**Traditional methods:**

1. **Payback period method:**

The term pay back refers to the period in which the project will generate the necessary cash to recoup the initial investment.

Initial investment

Payback period = --------------------------------------------

Annual cash inflow

**Accept or reject criteria**

The payback period can be used as criteria to accept or reject an investment proposal. A project whose actual payback period is more than what has been predetermined by the management will be straight away rejected. Taking into account the reciprocal of the cost the maximum acceptable payback period.

**Advantages**

1. It is an important guide to investment policy.
2. It lays a great emphasis on liquidity
3. It is simple to operate and easy to understand.
4. This method costs less as it requires only very little effort for its computation.
5. It weighs early returns heavily and ignores distant returns.

**Disadvantages**

1. It fails to consider the period over which an investment is likely to fetch incomes.
2. It ignores the value of money.
3. This method does not take into consideration the cash flows beyond the payback period.

**II. Accounting/Average rate of returns (ARR)**

Average rate of returns is average of the net profit after taxes over the whole of the economic life of the project are taken. Under this method return, is expressed as percentage of capital or investment. Accounting rate of returns may be calculated using any one of the following formulas.

Average net profit after tax

ARR = --------------------------------------------

Average investment

The amount of average net profit after taxes and “Average Investment” are calculated as

Total net profit after taxes

A. Average net profit after tax = -----------------------------------------------------

No. of years

Investment – Scrap value + Additional working capital + Scrap value

B. Average Investment = ---------------------------------------------------------------    2

**Accept or reject criteria**

* + In case of independent projects, calculated ARR of the project will be accepted otherwise rejected.
  + While evaluating mutually exclusive projects, calculated ARR of the alternatives will be compared to judge the profitability. The projects, which has higher rate of return, will be accepted.

**Advantages**

1. It is simple to calculate and easy to understand and hence it is widely used.
2. It uses the entire earnings of a project in calculating rate of return.
3. It facilitates the comparison of new product project with that of cost reducing project or other projects of competitive nature.

**Disadvantages**

1. This method is like payback period method, ignores the time value of money.
2. This method cannot be applied to a situation where investment in a project is to make in parts.

**Discounted cash flow techniques**

**1. Net present value method**

NPV is considered the best method or evaluating the capital investment proposals. In case of this method cash in flow and cash out flow associated with each project are first worked out. The manager then calculates the present values of these, cash inflow and out flows at the rate of acceptable. This rate of return is considered as the cut off rate and is generally determined based on cost of capital. Cash out flows represent the investment and commitment of cash in the project at various points of time. The working capital is taken as a cash outflow in the year the project starts commercial production. The NPV is the difference between the total present value of future cash inflows and the total present value of future cash out flows.

The equation for calculating NPV in case of conventional cash flows can be put as follows.

A1 A2 A3 An

NPV = ---------- + ---------- + ---------- + ……….. + ----------- - C

(1+r) 1 (1+r) 2 (1+r) 3 (1+r) n

Where NPV = Net present value, A1, A2, A3………An = Annual cash inflows.

R = Discounting rate / cost of capital

1, 2, 3…….n = no. of years

C = Cash out flows

**Accept or reject criteria**

Net present value be used as an “accepted or rejection” in case the NPV is positive, the project should be accepted. However, if the NPV is negative the project should be rejected. Symbolically represents

NPV > 0 Accept the proposal

NPV < 0 Reject the proposal

**Advantages**

1. It is generally accepted by economist
2. It is superior to other methods of evaluating the economic worth of investments.
3. It recognizes the time value of money.
4. It recognizes all cash flows through out the life of the project.

**Disadvantages**

1. It may not give good results while comparing project with unequal lives and investment.
2. It is not easy to determine an appropriate discount rate.
3. As compared to the traditional methods the net present value method is more difficult to understand.

**2. Profitability Index**

Profitability index is one of the methods of evaluating the investment proposal. It is also called as benefit cost ratio and measures the relationship between present values of cash out flows and cash in flows. Thus, it can be calculated by using formula.

Present value of inflows

Gross Profitability index = ----------------------------------------------------

Present value of cash out flows

**Accept or reject criteria**

The proposal is accepted if the profitability index is more than one and rejected in case the profitability index is less than one. In case of mutually exclusive projects and capital rationing situation projects are ranked in orders of their profitability index and accepted.

**Advantages:**

1. It evaluates the worth of projects in terms of their relative magnitude. Hence, it is superior to P.V. Method.
2. It can used to choose between mutually exclusive projects by computing in gametal benefit- Cost ratio.

**Disadvantages**

1. It involves more calculations than the traditional methods and hence it is very difficult to understand.
2. In some cases of mutually exclusive nature, P.I is interior to N.P.V method.

**3. Internal rate of returns:**

Internal rate of return is that rate at which the sum of discounted cash inflows equals the sum of discounted cash out flows.

(Or)

IRR is the rate which discounts the cash flows to zero.

So at IRR

Cash in flows

---------------------- = 1

Cash out flows

Relationship between Payback period& Rate of Return by using PBP we can find the IRR .we follow “Two Methods” to find the IRR.

1. When Fixed Annuity of Cash Inflows.
2. In the case of Mixed Stream.

We can choose the Fixed Annuity of cash flows method.

IRR=r-(PBP-DFr/DFrl-DFrh)\*r

Where:

R= rate of return

PBP= Pay Back Period

DFr=Discount factor of interest rate

DFrl= Discount factor of lower rate

DFrh= Discount factor of higher rate

**Accept or reject criteria:**

Internal rate of return is the maximum rate of interest, which an organization can afford to pay on the capital invested in a project would qualify to be accepted of IRR exceeds the cut off rate. While evaluating two or more projects, a project giving the higher rate of return would be preferred. This is because the higher the rate of return, the more profitable is the investment.

**Advantages:-**

1. It provides more precise information regarding profitability.
2. It helps the form to choose from among different alternatives.
3. It considers the profitability of the project for its entire economic life and hence enables evaluating of true profitability.

**Disadvantages:-**

1. It is different to understand and is most difficult method of evaluation of investment proposal.
2. It does not provide significant answers under all situations.

