

# A Study on Working Capital Management at Penna Cements Pvt Ltd., Boyareddipalli, Anantapur Dist

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## ABSTRACT

Working capital management is the amount of fund which is required to carry out the day-to-day transactions of an enterprise whether big or small. It may also regard as that position of an enterprise total capital which is employed in its short-term operations those operations consist of primarily such items as raw materials, semi-finished goods, finished goods, sundry debtors, short-term investments etc. thus working capital also refers to all short-term assets know as current assets used in day-to-day operations of an organization.

Working capital is regarded as the “lifeblood of business”. Every business needs two types of funds - long term funds which are required to create production facilities though purchase of fixed assets, like plant machinery, land, building etc. and short-term funds for the purchase of raw materials, payment of wages and other day to day expense etc. These funds are also known as working capital or circulating capital or short-term capital. Working capital needs are generally financed through outside sources.

The main objective of the study is to analyse the various components of working capital of the PENNA CEMENT INDUSTRIES LTD, BOYAREDDIPALLI, ANANTHAPURAM DIST. and to assess the impact of working capital on profitability. The main objectives of the study are to analyse and evaluate the liquidity position of the company and to analyse the components of working capital of the company.

## WORKING CAPITAL MANAGEMENT

Working capital management refers to a company's managerial accounting strategy designed to monitor and utilize the two components of working capital, current assets and current liabilities, to ensure the most financially efficient operation of the company. The primary purpose of working capital management is to make sure the company always maintains sufficient cash flow to meet its short-term operating costs and short-term debt obligations.

Working capital management is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the interrelationship that exists between them. The term current assets refer to those assets which in the ordinary course of business can be, or will be, converted in to cash within one year without undergoing a diminution in value and without disrupting the operation of the firm.

The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable, and cash. The excess of current assets of a business organization over its current liabilities is termed as the working capital of that organization.

The major current assets are cash, marketable security, account receivable and inventory. Current liabilities are those liabilities which are intended, at their inception, too be paid in the ordinary course of business, within a year, out of the current assets or earning of the concern. The basic current liabilities are account payable, bills payable, bank overdraft and outstanding expenses.

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### Definitions:

- Working capital is defined as the excess of current assets over current liabilities and provisions.
- In the Annual Survey of Industries (1961), working capital is defined to include,

Stocks of materials, fuels, semi-finished goods including work-in-progress and finished goods and by-products; cash in hand and bank and the algebraic sum of sundry creditors as represented by,

- outstanding factory payments e.g., rent, wages, interest and dividend;
- purchase of goods and services;
- short-term loans and advances and sundry debtors comprising amounts due to the factory on account of sale of goods and services and advances towards tax payments.

In the words of shubin, “working capital is the amount of funds necessary to cover the cost of operating the enterprise”.

According to Ganestenberg, “circulating capital means current assets of a company that are changed in the ordinary course of business from one form to another, as for example from cash to inventories, inventories to receivables, receivables to cash”.

Working capital has been described as the —life blood of any business which is a applicable because it constitutes a cyclically flowing stream through the business

### CALCULATION OF WORKING CAPITAL

The net working capital formula is calculated by subtracting the current liabilities from the current assets. Here is what the basic equation looks like

**Net working capital = current assets - current liabilities**

#### A. Concepts based working capital

##### Gross Working Capital:

It refers to the firm’s investment in total current or circulating assets.

##### Net Working Capital:

- It is the excess of current assets over current liabilities.

#### B. Time based working capital

##### Permanent Working Capital:

This refers to that minimum amount of investment in all current assets which is required at all times to carry out minimum level of business activities. In other words, it represents the current assets required on a continuing basis over the entire year.

##### Temporary Working Capital:

The amount of such working capital keeps on fluctuating from time to time on the basis of business

activities. In other words, it represents additional current assets required at different times during the operating year. On the other hand, investment in inventories, receivables, etc., will decrease in periods of depression.

### Importance of working capital

#### Liquidity Management:

By properly analyzing the expenses payable or to be incurred in the near future the financial team of an enterprise would easily plan for their funds accordingly.

#### Out of Cash:

In-appropriate prepared plans of day to day expenses may result in enterprise liquidity issues. They have to postpone or to arrange funds from some other sources which give a bad impression of an enterprise at the party.

#### Helps in Decision Making:

By correctly analyzing the requirement of funds for day to day operations the finance team can appropriately manage the funds and can decide accordingly for available funds and for the availability of funds also.

#### Addition in the Value of Business:

As the management accordingly manages all the day to day required funds that help the authorized personnel to timely pay for all the outstanding creates a value addition or goodwill enhancement in the market

#### Helps in the Situation of Cash Crunches:

By properly managing the liquid funds one can help the organization not to affect the situation of crises or cash crunches and pay for its day to day expenses on a timely basis.

#### Perfect Investments Plans:

Correctly managing the funds or working capital one can choose or plan for their investments accordingly and invest the funds to maximize the return as per their availability.

