

COMPARATIVE ANALYSIS OF CONVENTIONAL METHOD WITH ACTIVITY BASED COSTING IN PT MULIA SEJATI GALLERY

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ABSTRACT

The goal of this research was to provide readers the information about the calculation methods, both traditional and activity-based costing in the application of the cost of production. The method used in this research was the qualitative method. The analysis was done by calculating the amount of the production cost using the traditional system and the magnitude of the production cost when using the activity-based costing system. The amount of each acquisition was then performed into data analysis. The results achieved are massive distortion between the calculations using traditional systems and activity based costing system. The conclusions of the whole thesis are activity-based costing system is considered more relevant than traditional systems that are currently used by the company.

Keywords: management accounting, activity based costing, conventional accounting

INTRODUCTION

Problem formulations in this research are the company's production process, calculation of the production cost that is carried out by the company, the calculation of the production cost when using activity based costing, the comparison between the two methods, and reconciliation. Figure 1 explains the activity in one company based on the cost.

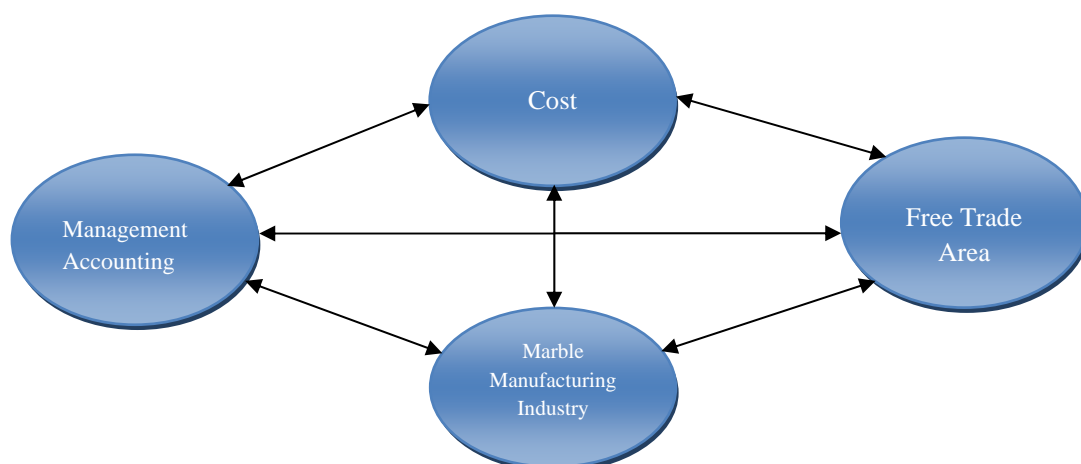


Figure 1 Activity Based Costing

The goals of this research are to know how to calculate the production cost of marble products that made by the company, the calculation of production cost if using activity-based costing system in the product that made from marble with the type of Common (Travertine and Empire Beige), Limited (Opera Vaticano and Golden Venatino), and Exotic (Statuario and Potoro Gold), and the difference in costs incurred both. Application of activity is based on costing in a textile company in Pakistan. The case study is an international journal that discussed the determination of activity-based costing system in a textile company in Pakistan. That journal is organized in Islamabad (capital of Pakistan) in 2013 which is made by Godil that discusses the implementation of the activity-based costing system in the textile industry. Research on this journal is performed to facilitate the public in setting the cost of production in the textile industry that is now starting to bloom in Pakistan. It produces the cost of production in the textile company that studies and shows the company wants to compete in price, determine the cost of production, as well as the advantages and disadvantages of this system which is really needed. According to Atkinson, et al., (2012) the description of the cost is as follows:

"The monetary value of goods or services issued to benefit present or future. Therefore, while the cost reflects the outflow of sources such as cash or financial commitment to pay in the future. The cash outflow brings benefits that can be used to make products that can be sold to generate a cash benefit ".

Carter (2009) has defined cost as an exchange, expenses, or sacrifices that are made to ensure the acquisition of the benefits. Dunia and Wasillah (2012) have suggested that the cost of production is the costs incurred in connection with manufacturing activities. The cost of production is divided into three broad categories, namely direct material, direct labor, and manufacturing overhead. While Hansen and Mowen (2007) have defined the traditional methods of calculating the production cost by cost charging function of direct materials and direct labor using direct search. Overhead costs, on the other hand, is charged by using a driving element and allocation. According to Garrison, Noreen, and Brewer (2013), in the traditional accounting, all expenses are charged to production costs even products cost that is not caused by products. For example, some wages for the security of the plant will be located on the product even though the wages of security guards is completely unaffected whether the firm produces or not.

