

Task IM-12.8: Exercise on Income Statement along the Cost of Sales Format
(Erfolgsermittlung nach dem Umsatzkostenverfahren)

HOEVERINGHAUSEN Ltd. is a company based on shares. The business produces espresso machines. An espresso machine contains a body, a water pump and the coffee powder distribution unit CPDU. The exhibit below shows HOEVERINGHAUSEN Ltd.'s balance sheet as at 1.01.20X4.

Höveringhausen Ltd.'s STATEMENT of FINANCIAL POSITION as at 1.01.20X4			
A			C, L
<i>Non-current assets</i>	[EUR]	<i>Equity</i>	[EUR]
P, P, E	100,000.00	Share capital	50,000.00
Intangibles		Reserves	10,000.00
Financial assets		Retained earnings	
<i>Current assets</i>		<i>Liabilities</i>	
Inventory	36,000.00	Interest bear liab	
Accounts receivables		Accounts payables	60,000.00
Prepaid expenses		Provisions	
Cash/Bank	14,000.00	Tax liabilities	30,000.00
Total assets	150,000.00	Total equity and liab.	150,000.00

Exhibit 1: HOEVERINGHAUSEN Ltd.'s balance sheet

The Inventory account contains 3,000 CPDUs at 12.00 EUR each. The reserves are earnings reserves. The production process of the espresso machines follows a job order costing system. By the first step the machines get assembled in the assembling department. The next step is the cleaning process followed by the packing. HOEVERINGHAUSEN Ltd. operates three departments: Assembling, Cleaning and Packing. For job order costing consider two job orders. During the Accounting period HOEVERINGHAUSEN Ltd. purchases the materials below: Regard soap and boxes as overheads.

item	date of purchase	amount	cost of purchase per unit
CPDU	2.01.20X4	10,000	14.00
pump	3.01.20X4	20,000	9.50
boxes	6.01.20X4	15,000	1.00
cleaning soap for 100 machines	15.01.20X4	200	10.00
CPDU	6.04.20X4	10,000	13.50
boxes	15.06.20X4	15,000	1.00
CPDU	1.10.20X4	10,000	13.50
cleaning soap for 100 machines	1.10.20X4	200	10.00
pump	14.11.20X4	20,000	9.50

During the Accounting period 20X4, HOEVERINGHAUSEN Ltd. produces 30,000 espresso machines. The production is split in 2 job orders, worked on during the first half of the year and the second one. At the beginning of the job order, assign the exact amount of CPDUs, pumps, boxes and cleaning soap as required for the production, cleaning and packing of 15,000 units.

In 20X4, HOEVERINGHAUSEN Ltd. recorded 30,000.00 EUR depreciation on the assembling department, 1,000.00 EUR depreciation on the cleaning department and 2,000.00 EUR depreciation on the packing department. You can assume depreciation is equally distributed over the 2 job orders, which gives you half of depreciation for each job order.

Labour is 40,000.00 EUR/a in the assembling department, 30,000.00 EUR/a in the cleaning department and 25,000.00 EUR/a in the packing department. There is a further 55,000.00 EUR labour in the management/administration department. Split up labour along a half:half ratio over the job orders.

In 20X4, HOEVERINGHAUSEN Ltd. sells 28,533 espresso machines at 230 % of their cost of manufacturing.

Required: Prepare an income statement for HOEVERINGHAUSEN Ltd. Ignore VAT. Apply a perpetual inventory system and the first-in-first-out cost formula. Assume there are 2 job orders: (1) from 1.01.20X4 until 30.06.20X4 and (2) from 1.07.20X4 until 31.12.20X4.

Solution:

- (1) Payment of income tax
- (2) Purchase of CPDUs
- (3) Purchase of pumps
- (4) Purchase of boxes
- (5) Purchase of soap
- (6) Purchase of CPDUs
- (7) Purchase of boxes
- (8) Purchase of CPDUs
- (9) Purchase of soap

(10) Purchase of pumps

(11) Assigning CPDUs to WIP accounts: $3,000 \times 12 + 10,000 \times 14 + 2,000 \times 13.50 = \mathbf{203,000.00 \text{ EUR}}$.

(12) Assigning pumps to WIP accounts: $15,000 \times 9.50 = \mathbf{142,500.00 \text{ EUR}}$.

(13) Assigning soap to the MOH Cleaning account: $10 \times 15,000 / 100 = \mathbf{1,500.00 \text{ EUR}}$.

