



## EVALUATION OF CALCULATING THE COST OF THE PRODUCT THROUGH THE ENTRANCE TO ACCOUNTING FOR ACCOMPLISHMENT APPLIED RESEARCH IN ELECTRICAL METROLOGY LAB

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Article history:	Abstract:
<p><b>Received:</b> 10<sup>th</sup> February 2022 <b>Accepted:</b> 11<sup>th</sup> March 2022 <b>Published:</b> 30<sup>th</sup> April 2022</p>	<p>The research seeks to shed light on calculating product cost in the light of the modern business environment that witness continuous and rapid development through the development of production . Whether it is a commodity or a service for the purpose of achieving the requirements , desires of customers at the lowest cost and the best quality by meeting the requirements of the customer. Therefore the economic units look for ways to work to evaluate the calculation of product costs and work to economize costs by using accounting on accomplishment to develop the reality of costs accounting and to measure costs clearly and fair manner that has a positive impact on managing economic units through rationalizing administrative decisions and the ability to face developments are occurred at the level of the labor market and the desires of the customer . While the research sample is the electrical gauges factory . Whereas the period is in year 2017 , to calculate the cost of the product. The research has reached the most important conclusions to work on developing the cost systems are applied in the Iraqi industrial companies, including Diyala State Company for Electrical Industries, the metrology laboratory by using modern advanced methods for its ability to provide information . Whether financial or non-financial to the aid administration to help in planning and decision making</p>

**Keywords:** Electrical Industries, metrology laboratory

### INTRODUCTION

#### Research problem

The rapid development that has occurred in the modern manufacturing environment through modernizing of tools and methods are adopted in many of economic units . Whether at the level of providing services or saving products . Therefore we find that cost accounting systems in need to develop and add good methods that make to provide information in addition to fair , clearly calculating costs . Which just reflects the management level of performance and accomplishment more realistically . Thus the research problem lies in the inability of traditional cost accounting systems to keep pace with modern developments in the current business environment.

#### The research objective :

The research aims to:

- 1) To recognize the concept and dimensions of achievement accounting.
- 2) Presenting accounting for achievement as a modern method of cost accounting.

3) Studying and analyzing the difference between cost accounting and accomplishment accounting.

4) Shed light on the application of accomplishment accounting for the purpose of developing approved systems for cost accounting and assisting the administration for intentions of measuring costs and evaluating performance.

#### Research importance

The importance of research lies in the following :

1) Providing modern methods to develop the reality of cost accounting at the academic and applied levels through the application of accounting on accomplishment

2 ) The measurement of costs clearly and fair way has a positive impact on corporate management through evaluating performance and rationalizing administrative decisions

3) The ability to meet the requirements of the modern industrial environment through the developments are taken place . Whether at the level of the labor market or changes in the customer's desires

Research Hypothesis :



Through the research problem . We deduce the research hypothesis as follows :

(( The application of accounting on achievement makes to support and enhances the evaluation of cost measurement of products ))

The place – time limits of the research :

The research sample was chosen as the Electrical Measurements Laboratory in Diyala State Company for Electrical Industries and the fiscal year 2017

The second research

First: Concept and definition of accounting on accomplishment

Since the mid-seventies decade of the last century . The term accomplishment began to appear for the first time in goldratt's writings in field of administrative sciences through development of one of the computer programs are related to production scheduling .

Since the beginning of the nineties decade , the accomplishment accounting has appeared to face needs of management for the necessary information as a result of recent developments in the theory of constraints

Through some attempts to formulate concept of accomplishment accounting . Where the Indian Institute of Chartered Accountants sees achievement accounting as a method of measuring performance that works on building relationships between production and other costs . The ability to accomplish and calculating the cost of products according to the accounting of completion and the use of main resources and various products. (ICAI, 2011: 120 )

As it is defined by the British Institute of Management Accountants CIMA as a technique to achieve maximum achievement and at the same time to reduce inventory and operating costs (CIMA, 2007:3).

There are many attempts that worked on defining the concept of accomplishment accounting as a homogeneous accounting approach with the philosophy of production on certain time (JIT) . Where it is assumed that the administration has a set of economic resources are represented by capital, buildings, equipment and work. Through use of those resources are possible to purchase raw materials and converted into a finished product may be sold to generate revenues ( Yshilkawa , 1993:145-157 )

Although the term accounting on accomplishment lacks to definitions in academic literature as it is one of the methods are modernized in cost accounting through the above definitions . The researcher sees that the definition of achievement accounting is a method for measuring the relationship between economic resources are expended and profits are achieved during

a period of time by gauge the relationship between them and calculating the ability to achievement.