Horngren, *et al.*, (2007) have defined the activity based costing by identifying individual activities as the fundamental cost objects. An activity is an event, task, or a unit of work with the specific purpose. It means that activity based costing is a purification system costs by identifying the individual activities as the fundamental cost objects and activities are undertaken in the form of an event, a task, or work unit with a specific goal. According to Garrison, Norren, Brewer (2013), it is activity based costing that method is designed to provide cost information for managers to strategic decision-making and other decisions that affect the capacity and fixed costs. Weygandt, Kimmel, Kieso (2010) have defined that activity based costing is a cost accounting system that focuses on the activities performed in the specific manufacturing a product that can be interpreted as activity based costing that system exists in cost accounting. It focuses on the activities conducted in the manufacturing process of a product.

METHODS

The method used is the qualitative method that uses primary data as a reference. Primary data is obtained directly from the company related to the documents concerning production processes and documents relating to the calculation of the cost of production that carried out by the company and other supporting documents on the website of the company. The collection method to obtain these data is carried out as follows (1) Library research by collecting the required information or data related to

the topics discussed. (2) Field research by conducts researches to obtain information directly by visiting the company. Field research can be done by observation, interview, and re-performance.

RESULTS AND DISCUSSIONS

Figure 2 shows the production process within the company. It can be seen that the process consists of three stages, namely the initial stage, processing stage, and final stage.



Figure 2 Production Process

Table 1 shows the method calculation that is used by the company (traditional).

Table 1 Cost of Phone Bills, Water, Electricity and Property Tax in 2013

Phone Bills Per Year						
24%	21%	17%	15%	13%	10%	100%
Travertine	Empire Beige	Opera Vaticano	Golden Venatino	Statuario	Potoro Gold	Total
Rp25.252.049	Rp22.095.543	Rp17.886.868	Rp15.782.531	Rp13.678.193	Rp10.521.687	Rp105.216.870

Electricity Bill Per Year						
24%	21%	17%	15%	13%	10%	100%
Travertine	Empire Beige	Opera Vaticano	Golden Venatino	Statuario	Potoro Gold	Total
Rp236.366.208	Rp206.820.432	Rp167.426.064	Rp147.728.880	Rp128.031.696	Rp98.485.920	Rp984.859.200

Water Bill Per Year						
24%	21%	17%	15%	13%	10%	100%
Travertine	Empire Beige	Opera Vaticano	Golden Venatino	Statuario	Potoro Gold	Total
Rp125.702.592	Rp109.989.768	Rp89.039.336	Rp78.564.120	Rp68.088.904	Rp52.376.080	Rp523.760.800

Property Tax Per Year						
24%	21%	17%	15%	13%	10%	100%
Travertine	Empire Beige	Opera Vaticano	Golden Venatino	Statuario	Potoro Gold	Total
Rp3.228.000	Rp2.824.500	Rp2.286.500	Rp2.017.500	Rp1.748.500	Rp1.345.000	Rp13.450.000

The allocation of costs is charged by percentage of each product; that will be included in the calculation of factory overhead. It becomes the important thing to do, where company allocates detail costs which actually happen then charged to each product.

Table 2 Calculation of the Production Cost that is Used by the Company (Traditional)