**DATA ANALYSIS AND INTERPRETATION**

**PAYBACK PERIOD**

Initial investment

Payback = --------------------------------------

Total cash inflows

1. Budget Title

Auto values for caustic

**3, 00,000**

**Pay back = -------------------**

**5, 00,000**

**=7.2 moths**

2. Budget Title

Installation of separate lighting transformers for lighting circuits

**40, 00,000**

**Payback = --------------------**

**11, 54,000**

**= 3 years 4 months**

3. Budget Title

Basis control weight valves instrumentation

**18, 44,000**

**Payback = -------------------**

**10, 60,000**

**=1year 7months**

4. Budget Title

Street c pulper, carrying system

**1, 47, 63,000**

**Payback = --------------------**

**6, 84, 00,000**

**= 0.2 years**

5. Budget Title

Consistency transmitters for horizontal chests 3, 4,6and 7

**28, 00,000**

**Payback = ------------------**

**7, 58,000**

**=3 years 6 months**

6. Budget Title

Top layer clear filtrate lime to SFT-B

**5, 00,000**

**Payback = ---------------------**

**2, 52,000**

**= 1year 9 months**

7. Budget Title

Energy efficient vacuum pump for PM1&3

**30, 00,000**

**Payback = --------------------**

**18, 30,000**

**= 1 year 6 months**

8. Budget Title

Replacement of old vacuum pump with energy efficient vacuum pump PM1

**8, 50,000**

**Payback = --------------------**

**5, 06,000**

**= 1 year 6 months**

9. Budget Title

VFD’s for stock pump

**20, 98,000**

**Payback = ----------------------**

**12, 45,000**

**= 1.6 year (18 months)**

10. Budget Title

Water conservation measures

**37, 18,000**

**Payback = ---------------------**

**15, 38,000**

**= 2.4 year (28 months)**

11. Budget Title

Clamp truck

**39, 72,000**

**Payback = -----------------------**

**12, 00,000**

**=3.3 years (39 months)**

12. Budget Title

Chest auto cleaning

**47, 98,000**

**Payback = ---------------------**

**36, 00,000**

**=1.3 years (15 months)**

13. Budget Title

250 KW VFD Pumps

**8, 83,000**

**Payback = ----------------------**

**7, 43,000**

**= 14 months**

**Budgets of 2012-2013 were ranked on the basis of least pay back (months).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **SCHEME** | **Investment** | **Payback** | **Rank** |
| 1 | Auto Valves for  Caustic | 2, 99,000 | 7.2(months) | I |
| 2 | Installation of Separate Lighting Tran formers for lighting circuits | 30,32,000 | 3year4months | X |
| 3 | Basis Control  Weight values  Instrumentation | 18,44,000 | 1 year 7m | V |
| 4 | Street-cpulper  Carrying system | 1,47,63,000 | 0.2year | VIII |
| 5 | Consistency transmitters for Horizontal Chests 3 , 4,6and 7 | 27, 99, 000 | 3 year 6m | XI |
| 6 | Top Layer clear filtrate lime to SFT-B | 4, 99,000 | 1 year 9m | VI |
| 7 | Energy Efficient Vacuum pump for PM1&3 | 26,60,000 | 1 year 6m | IV |
| 8 | Replacement of old Vacuum pump with energy efficient Vacuum pump at PM1 | 8,47,000 | 1 year 6m | IV |
| 9 | VFD’s for stock pump | 20,98,000 | 1 year 6m | IV |
| 10 | Water conservation measure | 37,18,000 | 2 year 4m | VII |
| 11 | Clamp truck | 39,72,000 | 3 year 3m | IX |
| 12 | Chest auto cleaning | 47,98,000 | 1 year 3m | III |
| 13 | 250 kw VFD pumps | 8,83,000 | 1 year 2m | II |



**INTERPRETATION:**

In this payback period ranks are given low months can give the highest rank. The first rank of the budget title is “auto valves for caustic” the pay back will be 7.2 months.

Then the last rank of the budget title is **“**Consistency transmitters for Horizontal Chests 3, 4,6and 7”the pay back will be 3 years 6 months.

**53**

**NET PRESENT VALUE METHOD**

1. Budget Title

Auto valves for caustic

**A1 A2 A3 A4 A5 An**

**NPV = ----------- + ----------- + ---------- + ---------- + ---------- + --------- - C**

**(1+r) 1  (1+r)2 (1+r)3 (1+r)4  (1+r)5 (1+r)n**

**5, 00,000 5, 00,000 5, 00,000 5, 00,000 5, 00,000**

**= -------------- + -------------- + ---------------- + -------------- + ------------ -2, 98,849**

**(1+0.12)1 (1+0.12)2 (1+0.12)3 (1+0.12)4  (1+0.12)5**

**5, 00,000 5, 00,000 5, 00,000 5, 00,000 5, 00, 000**

**= -------------- + -------------- + ---------------- + -------------- + -------------- - 2, 98,849**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 446428+398597+355897+317763+283720 - 298849**

**= 1,80,2405 – 2, 98,849**

**= 15, 03,556**

2. Budget Title

Installation of Separate Lighting Transformers for Lighting Circuit

**11 ,54 ,000 11 ,54 ,000 11 ,54 ,000 11 ,54 ,000 11 ,54 ,000**

**NPV = ------------- + ------------- + ------------- + ------------- + ------------- - 3,032,477**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 10,30,357 + 9,19,962 + 8,21,411 +7,33,397+ 6,54,826 – 30,32,477**

**= 41, 59,953 – 30, 32,477**

**= 11, 27,476**

3. Budget Title

Basis control weight valves instrumentation

**10, 60,000 10, 60,000 10, 60,000 10, 60,000 10, 60,000**

**NPV = ------------ + ------------- + ------------- + ------------- + ------------- - 18, 43,990**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 9,46,428.57+8,45,025.51+ 7,54,502.09 + 6,73,657.45 + 6,01,486.69 – 18,43,990**