**Second : The accomplishment rate**

The completion rate indicates as a measure of the speed of money turnover in the economic unit or the amount of sales in and from a specific one and the time that is determined from the beginning of production operations to completion . Regardless of whether time adds value or not adds value . This is in turn helps the economic unit to identify the activities that take time longer and greater cost, as well as highlighting the activities that are considered as a choking point on the natural flow of production instead of being limited only to the actual operating rates . Which do not reflect the efficiency of using the total time . Which is considered as one of the important resources and the level of performance quality in the production process . Where rapid achievement of high quality indicates efficiency and the effectiveness of performance towards achieving the main objective of the economic unit . Which is to increase sales , maximize profitability through improving , increasing the achievement represented in the speedy implementation of customer orders, reducing the level of inventory and reducing production costs. ( Malcolm, 1995:234 )

The completion rate can be calculated as follows: ( Dugdale & Jones, 1998: 203 )

$$\frac{\text{Selling price - cost of raw materials}}{\text{-Completion rate per work hour}} = \text{spent time}$$

$$\frac{\text{Total manufacturing costs}}{\text{-Completion rate per manufacturing hour}} = \text{Total time available}$$

$$\frac{\text{return per hour of manufacture}}{\text{Completion rate}} = \text{manufacturing hour cost}$$

**Third : The margin of achievement**

The focus in traditional cost accounting systems was on using resources with their full potential by ignoring the interrelated relationships between resources within the system . This in turn leads to an improper view of the economic unit. Also the methods are used in traditional managerial accounting, such as standard costing were treated as an independent group of investments instead of considering it as a single system to fulfill money, to be more information that the theory of constraints looks at the economic unit as a series of interconnected processes . Where it is necessary to coordinate among them. Therefore , theory of entries pays attention to



achieve balanced influx of production within the system and make to increase margin of achievement through decrease points of choke . Concept of production margin is the amount of sales per unit of time . It means the sales rate at which the economic unit can develop its monies and earn profits from the sales process , not just carrying out the production process only. So , the accomplishment margin is the rate at which monies are generated for the economic unit by converting raw materials into sales revenue. ( Moore, Richard, 2010:124) .

The value chain has a major role in achieving the accomplishment margin by adding them into direct materials , consequently transforming into a sold product. The accomplishment margin can be calculated as follows:

Accomplishment margin = Sales Value - Direct Material Cost

We find that the direct materials within the accomplishment accounting are a single variable cost element . While the rest of the cost elements for others, including direct wages are fixed costs within the short term . ( 88 Dugdale & Jones , 1998 )

We note that the accounting for achievement does not work on classifying products on the basis of their profitability through the surplus contribution to the traditional product. Rather, it takes into account the depleted resources in order to transform raw materials into a final product. Therefore, the focus of accounting attention on the accomplishment is concentrated in the following :

- 1) It focuses on what each product achieves from using the scarce resource to achieve profits.
- 2) It tries to link the fulfilled accomplishment of each product with the costs of the restricted resource that it has consumed.
- 3) It makes to arrange the relative profitability of products for the purpose of managing the administrative decisions by choosing the optimal product assortment and calculating the percentage of the accomplishment margin for each product as follows:

Ratio of the accomplishment margin of each product =  
The accomplishment margin per hour of operation in the restricted resource / Cost per operating hour on the restricted resource

In order to calculate the ratio of the accomplishment margin at the level of the economic unit by identifying efficiency of operational processes , measuring the relationship between the total the accomplishment margin of the economic unit and the total of manufacturing costs . Where it is as follows :

Ratio of general accomplishment margin = Overall accomplishment margin / Total factory costs

If the general accomplishment margin ratio is greater than one . This indicates feasibility of operational processes , the ability to achieve profits and vice versa. Therefore, it can be said that the accomplishment margin is a function of four elements which are : ( Galloway and Waldron, 1998:90 )

