

Aufgabe 9.31: Job-Order Costing

SALINAS Ltd. is a production firm for mobile phone covers. The company buys materials (leather) from its supplier McLEATHER GmbH. The leather amount for one phone cover is 0.01 m². A square metre of leather cost 45.00 EUR (net amount). At the beginning of the accounting period 20X4 there is an amount of 200 m² on stock – bought at 45.00 EUR/m² recently.

On 1.01.20X4, SALINAS Ltd. buys 500 m² leather from its supplier at 50.00 EUR/m². On 1.07.20X4, SALINAS buys the same amount of leather (=500 m²). However the supplier increases the price and charges 60.00 EUR/m² then. SALINAS Ltd. applies an inventory valuation along the weighted average cost formula.

During the accounting period 20X4 SALINA Ltd. produces 120,000 mobile phone covers. There are 12 job orders for 10,000 covers each. Every month SALINAS Ltd. runs one job order. All job orders will produce 10,000 covers. In order to keep the task simple assume the material requisition occurs on the 15th of each month. There is no waste of leather in the production process.

The operating expenses for the year equal to 360,000.00 EUR. Depreciation on the plant is not included in the operating expenses and equals to 10,000.00 EUR/a.

Costs for marketing and advertising amount to 94,000.00 EUR/a.

The application of overheads (operating expenses plus depreciation) is along the estimated cost rate of 30,000 EUR/job order. Under or over applied overheads are to be closed off to the Cost of Sales account! SALINAS Ltd. completes all job orders and sells 100,500 of the mobile phone covers at a selling price of 8.50 EUR/u. For the sales of the mobile phone covers first-in-first-out cost formula applies.

During the accounting period 20X4 an amount of 200 covers is returned. The customers get refunded on a cash basis and the returned covers are thrown away due to massive quality issues.

Required: Prepare the relevant accounts for SALINAS Ltd. and calculate the profit. Apply a perpetual inventory system. Ignore VAT!

Solution:

Item	price paid/u	amount	date	stock	value	change	stock level
opening amount	45.00	200	1.01.20X4	200	45.00		9,000.00
+ leather	50.00	500	1.01.20X4	700	50.00	25,000.00	34,000.00
-leather		(100)	15.01.20X4	600	48.57	(4,857.14)	29,142.86
-leather		(100)	15.02.20X4	500	48.57	(4,857.14)	24,285.71
-leather		(100)	15.03.20X4	400	48.57	(4,857.14)	19,428.57
-leather		(100)	15.04.20X4	300	48.57	(4,857.14)	14,571.43
-leather		(100)	15.05.20X4	200	48.57	(4,857.14)	9,714.29
-leather		(100)	15.06.20X4	100	48.57	(4,857.14)	4,857.14
+ leather	60.00	500	1.07.20X4	600	60.00	30,000.00	34,857.14
-leather		(100)	15.07.20X4	500	58.10	(5,809.52)	29,047.62
-leather		(100)	15.08.20X4	400	58.10	(5,809.52)	23,238.10
-leather		(100)	15.09.20X4	300	58.10	(5,809.52)	17,428.57
-leather		(100)	15.10.20X4	200	58.10	(5,809.52)	11,619.05
-leather		(100)	15.11.20X4	100	58.10	(5,809.52)	5,809.52
-leather		(100)	15.12.20X4	0	58.10	(5,809.52)	0.00

Exhibit 1: Accounting for materials

Observe the accounts. Consider the WIP accounts for Jan, Febr, etc. being represented by a JO 1-6 account and the next following accounts by a JO 7-12 account. Consider these accounts to exist 6 times.

- (1) Purchase of leather
- (2) Putting purchases on stock
- (3.X) Releases from stock
- (4) Purchase in July
- (5) Putting purchases on stock
- (6.X) Releases from stock
- (7) Recording operating expenses
- (8) Transfer of operating expenses to the MOH account
- (9) Recording depreciation
- (10) Transfer of depreciation to the MOH account
- (11.X) Application of overheads: $30,000 \times 12 = \mathbf{360,000.00 \text{ EUR}}$.
- (12.X) Closing job orders and transfer finished goods to stock. The unit costs of the mobile phone covers from the first half of the year equal to $34,857.14 / 10,000 = \mathbf{3.49 \text{ EUR}}$ and in the second half of the year $35,809.52 / 10,000 = \mathbf{3.58 \text{ EUR}}$. We continue calculation based on the rounded unit costs.
- (13) The expense of the finished goods follows the first-in-first-out formula. According to that rule the cost of sales equal to $60,000 \times 3.49 + 40,500 \times 3.58 = \mathbf{354,390.00 \text{ EUR}}$
- (14) Transfer under-applied overheads to COS account
- (15) Sales is at $8.50 \times 100,500 = \mathbf{854,250.00 \text{ EUR}}$.
- (16) Recording of marketing/advertising expenses
- (17) Returns inwards equals to $200 \times 8.50 = \mathbf{1,700.00 \text{ EUR}}$.