**= 3821100.31 – 18, 43,990**

**= 19, 77,110.31**

4. Budget Title

Street – c pulper, carrying system

**6,84,00,000 6, 84,00,000 6,84,00,000 6, 84,00,000 6,84,00,000**

**NPV = -------------- + -------------- + -------------- + --------------+ --------------- - 1, 47,834.03**

**1.12 1.2544 1.4049 1.5735 1.7623**

**=6,10,71,428.57+5,45,28,061.22+4,86,86,739.27+4,34,69,971.4+3,88,12,914.94– 1,47,83,403**

**= 20, 74, 46,141.1 – 1, 47, 83,403**

**= 19, 26, 62,738.1**

5. Budget title

Consistency Transmitters for Horizontal Chests 3, 4, 6and 7

**7, 58, 000 7, 58,000 7, 58,000 7, 58,000 7, 58,000**

**NPV = -------------- + -------------- + -------------- + --------------+ --------------- - 27, 98,51**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 6, 76, 786 +6, 04, 273 +5, 39, 540 +4, 81,728 +4, 30,120 -27, 98,519**

**=27, 32,447-27, 98,519**

**= (-66072).**

6. Budget Title

Top Layer Clear Filtrate Lime to SFT-B

**2, 52,000 2, 52,000 2, 52,000 2, 52, 000 2, 52,000**

**NPV = -------------- + -------------- + --------------- + --------------+ ------------- - 4, 98,560**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 2,25,000+2,00,893+1,79,372+1,60,153+1,42,995 – 4, 98, 560**

**= 9, 08,443 – 4, 98,560**

**= 4, 09, 853**

7. Budget Title

Energy Efficient Vacuum Pump for PM1 & 3

**18, 30,000 18, 30, 000 18, 30,000 18, 30,000 18, 30,000**

**NPV= -------------- + -------------- + -------------- + --------------+ --------------- - 26, 59,560**

**1.12 1.2544 1.4049 1.5735 1.7623**

**=16,33,929+14,58,865+13,02,584+11,63,012+10,38,414– 26, 59,560**

**=65, 96,804 – 26, 59,560**

**= 39, 37,244**

8. Budget Title

Replacement of Old Vacuum Pump with Energy Efficient Vacuum pump at PM1

**5, 06,000 5, 06,000 5,06,000 5, 06,000 5,06,000**

**NPV = -------------- + -------------- + -------------- + -------------- + ------------- -8, 47,345**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 4,51,786+4,03,380+3,60,168+3,21,576+2,87,125 – 8,47,345**

**= 18, 24,025 – 8, 47,345**

**= 9, 76,690**

9. Budget Title

VFD’s for stock pump

**12, 45,000 12, 45,000 12, 45,000 12, 45,000 12, 45,000**

**NPV = -------------- + -------------- + -------------- + --------------+ -------------- - 20, 97,974.00**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 11, 11,607.14+992506.37+886184.07+791229.74+7, 06,463.14 – 20, 97,974**

**= 44, 87,990.46 – 20, 97,974**

**= 23, 90,016.46**

10. Budget Title

Water conservation measures

**15, 38,000 15, 38,000 15, 38,000 15, 38,000 15, 38,000**

**NPV = -------------- + -------------- + -------------- + --------------+ --------------- -37, 18,413**

**1.12 1.2544 1.4049 1.5735 1.7623**

**=1373214.28+1226084+1094739.83+977438.83+872723.14 – 37, 18,413**

**= 5544200.26 – 37, 18,413**

**= 18, 25,787.26**

11. Budget Title

Clamp truck

**12, 00,000 12, 00,000 12, 00,000 12, 00,000 12, 00,000**

**NPV = -------------- + -------------- + -------------- + --------------+ --------------- - 39, 72,299**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 1071428.57+956632.65+854153.32+762631.07+680928.33 – 39, 72,299**

**= 43, 25,773.94 – 39, 72,299**

**= 3, 53,474.94**

12. Budget Title

Chest auto cleaning

**36, 00,000 36, 00,000 36, 00,000 36, 00,000 36, 00,000**

**NPV = -------------- + -------------- + -------------- + --------------+ --------------- 47, 97,852**

**2 1.2544 1.4049 1.5735 1.7623**

**= 3214285.71+2869897.95+2562459.96+2287893.23+2042784.99 – 47, 97,852**

**= 12977321.84 – 47, 97,852**

**=81, 79,469.86**

13. Budget Title

250 KW VFD pumps

**7,43,000 7,43,000 7,43,000 7,43,000 7,43,000**

**NPV = -------------- + -------------- + -------------- + --------------+ --------------- - 882617**

**1.12 1.2544 1.4049 1.5735 1.7623**

**= 663392.85+592315.05+528863.26+472195.74+421608.1 – 8, 82,617**

**= 26, 78,375 – 882617**

**= 17, 95,758**

**Budgets of 2013-2014 net present value ranking on the basis of highest value**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.no** | **Scheme** | **Investment** | **Net present value** | **Ranking** |
| 1 | Auto Valves for  Caustic | 2, 99,000 | 15,03,556 | VIII |
| 2 | Installation of Separate Lighting Tran formers for lighting circuits | 30,32,000 | 11,27,476 | IX |
| 3 | Basis Control  Weight values  Instrumentation | 18,44,000 | 19,77,110.31 | V |
| 4 | Street-cpulper  Carrying system | 1,47,63,000 | 19,26,62,738.1 | I |
| 5 | Consistency transmitters for Horizontal Chests 3 , 4,6and 7 | 27, 99, 000 | -66072 | XIII |
| 6 | Top Layer clear filtrate lime to SFT-B | 4, 99,000 | 4,09,853 | XI |
| 7 | Energy Efficient Vacuum pump for PM1&3 | 26,60,000 | 39,37,244 | III |
| 8 | Replacement of old Vacuum pump with energy efficient Vacuum pump at PM1 | 8,47,000 | 9,76,690 | X |
| 9 | VFD’s for stock pump | 20,98,000 | 23,90,016.46 | IV |
| 10 | Water conservation measure | 37,18,000 | 18,25,787.26 | VI |
| 11 | Clamp truck | 39,72,000 | 3,53,474.94 | XII |
| 12 | Chest auto cleaning | 47,98,000 | 81,79,469.86 | II |
| 13 | 250 kw VFD pumps | 8,83,000 | 17,95,758 | VII |



**INTERPRETATION**:

NPV can give the ranks in to highest value can give the first rank. First rank of the budget title is “street-cpulper carrying system”.

The lowest rank of the budget title is “consistency transmitter for horizontal chests 3, 4, 6 and 7”.