#### Helps in Earning Short Term Profits:

Sometimes it is seen that the enterprises keep a heavy amount of funds as working capital which is far over and above the required level of working capital. So by correctly preparing the required working capital those extra funds could be invested for a short span of time and could create value in the profits of the enterprise.

#### Strengthening the Work Culture of Entity:

Timely payment of all the day to day expenses mainly focused on the salary of the employees creates a good environment and a sort of motivation amongst employees to work harder and strengthening the good working environment

### **Improves Creditworthiness of Entity:**

When the enterprise has adequately planned their working capital requirements, they will surely pay the payments to vendors and other creditors timely which improves their creditworthiness which could help them to get the funds as and when required easily.

### **Act as Guarantor to Other Enterprises:**

#### **DETERMINANTS OF WORKING CAPITAL**

The factors influencing the working capital decisions of a firm may be classified as two groups, such as

1. Internal factors
2. External factors

#### **INTERNAL FACTORS**

Nature and size of the business  
Firm's production policy  
Firm's credit policy  
Availability of credit  
Growth and expansion of business  
Profit margin and dividend policy  
Operating efficiency of the firm  
Co-ordinating activities in firm

#### **EXTERNAL FACTORS**

Business fluctuations.  
Changes in the technology  
Import policy  
Infrastructural facilities  
Taxation policy

#### **DISADVANTAGES OF INADEQUATE WORKING CAPITAL**

- It cannot buy its requirements in bulk and cannot avail of discounts, etc
- It becomes difficult for the firm to exploit favourable market conditions and undertake profitable projects due to lack of working capital.
- The firm cannot pay day-to-day expenses of its operations and its creates inefficiencies, increases costs and reduces the profits of the business.
- It becomes impossible to utilize efficiently the fixed assets due to non-availability of liquid funds.
- The rate of return on investments also falls with the shortage of working capital.

#### **RATIO ANALYSIS**

Ratio analysis is one of the most powerful tool and widely used technique of analyzing financial statements. It is the process of computing and interpreting relationship between the items of the financial statements for arriving at conclusions about the financial position and performance of an enterprise.

1. Liquidity Ratio.
2. Leverage Ratio
3. Profitability Ratio.
4. Activity Ratio

### **LIQUIDITY RATIOS**

Liquidity refers to the ability of the concern to meet its current obligations as and when they become due. These ratios are calculated to comment upon the short term paying capacity of the concern or the firm's ability to meet its current obligations.

#### **The various liquidity ratios are:**

##### **Current Ratio**

Current ratio may be defined as the relationship between current assets and current liabilities. It is calculated by dividing the total of current assets to the total of current liabilities.

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

##### **Liquid Ratio**

It is also known as acid test ratio. Liquid ratio is more rigorous test of liquidity than the current ratio. An asset is said to be liquid if it can be converted into cash within a short period without loss of value. Liquid ratio may be defined as the relationship between liquid assets and current liabilities.

$$\text{Liquid Ratio} = \text{Liquid Assets} / \text{Current Liabilities}$$

##### **Absolute Liquid ratio**

Some authors are of the opinion that the absolute liquid ratio should also be calculated together with current ratio and acid test ratio so as to exclude even receivables from the current assets and find out the absolute liquid assets.

$$\text{Absolute Liquid Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}}$$

### **LEVERAGE RATIOS**

The short-term creditors like the bankers and the suppliers of the raw materials are more concerned with the firm's current debt paying ability. On the other hand long-term creditors like debenture holders, financial institutions, etc., are more concerned with the firm's long term financial position.

Accordingly, there are two types of leverage ratios. The first type of leverage ratio is based on the relationship between owned capital and borrowed capital. These ratios are calculated from the balance items. The second type of leverage ratio is coverage ratio. These are computed from profit and loss account.

##### **Debt-equity ratio**

Debt-equity ratio is also known as external-internal equity ratio. It is calculated to measure the relative claims of outsiders and the owners against the firm's assets.

$$\text{Debt-equity ratio} = \frac{\text{Outsider's fund}}{\text{Shareholders fund}}$$

### Capital gearing ratio

The term capital gearing is used to describe the relationship between equity share capital including reserves and surpluses to preference share capital and other fixed interest bearing loans.

### PROFITABILITY RATIOS

There is two types of profitability ratios namely margin ratio and ratio on returns rates. Profit margin ratios show the relation between sales and profits.

#### Gross profit ratio

Gross profit ratio measures the relationship of gross profit to net sales and is usually represented as percentage. Thus, it is calculated by dividing gross profit by sales.

Gross profit ratio = gross profit / net sales

#### Operating profit ratio

This ratio is calculated by dividing operating profit by sales. Operating profit is the excess of net sales over operating costs.