	Marble Cost Production					
	Statuario	Potero Gold	Opera Vaticano	Golden Ventino	Travertine	Empire Beige
Direct Cost Production						
Marble Cost Production	Rp9,782,690,080	Rp10,987,655,700	Rp9,876,549,500	Rp10,712,675,770	Rp9,234,957,000	Rp10,563,004,500
Import Taxes (Has Import Identification Number)	Rp244.567.252	Rp274.691.393	Rp246.913.738	Rp267.816.894	Rp230.873.925	Rp264.075.113
Total of Direct Raw Material	Rp10.027.257.332	Rp11.262.347.093	Rp10.123.463.238	Rp10.980.492.664	Rp9.465.830.925	Rp10.827.079.613
Direct Labor						
Total of Direct Labor	Rp110.635.200	Rp85.104.000	Rp144.676.800	Rp127.656.000	Rp204.249.600	Rp178.718.400
Overhead Factory						
Cost of Lab Marble	Rp58.216.400	Rp62.111.900				
Indirect Raw Material:						
Pigment	Rp33,218,450	Rp39,867,800				
Netting	Rp50,916,812	Rp49,800,350	Rp52,711,980	Rp50,867,400	Rp54,927,450	Rp51,254,800
Eppoxy	Rp43,672,450	Rp48,679,800	Rp44,219,800	Rp49,990,750	Rp43,849,000	Rp47,980,600
Resin	Rp62,234,560	Rp61,960,800	Rp62,876,500	Rp61,411,250	Rp62,914,700	Rp60,509,200
Peeled Stone	Rp21,960,800	Rp24,356,800	Rp22,897,650	Rp25,490,110	Rp23,987,000	Rp27,943,800
Coating	Rp42,567,400	Rp49,861,120	Rp45,527,600	Rp48,870,900	Rp45,897,200	Rp49,800,700
Indirect Labor	Rp214,798,740	Rp165,229,800	Rp280,890,660	Rp247,844,700	Rp396,551,520	Rp346,982,580
Pemeliharaan/PerbaikanMesin	Rp50,112,150	Rp48,716,890	Rp52,112,650	Rp50,275,600	Rp57,216,000	Rp53,187,000
Machine Depreciation	Rp18,987,611	Rp16,980,950	Rp20,055,170	Rp19,170,600	Rp24,145,800	Rp20,170,600
Wisting(20% from Raw Material)	Rp2,005,451,466	Rp2,252,469,419	Rp2,024,692,648	Rp2,196,098,533	Rp1,893,166,185	Rp2,165,415,923
Wastewater Treatment Plant	Rp36,211,456	Rp36,540,312	Rp38,251,211	Rp34,875,400	Rp40,821,000	Rp36,987,000
Property Tax	Rp2,198,200	Rp2,145,190	Rp2,286,500	Rp2,017,500	Rp3,228,000	Rp2,824,500
Factory Depreciation	Rp23,976,800	Rp19,386,500	Rp25,211,450	Rp21,245,800	Rp27,430,900	Rp25,325,420
Factory Electricity	Rp128,031,696	Rp98,485,920	Rp167,426,064	Rp147,728,880	Rp36,366,208	Rp206,820,432
Factory Water	Rp68,088,904	Rp52,376,080	Rp89,039,336	Rp78,564,120	Rp25,702,592	Rp109,989,768
Telephone	Rp13,678,193	Rp10,521,687	Rp17,886,868	Rp15,782,531	Rp25,252,049	Rp22,095,543
Vehicle Maintenance	Rp31,435,670	Rp29,856,700	Rp35,761,400	Rp33,217,650	Rp37,814,700	Rp35,911,300
Vehicle Depreciation	Rp32,423,500	Rp29,879,850	Rp37,245,780	Rp33,421,160	Rp42,453,000	Rp39,876,200
Equipment and Supplies	Rp5,567,800	Rp5,112,560	Rp5,219,870	Rp4,870,200	Rp7,243,500	Rp7,723,000
Jagrag (PenyangaMarmer)	Rp39,265,700	Rp42,380,900	Rp36,780,900	Rp32,398,420	Rp42,850,000	Rp39,761,800
Marble Maintenance	Rp38.691.100	Rp41.267.800	Rp25.230.800	Rp22.460.800		
Other Overhead	Rp57,214,500	Rp57,089,700	Rp58,265,550	Rp54,378,900	Rp67,987,200	Rp66,708,000
Total Overhead of Factory	Rp3,078,920,358	Rp3,245,078,828	Rp3,144,590,334	Rp3,230,981,204	Rp2,259,804,004	Rp3,417,268,166
Cost of Production	Rp13,216,812,890	Rp14,592,529,920	Rp13,412,730,372	Rp14,339,129,868	Rp2,929,884,529	Rp14,123,066,178
Volume of Production	1.745 m2	1.771 m2	3.136 m2	2.948 m2	27.989 m2	21.611 m2
Cost of Production/m2	Rp7574105/m2	Rp8239712/m2	Rp4277019/m2	Rp4864020/m2	Rp461963/m2	Rp667395/m2

As it can be seen in Table 2, the cost of goods sales of PT MSG does not look proportional. It happens because the company only uses cost driver which is production volume to divide the total costs. This is less proper for some of the cost elements should be used as a cost driver; such as indirect labor costs, machinery depreciation costs, property taxes, and other similar fees. This occurs cost of distortion. Adjustment of the traditional method can give benefit for the growth of the company. Activity-based costing can be used to correct the distortion cost which occurs by the conventional method.