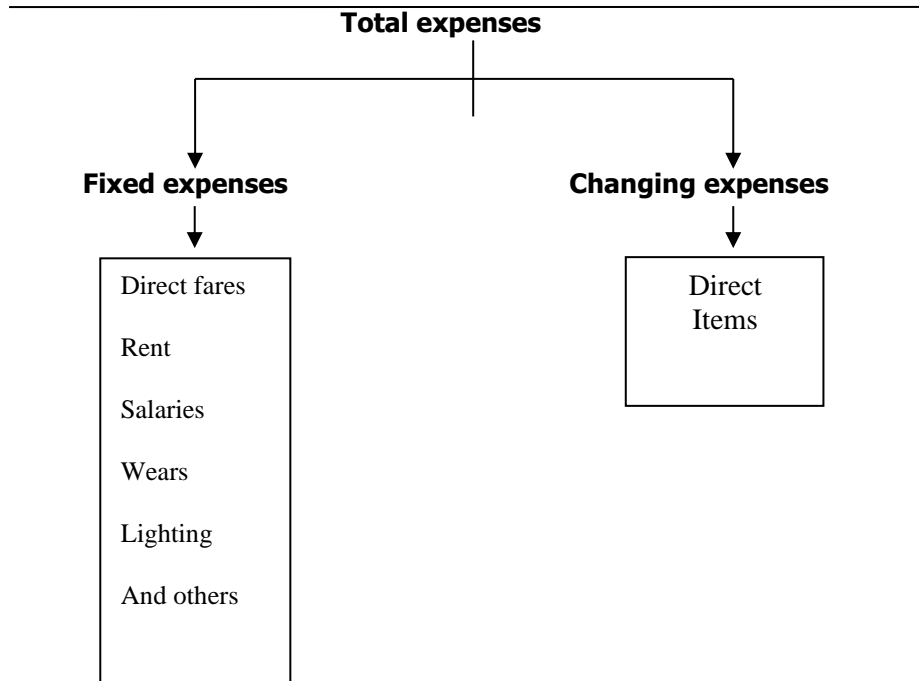
- \* Selling price
- \* The purchase price of raw materials
- \* Raw material utilization rate
- \* The amount of accomplishment achieved

Fourth: Classify elements of costs in the light of accomplishment accounting

Developments in the modern manufacturing environment are tended to increase investments in machines, equipment , electronic control and control devices . Which led to a largely decrease in the direct wage component with full reliance on modern manufacturing technology . It almost completely disappeared from the industrial cost structure, thus becoming the raw material component the only variable in the cost structure .Where the accounting entrance depends on the accomplishment on the classification of the structure of the industrial cost elements based on the behavior of costs (variable and fixed) . Galloway and Waldron indicated that the element of raw materials are variable costs and the rest of the cost elements are called total factory costs . As they are called by goldratt as operating expenses . Which are fixed costs in the short term. ( Galloway & Waldron, 1998:90 )

The costs clasifying can be viewed under the achievement accounting as follows :

Figure No.1



**Source : Arranged by two researchers**

Source: It is prepared by both researchers

Income statement under variable costs		Income statement under accomplishment accounting	
Amount	Details	Amount	Details
Xx	Selling price	xx	Selling price
(xx)	Variable costs ( Direct materials, direct wages, variable marketing and administrative costs )	(xx)	Raw materials costs
xx	Contribution margin	xx	Accomplishment margin
( xx)	Other fixed expenses	(Xx)	Other fixed expenses ( Direct wages, salaries, rent, depreciation .... so on )
xx	Net of profit or loss	xx	Net of profit or loss



Through what was presented above . We note that the accomplishment accounting approach to cost measurement clearly tends to the variable cost method theory with a simple distinction between the accomplishment margin and contribution margin. The difference between the variable cost theory and the

accomplishment accounting approach can be clarified by revealing income for both ways :  
 Fifth: Comparison between cost accounting and accomplishment accounting.  
 To shed light on the most important points of difference between cost accounting and agency accomplishment accounting: ( Baxendale and Sidney , 2012: 31 ) .

