

Task A9.52: Inventory valuation

WILLOW Ltd. produces bicycles. At the beginning of the Accounting period, there are 53 mountain bikes on stock. The unit costs of manufacturing for the bikes are 800.00 EUR/u. WILLOW Ltd. also has 40 frames on stock which it bought at a purchase price of 480.00 EUR/u.

WILLOW purchases wheels on the first day of each quarter in 20X7. It always buys 1,000.00 wheels. The unit cost of purchase for the 4 deliveries are: 110.00 EUR/u; 112.00 EUR/u.; 112.00 EUR/u. and 115.00 EUR/u. On 1.01.20X7 WILLOW Ltd. purchases 2,000 frames at a price of 450.00 EUR/u (gross amount). The dealership granted a discount of 4 % on the frames.

At WILLOW Ltd., the bike assembling takes place in the assembling department. 2 wheels are assembled into 1 frame. WILLOW Ltd. produces 900 bikes in June and 1,000 bikes in December. Besides direct materials for the wheels and frames, WILLOW records manufacturing overheads like depreciation on the assembling facilities of 100,000.00 EUR and quality insurance costs of 305,800.00 EUR (not subjected to VAT) during the Accounting period 20X7. Assume the manufacturing overheads are equally distributed over the time, meaning assign half thereof to the first batch and the other half to the second one. No over- nor underapplication of overheads applies. Apply the cost formula first-in-first-out for all material and goods movements. Record the manufacturing of the bikes as 2 batches.

WILLOW Ltd. sells 1,600 bikes during 20X7 at 2,000.00 EUR (net amount).

Required: Prepare accounts for Manufacturing Accounting.

Solution:

- (1) – (4) Purchase of wheels.
- (5) Purchase of frames.
- (6) Depreciation
- (7) Quality assurance.
- (8) Allocating frames to WIP-1
- (9) Allocating wheels to WIP-1
- (10) Allocating depreciation to MOH
- (11) Allocating quality costs to MOH
- (12) Application of overheads to WIP-1
- (13) Adding 900 bikes to stock from WIP-1; unit costs: 809.00 EUR/u
- (14) Allocating frames to WIP-2
- (15) Allocating wheels for WIP-2
- (16) Application of overheads to WIP-2
- (17) Adding 1,000 bikes to stock from WIP-2; unit costs: 789.30 EUR/u.
- (18) Recording cost of sales: $53 \times 800 + 900 \times 809 + 647 \times 789.30 = 1,281,177.10 \text{ EUR}$.
- (19) Recognition of revenue.

D		Inventory-bike INB	C
OV	42,400.00	(18)	1,281,177.10
(13)	728,100.00		
(17)	789,300.00	c/d	278,622.90
	<u>1,559,800.00</u>		<u>1,559,800.00</u>
b/d	278,622.90		

D		Inventory-frames INF	C
OV	16,000.00	(8)	325,600.00
(5)	720,000.00	(14)	360,000.00
		c/d	50,400.00
	<u>736,000.00</u>		<u>736,000.00</u>
b/d	50,400.00		

D		Inventory-wheels INW	C
(1)	110,000.00	(9)	199,600.00
(2)	112,000.00	(15)	226,400.00
(3)	112,000.00		
(4)	115,000.00	c/d	23,000.00
	<u>449,000.00</u>		<u>449,000.00</u>
b/d	23,000.00		

D		Value added tax VAT	C
(1)	22,000.00	(19)	640,000.00
(2)	22,400.00		
(3)	22,400.00		
(4)	23,000.00		
(5)	144,000.00		
c/d	406,200.00		
	<u>640,000.00</u>		<u>640,000.00</u>
		b/d	406,200.00

D		Cash/Bank C/B	C
(19)	3,840,000.00	(1)	132,000.00
		(2)	134,400.00
		(3)	134,400.00
		(4)	138,000.00
		(5)	864,000.00
		(7)	305,800.00
		c/d	2,131,400.00
	<u>3,840,000.00</u>		<u>3,840,000.00</u>
b/d	305,800.00		

D		Depreciation DPR	C
(6)	100,000.00	(10)	100,000.00

D		Accumulated depreciation ACC	C
c/d	<u>100,000.00</u>	(6)	<u>100,000.00</u>
		b/d	100,000.00

D		Quality assurance QAS	C
(7)	<u>305,800.00</u>	(11)	<u>305,800.00</u>

D		WIP-1		C	
(8)	325,600.00	(13)	728,100.00		
(9)	199,600.00				
(12)	202,900.00				
	<u>728,100.00</u>		<u>728,100.00</u>		

D		Manufacturing overheads MOH		C	
(10)	100,000.00	(12)	202,900.00		
(11)	305,800.00	(16)	202,900.00		
	<u>405,800.00</u>		<u>405,800.00</u>		

D		WIP-2		C	
(14)	360,000.00	(17)	789,300.00		
(15)	226,400.00				
(16)	202,900.00				
	<u>789,300.00</u>		<u>789,300.00</u>		

D		Cost of goods sold COS		C	
(18)	<u>1,281,177.10</u>	P&L	<u>1,281,177.10</u>		

D		Revenue REV		C	
P&L	<u>3,200,000.00</u>	(19)	<u>3,200,000.00</u>		

D		Profit and Loss P&L		C	
COS	1,281,177.10	REV	3,200,000.00		
EBT	1,918,822.90				
	<u>3,200,000.00</u>		<u>3,200,000.00</u>		
ITL	575,646.87	b/d	1,918,822.90		
R/E	1,343,176.03				
	<u>1,918,822.90</u>		<u>1,918,822.90</u>		

D		Income tax liabilities ITL		C	
c/d	<u>575,646.87</u>	P&L	<u>575,646.87</u>		
		b/d	575,646.87		

D		Retained earnings R/E		C	
c/d	<u>1,343,176.03</u>	P&L	<u>1,343,176.03</u>		
		b/d	1,343,176.03		