Table 3 Calculation Pool Rate per Products

Overhead Pabrik	Travertine	Empire Beige	Total Biaya T+E	Opera Vaticano	Golden Venetino	Total Biaya O+G	Statuario	Peters Gold	Total Biaya S + P
Total Biaya 1 (berkubungan dengan volume produksi)									
Lab Marmer							Rp 58.216.400	Rp 62.111.900	Rp 120.328.300
Figuran							Rp 33.218.450	Rp 39.867.800	Rp 73.086.250
Nemag	Rp 54.927.450	Rp 51.254.800	Rp 106.182.250	Rp 52.711.980	Rp 50.867.400	Rp 103.579.380	Rp 50.918.812	Rp 49.800.350	Rp 100.717.162
Epoxy	Rp 43.849.000	Rp 47.980.600	Rp 91.829.600	Rp 44.219.800	Rp 49.990.750	Rp 94.210.550	Rp 43.672.450	Rp 48.679.800	Rp 92.352.250
Resin	Rp 62.914.700	Rp 60.509.200	Rp 123.423.900	Rp 62.876.500	Rp 61.411.250	Rp 124.287.750	Rp 62.234.560	Rp 61.960.800	Rp 124.195.360
Batu Kupas	Rp 23.987.000	Rp 27.943.800	Rp 51.930.800	Rp 22.897.650	Rp 25.490.110	Rp 48.387.760	Rp 21.960.800	Rp 24.356.800	Rp 46.317.600
Coating	Rp 45.897.200	Rp 49.800.700	Rp 95.697.900	Rp 45.527.600	Rp 48.870.900	Rp 94.398.500	Rp 42.567.400	Rp 49.861.120	Rp 92.428.520
Wining (20% dari bahan Batu)	Rp1.893.166.185	Rp2.165.415.923	Rp4.058.582.108	Rp2.024.692.648	Rp 2.196.089.333	Rp 4.220.782.181	Rp 2.005.451.400	Rp2.252.469.419	Rp4.257.920.883
Pengolahan Limbah Pabrik	Rp 40.821.000	Rp 36.987.000	Rp 77.808.000	Rp 38.251.211	Rp 34.875.400	Rp 73.126.611	Rp 36.211.456	Rp 36.540.312	Rp 72.751.768
Mesin Gengsaw	Rp 45.523.848	Rp 42.334.712	Rp 87.858.560	Rp 34.164.473	Rp 32.383.400	Rp 66.547.873	Rp 19.415.688	Rp 19.083.077	Rp 38.498.765
Mesin wire	Rp 9.000.034	Rp 7.973.456	Rp 16.973.470	Rp 2.555.445	Rp 1.279.255	Rp 3.834.699	Rp 1.202.701	Rp 984.055	Rp 2.186.756
Mesin Polish	Rp 7.693.814	Rp 4.570.266	Rp 12.264.080	Rp 4.023.528	Rp 3.411.300	Rp 7.434.828	Rp 3.583.358	Rp 2.748.383	Rp 6.331.741
Mesin SEI	Rp 5.248.156	Rp 4.985.745	Rp 10.233.901	Rp 4.634.711	Rp 2.888.785	Rp 7.523.496	Rp 2.789.802	Rp 1.968.070	Rp 4.757.872
Mesin Hooned	Rp 3.308.925	Rp 3.077.651	Rp 6.386.576	Rp 2.865.504	Rp 1.847.782	Rp 4.713.286	Rp 1.635.439	Rp 1.084.738	Rp 2.720.177
Mesin Pompa Limbah	Rp 1.434.610	Rp 1.434.176	Rp 2.868.786	Rp 1.464.476	Rp 1.137.094	Rp 2.601.570	Rp 1.130.482	Rp 885.629	Rp 2.016.111
Mesin Meja Transfer	Rp 2.067.496	Rp 1.809.059	Rp 3.876.555	Rp 2.067.496	Rp 1.292.185	Rp 2.756.661	Rp 1.119.894	Rp 861.457	Rp 1.981.351
Mesin Gantry Crane	Rp 1.312.102	Rp 1.148.089	Rp 2.460.191	Rp 929.405	Rp 820.064	Rp 1.749.469	Rp 710.722	Rp 546.709	Rp 1.257.431
Mesin Gengsaw	Rp 10.559.068	Rp 10.025.066	Rp 20.584.134	Rp 11.975.336	Rp 11.315.833	Rp 23.291.169	Rp 10.996.059	Rp 9.802.303	Rp 20.798.362
Mesin wire	Rp 1.170.162	Rp 1.128.998	Rp 2.299.160	Rp 1.072.523	Rp 997.223	Rp 2.069.746	Rp 920.166	Rp 875.865	Rp 1.796.031