Table No. 2

<b>Difference</b>	<b>Accountancy on accomplishment</b>	<b>Costs accounting</b>
<b>Classification of costs elements according to the cost objective and the degree of flexibility</b>	<b>Determining the margin of achievement with a focus on sales and the cost of raw materials only, in addition to that it assumes the stability of the available energy for different resources and its non-change in the short term</b>	<b>Determining the cost of products and then dividing the cost components into direct and indirect, in addition to its dependence on the volume of activity for the purpose of classifying costs into flexible and inflexible</b>
<b>Allocation indirect costs</b>	<b>Operating costs, except for direct materials, are considered a cost over the period, so that indirect costs are not allocated to products.</b>	<b>Indirect costs are allocated to products for the purpose of calculating the cost of each product.</b>
<b>Measuring costs of outputs</b>	<b>Costs are calculated for products at the point of sale and delivery to the customer, assuming that only the sales process leads to adding value to the economic unit.</b>	<b>Costs are calculated for products upon completion of production operations.</b>
<b>Assessing inventory</b>	<b>Costs are calculated for products at the point of sale and delivery to the customer, assuming that only the sales process leads to adding value to the economic unit.</b>	<b>Inventory is production out of sync with required needs and disruption of resources</b>
<b>Utilize power</b>	<b>The energy used is calculated by dividing the actual energy by the required energy</b>	<b>The utilized energy is calculated by dividing the actual energy by the available energy.</b>

Baxendale, Sidney J., & Raju, P. S. (2004). Using ABC to Enhance Accomplishment Accounting: A Strategic Perspective. Journal of cost

Sixth: The most important advantages of applying accomplishment accounting under traditional cost systems  
 We note from the above that the approach to accomplishment accounting and through its reliance on a set of concepts that are compatible with the modern manufacturing environment . As it works to provide information are related to costs to management , helps to develop systems for measuring , evaluating performance and

thus the most important advantages of accomplishment accounting can be summarized as follows: ( Galloway & Waldron: , 1998: 102 )  
 1) Reducing the value of the inventory , the costs are associated with it , to be taken into consideration that the inventory value does not exceed the cost of direct materials and other operating costs that do not add value to the economic unit  
 2) Working on speed of response to the customer. As this in turn will motivate the employees , management



to deliver the product to the customer . As regard to that the point of sale , delivery leads to adding value to the economic unit and developing its funds

3- Focusing on making profit at the level of the economic unit as a whole , not for a specific product . This in turn will lead to the development of money in general.

4 ) Helping management focus on bottlenecks during the production process by adopting the theory of constraints

5) The focus of senior management on effectiveness, not efficiency, as accomplishment accounting works on the effectiveness of production processes more than efficiency in production

Through the foregoing . We note that the approach to accounting for accomplishment clearly focuses on maximizing the value of accomplishment by working to maximize sales, as sales are what lead to adding value to the economic unit , the flow of its funds. It is a single entrance which maximize accomplishment margin . Accomplishment accounting does not cast attention with size of production without couple production with sales . The basis for evaluating efficiency , effectiveness of the company's management on exploitation of available resources is sales . This will be clarified in the applied aspect of the third research

**Third Research**  
**Applied Method of Research**

First : A historical overview of electrical metrology lab  
 The Electrical Measurements Factory is one of the laboratories are affiliated to Diyala State Company for Electrical Industries. It was established in 1978 according to the articles of incorporation was published in the Iraqi Gazette No. 2575 on 14 / 3 / 1977. The laboratory was established after year of the company's foundation date

Second: Standards Laboratory Products

The laboratory produces electrical measurements according to the international standard IEC-512 . The right of knowledge is purchased from Swiss company Landzand Care and the measures manufacturing as follows :

1) Single phase electric meter with a voltage of 220 volts , a current ( 10-40 ) , ( 20-80) amperes , a frequency of (50) hertz and a design power

of laboratory has (250,000) scales annually

2) Three-phase electric meter with a voltage of 3X 220/380 volts , a current of ( 20-60 )

Ampere, frequency (50) hertz, laboratory design power (20000) scale annually

Third: Costs for the measurement laboratory according to the company's records

The total costs of the products in the measurement laboratory in year 2017 are as follows :

The total cost of the product unit . Amounts in Iraqi Dinar - Table No. 3

Gauge phase 1 )20-80 (	Guage phase 3	Gauge phase 1	Costs
26602	56269	26793	Raw materials
35058	74148	35309	wages
77	162	77	extinction
371	785	374	Back-up
506	1070	510	Fill
21040	44497	21189	Other items
83654	176924	84251	Manufacturing cost
213	452	215	Marketing costs
18162	38412	18292	Administrative costs
102029	215788	102759	Total cost