**INTERNAL RATE OF RETURN (IRR)**

(R-(PBP-DFr)

IRR= --------------------\*r

(DFrl-DFrh)

**Where:**

**R= rate of return**

**PBP= Pay Back Period**

**DFr=Discount factor of interest rate**

**DFrl= Discount factor of lower rate**

**DFrh= Discount factor of higher rate**

1. Budget Title

Installation of separate lighting transformers for lighting circuits

**3.466-3.517**

**= 13- --------------------\*1**

**3.517-3.433**

**(-0.0510)**

**= 13- -----------\*1**

**0.084**

**= 13+0.607**

**= 13.60**

2. Budget Title

Basis control weight valves instrumentation

**1.7396-1.7896**

**= 48- ------------------\*2**

**17896-1.7366**

**=48+ (0.9433)2**

**=48+1.886**

**= 49.88**

3. Budget Title

Consistency transmitters for horizontal chests 3, 4,6and 7

**3.466-3.696**

**= 11 - ----------------\*1**

**3.696-3.605**

**=11+0.032**

**=11.032**

4. Budget Title

Top Layer Clear Filtrate Lime to SFT-B

**1.9841-2.168**

**= 40 - ------------------\*2**

**2.168-1.9685**

**=40+ (0.9195)2**

**= 41.83**

5. Budget Title

Energy Efficient Vacuum Pump for PM1 & 3

**1.6293-1.6860**

**= 52 - -------------------\*2**

**1.6860-1.638**

**= 52+ (0.972)2**

**=52+1.94**

**= 53.94**

6. Budget Title

Replacement of old vacuum pump with energy efficient vacuum pump PM1

**1.6798**-**1.6860**

**= 52- ---------------------\*2**

**1.6860-1.636**

=**52+ (0.1291)2**

=**52+0.258**

**=52.25**

7. Budget Title

VFD’s for stock pump

**1.6851-1.6850**

**= 52- -------------------\*2**

**1.6860-1.638**

**=52+ (0.0187)2**

**=52+0.3**

**=52.03**

8. Budget Title

Water conservation measures

**2.417-2.436**

= **30-** -----------------\***1**

**2.436-2.390**

**=30+0.413**

**=30.413**

9. Budget Title

Clamp truck

**3.310-3.352**

**= 15- ---------------- \*1**

**3.352-3.274**

**=15+0.538**

**=15.538**

10. Budget Title

Chest auto cleaning

**1.3327-1.3606**

**= 68 - ----------------------- \*2**

**1.3606-1.3279**

**=68+ (0.8532)2**

**=68+1.706**

**=69.70**

11. Budget Title

250 KW VFD pumps

**1.1884-1.2100**

**= 78- ----------------------\*2**

**1.210-1.188**

**=78+ (0.8000)2**

**=78+1.60**

**=79.60**

**INTERPRETATION;**

IRR is maximum rate of interest which an organization can offer to pay on capital invested on the project.

The cut off rate is 12%.IRR above 12% it can be accepted.

Below 12% budgets will be rejected.

The budget title Consistency transmitters for horizontal chests 3, 4,6and 7, **this budget have to reject**

IRR = 11.03

**Accepted budgets will be shown below table.**

**LIST OF ACCEPTED BUDGET TITLES**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **BUDGET TITLE** | **IRR** | **RANKING** |
| 1 | Installation of separate lighting transformers for lighting circuits | 13.60 | X |
| 2 | Basis control weight valves instrumentation | 49.88 | VI |
| 3 | Top Layer Clear Filtrate Lime to SFT-B | 41.83 | VII |
| 4 | Energy Efficient Vacuum Pump for PM1 & 3 | 53.94 | III |
| 5 | Replacement of old vacuum pump with energy efficient vacuum pump PM1 | 52.25 | IV |
| 6 | VFD’s for stock pump | 52.03 | V |
| 7 | Water conservation measures | 30.41 | VIII |
| 8 | Clamp truck | 15.53 | IX |
| 9 | Chest auto cleaning | 69.70 | II |
| 10 | 250 KW VFD pumps | 79.60 | I |



**INTERPRETATION:**

**The range of rate of returns should be decreased for the budget title “**installation of separate lighting transformers for lighting circuits”. **The highest rank of IRR budget title is “**250 kW VFD pumps”. **Lowest** **rank of budget is “**installation of separate lighting transformers for lighting circuits”

**COST BENFIT**

Budget Title: - Auto Valves for Caustic

**Cost Benefit: 5.00 lacks per annum**

**Payback = 7.2 months**

**Cost Benefit is taken as cash inflows**.

Budget Title: - Installation of separate lighting Transformers for lighting circuits.

**Total mill lighting load is- 816.8 kW**

**Envisaged savings in % - 20%**

**Power saving per hour – 163kw**

**Annual running hours @ 10 hrs /day-3650 hours**

**Annual savings in kWh -594950**

**Annual saving @Rs 1.94/kwh – Rs 11.54 lack**

**Cost benefits are taken cash inflows.**

Budget Title: - Basis control weight values instrumentation.

**After replacing Basis control in PMC**

**Loss per ton = Rs. 6000**

**Net saving = 170 / 2 = 85 MT/annum,**

**= 85 MT x 6000 = Rs. 5.10 lack**

**Paper M/c 2**

**Estimate saving of fibre**

**= 7.0 kg/hour**

**= 168 kg/day**

**= 168 x 330 days = 55000 kg /annum**

**Fiber saving @ Rs. 10,000-00 MT**

**= 55 x 10,000 =Rs.5.5 lack**

**Total Saving = Rs. 5.10 lack + 5.5 lack**

**=Rs. 10.60 lack/annum**

**Cost benefits are taken as cash inflows.**

Budget Title: Street-c pulper, carrying system

**Capacity enhanced by 950 Mt per month**

**Cost benefit = 950 mt x 6000 (Diff of contribution between VAP and grey back)**

**= 57 lakh per month**

**= 6, 84, 00,000 per annum**

**Investment = 147.63 Lacks**

**Payback = 30 months**

**Here costs Benefit are taken as cash inflows.**

Budget Title: - Consistency Transmitters for Horizontal Chests, 3, 4, 6and 7

**Cost Benefit : 7.58 lachs /per year**

**Pay back =42 months**

**Here cost benefits are taken as cash inflows.**

Budget Title: Top Layer clear filtrate lime to SFT-B

**Fresh water saving 7000m3/month\*Rs 3\*12 =2.52 lacks/yr**

**Annual savings: Rs. 2.52 lacks**

**Payback: 21 months**

**Cost benefits are taken as cash inflows.**

Budget Title: Energy Efficient vacuum pump for PM1 & 3

**Cost benefit: 18.30 lack/annum**

**Investment: 30 lacks**

**Payback: 18 months**

**Cost benefits are taken as cash inflows.**

Budget Title: Replacement of old Vacuum pump with energy efficient Vacuum pump at PM1