Mesin Polish	Rp 5.056.897	Rp 4.842.167	Rp 9.899.064	Rp 3.827.876	Rp 3.709.655	Rp 7.537.531	Rp 3.015.577	Rp 2.319.924	Rp 5.335.481
Mesin SEI	Rp 4.863.502	Rp 4.553.642	Rp 9.417.144	Rp 2.969.205	Rp 2.553.423	Rp 5.522.628	Rp 2.365.424	Rp 2.311.961	Rp 4.677.385
Mesin Hooned	Rp 2.922.644	Rp 2.646.921	Rp 5.569.565	Rp 2.456.161	Rp 2.058.443	Rp 4.512.604	Rp 1.994.908	Rp 1.947.886	Rp 3.952.794
Mesin Pompa Limbah	Rp 1.690.109	Rp 1.404.847	Rp 3.094.956	Rp 1.266.044	Rp 1.237.556	Rp 2.503.600	Rp 1.093.031	Rp 1.145.062	Rp 2.238.093
Telepon	Rp 25.252.049	Rp 22.095.543	Rp 47.347.592	Rp 17.886.868	Rp 15.782.531	Rp 33.669.399	Rp 13.678.193	Rp 10.521.687	Rp 24.199.880
Peralatan dan Perlengkapan Jagrak (Penyangga Marmer)	Rp 7.243.500	Rp 7.723.000	Rp 14.966.500	Rp 5.219.870	Rp 4.870.200	Rp 10.090.070	Rp 5.567.800	Rp 5.112.580	Rp 10.680.360
Pemeliharaan Marmer				Rp 25.230.800	Rp 22.460.800	Rp 47.691.600	Rp 38.691.100	Rp 41.267.800	Rp 79.958.900
Overhead Lain-Lain	Rp 67.987.200	Rp 66.708.000	Rp 134.695.200	Rp 58.265.550	Rp 54.378.900	Rp 112.644.450	Rp 57.214.500	Rp 57.089.700	Rp 114.304.200
Total Biaya yang Berkubungan Dengan Volume Produksi	Rp2.410.746.651	Rp2.668.135.141	Rp5.078.881.792	Rp2.510.148.120	Rp2.664.416.172	Rp 5.174.564.292	Rp 2.558.116.318	Rp 2.826.498.047	Rp 584.614.365
Volume Produksi	Rp 27.989	Rp 21.611	Rp 49.600	Rp 3.136	Rp 2.948	Rp 6.084	Rp 1.745	Rp 1.771	Rp 3.516
Total Biaya 1 (berkubungan dengan volume produksi)			Rp 102.397			Rp 850.520			Rp 1.531.460
Total Biaya 2 (berkubungan dengan Luas Pabrik)									
Pajak Bumi dan Bangunan	Rp 3.228.000	Rp 2.824.500	Rp 6.052.500	Rp 2.286.500	Rp 2.017.500	Rp 4.304.000	Rp 2.198.200	Rp 2.145.190	Rp 4.343.390
Penyusutan Pabrik	Rp 27.430.900	Rp 25.325.420	Rp 52.756.320	Rp 25.211.450	Rp 21.245.800	Rp 46.457.250	Rp 23.976.800	Rp 19.386.500	Rp 43.363.300
Limbah Pabrik	Rp 160.777.224	Rp 130.467.293	Rp 300.244.522	Rp 115.406.411	Rp 102.668.994	Rp 218.075.405	Rp 96.443.610	Rp 70.323.822	Rp 166.767.432
Air Pabrik	Rp 99.440.211	Rp 85.388.129	Rp 184.828.340	Rp 65.472.193	Rp 56.693.988	Rp 122.166.181	Rp 50.427.759	Rp 36.061.079	Rp 86.422.838
Total Biaya yang Berkubungan Dengan Luas Pabrik	Rp 290.876.335	Rp 253.005.347	Rp 543.881.682	Rp 208.376.554	Rp 182.626.282	Rp 391.002.836	Rp 173.046.369	Rp 127.916.591	Rp 300.962.960
Total Biaya 2 (berkubungan dengan luas Pabrik)	Rp 2.880	Rp 2.520	Rp 5.400	Rp 2.040	Rp 1.800	Rp 3.840	Rp 1.560	Rp 1.200	Rp 2.760
Total Biaya 3 (berkubungan dengan jumlah Pengiriman)									
Pemeliharaan Kendaraan	Rp 37.814.700	Rp 35.911.300	Rp 73.726.000	Rp 35.761.400	Rp 33.217.650	Rp 68.979.050	Rp 31.435.670	Rp 29.856.700	Rp 61.292.370
Penyusutan Kendaraan	Rp 42.453.000	Rp 39.876.200	Rp 82.329.200	Rp 37.245.780	Rp 33.421.160	Rp 70.666.940	Rp 32.423.500	Rp 29.879.850	Rp 62.303.350