Prepared by researchers

Fourth : Active production and sold within year 2017

Table no. 5 : It shows quantities of production and selling during year 2017 as following :

Table no. 4 : ( Numbers & Units )

Gauge phase 1 )20-50 (	Guage phase 3	Gauge phase 1	Details
2502	536	935	Production inventory first term





<b>6215</b>	<b>9374</b>	<b>30536</b>	Production within year
<b>8442</b>	<b>9409</b>	<b>28995</b>	Active sales
<b>275</b>	<b>507</b>	<b>2476</b>	Inventory last term

It is arranged by both researchers

Fifth: Calculating the actual time of production

The actual time of production was calculated during year 2017 for the electrical metering lab and it was as follows :

Through the field visit to the lab . It was noted that manual labor constitutes ratio more than 80% through the existing production lines . Whereby semi-manufactured parts are relied upon in the composition of the device in addition to production of other parts inside the lab such as the outer cover. The plant consists of 238 workers starting from entering the lab till transferring the product to the finished production warehouse , to calculate the working hours in the metrology lab during the year . The equations are depended as the following :

Number of workers x daily working hours x number of actual working days during the year

238 workers X 8 daily working hours = 1904 working hours per day actual

22 days working monthly X 12 months annually = 264 days of working within year

264 days X 1904 hours of working daily = 502656 hours of working annually

Note : The taken time of production was calculated during the year, regardless of holidays , production interruptions . Therefore because the cost of work is fixed , the wage is not deducted from the worker as a result of production interruption and thus the factory bears the costs of the work completely

Through conducting meetings with the officials of the production lines . The metrology laboratory entered about the taken time for each product according to the types of standards produced inside the factory in addition to reviewing the standard time for the production of each product and it was as follows :

Table No. 5

<b>Active hours of production</b>	<b>Active production</b>	<b>Active time of product</b>	<b>Standard time of product</b>	<b>Product</b>
<b>366432 Hours</b>	<b>30536 Units</b>	<b>12Hours</b>	<b>8Hours</b>	<b>Measure phase 1</b>
<b>140610 Hours</b>	<b>9374 Units</b>	<b>15Hours</b>	<b>10Hours</b>	<b>Measure phase 3</b>
<b>45873 Hours</b>	<b>6215 Units</b>	<b>7.381Hours</b>	<b>5Hours</b>	<b>Measure phase 1(20-50)</b>

It is arranged by both researchers :

Sixth : Calculating the sales are achieved for the metrology laboratory during the year 2019

The company's policy is to set prices for products that witness sharp competition in the market through the imported product, especially the electric meter product . Where there are competing products in the market such as the Iranian, Saudi and Egyptian products. As it is remarked , wages are regarded as choking point at electrical measurements plant through rising salaries

besides to surplus employments more than what it is required by the plant . This in turn leads to a high cost of products, accordingly we find that the company is working on setting competitive prices at less than the total cost of the product in the distribution plant in order to ensure operation of the plant in addition to achieving an annual cash flow . As well as there is a request presented by Ministry of Electricity on electrical measurements . The following table elucidates sales are achieved during year 2017 as below :

Table no. 6

Revenues are fulfilled from sale of electrical meters gauges in year 2017

Product	Sales	Selling price	Revenues
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Gauge phase 1	28995 units	47500 Iraqi dinars	1377262500 Iraqi dinars
Gauge phase 3	9409 units	105000 Iraqi dinars	987945000 Iraqi dinars
Gauge phase 1(20-50)	8442 units	51000 Iraqi dinars	430542000 Iraqi dinars
Total	--	--	2795749500 Iraqi dinars

It is arranged by both researchers

Seventh: Applying accounting to accomplishment

1) Calculate the accomplishment rate for the workmanship hour

For the purpose of calculating the factory hour Iraqi dinars rate . It is required to count sales total at the factory level , costs of raw materials , the actual spent time during the year must be calculated.