**Cost benefit: 5.06 lack**

**Power saving per/annum = 5.06**

**Payback period: 18 months**

**Cost benefit is taken as cash inflows.**

Budget Title: VFD’s for stock pump

**By implementing in this scheme**

**1. To eliminate energy loss due to throttling of pump delivery value due to variable draw from paper machine based on GSM.**

**Cost benefit:-**

**Power saving by VFD is 94.23 kW**

**Annual hours considered is 7920 hrs**

**Annual energy savings is 7.46 lack kWh**

**Cost of generation is Rs. 1.6/ Kwh**

**Annual savings is Rs. 1245 Lack**

Budget Title: - Water conservation measures

**In this scheme we have to implement 2 proposals**

**Copex proposal Title:**

**Proposals: 1. Water conservation Proposal- Chemical recovery plant (SRP)**

**Proposals: 2. Water conservation Proposal –paper machine 2 & 3**

By implementing the proposal For Congreve 1300 m3/day of process water consumption at limekiln and caustic zing through recycling bases on findings of CII water audit.

By implementing the Proposal 2. To conserve 1500 m3/day of process water consumption at pm 2/3 from vacuum pumps & refiners sealing water by installing fan & finless cooling tower through recycling.

**The Cost Benefit:**

Proposal: 1: Rs. 935 Lac (1300 m3 1 day + 333days + Rs. 1.65)

Proposal: 2: Rs 10.78 lack (1500 m3 1day + 333 days + 2.16)

Total saving: 15.37 lack

This is taken as cash inflows

Budget Title: Clamp Truck

**Cost Benefit: Rs. 12 lakh per annum**

**Pay back = 28 months**

**Cost benefits are taken as cash inflows.**

Budget Title: Chest Auto Cleaning

**Cost benefit:-**

Reduction in down time is 2 hours per sheet.

Total reduction per annual is 24 hours.

Addl. Contribution = 24 x 10 tph x Rs. 15000/7 = Rs. 36 lacks/Annum

Reduction in contract Labor is 48/ annual

There fore addl. Reduction in cost is 48x 123.73 = Rs. 5939/annum

Payback: 18 months

Cost benefit taken as cash **flows.**

Budget Title: 250 kW VFD pumps

**By implementing in this scheme**

* + - 1. **Installation of 1 x 250 kw VFD for process water pumps.**
      2. **Optimization of power consumption for process water pump by VFD**

**Cost benefit: Rs. 7.43 Lac /annum**

**This is taken as cash inflows.**

**BALANCE SHEETS**

**SRIKALAHASTHI PIPES LIMITED INDUSTRIES LIMITED BALANCESHEET FOR THE YEAR 2009-10**

|  |  |  |
| --- | --- | --- |
| **Sources of funds** | **2010** | **2009** |
| Share holders funds | | |
| A) share capital | 3976.36 | 3976.36 |
| B) Reserves and Surplus | 3804.74 | 2160.18 |
| A) Secured Loans | 10886.36 | 10723.23 |
| B) Unsecured Loans | 9588.74 | 5404.59 |
| Differed tax Liability | 424.17 | - |
| **Total** | **28680.37** | **22264.36** |
| Application of funds | | |
| Fixed Assets - | | |
| A) Gross Block | 2002136 | 17884.47 |
| B) Less Depreciation | 5417.03 | 4648.10 |
| Net Block | 14604.33 | 13236.37 |
| Capital Work In Progress | 6015.09 | 2652.95 |
| Investment | 589.83 | - |
| Current Assets, Loans and Advances | | |
| A) Inventories | 7075.18 | 5294.05 |
| B) Sundry Debtors | 7197.89 | 4098.66 |
| C) Cash and Bank Balance | 247.72 | 447.49 |
| D) Loans and Advances | 1616.75 | 1462.76 |
|  | 16,137.54 | 11,302.96 |
| Less current Liabilities and Provisions | | |
| A) Current Liabilities | 8090.45 | 5052.57 |
| B) Provisions | 586.14 | 572.72 |
|  | 8676.59 | 5625.29 |
| Net Current Assets | 7460.95 | 5677.67 |
| Differed Tax Assets |  | 683.48 |
| Miscellaneous Expenditure | 10.17 | 13.89 |
| **Total** | **28,680.37** | **22,264.36** |

SRIKALAHASTHI PIPES LIMITED INDUSTRIES LIMITED BALANCESHEET FOR THE YEAR 2010-11

|  |  |  |
| --- | --- | --- |
| **Sources of funds** | **2011** | **2010** |
| Share holders funds | | |
| A) Share capital | 3976.36 | 3976.36 |
| B) Reserves and Surplus | 3993.06 | 3804.74 |
| A) Secured Loans | 9244.82 | 10886.36 |
| B) Unsecured Loans | 15069.11 | 9588.74 |
| Deferred Tax Liability | 618.06 | 424.17 |
| **Total** | **32901.40** | **28680.37** |
| Application of funds | | |
| Fixed Assets - | | |
| A) Gross Block | 25035.99 | 20021.36 |
| B) Less Depreciation | 6510.29 | 5417.03 |
| Net Block | 18525.70 | 14604.33 |
| Capital Work In Progress | 5604.02 | 6015.09 |
| Investment | - | 589.83 |
| Current Assets, Loans and Advances | | |
| A) Inventories | 9194.04 | 7075.18 |
| B) Sundry Debtors | 6706.59 | 7197.89 |
| C) Cash and Bank Balance | 350.67 | 247.72 |
| D) Loans and Advances | 2070.42 | 1616.75 |
|  | 18,321.76 | 16,137.54 |
| Less current Liabilities and Provisions | | |
| A) Current Liabilities | 9202.11 | 8090.45 |
| B) Provisions | 354.42 | 586.14 |
|  | 9556.53 | 8676.59 |
| Net Current Assets | 8765.23 | 7460.95 |
| Differed Tax Assets | - | - |
| Miscellaneous Expenditure | 6.45 | 10.17 |
| **Total** | **32,901.40** | **28,680.37** |