Table 3 Calculation Pool Rate per Products (continued)

Overhead Pabrik	Travertine	Empire Beige	Total Biaya T+E	Opera Vaticano	Golden Venetian	Total Biaya O+G	Statuario	Potero Gold	Total Biaya S + P
Total Biaya yang Berhubungan Dengan Jumlah Pengiriman	Rp 80.267.700	Rp 75.787.500	Rp 156.055.200	Rp 73.007.180	Rp 66.638.810	Rp 139.645.990	Rp 63.589.170	Rp 59.736.550	Rp 112.595.720
Jumlah Pengiriman	Rp 25.750	Rp 19.018	Rp 44.768	Rp 2.101	Rp 1.592	Rp 3.696	Rp 750	Rp 567	Rp 1.317
Total Biaya 3 (berhubungan dengan jumlah pengiriman)			Rp 3.486			Rp 37.814			Rp 93.846
Total Biaya 4 (berhubungan dengan jam tenaga kerja langsung)									
Tenaga Kerja Tidak Langsung	Rp396.551.520	Rp 346.982.580	Rp 743.534.100	Rp 280.890.660	Rp 247.844.700	Rp 528.735.360	Rp 214.798.740	Rp 165.889.800	Rp 380.028.540
Total Biaya yang Berhubungan Dengan jam Tenaga Kerja Langsung	Rp396.551.520	Rp 346.982.580	Rp 743.534.100	Rp 280.890.660	Rp 247.844.700	Rp 528.735.360	Rp 214.798.740	Rp 165.889.800	Rp 380.028.540
Jam Tenaga Kerja Langsung	Rp 11.052	Rp 10.584	Rp 21.636	Rp 9.837	Rp 9.404	Rp 19.241	Rp 8.849	Rp 8.380	Rp 17.229
Total Biaya 4 (berhubungan dengan jam tenaga kerja langsung)			Rp 34.366			Rp 27.480			Rp 22.057
Total Biaya 5 (berhubungan dengan mesin)									
Pemeliharaan dan Perbaikan Mesin	Rp 57.216.000	Rp 53.187.000	Rp 110.403.000	Rp 52.112.650	Rp 50.275.600	Rp 102.388.250	Rp 50.112.150	Rp 48.176.890	Rp 98.829.040
Penyusutan Mesin	Rp 2.145.800	Rp 20.170.600	Rp 22.316.400	Rp 20.055.170	Rp 19.170.600	Rp 22.316.400	Rp 18.987.611	Rp 16.980.950	Rp 35.968.561
Total Biaya yang Berhubungan Dengan jam Mesin	Rp 59.361.800	Rp 73.357.600	Rp 132.719.400	Rp 72.167.820	Rp 69.446.200	Rp 141.614.020	Rp 69.099.761	Rp 65.697.840	Rp 134.797.601
Jam Mesin	Rp 13.991	Rp 12.242	Rp 26.233	Rp 9.910	Rp 8.744	Rp 18.654	Rp 7.578	Rp 5.830	Rp 13.408
Total Biaya 5 (berhubungan dengan jam mesin)			Rp 5.059			Rp 7.592			Rp 10.054

Calculation of overhead costs by cost categories, it is starting with counting the pool rate = total overhead cost: cost driver.

Table 4 Production Cost of Activity Based Costing System of Common Marble Type

Marmer Common : Travertine				Marmer Common : Empire Beige			
Perhitungan overhead Kelompk 1				Perhitungan overhead Kelompk 1			
Pool Rate Rp102.397	x	Volume Produksi 27989	= Rp.865.984.324	Cost Driver Rp102.397.00	x	Volume Produksi 21611	= Rp2.212.897.468
Perhitungan overhead Kelompk 2				Perhitungan overhead Kelompk 2			
Pool Rate Rp100.719	x	Luas Pabrik 2880	= Rp290.070.230	Cost Driver Rp100.719	x	Luas Pabrik 2520	= Rp253.811.452
Perhitungan overhead Kelompk 3				Perhitungan overhead Kelompk 3			
Pool Rate Rp3.486	x	Jumlah Pengiriman 25750	= Rp89.761.021	Cost Driver Rp3.486	x	Jumlah Pengiriman 19018	= Rp66.294.179
Perhitungan overhead Kelompk 4				Perhitungan overhead Kelompk 4			
Pool Rate Rp34.366	x	Jam Tenaga Kerja Langsung 11052	= Rp379.808.600	Cost Driver Rp34.3666	x	Jam Tenaga Kerja Langsung 10584	= Rp363.725.500
Perhitungan overhead Kelompk 5				Perhitungan overhead Kelompk 5			
Pool Rate Rp5.059	x	Jam Mesin 13991	= Rp70.784.017	Cost Driver Rp5.059	x	Jam Mesin 12242	= Rp61.935.583
Total Overhead Pabrik			Rp3.696.408.193	Total Overhead Pabrik			Rp2.958.663.981

Based on Table 2, Table 3, and Table 4, it is known that the company is still using conventional methods. An overview of the amount of the production cost of each species using the calculations made by the company is as follows (1) Common marble type consists of Travertine =

Rp461.963/m² and Empire Beige = Rp667.395/m². (2) Limited marble type consists of Opera Vaticano = Rp4.277.019/m² and Golden Venatino = Rp4.86402 million/m². (3) Exotic marble type consists of Statuario = Rp7.574.105/m² and Potoro Gold = Rp8.239.712/m².