(14) Assigning boxes to the MOH Packing account: $15,000 \times 1 = \mathbf{15,000.00 \text{ EUR}}$.

(15) Recording depreciation

(16, 17, 18) Assigning depreciation to MOH accounts for half of a year.

(19) Recording labour: $40,000 + 30,000 + 25,000 + 55,000 = \mathbf{150,000.00 \text{ EUR}}$.

(20, 21, 22) Assigning labour to MOH accounts for half of a year.

Observe internal bookkeeping entries in the accounts.

(23) Assigning CPDUs to WIP accounts: $8,000 \times 13.50 + 7,000 \times 13.50 = \mathbf{202,500.00 \text{ EUR}}$.

(24) Assigning pumps to the WIP accounts: $15,000 \times 9.50 = \mathbf{142,500.00 \text{ EUR}}$.

(25) Assigning soap to the MOH Cleaning account: $10 \times 15,000 / 100 = \mathbf{1,500.00 \text{ EUR}}$.

(26) Assigning boxes to the MOH Packing account: $15,000 \times 1 = \mathbf{15,000.00 \text{ EUR}}$.

(27, 28, 29) Assigning depreciation to WIP accounts for half of a year.

(30, 31, 32) Assigning labour to WIP accounts for half of a year.

(33) Assigning labour to the Administration/Management account

Observe internal bookkeeping entries between MSA accounts.

Recording cost of sales: HOEVERINGHAUSEN Ltd. sells 28,533 espresso machines. These are 15,000 from the first job order and 13,533 from the last one. The first one's cost of sales is 426,000.00 EUR. The second one's are $13,533 \times 425,500 / 15,000 = \mathbf{383,886.10 \text{ EUR}}$.

(34) Recording sales: $230\% \times (426,000 + 383,886.10) = \mathbf{1,862,738.03 \text{ EUR}}$.

Observe the accounts.

D		Property, Plant, Equipment	C
OV	100,000.00	c/d	100,000.00
	<u>100,000.00</u>		<u>100,000.00</u>
b/d	100,000.00		

D		Inventory CPDU	C
OV	36,000.00	(11)	203,000.00
(2)	140,000.00	(23)	202,500.00
(6)	135,000.00		
(8)	135,000.00	c/d	40,500.00
	<u>446,000.00</u>		<u>446,000.00</u>
b/d	40,500.00		

D		Inventory pump	C
(3)	190,000.00	(12)	142,500.00
(10)	190,000.00	(24)	142,500.00
		c/d	95,000.00
	<u>380,000.00</u>		<u>380,000.00</u>
b/d	95,000.00		

D		Inventory box	C
(4)	15,000.00	(14)	15,000.00
(7)	15,000.00	(26)	15,000.00
	<u>30,000.00</u>		<u>30,000.00</u>

D		Inventory soap	C
(5)	2,000.00	(13)	1,500.00
(9)	2,000.00	(25)	1,500.00
		c/d	1,000.00
	<u>4,000.00</u>		<u>4,000.00</u>
b/d	1,000.00		

D		Cash/Bank	C
OV	14,000.00	(1)	30,000.00
(34)	1,862,738.03	(2)	140,000.00
		(3)	190,000.00
		(4)	15,000.00
		(5)	2,000.00
		(6)	135,000.00
		(7)	15,000.00
		(8)	135,000.00
		(9)	2,000.00
		(10)	190,000.00
		(19)	150,000.00
		c/d	872,738.03
	<u>1,876,738.03</u>		<u>1,876,738.03</u>
b/d	872,738.03		

D		Share capital	C
c/d	50,000.00	OV	50,000.00
	<u>50,000.00</u>		<u>50,000.00</u>
		b/d	50,000.00

D		Reserves	C
c/d	10,000.00	OV	10,000.00
	<u>10,000.00</u>		<u>10,000.00</u>
		b/d	10,000.00

D		Accounts payables	C
c/d	60,000.00	OV	60,000.00
	<u>60,000.00</u>		<u>60,000.00</u>
		b/d	60,000.00

D		Income tax liabilities	C
(1)	30,000.00	OV	30,000.00
c/d	299,355.58	ITL	299,355.58
	<u>329,355.58</u>		<u>329,355.58</u>
		b/d	299,355.58

D		Sales	C
P&L	1,862,738.03	(34)	1,862,738.03
	<u>1,862,738.03</u>		<u>1,862,738.03</u>