Observe the accounts:

Inventories				Purchase			
D			C	D			C
OV	9,000.00	(3.1)	4,857.14	(1)	25,000.00	(2)	25,000.00
(2)	25,000.00	(3.2)	4,857.14	(4)	30,000.00	(5)	30,000.00
(5)	30,000.00	(3.3)	4,857.14		<u>55,000.00</u>		<u>55,000.00</u>
		(3.4)	4,857.14				
		(3.5)	4,857.14				
		(3.6)	4,857.14				
		(6.1)	5,809.52				
		(6.2)	5,809.52				
		(6.3)	5,809.52				
		(6.4)	5,809.52				
		(6.5)	5,809.52				
		(6.6)	5,809.52				
	<u>64,000.00</u>		<u>63,999.96</u>				

Exhibit 2: Accounts

				This account exists 6 times!			
D		Cash/Bank		D		Job Order 1-6	
		C				C	
(15)	854,250.00	(1)	25,000.00	(3.X)	4,857.14	(12.X)	34,857.14
		(4)	30,000.00	(11.X)	30,000.00		
		(7)	360,000.00		<u>34,857.14</u>		<u>34,857.14</u>
		(15)	94,000.00				
		(16)	1,700.00				
		c/d	346,050.00				
	<u>854,250.00</u>		<u>856,750.00</u>				
b/d	346,050.00						
				This account exists 6 times!			
D		Job Order 7-12		D		Operating expenses	
		C				C	
(6.X)	5,809.52	(12.X)	35,809.52	(7)	<u>360,000.00</u>	(8)	<u>360,000.00</u>
(11.X)	30,000.00						
	<u>35,809.52</u>		<u>35,809.52</u>				
D		Manufacturing overheads		D		Finished goods inventory	
		C				C	
(8)	360,000.00	(11.1)	30,000.00	(12.1)	34,857.14	(13)	354,390.00
(10)	10,000.00	(11.2)	30,000.00	(12.2)	34,857.14		
		(11.3)	30,000.00	(12.3)	34,857.14		
		(11.4)	30,000.00	(12.4)	34,857.14		
		(11.5)	30,000.00	(12.5)	34,857.14		
		(11.6)	30,000.00	(12.6)	34,857.14		
		(11.7)	30,000.00	(12.7)	35,809.52		
		(11.8)	30,000.00	(12.8)	35,809.52		
		(11.9)	30,000.00	(12.9)	35,809.52		
		(11.10)	30,000.00	(12.10)	35,809.52		
		(11.11)	30,000.00	(12.11)	35,809.52		
		(11.12)	30,000.00	(12.12)	35,809.52	c/d	69,609.96
		(14)	10,000.00		<u>423,999.96</u>		<u>423,999.96</u>
	<u>370,000.00</u>		<u>370,000.00</u>	b/d	69,609.96		
D		Accumulated depreciation		D		Depreciation	
		C				C	
c/d	<u>10,000.00</u>	(9)	<u>10,000.00</u>	(9)	<u>10,000.00</u>	(10)	<u>10,000.00</u>
		b/d	10,000.00				
D		Cost of sales COS		D		Revenue	
		C				C	
(13)	354,390.00	c/d	364,390.00	P&L	<u>854,250.00</u>	(15)	<u>854,250.00</u>
(14)	10,000.00		<u>364,390.00</u>				
	<u>364,390.00</u>		<u>364,390.00</u>				
b/d	364,390.00	P&L	364,390.00				
D		Marketing/Advertising		D		Returns inwards	
		C				C	
(15)	<u>94,000.00</u>	P&L	<u>94,000.00</u>	(16)	<u>1,700.00</u>	P&L	<u>1,700.00</u>

Exhibit 2: Accounts (continued)

Profit and Loss account				Income tax liabilities			
D			C	D			C
COS adj	364,390.00	Rev	854,250.00	c/d	<u>118,248.00</u>	P&L	<u>118,248.00</u>
Mar/Adv	94,000.00					b/d	<u>118,248.00</u>
R.I.	1,700.00						
NP c/d	<u>394,160.00</u>						
	<u>854,250.00</u>		<u>854,250.00</u>				
ITL	118,248.00	b/d	394,160.00				
R/E	<u>275,912.00</u>						
	<u>394,160.00</u>		<u>394,160.00</u>				

Retained earnings							
D			C	D			C
c/d	<u>275,912.00</u>	P&L	<u>275,912.00</u>				
		b/d	<u>275,912.00</u>				

Exhibit 2: Accounts (continued)