

Task A9.56b: Exercise on Manufacturing Accounting

Numbers in this task are to be derived from your Student-ID. If i.e., your student-ID is 125518, the following amounts will apply: X = 5; Y = 1; Z = 8. Accordingly, the opening stock of frames given in the task as 4X0 units would be for you: 450 units. The other figures apply respectively. You must use your actual student-ID as stated on the enrol list!

ENTER YOUR STUDENT-ID:				X	Y	Z
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WORTHING Ltd. is an Australian manufacturer for water boilers. The water boiler consists of 1 body (kettle), 1 electric unit (EUT) and 1 handle. At the beginning of the Accounting period 20X7, WORTHING Ltd. has 2,X00 kettles on stock. The unit costs per kettle are 21.00 AUD/u. Furthermore there are Y00 handles on stock at 8.Z0 AUD/u. WORTHING Ltd. applies a perpetual inventory movement system and the first-in-first-out method for valuation.

During the Accounting period 20X7, WORTHING Ltd. runs 3 job orders on 15.04.20X7, on 30.08.20X7 and on 7.09.20X7. All job orders have a lot size of 10,000 water boilers. The production steps are Assembling and Quality Checking. The allocation of manufacturing overheads in both departments is based on the assembling and quality checking time. **No other jobs are considered in the Accounting period 20X7.** The actual production time for the 3 orders is in the Assembling department: 155 hrs., 170 hrs. and 16Y hrs. In the Quality Checking department it is: 80 hrs, 7X hrs and 69 hrs.

The following information is required to calculate the predetermined overhead allocation rate POR: Under normal capacity conditions, indirect labour (supervisor) in the Assembling department is 3X,000.00 AUD/480hrs. Depreciation is 12,000.00 AUD/480 hrs. (The planned capacity is 480 hrs.) In the Quality Checking department labour is amounting to 30,000.00 AUD/240 hrs. (The planned capacity is 240 hrs.)

In 20X7, labour in the Assembling department is 30,000.00 AUD/a, depreciation is 12,000.00 AUD/a. In the Quality Checking department labour is 31,X00.00 AUD/a. There are further cost for general administration to an extent of 3Z,000.00 AUD/a.

The following purchases are recorded by WORTHING Ltd.

- (1) On 2.01.20X7, WORTHING Ltd. purchases 2~~Y~~,000 handles at 8.00 AUD/u.
- (2) On 10.02.20X7, WORTHING Ltd. purchases 5,000 kettles at 2~~X~~.00 AUD/u.
- (3) On 15.02.20X7, WORTHING Ltd. purchases 35,000 electrical units at 30.~~Z~~0 AUD/u.
- (4) On 20.02.20X7, WORTHING Ltd. purchases 7,000 kettles at 22.~~Y~~0 AUD/u.
- (5) On 2.03.20X7, WORTHING Ltd. purchases 6,000 kettles at 20.00 AUD/u.
- (6) On 14.05.20X7, WORTHING Ltd. purchases 1~~Y~~,000 handles at 7.50 AUD/u.
- (7) On 17.06.20X7, WORTHING Ltd. purchases 14,000 kettles at 19.00 AUD/u.

IAS 2.13 applies.

On 9.06.20X7, WORTHING Ltd. sells 9,00~~Z~~ water boilers at 12~~X~~.00 AUD/u net selling price. On 31.10.20X7 it sells 18,~~Y~~00 water boilers at 13~~Y~~.00 AUD/u net selling price.

Required: Determine the closing stock of kettles, electrical units and handles and of finished goods as at 31.12.20X7. Calculate the profit before tax. Ignore VAT!

Solution (X=5; Y=1; Z=8)

See below the accounts:

D Inventories kettles INK C				D Work in process-15.04.20X7 C				D Manufacturing overheads assembling MOA C					
2500 OV	52,500.00	W4P	232,750.00	10000	INK	232,750.00	FGI	646,007.08	LAB	30,000.00	W4P	15,177.08	155
5000 (2)	125,000.00				INE	308,000.00			DPR	12,000.00	W8P	16,645.83	170
7000 (4)	154,700.00				INH	80,080.00					W9P	16,450.00	168
6000 (5)	120,000.00	c/d	219,450.00	10500	MOA	15,177.08			COS	6,272.92			
	452,200.00		452,200.00		MOQ	10,000.00				48,272.92		48,272.92	
10500 b/d	219,450.00	W8P	209,450.00	10000		646,007.08		646,007.08					
14000 (7)	266,000.00	c/d	276,000.00	14500									
	485,450.00		485,450.00										
14500 b/d	276,000.00	W9P	190,500.00	10000									
		c/d	85,500.00	4500									
	276,000.00		276,000.00										
4500 b/d	85,500.00												
D Inventories electrical units INE C				D Work-in-process-30.08.20X7 C				D Manufacturing overheads QualCheck MOQ C					
35000 (3)	1,078,000.00	W4P	308,000.00	10000	INK	209,450.00	FGI	623,470.83	LAB	31,500.00	W4P	10,000.00	80
		c/d	770,000.00	25000	INE	308,000.00					W8P	9,375.00	75
	1,078,000.00		1,078,000.00		INH	80,000.00					W9P	8,625.00	69
25000 b/d	770,000.00	W8P	308,000.00	10000	MOA	16,645.83					COS	3,500.00	
		c/d	462,000.00	15000	MOQ	9,375.00			31,500.00			31,500.00	
	770,000.00		770,000.00			623,470.83		623,470.83					
15000 b/d	462,000.00	W9P	308,000.00	10000									
		c/d	154,000.00	5000									
	462,000.00		462,000.00										
5000 b/d	154,000.00												
D Inventories handles INH C				D Work-in-process-7.09.20X7 C				D General administration GAD C					
100 OV	880.00	W4P	80,080.00	10000	INK	190,500.00	FGI	599,125.00	LAB	38,000.00			
21000 (1)	168,000.00	c/d	88,800.00	11100	INE	308,000.00							
	168,880.00		168,880.00		INH	75,550.00							
11100 b/d	88,800.00	W8P	80,000.00	10000	MOA	16,450.00							
11000 (6)	82,500.00	c/d	91,300.00	12100	MOQ	8,625.00							
	171,300.00		171,300.00			599,125.00		599,125.00					
12100 b/d	91,300.00	W9P	75,550.00	10000									
		c/d	15,750.00	2100									
	91,300.00		91,300.00										
2100 b/d	15,750.00												
D Finished goods inventories FGI C				D Cash/Bank C/B C				D Cost of goods sold-20X7 COS C					
10000 W4P	646,007.08	COS	581,923.18	9008	OV	146,620.00	LAB	30,000.00	MOQ	3,500.00	MOA	6,272.92	
		c/d	64,083.90	992	(8)	1,126,000.00	DPR	12,000.00	FGI	581,923.18			
	646,007.08		646,007.08		(9)	2,371,100.00	LAB	31,500.00	FGI	1,155,351.54	P&L	1,734,501.80	
992 b/d	64,083.90	COS	1,155,351.54	18800			LAB	38,000.00		1,740,774.72		1,740,774.72	
10000 W8P	623,470.83						(1)	168,000.00					
10000 W9P	599,125.00	c/d	131,328.20	2192			(2)	125,000.00					
	1,286,679.74		1,286,679.74				(3)	1,078,000.00					
2192 b/d	131,328.20						(4)	154,700.00					
							(5)	120,000.00					
							(6)	82,500.00					
							(7)	266,000.00					
							c/d	1,538,020.00					
								3,643,720.00					
						b/d	1,538,020.00						
D Profit and Loss-20X7 P&L C				D Revenue-20X7 REV C				D Retained earnings R/E C					
COS	1,734,501.80	REV	3,497,100.00	P&L	3,497,100.00	(8)	1,126,000.00	c/d	1,207,218.74	P&L	1,207,218.74		
GAD	38,000.00					(9)	2,371,100.00			b/d	1,207,218.74		
EBT	1,724,598.20						3,497,100.00						
	3,497,100.00		3,497,100.00										
ITL	517,379.46	b/d	1,724,598.20										
R/E	1,207,218.74												
D Income tax liabilities ITL C				D name C				D name C					
c/d	517,379.46	P&L	517,379.46										
		b/d	517,379.46										

Exhibit 1: Accounts

Find below in Exhibit 3 a balance sheet. It was assumed that the company is established with 200,000.00 AUD and spend cash on opening values for materials.

Worthing Ltd. STATEMENT of FINANCIAL POSITION as at 31.12.20X6			
A			C, L
<i>Non-current assets</i>	[ZAR]	<i>Equity</i>	[ZAR]
P, P, E		Share capital	200,000.00
Intangibles		Reserves	
Financial assets		Retained earnings	
<i>Current assets</i>		<i>Liabilities (liab.)</i>	
Inventory	53,380.00	Long-term liab. IBL	
Acc. receivables A/R		Short-term liab. A/P	
Prepaid expenses		Provisions	
Cash/Bank	146,620.00	Income tax liab.	
Total assets	200,000.00	Total equity and liab.	200,000.00

Exhibit 2: Opening balance sheet

Find the balance sheet as at the end of the Accounting period 20X7 in Exhibit 3 (for checking purposes)

Worthing Ltd. STATEMENT of FINANCIAL POSITION as at 31.12.20X7			
A			C, L
<i>Non-current assets</i>	[ZAR]	<i>Equity</i>	[ZAR]
P, P, E		Share capital	200,000.00
Intangibles		Reserves	
Financial assets		Retained earnings	1,207,218.74
<i>Current assets</i>		<i>Liabilities (liab.)</i>	
Inventory	386,578.20	Long-term liab. IBL	
Acc. receivables A/R		Short-term liab. A/P	
Prepaid expenses		Provisions	
Cash/Bank	1,538,020.00	Income tax liab.	517,379.46
Total assets	1,924,598.20	Total equity and liab.	1,924,598.20

Exhibit 3: balance sheet