SRIKALAHASTHI PIPES LIMITED INDUSTRIES LIMITED BALANCESHEET FOR THE YEAR 2011-12

|  |  |  |
| --- | --- | --- |
| **Sources of funds** | **2012** | **2011** |
| Share holders funds | | |
| A) Share capital | 3976.36 | 3976.36 |
| B) Reserves and Surplus | 5,108.64 | 3993.06 |
| A) Secured Loans | 16,382.92 | 9244.82 |
| B) Unsecured Loans | 13,733.65 | 15069.11 |
| Deferred Tax Liability | 1,184.79 | 618.06 |
| **Total** | **40,386.36** | **32901.40** |
| Application of funds | | |
| Fixed Assets - | | |
| A) Gross Block | 31,824.32 | 25035.99 |
| B) Less Depreciation | 7,666.24 | 6510.29 |
| Net Block | 24,158.08 | 18525.70 |
| Capital Work In Progress | 754.45 | 5604.02 |
| Investment | - | - |
| Current Assets, Loans and Advances | | |
| A) Inventories | 10,636.86 | 9194.04 |
| B) Sundry Debtors | 7,667.92 | 6706.59 |
| C) Cash and Bank Balance | 2,650.37 | 350.67 |
| D) Loans and Advances | 5,241.68 | 2070.42 |
|  | 26,196.83 | 18,321.76 |
| Less current Liabilities and Provisions | | |
| A) Current Liabilities | 10,188.34 | 9202.11 |
| B) Provisions | 538.25 | 354.42 |
|  | 10,726.59 | 9556.53 |
| Net Current Assets | 15,470.24 | 8765.23 |
| Differed Tax Assets | - | - |
| Miscellaneous Expenditure | 3.59 | 6.45 |
| **Total** | **40,386.36** | **32,901.40** |

SRIKALAHASTHI PIPES LIMITED INDUSTRIES LIMITED BALANCESHEET FOR THE YEAR 2012-13

|  |  |  |
| --- | --- | --- |
| **Sources of funds** | **2013** | **2012** |
| Share holders funds | | |
| A) Share capital | 3976.36 | 3976.36 |
| B) Reserves and Surplus | 7179.70 | 5,108.64 |
| A) Secured Loans | 17832.33 | 16,382.92 |
| B) Unsecured Loans | 12271.32 | 13,733.65 |
| Deferred Tax Liability | 2576.95 | 1,184.79 |
| **Total** | **43836.66** | **40,386.36** |
| Application of funds | | |
| Fixed Assets - | | |
| A) Gross Block | 35516.23 | 31,824.32 |
| B) Less Depreciation | 9127.88 | 7,666.24 |
| Net Block | 26388.35 | 24,158.08 |
| Capital Work In Progress | 862.01 | 754.45 |
| Investment | - | - |
| Current Assets, Loans and Advances | | |
| A) Inventories | 12092.91 | 10,636.86 |
| B) Sundry Debtors | 8814.31 | 7,667.92 |
| C) Cash and Bank Balance | 420.10 | 2,650.37 |
| D) Loans and Advances | 5289.66 | 5,241.68 |
|  | 26,616.98 | 26,196.83 |
| Less current Liabilities and Provisions | | |
| A) Current Liabilities | 9319.38 | 10,188.34 |
| B) Provisions | 711.30 | 538.25 |
|  | 10,030.68 | 10,726.59 |
| Net Current Assets | 16586.30 | 15,470.24 |
| Differed Tax Assets | - | - |
| Miscellaneous Expenditure | - | 3.59 |
| **Total** | **43,836.66** | **40,386.36** |

**SRIKALAHASTHI PIPES LIMITED INDUSTRIES LIMITED BALANCESHEET FOR THE YEAR 2013-14**

|  |  |  |
| --- | --- | --- |
| **Sources of funds** | **2014** | **2013** |
| Share holders funds | | |
| A) Share capital | 3976.36 | 3976.36 |
| B) Reserves and Surplus | 8549.77 | 7179.70 |
| A) Secured Loans | 22645.54 | 17832.33 |
| B) Unsecured Loans | 15460.46 | 12271.32 |
| Deferred Tax Liability | 3123.73 | 2576.95 |
| **Total** | **53755.86** | **43836.66** |
| Application of funds | | |
| Fixed Assets - | | |
| A) Gross Block | 38974.86 | 35516.23 |
| B) Less Depreciation | 10734.88 | 9127.88 |
| Net Block | 28239.98 | 26388.35 |
| Capital Work In Progress | 425.37 | 862.01 |
| Investment | - | - |
| Current Assets, Loans and Advances | | |
| A) Inventories | 14436.48 | 12092.91 |
| B) Sundry Debtors | 11966.16 | 8814.31 |
| C) Cash and Bank Balance | 3463.66 | 420.10 |
| D) Loans and Advances | 6107.54 | 5289.66 |
|  | 35,973.84 | 26,616.98 |
| Less current Liabilities and Provisions | | |
| A) Current Liabilities | 10108.38 | 9319.38 |
| B) Provisions | 774.95 | 711.30 |
|  | 10,883.33 | 10,030.68 |
| Net Current Assets | 25090.51 | 16586.30 |
| Differed Tax Assets | - | - |
| Miscellaneous Expenditure | - | - |
| **Total** | **53,755.86** | **43,836.66** |