Operating profit ratio = operating profits /net sales

#### Net profit ratio

Net profit ratio establishes the relationship between net profit (after taxes) and sales, and it indicates the efficiency of the management in manufacturing, selling, administrative and other activities of the firm. This ratio is the overall measure of firm's profitability and is calculated as:

Net profit ratio = net profit / net sales

### ACTIVITY RATIOS

Funds of the owners and creditors are invested in various assets to generate sales and profits. Activity ratios are employed to evaluate the efficiency with which the firm's managers utilize their assets. These ratios is also called turnover ratio because they indicate the speed with the assets are being converted or turn over into sales.

#### The various activity ratios are:

##### Debtor's turnover ratio

Debtor's turnover ratio indicates the velocity of debt collection of a firm. In simple words, it indicates the number of times average debtors are turned over during a year.

Debtor's turnover ratio = Net credit annual sale / Average trade debtors

##### Creditors turnover ratio

This ratio indicates the velocity with which the creditors are turned over he relation to purchases.

Creditors turnover ratio = Net credit purchases / Average trade creditors

### Inventory turnover ratio

It is also known as stock velocity, is normally calculated as sales/average inventory or cost of goods sold /average inventory.

Inventory turnover ratio = Cost of goods sold / Average inventory at cost

### Fixed assets turnover ratio

This ratio indicates the extent to which the investments in fixed assets contribute towards sales. If it is compared with a previous period, it indicates whether the investment in fixed assets has been judicious or not.

Fixed assets turnover ratio = Net sales / Fixed assets (Net)

### Working capital turnover ratio

It indicates the velocity of the utilization of net working capital. This ratio indicates the number of times the working capital is turned over in the course of a year. It measures the efficiency with which the working capital is being used by a firm.

Working capital turnover ratio = Cost of sales / Average working capital

### NEED OF THE STUDY:

The Study of working capital Management helps to operate the business smoothly without any financial problems for making the payment of short term liabilities. The study helps to know the changes in the working capital at Penna Cement Ltd

### SCOPE OF THE STUDY:

The study focuses on the Working capital management in Penna Cement Industries Ltd, Boyareddypalli, Anantapur, for the period of 5 years i.e., 2016-17 to 2020-21

### OBJECTIVES OF THE STUDY:

- To study the working capital position of the Penna cements Ltd.
- To know the liquidity position of the Penna cements Ltd.
- To analyze the operating efficiency of the Penna cements Ltd.
- To know relationship between Current Assets and Current Liabilities.

### RESEARCH METHODOLOGY

#### SOURCES OF DATA:

The data required for the study is mainly based on the "secondary data"

The required information is collected from the annual reports of the Penna cements limited balance sheet, P&L accounts. The related data is obtained from the printed and published journals and financial statements of the corporation

**TOOLS AND TECHNIQUES:**

- Ratio analysis
- Statement shows changes in working capital
- Graphs

**LIMITATIONS OF THE STUDY:**

- The study is based on the secondary data obtained from the published reports and its findings depends entirely on the accuracy of such data and study is confined to a period of 5 years i.e., 2016-17 to 2020-21.

**TABLE 4.1 Statement showing changes in working capital for the year 2016- 2017.**

Source of data: Annual reports (In crores)

Particulars	2015-16	2016-17	Increase in Working capital	Decrease in working capital
<b>[a]CURRENT ASSETS</b>				
Inventories	217.05	273.51	56	
Cash and bank	68.77	20.23		48.54
Debtors	111.84	85.96		25.88
Investments	16.23	34.43	18	
Other current assets	223.55	291.98	68	
<b>Total current assets</b>	<b>637.44</b>	<b>706.11</b>		
<b>[b]CURRENT LIABILITIES</b>				
Short term borrowings	227.42	213.03	14	
Creditors	47.86	97.14		49.28
Other Financial Liabilities	210.48	107.85	103	
Current tax Liabilities	83.57	80.64	3	
Provisions	0.35	0.58		0.23
Other Current Liabilities	6.45	21.67		15.22
<b>Total current liabilities</b>	<b>576.13</b>	<b>520.91</b>		
Net working capital	61.31	185.2		
Increase in working capital		-123.89		123.89
<b>Total</b>			<b>263</b>	<b>263</b>

**INTERPRETATION:**

- In the above table, it is seen that during the year 2016-17 there was a net increase in working capital of Rs 123.89 crores. It indicates an adequate working capital in PENNA CEMENT PVT LIMITED.
- This is due to increase in inventories by 56 crores, other Current assets by 68 crores and decrease in other Financial Liabilities by 103 crores.