D		MOH assembling ASS	C
(16)	15,000.00	WI1	35,000.00
(20)	20,000.00		
	<u>35,000.00</u>		<u>35,000.00</u>
(27)	20,000.00	WI2	35,000.00
(30)	15,000.00		
	<u>35,000.00</u>		<u>35,000.00</u>

D		WIP 1	C
(11)	203,000.00	FG	426,000.00
(12)	142,500.00		
ASS	35,000.00		
CLN	17,000.00		
PCK	28,500.00		
	<u>426,000.00</u>		<u>426,000.00</u>

D		WIP 2	C
(23)	202,500.00	FG	425,500.00
(24)	142,500.00		
ASS	35,000.00		
CLN	17,000.00		
PCK	28,500.00		
	<u>425,500.00</u>		<u>425,500.00</u>

D		MOH cleaning CLN	C
(13)	1,500.00	WI1	17,000.00
(17)	500.00		
(21)	15,000.00		
	<u>17,000.00</u>		<u>17,000.00</u>
(25)	1,500.00	WI2	17,000.00
(28)	15,000.00		
(31)	500.00		
	<u>17,000.00</u>		<u>17,000.00</u>

D		MOH packing PCK	C
(14)	15,000.00	WI1	28,500.00
(18)	1,000.00		
(22)	12,500.00		
	<u>28,500.00</u>		<u>28,500.00</u>
(26)	15,000.00	WI2	28,500.00
(29)	12,500.00		
(32)	1,000.00		
	<u>28,500.00</u>		<u>28,500.00</u>

D		Depreciation	C
(15)	33,000.00	(16)	15,000.00
		(17)	500.00
		(18)	1,000.00
		(30)	15,000.00
		(31)	500.00
		(32)	1,000.00
	<u>33,000.00</u>		<u>33,000.00</u>

D		Acc depr	C
c/d	33,000.00	(15)	33,000.00
	<u>33,000.00</u>		<u>33,000.00</u>
		b/d	33,000.00

D		Labour	C
(19)	150,000.00	(20)	20,000.00
		(21)	15,000.00
		(22)	12,500.00
		(27)	20,000.00
		(28)	15,000.00
		(29)	12,500.00
		(33)	55,000.00
	<u>150,000.00</u>		<u>150,000.00</u>

D		Management/Administration	C
(33)	55,000.00	Mgt	55,000.00
	<u>55,000.00</u>		<u>55,000.00</u>

D Finished goods inventory FG C				D Cost of sales COS C			
WI1	426,000.00	COS	426,000.00	FG	426,000.00	P&L	809,886.10
WI2	425,500.00	COS	383,886.10	FG	383,886.10		
		c/d	41,613.90		809,886.10		809,886.10
	851,500.00		851,500.00				
b/d	41,613.90						

D Profit and Loss P&L C				D Retained earnings R/E C			
COS	809,886.10	Rev	1,862,738.03	c/d	698,496.35	R/E	698,496.35
Mgt	55,000.00				698,496.35		698,496.35
EBT	997,851.93					b/d	698,496.35
	1,862,738.03		1,862,738.03				
ITL	299,355.58	b/d	997,851.93				
R/E	698,496.35						
	997,851.93		997,851.93				

See below the income statement:

Höveringhausen Ltd.'s
STATEMENT of COMPREHENSIVE INCOME
for the year ended 31.12.20X4

	[EUR]
Revenue	1,862,738.03
Other income	
	1,862,738.03
Cost of sales	(809,886.10)
Labour	
Depreciation	
Other expenses	(55,000.00)
Earnings before int. & taxes (EBIT)	997,851.93
Interest	
Earnings before taxes (EBT)	997,851.93
Income tax expenses	(299,355.58)
Deferred taxes	
Earnings after taxes (EAT)	698,496.35

Höveringhausen Ltd.'s
STATEMENT of FINANCIAL POSITION
as at 31.12.20X4

A			C, L
<i>Non-current assets</i>	[EUR]	<i>Equity</i>	[EUR]
P, P, E	67,000.00	Share capital	50,000.00
Intangibles		Reserves	10,000.00
Financial assets		Retained earnings	698,496.35
<i>Current assets</i>		<i>Liabilities</i>	
Inventory	178,113.90	Interest bear liab	
Accounts receivables		Accounts payables	60,000.00
Prepaid expenses		Provisions	
Cash/Bank	872,738.03	Tax liabilities	299,355.58
Total assets	1,117,851.93	Total equity and liab.	1,117,851.93