

Aufgabe QR-9.16: Bestandsbewertung (Valuation of Inventory)

BROADWOOD Ltd. is a heat treatment shop. It buys machine elements like axles and does heat treatment on them. Right at the beginning of fiscal year 20X4 BROADWOOD bought 5,000 axles. The first 3,000 axles cost them 288.00 EUR/u (gross amount), the following 270.00 EUR/u (gross amount). At the beginning of fiscal year there is an opening value 2,800 axles at a cost price 180.00 EUR/u. On 1.06.20X4 BROADWOOD purchased another 5,000 axles at 255.00 EUR each (gross amount). The heat treatment requires only direct work for handling which are 20.00 EUR/100 units. The furnace cost center cost 3,000.00 EUR/month. For the application of overheads BROADWOOD determined an overhead allocation rate which amounts to 2.80 EUR/unit. BROADWOOD uses the weighted average cost formula for inventory valuation. It works every month on 1,000 axles. In June the furnace did not work properly and half of the axles could not be sold after the heat treatment. The axles could only be sold at 32.50 EUR/unit (net amount) to a scrap dealer. BROADWOOD sold the other 500 to their customers. In 20X4 BROADWOOD sold 11,000 axles (after heat treatment) at 525.00 EUR/unit (except of the scrap) to their customers. They sold 1,000 units at the end of each month except of December. The amount for June is 1,000 also because the sale to the scrap dealer counts as a sale. The sales price given is the net amount. The customer who bought 600 axles in September returns them on 1.10.20X4 and gets his money back. BROADWOOD puts them on stock as they were not damaged. The sequence of heat treatment and selling is the same as opening value and then purchases. Consider the monthly production like a single job order.

Required: How much is the amount for inventories on the face of BROADWOOD's statement of financial position? **Hint:** Make only bookkeeping entries which are required to determine the solution. Not all postings are required. How much is the operating profit BROADWOOD earned?

Lösung (solution)

Postings were:

- (1) Purchase of 3,000 axles: $3,000 \cdot 240 = 720,000.00 \text{ EUR}$.
- (2) Purchase of 2,000 axles: $2,000 \cdot 225 = 450,000.00 \text{ EUR}$.
- (3) Material expenses January $1,000 \cdot (2,800 \cdot 180 + 3,000 \cdot 240 + 2,000 \cdot 225) / 7,800 = 214,615.38 \text{ EUR}$.
- (4) Posting for labour
- (5) Transfer labour to WIP-account
- (6) Posting overheads for furnace
- (7) Cost allocation for overheads
- (8) Transfer of finished goods to inventory account
- (9) Sales of 1,000 axles
- (10) Posting under-applied overheads
- ...
- (11)...(14) Posting of job orders completed
- (15)...(22) Posting cost of goods sold
- (23)...(27) Sales revenue posted
- (28) Purchase of further axles $5,000 \cdot 212.5 = 1,062,500.00 \text{ EUR}$.

(29) Posting material expenses for June: $1,000 \cdot (2,800 \cdot 214.62 + 5,000 \cdot 212.5) / 7,800 = \mathbf{213,261.03 \text{ EUR}}$.

(30) Posting for labour

(31) Overhead application

(32)...(33) Transfer finished goods to FG inventory account and to scrap account in June

(34)...(35) Posting COS

(36) Transfer scrap sold to COS account

(37) Sales of axles during June

(38) Sales of scrap

(39)...(41) Transfer of finished goods to FG inventory July, August, and September

(42)...(44) Posting goods sold

(45)...(47) Posting under-applied overheads to COS

(48)...(50) Posting sales

(51) Posting return inwards – materials $600 \cdot 216,26 = \mathbf{129,756.00 \text{ EUR}}$.

(52) Posting return inwards – refund $600 \cdot 525 = \mathbf{315,000.00 \text{ EUR}}$.

DR Sales (R.I.) 315,000.00 EUR

DR VAT 63,000.00 EUR

CR Bank 378,000.00 EUR

(53)...(55) Transfer of finished goods to FG inventory

(56)...(57) Transfer goods sold to COS account (no goods sold in December!)

(58)...(60) Transfer of under-applied overheads to COS account.