Table (7) shows this as my agencies  
 Calculation of sales, raw materials and time spent at the metrology lab level  
 Product Sales Raw Materials Time Spent hours

Product	Sales	Basic items	Spent time ( Hour)
Gauge phase 1	1377262500 Iraqi dinars	706228779 Iraqi dinars	333120
Gauge phase 3	987945000 Iraqi dinars	480934414 Iraqi dinars	127830
Gauge phase 1(20-80)	430542000 Iraqi dinars	204173420 Iraqi dinars	41706
Total	2795749500 Iraqi dinars	1391336613 Iraqi dinars	502656

It is arranged by both researchers

Completion rate per work hour :  $1391336613 - 2795749500 / 502656$  Hours = 2794 Iraqi dinars / Hr

2) Calculate average of manufacturing hour cost

For the purpose of calculating as an average of accomplishment cost of the workmanship hour . The total costs of the factory must be calculated during year 2017 . The total costs of the factory are 4714043400 dinars.

To calculate the cost of the workmanship hour as following is

Manufacturing hour cost :  $4714043400$  Iraqi dinars /  $502656$  hours = 9378.2 Iraqi dinars

3) Calculating the accomplishment margin for each product in the metrology lab

For the purpose of calculating the accomplishment margin for each product . It is done by subtracting the cost of raw materials from the selling price or the sales revenue of the product and my agencies

Margin of accomplishment for phase scale (1)  $1377262500 - 706228779 = 671033721$  dinars

Margin of accomplishment for phase scale (3)  $987945000 - 480934414 = 507010586$  dinars

Margin of accomplishment for phase scale (1)/(20-50)  $430542000 - 204173420 = 226368580$  dinars

4) Compute the margin of accomplishment per hour

For the purpose of calculating the achievement margin per hour . It is done by dividing the accomplishment margin for each product by the hours spent for the product as follows :

Phase scale (1) :  $671033721$  Iraqi dinars /  $333120$

Hours = 2014.3 Iraqi dinars

Margin of accomplishment per hour

Phase scale (3) :  $507010586$  Iraqi dinars /  $127830$

Hours = 3966.2 Iraqi dinars

Margin of accomplishment per hour

Phase scale (1) / (20-80) :  $226368580$  Iraqi dinars /  $41706$  Iraqi dinars = Margin of accomplishment per hour

5) Calculate the operating hour cost of the restricted resource

Wages are the choke point or the resource restricted to the factory standards due to high cost of wages through the salary scale and the presence of more workers than the factory needs . Which leads to a higher cost of the product due to high wages. No calculation of the cost per hour of operation in the restricted resource (choke point) is done through a sampling . The cost of labor for each product in the number of products sold divided by the time spent on production for each agency product :

Phase scale (1) :  $35309$  Iraqi dinars X  $28995$  Units /  $333120$  Hours =  $3073.3$  Iraqi dinars / Hour

Phase scale (3) :  $74148$  Iraqi dinars X  $9409$  Units /  $127830$  Hours =  $5457.7$  Iraqi dinars ? Hour

Phase scale (1)/(20-80) :  $35058$  Iraqi dinars X  $8442$  Units /  $41706$  Hours =  $7096.3$  Iraqi dinars / Hour

6) Calculate the percentage of accomplishment margin for each product

For the purpose of calculating the accomplishment margin percentage for each product . It is done by dividing the accomplishment margin per hour by the operating hour cost in the restricted resource and it is as follows :





Phase scale (1) : 2014.3 Iraqi dinar per hour / 3073.3 Iraqi dinar / hour = 66%

Phase scale (3) : 3966.2 Iraqi dinar / 5457.7 Iraqi dinar / hour = 73%

Phase scale (1)/(20-80) : 5427.7 Iraqi dinars / 7096.3 Iraqi dinars = 76%

7) Calculating the general accomplishment margin ratio for the plant

The general accomplishment margin for the factory is calculated by subtracting the cost of raw materials at the factory level from the total sales revenue at the factory level and my agencies

Total accomplishment margin : 2795749500 – 1391336613 = 1404412887 dinars

To calculate the general accomplishment margin for the plant . It is done by dividing the total completion margin by the total costs of the plant and my agencies

General Margin of accomplishment Percentage : 1404412887 Iraqi dinars / 4714043400 Iraqi dinars x 100 = 24.12 %

8) Analyzing product costs according to the behavior of costs

The costs of the electric meter product were calculated for each capacity according to the behavior of costs variable are fixed as follows :

Table No. 8  
 Classification of product costs (per unit) by cost behavior ( Iraqi Dinar )