SRIKALAHASTHI PIPES LIMITED INDUSTRIES LIMITED BALANCESHEET FOR THE YEAR 2014-15

|  |  |  |
| --- | --- | --- |
| **Sources of funds** | **2015** | **2014** |
| Share holders funds | | |
| A) Share capital | 3,976.36 | 3976.36 |
| B) Reserves and Surplus | 13,713.91 | 8549.77 |
| A) Secured Loans | 26,486.50 | 22645.54 |
| B) Unsecured Loans | 6,130.29 | 15460.46 |
| Deferred Tax Liability | 3,435.74 | 3123.73 |
| **Total** | **53,742.80** | **53755.86** |
| Application of funds | | |
| Fixed Assets - | | |
| A) Gross Block | 40,286.29 | 3,8974.86 |
| B) Less Depreciation | 12,527.20 | 10,734.88 |
| Net Block | 27,759.09 | 28,239.98 |
| Capital Work In Progress | 3,441.21 | 425.37 |
| Investment | - | - |
| Current Assets, Loans and Advances | | |
| A) Inventories | 11,519.49 | 14,436.48 |
| B) Sundry Debtors | 11,845.80 | 11,966.16 |
| C) Cash and Bank Balance | 1,516.42 | 3,463.66 |
| D) Loans and Advances | 5,581.47 | 6,107.54 |
|  | 30,463.18 | 35,973.84 |
| Less current Liabilities and Provisions | | |
| A) Current Liabilities | 6,853.94 | 10,108.38 |
| B) Provisions | 1,066.74 | 774.95 |
|  | 7,920.68 | 10,883.33 |
| Net Current Assets | 22,542.50 | 25,090.51 |
| Differed Tax Assets | - | - |
| Miscellaneous Expenditure | - | - |
| **Total** | **53,742.80** | **53,755.86** |

**STATEMENT OF CHANGES IN WORKING CAPITAL** (Rupees in Lakhs)

**2009-10**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **2009** | **2010** | **Changes in working capital** | |
| **Increase** | **Decrease** |
| Current assts (CA) | | | | |
| Inventories | 5294.05 | 7075.18 | 1781.13 | - |
| Sundry debtors | 4098.66 | 7197.89 | 3099.23 | - |
| Cash and bank balances | 447.49 | 247.72 | - | 199.77 |
| Loans and advances | 1462.76 | 1616.75 | 153.99 | - |
| **Total Current Assets** | **11302.96** | **16137.54** | **-** | **-** |
| Current liabilities (CL) | | | | |
| Current liabilities | 5052.57 | 8090.45 | - | 3037.88 |
| Provisions | 572.72 | 586.14 | - | 13.42 |
| **Total current liabilities** | **5625.29** | **8676.59** | **-** | **-** |
| **Net Working capital (CA-CL)** | **5677.67** | **7460.95** | **-** | **-** |
| **Increase in Net working capital** | **1783.28** | **-** | **-** | **1783.28** |
|  | **7460.95** | **7460.95** | **5034.35** | **5034.35** |

**Net increase in the working capital is 1783.28.**

**Interpretation**

From the above table is observed that the networking capital of the company shows increasing trend. The total current assets of the company have increased from Rs.11302.96. in 2009 to Rs.16137.54 in 2010.

But the bank balance decreased from Rs.447.49 to Rs.247.72 i.e., 199.77. The total current liabilities increased from Rs.5677.67 to Rs.8676.59. The net working capital increases Rs.1783.28.

**STATEMENT OF CHANGES IN WORKING CAPITAL** (Rupees in Lakhs)

**2010-11**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **2010** | **2011** | **Changes in working capital** | |
| **Increase** | **Decrease** |
| Current assts (CA) | | | | |
| Inventories | 7075.18 | 9194.08 | 2118.9 | - |
| Sundry debtors | 7197.89 | 6706.59 | - | 491.3 |
| Cash and bank balances | 247.72 | 350.67 | 102.95 | - |
| Loans and advances | 1616.75 | 2070.42 | 453.67 | - |
| **Total Current Assets** | **16137.54** | **18321.76** | **-** | **-** |
| Current liabilities (CL) | | | | |
| Current liabilities | 8090.45 | 9202.11 | - | 1111.66 |
| Provisions | 586.14 | 354.42 | 231.72 | - |
| **Total current liabilities** | **8676.59** | **9556.53** | **-** | **-** |
| **Net Working capital (CA-CL)** | **7460.95** | **8765.23** | **-** | **-** |
| **Increase in Net working capital** | **1304.48** |  | **-** | **1304.48** |
|  | **8765.23** | **8765.23** | **2907.24** | **2907.24** |

**Net increase in the working capital is 1304.48**

**Interpretation**

From the above table is observed that the networking capital of the company shows increasing trend. The total current assets of the company have increased from Rs. 16137.54. in 2010 to Rs.18321.76 in 2011.

But the bank balance increased from Rs.247.72 to Rs.350.67 i.e., 102.95. The total current liabilities increased from Rs. 8676.59 to Rs.9556.53. The net working capital increases Rs.1304.48.

**STATEMENT OF CHANGES IN WORKING CAPITAL** (Rupees in Lakhs)

**2011-12**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **2011** | **2012** | **Changes in working capital** | |
| **Increase** | **Decrease** |
| Current assts (CA) | | | | |
| Inventories | 9194.08 | 10,636.86 | 1442.78 | - |
| Sundry debtors | 6706.59 | 7667.92 | 961.33 | - |
| Cash and bank balances | 350.67 | 2650.37 | 2299.70 | - |
| Loans and advances | 2070.42 | 5241.68 | 3171.26 | - |
| **Total Current Assets** | **18321.76** | **26196.83** | **-** | **-** |
| Current liabilities (CL) | | | | |
| Current liabilities | 9202.11 | 10188.34 | - | 986.23 |
| Provisions | 354.42 | 538.25 | - | 183.83 |
| **Total current liabilities** | **9556.53** | **10726.59** | **-** | **-** |
| **Net Working capital (CA-CL)** | **8765.23** | **15470.24** | **-** | **-** |
| **Increase in Net working capital** | **6705.01** | **-** | **-** | **6705.01** |
|  | **15470.24** | **15470.24** | **7875.07** | **7875.07** |

**Net increase in the working capital is 6705.01**

**Interpretation**

From the above table is observed that the networking capital of the company shows increasing trend. The total current assets of the company have increased from Rs. 18321.76. in 2011 to Rs.26196.83 in 2012.

But the bank balance increased from Rs.350.67 to Rs.2650.37 i.e., 2299.70. The total current liabilities increased from Rs. 9556.53 to Rs.10726.59. The net working capital increases Rs.6705.01.