**TABLE 4.2 Statement showing changes in working capital for the year 2017- 2018.**

Source of data: Annual reports (In crores)

Particulars	2016-17	2017-18	Increase in wc	Decrease in wc
<b>[a]CURRENT ASSETS</b>				
Inventories	273.51	178.95		94.56
Cash and bank	20.23	23.97	4	
Debtors	85.96	90.24	4	
Bank balance and other equivalents	34.43	16.86		17.57
Other current assets	291.98	312.75	21	
<b>Total current assets</b>	<b>706.11</b>	<b>622.77</b>		
<b>[b]CURRENT LIABILITIES</b>				
Short term borrowings	213.03	207.76	5	
Creditors	106.09	49.14	57	
Other Financial Liabilities	50.24	59.49		9.25
Current tax Liabilities	80.64	50.56	30	
Provisions	0.58	0.24	0.34	
Other Current Liabilities	70.33	46.43	24	
<b>Total current liabilities</b>	<b>520.91</b>	<b>413.62</b>		

Net working capital	185.2	67.73		
Decrease in working capital		<b>-23.95</b>		23.95
<b>Total</b>			146	146

**INTERPRETATION:**

- In the above table, it is seen that during the year 2017-18 there was a net increase in working capital of Rs 23.92 crores due to huge decrease in other current liabilities by 24 crs and increase in other current assets by 21 crs.

**TABLE 4.3 Statement showing changes in working capital for the year 2018-2019.****Source of data: Annual reports (In crores)**

Particulars	2017-18	2018-19	Increase in wc	Decrease in wc
<b>[a]CURRENT ASSETS</b>				
Inventories	178.95	371.11	192	
Cash and bank	23.97	63.08	39	
Debtors	90.24	145.99	56	
Investments	16.86	18.69	2	
Other current assets	171.33	178.92	8	
<b>Total current assets</b>	<b>622.77</b>	<b>777.79</b>		
<b>[b]CURRENT LIABILITIES</b>				
Short term borrowings	178.6	226.92		48.32
Creditors	78.3	207.3		129
Other Financial Liabilities	59.49	172.68		113.19
Current tax Liabilities	50.56	17.05	34	
Provisions	0.24	3.19		2.95
Other Current Liabilities	46.43	60.88		14.45
<b>Total current liabilities</b>	<b>413.62</b>	<b>688.02</b>		
Net working capital	67.73	89.77		
Increase in working capital		<b>-22.04</b>		22.04
<b>Total</b>			<b>330</b>	330

**INTERPRETATION:**

- In the above table, it is seen that during the year 2018-19 there was a net increase in working capital of Rs 22.04 crores. It indicates an adequate working capital in PENNA CEMENT PVT LTD.
- This increase is due to the increase of inventories of 192 crores when compared to the previous financial year 2017-18.

**TABLE 4.4 Statement showing changes in working capital for the year 2019-2020.****Source of data: Annual reports (In crores)**

Particulars	2018-19	2019-20	Increase in wc	Decrease in wc
<b>[a]CURRENT ASSETS</b>				
Inventories	371.11	412.89	42	
Cash and bank	63.08	2.04		61.04
Debtors	145.99	187.42	41	
Investments	18.69	13.75		4.94
Other current assets	178.92	174.36		4.56
<b>Total current assets</b>	<b>777.79</b>	<b>790.46</b>		
<b>[b]CURRENT LIABILITIES</b>				
Short term borrowings	226.92	246.97		20.05
Creditors	207.3	150.54	57	
Other Financial Liabilities	172.68	195.36		22.68
Current tax Liabilities	17.05	9.34	8	
Provisions	3.19	3.66		0.47
Other Current Liabilities	60.88	83.57		22.69
<b>Total current liabilities</b>	<b>688.02</b>	<b>689.44</b>		

Net working capital	89.77	101.02		
Increase in working capital		<b>-11.25</b>		11.25
<b>Total</b>			<b>148</b>	148

**INTERPRETATION:**

- In the above table, it is seen that during the year 2019-20 the working capital decreased by 11 crores when compared to the previous F.Y 2018-19 due to the decrease in cash and Bank balance by 61 crores and increase in creditors by 57 crores.

**TABLE 4.5 Statement showing changes in working capital for the year 2020- 2021.**

Source of data: Annual reports (In crores)

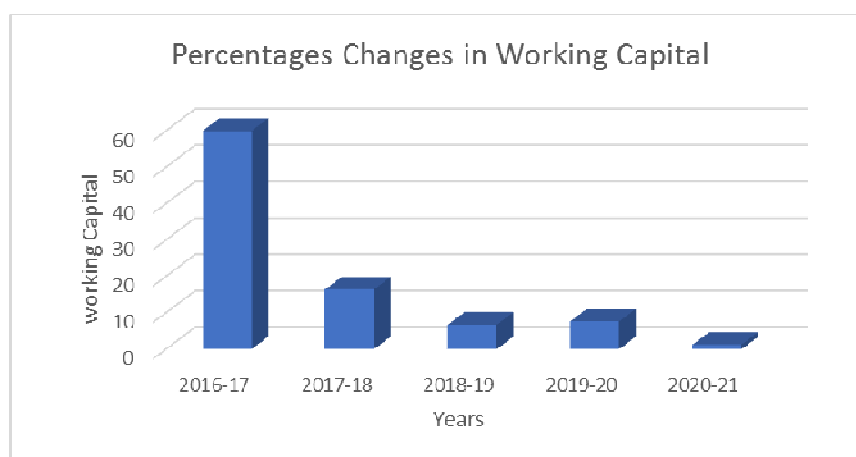
Particulars	2019-20	2020-21	Increase in wc	Decrease in wc
<b>[a]CURRENT ASSETS</b>				
Inventories	412.89	378.17		34.72
Cash and bank	2.04	83.54	82	
Debtors	187.42	182.19		5.23
Investments	13.75	34.58	21	
Other current assets	174.36	191.56	17	
<b>Total current assets</b>	<b>790.46</b>	<b>870.04</b>		
<b>[b]CURRENT LIABILITIES</b>				
Short term borrowings	246.97	217.49	29	
Creditors	150.54	129.44	21	
Other Financial Liabilities	195.36	245.31		49.95
Current tax Liabilities	9.34	44.38		35.04
Provisions	3.66	5.3		1.64
Other Current Liabilities	83.57	125		41.43
<b>Total current liabilities</b>	<b>689.44</b>	<b>766.92</b>		
Net working capital	101.02	103.12		
increase in working capital		<b>-2.1</b>		2.1
<b>Total</b>			<b>170</b>	170