Gauge phase 1 )20-80 (	Guage phase 3	Gauge phase 1	Details
<b>54071</b>	<b>114357</b>	<b>54456</b>	Fixed costs
<b>29583</b>	<b>62568</b>	<b>29795</b>	Changed details
<b>83654</b>	<b>176925</b>	<b>84251</b>	Making costs
<b>213</b>	<b>452</b>	<b>216</b>	Marketing costs
<b>18162</b>	<b>38411</b>	<b>18292</b>	Administrative costs
<b>102029</b>	<b>215788</b>	<b>102759</b>	Total costs

It is arranged by both researchers

9 ) Preparing the income statement according to accounting for accomplishment and theory of variable costs

The income statement has been prepared at the level of sales of the electrical meters lab (phase 1 scale, phase 3 scale, phase 1 scale (20-80) pursuant to theory of variable costs and accounting for accomplishment as follows :

Table No. 9  
 Income statement under theory of variable costs and the accounting for accomplishment

Accounting of accomplishment		Theory of changed costs	
2795749500	Revenues	2795749500	Revenues
( 1391336613 )	Basic materials	( 1547239720)	Changed costs
1404412887	Accomplishment margin	1248509780	Contribution margin
( 2983840205)	Fixed costs	( 2827937098)	Fixed costs
( 11185396 )	Marketing costs	( 11185396 )	Marketing costs
( 949896085 )	Administrative costs	( 949896085 )	Administrative costs
( 2540508799 )	Loss net	( 2540508799 )	Loss net

It is arranged by both researchers

Through aforementioned particulars on the practical side . It became clear to us that the electrical metrology lab achieves a loss of (255,2596909) dinars according to the company's records for the year 2017 . The accomplishment rate for the manufacturing hour during the year was (2794) dinars per hour and that the highest margin of accomplishment in the metrology lab is for a phase scale product ( 1) Capacity (20-80) . Where it amounted to (5427.7) dinars and the

percentage of accomplishment margin for each product was less than one number as following :

Phase Gauge (1) 66%

Phase Gauge (3) 73%

Phase scale (1) (20-80) 76%

While the general accomplishment margin for the plant was as follows :

1404412887 / 4714043400 = 30 %



It is less than one integer, thus the researchers see that there is no feasibility in the operational processes at the laboratory level according to this extracted ratio

Through what was presented in the theoretical side and the practical side . The researchers see that the research hypothesis was proven by evaluating the costs at the level of the economic unit under the accomplishment accounting . Which is the margin of accomplishment in addition to removing all bottlenecks during the chain of operations

### CONCLUSIONS AND RECOMMENDATIONS

First: the conclusions

Based on the foregoing from the theoretical and practical side of the research . The conclusions are summarized in the following :

- 1) Accounting for accomplishment works to match the modern trends of cost accounting by measuring plant costs in a more fair and clear manner
- 2) Accounting for accomplishment contributes to providing more clear information to management for the purpose of making decisions
- 3) The accounting for accomplishment clearly tends to the theory of variable costs by adopting the analysis of costs into fixed and variable
- 4) The point of sale and delivery to the customer is what leads to adding value to the economic unit not the accomplishment of production operations
- 5) In the light of the application of accounting for accomplishment, direct materials are the only variable cost element . While the rest of the costs are fixed costs in the short term
- 6 ) Accomplishment accounting works on the effectiveness of production processes more than the efficiency of operations
- 7) Accounting for accomplishment adopts the theory of constraints . Which considers the economic unit as an interconnected series of operations and it is necessary to coordinate among them

### Second : Recommendations

Through showing conclusions . The researcher recommend the following :

- 1 ) Working on developing cost systems are applied in Iraqi industrial companies, including Diyala State Company for Electrical Industries, metrology lab, using modern advanced methods for its ability to provide information . Whether financial or non-financial to the administration to assist in planning and decision-making
- 2) The use of external expertise for accountants , workers in the financial department for the purpose of

developing their accounting skills and their ability to keep pace with modern developments

- 3) The existence of a legal cover that legislates to work with modern methods of cost accounting through directing the numbers of lists and analyzing costs according to the modern methods used
- 4) Working on addressing choke points within the metrology lab , the presence of urgent solutions that lead to reducing the losses realized , then their final disappearance, crossing the break-even point and achieving profits
- 5) Working to raise the percentage of achievement margin for each product in the standards lab . Where the higher the percentage of achievement margin the lower the loss will be clearly

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