Table 5 Production Cost of Activity Based Costing Common Type

Production Cost of Activity Based Costing of Common Marble Type		
	Travertine	Empire Beige
Direct Cost Production	Rp9.468.830.925	Rp10.827.079.613
Total of Direct Labor	Rp204.249.600	Rp178.718.400
Total of Overhead	Rp3.696.408.193	Rp2.958.663.981
Production Cost	Rp13.369.488.718	Rp13.964.461.994
Production Volume	27.989 m ²	21.611 m ²
Production Cost/m ²	Rp477.669/m ²	Rp646.174/m ²

Table 6 Production Cost of Activity Based Costing System of Limited Marble Type

Marmer Limited : Opera Vaticano				Marmer Limited : Golden Venatino			
Perhitungan overhead Kelompk 1				Perhitungan overhead Kelompk 1			
Pool Rate Rp850.520	x	Volume Produksi 3136	= Rp.2.667231035	Pool Rate Rp850.520	x	Volume Produksi 2984	= Rp2.537.951.980
Perhitungan overhead Kelompk 2				Perhitungan overhead Kelompk 2			
Pool Rate Rp101.824	x	Luas Pabrik 2040	= Rp207.720.257	Pool Rate Rp101.824	x	Luas Pabrik 1800	= Rp183.282.579
Perhitungan overhead Kelompk 3				Perhitungan overhead Kelompk 3			
Pool Rate Rp37.814	x	Jumlah Pengiriman 2101	= Rp79.446.581	Pool Rate Rp37.814	x	Jumlah Pengiriman 1592	= Rp60.199.409
Perhitungan overhead Kelompk 4				Perhitungan overhead Kelompk 4			
Pool Rate Rp27.480	x	Jam Tenaga Kerja Langsung 9837	= Rp270.317.018	Pool Rate Rp27.480	x	Jam Tenaga Kerja Langsung 9404	= Rp258.418.342
Perhitungan overhead Kelompk 5				Perhitungan overhead Kelompk 5			
Pool Rate Rp7.592	x	Jam Mesin 9910	= Rp75.232.923	Pool Rate Rp7.592	x	Jam Mesin 8744	= Rp66.381.097
Total Overhead Pabrik			Rp3.299.947.814	Total Overhead Pabrik			Rp3.106.233.408

Table 7 Production Cost of Activity Based Costing

Production Cost of Activity Based Costing		
	Opera Vaticano	Golden Venatino
Direct Cost Production	Rp10.123.463.238	Rp10.980.492.664
Total of Direct Labor	Rp144.676.800	Rp127.656.000
Total of Overhead	Rp3.299.947.814	Rp3.106.233.408
Production Cost	Rp13.568.087.852	Rp14.214.382.072
Production Volume	3.136 m ²	2.948 m ²
Production Cost/m ²	Rp4.326.559/m ²	Rp4.821.704/m ²

Table 8 Production Cost of Activity Based Costing System of Exotic Marble Type

Marmer Exotic : Statuario				Marmer Exotic : Potoro Gold			
Perhitungan overhead Kelompk 1				Perhitungan overhead Kelompk 1			
Pool Rate Rp1.531.460	x	Volume Produksi 1745	= Rp2.672.398.199	Pool Rate Rp1.531.460	x	Volume Produksi 1771	= Rp2.712.216.166
Perhitungan overhead Kelompk 2				Perhitungan overhead Kelompk 2			
Pool Rate Rp109.045	x	Luas Pabrik 1560	= Rp170.109.466	Pool Rate Rp109.045	x	Luas Pabrik 1200	= Rp130.853.461
Perhitungan overhead Kelompk 3				Perhitungan overhead Kelompk 3			
Pool Rate Rp93.846	x	Jumlah Pengiriman 750	= Rp170.109.499	Pool Rate Rp109.045	x	Jumlah Pengiriman 567	= Rp53.210.914
Perhitungan overhead Kelompk 4				Perhitungan overhead Kelompk 4			
Pool Rate Rp22.057	x	Jam Tenaga Kerja Langsung 8849	= Rp195.186.752	Pool Rate Rp22.057	x	Jam Tenaga Kerja Langsung 8380	= Rp184.841.788
Perhitungan overhead Kelompk 5				Perhitungan overhead Kelompk 5			
Pool Rate Rp10.054	x	Jam Mesin 7578	= Rp76.185.577	Pool Rate Rp10.054	x	Jam Mesin 5830	= Rp58.612.024
Total Overhead Pabrik			Rp3.184.264.834	Total Overhead Pabrik			Rp3.139.734.352