**INTERPRETATION:**

- In the above table, it is seen that during the year 2020-21 the working capital decreased by 9 crores when compared to the previous F.Y 2019-20 due to the decrease in inventories by 34.75 crores and increase in short term borrowings by 29 crores.

**Table 4.6 Statement showing changes in working capital**

Years	Changes in working capital	Total	Percentages
2016-17	206.67	346	60
2017-18	23.95	146	16
2018-19	22.04	330	7
2019-20	11.25	148	8
2020-21	2.1	170	1

**Graph Showing changes in working capital 2016-2021**

**Interpretation:**

The above graph 4.6(1) represent the net working capital changes during the period 2016-2021. The working capital has increased in the year 2016-17 by 30 % decreased in the year 2020-21 by 10 % and then in fluctuating trend

**LIQUIDITY RATIOS**

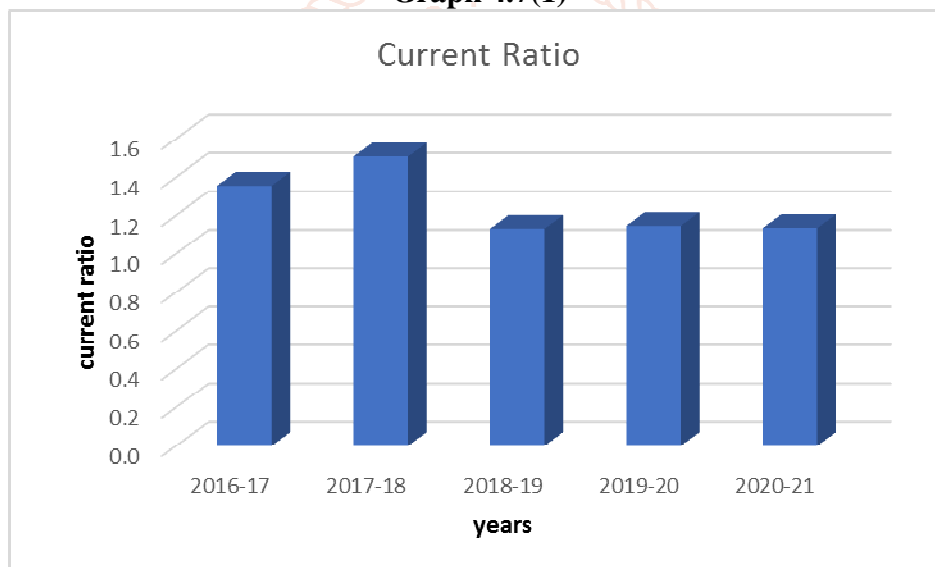
- Current ratio
- Quick ratio
- Cash ratio

**CURRENT RATIO:**

Current ratio=current assets/current liabilities

**Table 4.7(1)**

Years	Current assets	Current liabilities	Current ratio
2016-17	706.11	520.91	1.4
2017-18	481.35	413.62	1.2
2018-19	777.79	688.02	1.1
2019-20	790.46	689.44	1.1
2020-21	870.04	766.92	1.1

**Graph 4.7(1)****Interpretation**

The standard ratio of current ratio is 2:1. The above graph 4.7(1) reveals that the current ratio is fluctuating trend. The highest current ratio is 1.4 in the year 2016-17 and lowest current ratio is 1.1 in the year 2019-20