**STATEMENT OF CHANGES IN WORKING CAPITAL** (Rupees in Lakhs)

**2012-13**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **2012** | **2013** | **Changes in working capital** | |
| **Increase** | **Decrease** |
| Current assts (CA) | | | | |
| Inventories | 10,636.86 | 12092.91 | 1456.05 | - |
| Sundry debtors | 7667.92 | 8814.31 | 1146.39 | - |
| Cash and bank balances | 2650.37 | 420.10 | - | 2230.27 |
| Loans and advances | 5241.68 | 5289.66 | 47.98 | - |
| **Total Current Assets** | **26196.83** | **26616.98** | **-** | **-** |
| Current liabilities (CL) | | | | |
| Current liabilities | 10188.34 | 9319.38 | 868.96 | - |
| Provisions | 538.25 | 711.03 | - | 173.05 |
| **Total current liabilities** | **10726.59** | **10030.68** | **-** | **-** |
| **Net Working capital (CA-CL)** | **15470.24** | **16586.30** | **-** | **-** |
| **Increase in Net working capital** | **1116.06** | **-** | **-** | **1116.06** |
|  | **16586.30** | **16586.30** | **3519.38** | **3519.38** |

**Net increase in the working capital is 1116.06**

**Interpretation**

From the above table is observed that the networking capital of the company shows increasing trend. The total current assets of the company have increased from Rs. 26196.83. in 2012 to Rs.26616.98 in 2013.

But the bank balance decreased from Rs. 2650.37to Rs.420.10 i.e., 2230.27. The total current liabilities increased from Rs.10726.59 to Rs.10030.68. The net working capital increases Rs.1116.06.

**STATEMENT OF CHANGES IN WORKING CAPITAL** (Rupees in Lakhs)

**2013-14**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | | **2013** | **2014** | **Changes in working capital** | |
|  |  | | **Increase** | **Decrease** |
| Current assts (CA) | | | | | |
| Inventories | | 12092.91 | 14436.48 | 2343.57 | - |
| Sundry debtors | | 8814.31 | 11966.16 | 3151.85 | - |
| Cash and bank balances | | 420.10 | 3463.66 | 3043.56 | - |
| Loans and advances | | 5289.66 | 6107.54 | 817.88 | - |
| **Total Current Assets** | | **26616.98** | **35973.84** | **-** | **-** |
| Current liabilities (CL) | | | | | |
| Current liabilities | | 9319.38 | 10108.38 | - | 789.00 |
| Provisions | | 711.03 | 774.95 | - | 63.65 |
| **Total current liabilities** | | **10030.68** | **10883.33** | **-** | **-** |
| **Net Working capital (CA-CL)** | | **16586.30** | **25090.51** | **-** | **-** |
| **Increase in Net working capital** | | **8504.21** | **-** | **-** | **8504.21** |
|  | | **25090.51** | **25090.51** | **9356.86** | **9356.86** |

**Net increase in the working capital is 8504.21**

**Interpretation**

From the above table is observed that the networking capital of the company shows increasing trend. The total current assets of the company have increased from Rs. 26616.98. in 2013 to Rs.35973.84 in 2014.

But the bank balance increased from Rs.420.10 to Rs.3463.66 i.e., 3043.56. The total current liabilities increased from Rs. 10030.68 to Rs.10883.33. The net working capital increases Rs.8504.21

**STATEMENT OF CHANGES IN WORKING CAPITAL** (Rupees in Lakhs)

**2014-15**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **2014** | **2015** | **Changes in working capital** | |
| **Increase** | **Decrease** |
| Current assts (CA) | | | | |
| Inventories | 14436.48 | 11519.49 | - | 2916.99 |
| Sundry debtors | 11966.16 | 11845.80 | - | 120.36 |
| Cash and bank balances | 3463.66 | 1516.42 | - | 1947.24 |
| Loans and advances | 6107.54 | 5581.47 | - | 526.07 |
| **Total Current Assets** | **35973.84** | **30463.18** |  |  |
| Current liabilities (CL) | | | | |
| Current liabilities | 10108.38 | 6853.94 | 3254.44 | - |
| Provisions | 774.95 | 1066.74 | - | 291.79 |
| **Total current liabilities** | **10883.33** | **7920.68** | **-** | **-** |
| **Net Working capital (CA-CL)** | **25090.51** | **22542.50** | **-** | **-** |
| **Decrease in Net working capital** | **-** | **2548.01** | **2548.01** | **-** |
|  | **25090.51** | **25090.51** | **5802.45** | **5802.45** |

**Net Decrease in the working capital is 2548.01**

**Interpretation**

From the above table is observed that the networking capital of the company shows increasing trend. The total current assets of the company have Decreased from Rs.35973.84 . in 2014 to Rs.30463.18 in 2015.

But the bank balance Decreased from Rs.3463.66 to Rs.1516.42 i.e., 1947.24.The total current liabilities Decreased from Rs. 10883.33 to Rs.7920.68. The net working capital Decreases Rs.2548.01

**FINDINGS**

1)It was found that the payback Period of the project is 7.2 months.

2) It was found that the installation of separate lighting circuits 3years4 months

3) The Payback Period shows that the initial investment can be recovered with in a short period only.

4) Net Present Value of the project was Rs.192662738.1. This indicates high profitability because it was >1.

5) The Internal Rate of Return 250 KW VFD pumps shows 79.60% .These are also ensures a profitable investment.

6) The Internal Rate of Return is greater than the opportunity cost of capital.

**SUGGESTIONS**

2) Net Present Value method is more suitable for the company for making investment decision.

3) In future the company may follow the capital budget method before making investment decisions.

4) The company may effectively use the available resources for attaining maximum profit.

5) The company has to analyze the proposal for expansion or creating additional capacity.

6) The company may plan and control its capital expenditure.

## CONCLUSION

This study was taken to evaluate project after analyzing all the capital budgeting techniques. The researcher also recommended NPV method but the company shall consider all other critical factors before long term decisions.

**BIBLIOGRAPHY**

* Khan M.Y. & Jain P.K. Financial Management, 2nd Edition Tata Mc. Graw-Hill Publishing Co. Ltd., New Delhi.
* Pandey I.M., Financial Management, 7th Edition, Vikas Publishing House Pvt. Ltd., New Delhi, 1995.
* Kothari C.R. Research Methodology, 2nd Edition, Wishwa Prakasham, New Delhi, 1990.
* Maheswari S.N., Financial Management, 4th Edition, Sultan Chand & Sons, New Delhi. 1997.
* Prasanna Chandra, Financial Management, 3rd Edition, Tata Mc.Graw-Hill Publishing Co., Ltd., New Delhi, 1984.

**Website :**

www.Srikalahasthi pipes limitedindustries.com