Table 9 Production Cost of Activity Based Costing

Production Cost of Activity Based Costing		
	Statuario	Potoro Gold
Direct Cost Production	Rp10.027.257.332	Rp11.262.347.093
Total of Direct Labor	Rp110.635.200	Rp85.104.000
Total of Overhead	Rp3.184.264.234	Rp3.193.734.352
Production Cost	Rp13.322.157.366	Rp13.139.734.352
Production Volume	1745 m ²	1.771 m ²
Production Cost/m ²	Rp7.634.474/m ²	Rp8.180.229/m ²

Table 10 Reconciliation of Production Cost

Sistem Yang digunakan Perusahaan	Volume Produksi	Total	Sistem Activity Based Costing	Volume Produksi	Total	Selisih Antar Sistem	Keterangan
Jenis Common							
Travertine							
Rp462.070	x	27989	Rp12.932.877.230	Rp477.669	x	27989	Rp13.369.477.641 Rp(436.600.411) Understated
Empire Beige							
Rp667.395	x	21611	Rp14.423.073.345	Rp646.174	x	21611	Rp13.964.466.314 Rp458.607.031 Overstated
Jenis Limited							
Opera Vaticano							
Rp4.277.019	x	3136	Rp13.412.731.584	Rp4.326.559	x	3136	Rp13.568.089.024 Rp(155.357.440) Understated
Golden Venatino							
Rp4.864020	x	2948	Rp14.339.130.960	Rp4.821.704	x	2948	Rp14.214.383.392 Rp124.747.568 Overstated
Jenis Exotic							
Statuario							
Rp7.574.105	x	1745	Rp13.216.813.225	Rp7.634.474	x	1745	Rp13.322.157.130 Rp(105.343.905) Understated
Potoro Gold							
Rp8.239.712	x	1771	Rp14.592.529.952	Rp8.180.229	x	1771	Rp14.487.185.559 Rp105.344.393 Overstated
Total			Rp82.917.156.296	Total			Rp82.925.759.060 Rp(8.602.764) Understated
Statuario							
Rp7.574.105	x	1745	Rp13.216.813.225	Rp7.634.474	x	1745	Rp13.322.157.130 Rp(105.343.905) Understated
Potoro Gold							
Rp8.239.712	x	1771	Rp14.592.529.952	Rp8.180.229	x	1771	Rp14.487.185.559 Rp105.344.393 Overstated
Total			Rp82.917.156.296	Total			Rp82.925.759.060 Rp(8.602.764) Understated

CONCLUSIONS

There are several conclusions that can be drawn from the research that has been done. First, PT Mulia Sejati Gallery is an import-export company engaged in the manufacture of mining processing of natural stone marble, granite, onyx, and other kinds of that. Second, PT Mulia Sejati Gallery is still using conventional measuring systems. The cost of production of marble that is being discussed in this research is Rp12.932.877.230 and Rp14.423.073.345 each for common travertine and common empire beige. While the cost of production for limited types are limited opera vaticano Rp13.412.731.584 and limited golden venatino Rp14.33996 million. For the limited kind is Rp13.216.813.225 and Rp14.592.952 each for statuario and potoro gold. Third, if the system uses activity based costing in determining the cost of production, then the amount of the cost of production on each type is common travertine Rp13.369.477.641, common empire beige Rp13.964.466.314, limited opera vaticano Rp13.568.089.024, limited golden venatino Rp14.214.747.568, exotic statuario Rp13.322.157.130, exotic potoro gold Rp14.487.185.559. Fourth, by calculating the difference, the disparity of the cost of production of both systems are understated and occurs in three types of marble, namely common travertine Rp436.600.411, limited opera vaticano Rp155.357.440, and exotic statuario Rp105.343.905. Fifth, there is excess recording or overstated within the type of common empire beige Rp458.607.031. Limited opera vaticano Rp124.747.568, exotic potoro gold Rp105.344.393. Sixth, the overall cost of production used by the company is too low or understated with the amount of Rp8.602.764.

Some suggestions that can be recommended for PT Mulia Sejati Gallery include (1) after overall analysis, there is a recording that is too low and too high on the determination of cost of production. This should be evaluated immediately to sustain the company. (2) PT Mulia Sejati Gallery is advised to review the production cost calculation system that is currently used. (3) PT Mulia Sejati Gallery is advised to use the system to calculate the cost of production by using the activity-based costing system. (4) Training and in-depth understanding of marble are needed to be done for some employees who work directly in the production process for the sake of wasting reduction on raw materials.

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