**QUICK RATIO:**

Quick ratio=quick assets/current liabilities

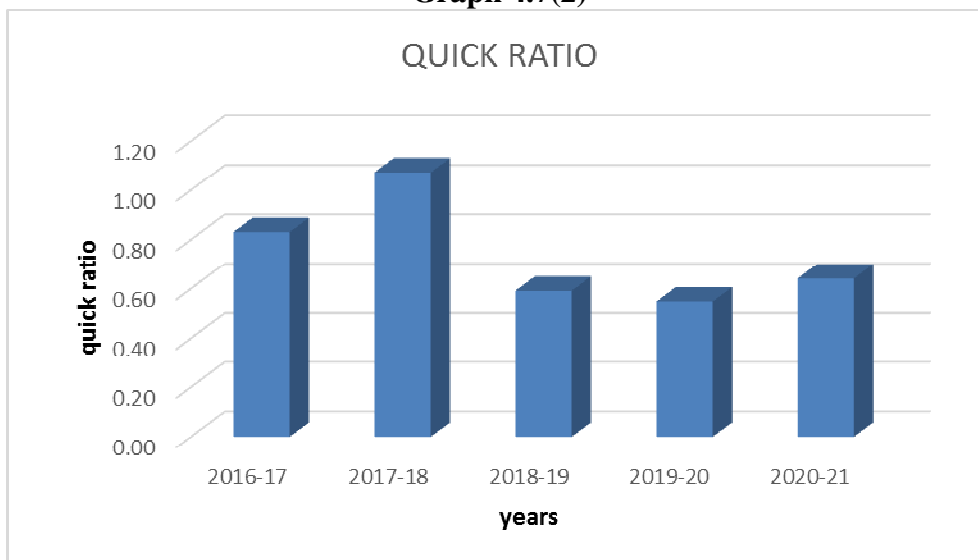
Quick assets = current assets -inventory

**Table 4.7(2)**

YEARS	QUICK ASSETS	CURRENT LIABILITIES	QUICK RATIO
2016-17	432.6	520.91	0.83
2017-18	302.4	413.62	0.73
2018-19	406.68	688.02	0.59
2019-20	377.57	689.44	0.55
2020-21	491.87	766.92	0.64



**Graph 4.7(2)**



**Interpretation**

The standard ratio of quick ratio is 1:2. The above graph 4.7(2) represents that the quick ratio is in fluctuating trend. The highest quick ratio is 10.83 in year 2016-2017 due to decrease in creditors. The lowest quick ratio is 0.55 in the year 2019-2020 due to decrease in cash and debtors

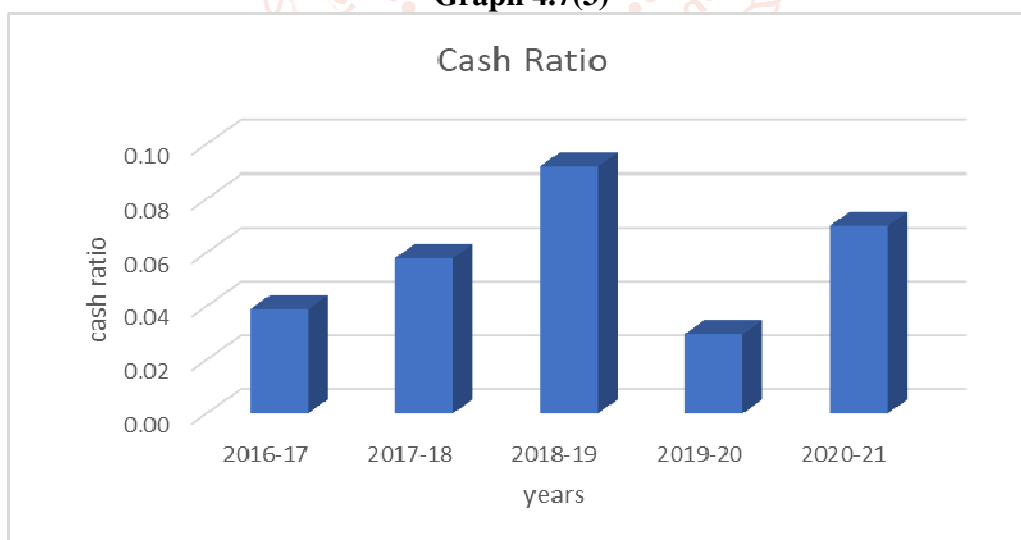
**Cash Ratio**

Cash ratio=cash/current liabilities

**TABLE 4.7(3)**

YEARS	Cash	Current Liabilities	Cash Ratio
2016-17	20.23	520.91	0.04
2017-18	23.97	413.62	0.06
2018-19	63.08	688.02	0.09
2019-20	2.04	689.44	0.02
2020-21	83.54	766.92	0.11

**Graph 4.7(3)**



**Interpretation**

The standard ratio of cash ratio is 0.5:1. The above graph 4.7(3) represents that the cash ratio is in fluctuating trend. The highest cash ratio is 1.11 in the year 2020-21. The lowest cash ratio is in 0.02 in the year 2019-20.