(61)...(62) Sales of finished goods in October and November

D Raw Material Inventory C				D WIP-Jan... C				D Labour C			
OV	504.000,00	(3)	214.615,38	(3)	214.615,38	(8)	217.615,38	(4)	200,00	(5)	200,00
(1)	720.000,00	...		(5)	200,00			
(2)	450.000,00	...		(7)	2.800,00					(30)	200,00
(28)	1.062.500,00	...			217.615,38					...	
		...									
		...									
		c/d	170.608,00								
	2.736.500,00		2.949.000,00								
b/d	170.608,00										

D Bank C				D VAT C				D MOH C			
(23)	630.000,00	(1)	864.000,00	(1)	144.000,00	(23)	105.000,00	(6)	3.000,00	(7)	2.800,00
(24)	630.000,00	(2)	540.000,00	(2)	90.000,00	(24)	105.000,00	...		(10)	200,00
(25)	630.000,00	(28)	1.275.000,00	(28)	212.500,00	(25)	105.000,00	
(26)	630.000,00	(52)	378.000,00	(52)	63.000,00	(26)	105.000,00			(31)	2.800,00
(27)	630.000,00					(27)	105.000,00			(35)	200,00
(37)	315.000,00					(37)	52.500,00			...	
(38)	19.500,00					(38)	3.250,00			(45)	200,00
(48)	630.000,00					(48)	105.000,00			(46)	200,00
(49)	630.000,00					(49)	105.000,00			(47)	200,00
(50)	630.000,00					(50)	105.000,00			...	
(61)	630.000,00					(61)	105.000,00			(58)	200,00
(62)	630.000,00					(62)	105.000,00			(59)	200,00
										(60)	200,00

D FG-Inventory C				D C.O.S. C				D Sales C			
(8)	217.615,38	(9)	217.615,38	(9)	217.615,38	(51)	129.756,00	(52)	315.000,00	(23)	525.000,00
(11)	217.615,38	(15)	217.615,38	(10)	200,00					(24)	525.000,00
(12)	217.615,38	(16)	217.615,38	(15)	217.615,38					(25)	525.000,00
(13)	217.615,38	(17)	217.615,38	(16)	217.615,38					(26)	525.000,00
(14)	217.615,38	(18)	217.615,38	(17)	217.615,38					(27)	525.000,00
(32)	108.130,51	(34)	108.130,51	(18)	217.615,38					(37)	262.500,00
		(42)	216.261,03	(19)	200,00					(38)	16.250,00
(39)	216.261,03	(43)	216.261,03	(20)	200,00					(48)	525.000,00
(40)	216.261,03	(44)	216.261,03	(21)	200,00					(49)	525.000,00
(41)	216.261,03	(56)	216.261,03	(22)	200,00					(50)	525.000,00
(51)	129.756,00	(57)	216.261,03	(34)	108.130,51					(61)	525.000,00
(53)	216.261,03			(35)	200,00					(62)	525.000,00
(54)	216.261,03			(36)	108.130,51						
(55)	216.261,03	c/d	346.017,03	(42)	216.261,03						
	2.623.529,59		2.623.529,59	(43)	216.261,03						
b/d	346.017,03			(44)	216.261,03						
				(45)	200,00						
				(46)	200,00						
				(47)	200,00						
				(56)	216.261,03						
				(57)	216.261,03						
				(58)	200,00						
				(59)	200,00						
				(60)	200,00	c/d	2.258.287,07				
					2.388.043,07		2.388.043,07				
				b/d	2.258.287,07	P&L	2.258.287,07				

D WIP-June... C				D Scrap C				D P&L C			
(29)	213.261,03	(32)	216.261,03	(33)	108.130,51	(36)	108.130,51	D	2.258.287,07	Sales	5.213.750,00
(30)	200,00							COS	2.955.462,93		
(31)	2.800,00							EBT	5.213.750,00		5.213.750,00
	216.261,03		216.261,03							b/d	2.955.462,93

Exhibit 1: Accounts

The inventory item on the face of the statement of financial position is $346,529.59 + 170,608 = 517,137.59$ EUR. The net profit is 2,955,462.93 EUR.