**TURNOVER RATIOS:**

- Inventory turnover ratio
- Debtors turnover ratio
- Working capital turnover ratio

**Inventory turnover ratio**

Inventory turnover ratio: Cost of goods sold/average inventory

**TABLE: 4.8(1)**

YEARS	Cost of goods sold	Average Inventory	Inventory turnover ratio
2016-17	255.13	245.28	1.04
2017-18	295.45	226.23	1.31
2018-19	392.2	275.03	1.43
2019-20	339.5	392	0.87
2020-21	352.75	365.34	0.97

**Graph 4.8(1)**



**Interpretation**

From the above graph 4.8(1) represent that the inventory turnover ratio is in fluctuating trend. The highest inventory turnover ratio is 1.43 in the year 2018-19 due to increase in COGS, and lowest is 0.87 in 2019-20.

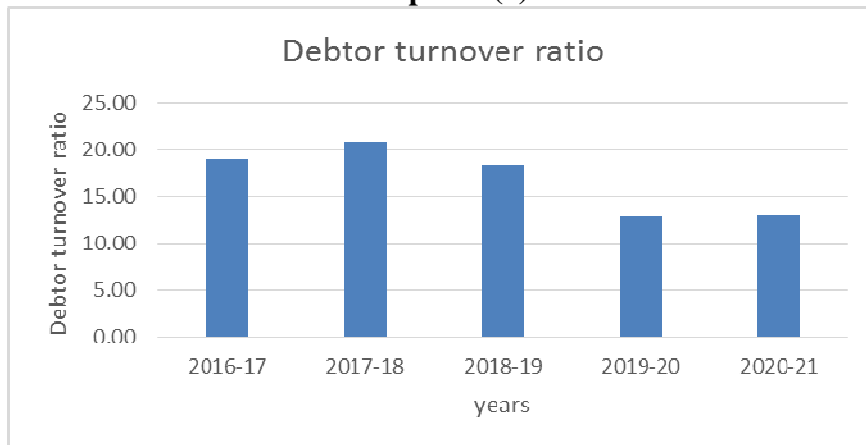
**DEBTORS TURNOVER RATIO**

Debtors turnover ratio=Credit Sales/average debtors

**Table 4.8(2)**

Years	Credit Sales	Average debtors	Debtor turnover ratio
2016-17	1880.33	98.9	19.01
2017-18	1839.83	88.1	20.88
2018-19	2164.04	118.12	18.32
2019-20	2126.14	166.71	12.75
2020-21	2403.18	184.81	13.00

**Graph 4.8(2)**



**Interpretation:**

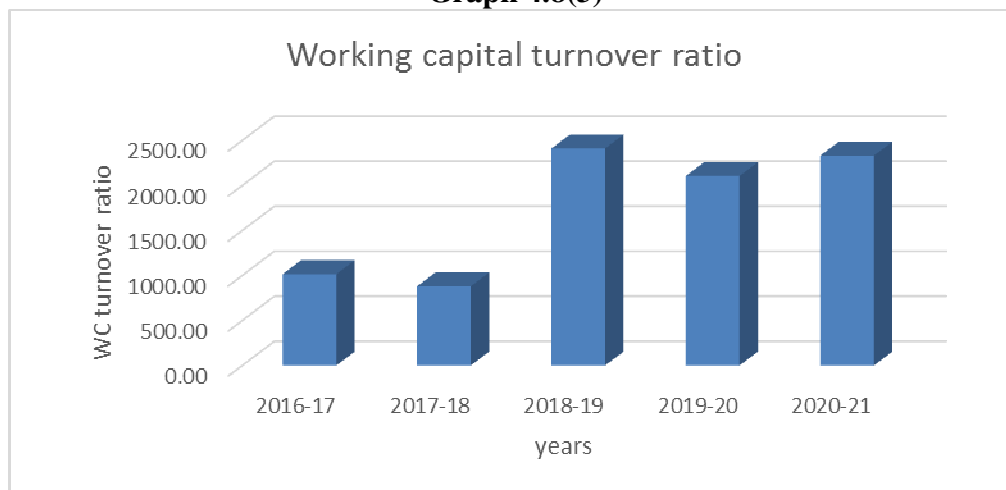
Debtors’ turnover ratio indicates the number of times debtors are converted into sales in each year. The above graph 4.8(2) represents that the debtor’s turnover ratio is in fluctuating trend. In the year 2017-18 the debtors turnover ratio is 20.88 and in the year 2019-20 it is 12.75 due to increase in credit sales.

**WORKING CAPITAL TURNOVER RATIO**

Working capital turnover ratios=Net sales/net working capital

**TABLE 4.8(3)**

Years	Net Sales	Working capital	Working capital turnover ratio
2016-17	1880.33	185.2	1015.30
2017-18	1839.83	67.73	2716.42
2018-19	2164.04	89.77	2410.65
2019-20	2126.14	101.02	2104.67
2020-21	2403.18	103.12	2330.47

**Graph 4.8(3)****Interpretation**

From the above graph we can observe working capital turnover ratio is in fluctuation trend. The respective years working capital turnover ratios are 1015.30, 2716.42, 2410.65, 2104.67, 2330.47. In the year of 2019-20 it is decreased to 2104.67 it indicates working capital is not effectively used. In the year of 2017-18 it is higher than 2716.42 it indicates higher profits.

**CORRELATION**

(amount in crs)

Years	current liabilities(X)	current assets(Y)	XY	X <sup>2</sup>	Y <sup>2</sup>
2016-17	706.11	520.91	367819.7601	498591.3	271347.228
2017-18	481.35	413.62	199095.987	231697.8	171081.504
2018-19	777.79	688.02	535135.0758	604957.3	473371.52
2019-20	790.46	689.44	544974.7424	624827	475327.514
2020-21	870.04	766.92	667251.0768	756969.6	588166.286
	$\Sigma X=2903$	$\Sigma Y=1722$	$\Sigma XY=910530$	$\Sigma X^2=1733055$	$\Sigma Y^2=996550$
		r-	0.956402347		

**Interpretation:**

From the above table we observed that the correlation between current assets and liabilities is  $r = 0.956$  which is positive correlation. There exist highly positive relation between current assets and current liabilities.

**FINDINGS****Changes in working capital**

- It is seen that during the year 2016-17 there was a net increase in working capital of Rs 123.89 crores. It indicates an adequate working capital in PENNA CEMENT PVT LIMITED.
- This is due to increase in inventories and other Current assets and decrease in Financial liabilities by 103 crores.
- In 2017-18 there was a net decrease in working capital of Rs 117.47 crores due to huge decrease in Inventories by 94.5 crs and other current assets by 120.65 crs.
- During the year 2018-19 there was a net increase in working capital of Rs 22.04 crores It indicates an adequate working capital in PENNA CEMENT PVT LTD.
- This increase is due to the increase of inventories of 192 crores when compared to the previous financial year 2017-18.
- During the year 2019-20 the working capital decreased by 11 crores when compared to the

previous F.Y 2018-19 due to the decrease in cash and Bank balance by 61 crores and increase in creditors by 57 crores.

- During the year 2020-21 the working capital decreased by 9 crores when compared to the previous F.Y 2019-20 due to the decrease in inventories by 34.75 crores and increase in short term borrowings by 29 crores.

#### **Changes in working capital 2016-2021**

- The working capital has increased in the year 2016-17 of 206.6(in crores)., decreased in the year 2017-18 of 112.75 (in crs) and gradually increased.

#### **CURRENT RATIO:**

- The standard ratio of current ratio is 2:1 and the current ratio is fluctuating trend. The highest current ratio is 1.4 in the year 2016-17 and lowest current ratio is 1.1 in the year 2019-20

#### **QUICK RATIO:**

- The standard ratio of quick ratio is 1:2 and quick ratio is in fluctuating trend. The highest quick ratio is 10.83 in year 2016-2017 due to decrease in creditors. The lowest quick ratio is 0.55 in the year 2019-2020 due to decrease in cash and debtors.

#### **Cash Ratio**

- The standard ratio of cash ratio is 0.5 and it is in fluctuating trend. The highest cash ratio is 1.11 in the year 2020-21. The lowest cash ratio is in 0.02 in the year 2019-20.

#### **INVENTORY TURNOVER RATIO**

- The inventory turnover ratio is in fluctuating trend. The highest inventory turnover ratio is 1.43 in the year 2018-19 due to increase in COGS, and lowest is 0.87 in 2019-20.

#### **DEBTORS TURNOVER RATIO**

- Debtors' turnover ratio indicates the number of times debtors are converted into sales in the each year and the debtor's turnover ratio is in fluctuating trend. In the year 2017-18 the debtors turnover ratio is 20.88 and in the year 2019-20 it is 12.75 due to increase in credit sales.

#### **WORKING CAPITAL TURNOVER RATIO**

- From the above graph we can observe working capital turnover ratio is in fluctuation trend. The respective years working capital turnover ratios are 1015.30, 2716.42, 2410.65, 2104.67, 2330.47. In the year of 2019-20 it is decreased to 2104.67 it indicates working capital is not effectively used. In the year of 2017-18 it is higher than 2716.42 it

indicates higher profits.

#### **SUGGESTIONS:**

- working capital of the company is fluctuating, so it is suggested that the management is better to maintain sufficient level of working capital for smooth operational activities
- Inventory turnover ratio has declining year by year. It is suggested to company to increase inventory level.
- The company current ratio is less than standard ratio, it should increase the current assets which are in the form of sundry debtors, inventory etc.
- Debtor's turnover ratio has been showing fluctuating trend.so it is suggested to the company that it should have proper control on the credit sales.
- The company should maintain the turnover ratios i.e., in terms of debtors, inventory, working capital at the same level. To improve efficiency and earn profits.
- The company must maintain more cash and marketable Securities in its accounts to meet their required liabilities immediately.

#### **CONCLUSION**

The liquidity position of the Penna Cements PVT LTD is good. It can be concluded that the working capital management efficiency has been fluctuating every year. It needs to be increased further for effective utilization of current assets.

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