ISCTE Business School
Instituto Universitário de Lisboa

Accounting Department

Management

Management Accounting I

EXERCISE-BOOK 2

SOLUTIONS – Exercises 10 to 19

School Year 2013/2014

EXERCISE 10 – MARMEX Company - SOLUTION

1. Ascertain the value of the joint costs to allocate to Scrap

Description	Value (€)
1. Sales value of the production	10 000
2. Specific manufacturing costs	0
3. Specific non-manufacturing costs	2 000
4. Joint cost to allocate to the by-product (1) – (2) – (3)	8 000

Unit MCFP by-product = 4 €/m^2

2. Ascertain the unit manufacturing cost of the Bricks of first quality and of the Bricks of second quality, using the net realizable value method.
Net realizable value method

Description	Value (€)
1. Costs with the purchase of Marble	250 000
2. Polishing	32 000
3. Cut	26 000
4. Joint costs of the period (1) + (2) + (3)	308 000
5. Joint costs to allocate to the by-product	8 000
6. Joint costs to allocate to the main products (4) – (5)	300 000

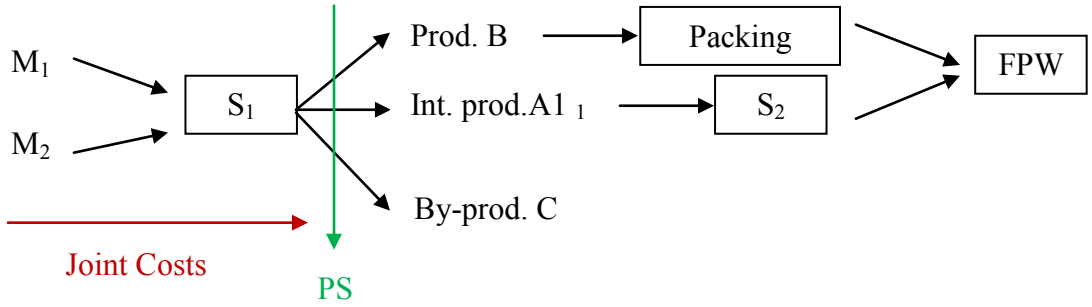
Products	SV Potential (1)	Specific costs		SV at SOP		Joint Costs (6)	MCFP	
		Manuf. (2)	Non-manuf. (*) (3)	Value (4) = (1) - (2) - (3)	% (5)		Global (7) = (2) + (6)	Unit (8) = (7) /Qp
Bricks of 1st quali.	300 000	0	15 000	285 000	0.75	225 000	225 000	45
Bricks of 2nd quali.	120 000	19 000	6 000	95 000	0.25	75 000	94 000	31.33
Total	420 000	19 000	21 000	380 000	1	300 000	319 000	

SV – Sales Value
SOP – Split – off point

3. P&L Stat per Functions

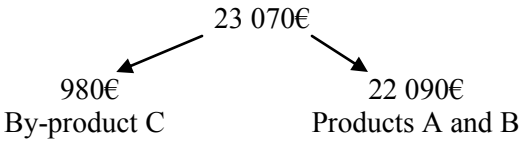
Description	Bricks of 1st qualitity	Bricks of 2nd qualitity	Scraps	Total
Sales	240 000	100 000	10 000	350 000
MCPS	180 000	78 325	8 000	266 325
Gross profit	60 000	21 675	2 000	83 675
Selling (distribution) costs				
Variable	12 000	5 000	2 000	19 000
Operational profit	48 000	16 675	0	64 675

EXERCISE 11 –STONE company - SOLUTION



Joint Costs

M_1	200*5.6	1 120€
M_2	300*6.5	1 950€
S_1		20 000€
Total		23 070€



By-product C

Criterion of the Profit Nil (P=0)

Joint C. = Qp * Sp – Spec. C.

Joint C=100*10 – 0.02*(100*10) = 980€

Finished products warehouse

Allocated to the quantities produced

Production A 280 tons

Production B 120 tons

Total 400 tons

2 800/400 = 7€/ton

Products	Potential SV	Specific Costs		SV at SOP		Joint Costs
		Manuf.	Non-manuf.	Value	%	
	(1)=Qp*Sp	(2)	(3)	(4)=(1)-(2)-(3)	(5)	(6)
A	28 000	10 760	840	16 400	69.28	15 304
B	9 600	2 040	288	7 272	30.72	6 786
Total	37 600	12 800	1 128	23 672	100	22 090

Specific costs

Manuf. (A) = 7*280 + 8 800 = 10 760€

Manuf. (B) = 7*120 + 1 200 = 2 040€

Non-manuf. = 0.03*(1)

Products	Joint Costs	Specific Manuf. Costs	MCFP	Unit MCFP
	(1)	(2)	(3) = (1) + (2)	(4) = (3) /Qp
A	15 304	10 760	26 064	93.08571
B	6 786	2 040	8 826	73.55
Total	22 090	12 800	34 890	-
By-product C	980	-	980	9.8

Profit and Loss Statement per Functions

(Values in €)

Description	Prod. A	Prod. B	By-product C	Total
Sales	25 000.00	9 600.00	1 000.00	35 600.00
MCPS	23 271.43	8 826.00	980.00	33 077.43
Gross Profit	1 728.57	774.00	20.00	2 522.57
Selling (distribution) expenses				
Variable	750 00	288.00	20.00	1 058.00
Fixed	-	-	-	-
Administrative expenses	-	-	-	-
Operational Profit	978 57	486.00	0.00	1 464.57

EXERCISE 12 CAT company – SOLUTION

1. Ascertainment of MCFP of the by-product

Criterion of the profit nil:

Sales value of the production S = total cost S

500 tons x 16.50 = joint costs + 0 + 500 tons x 2.50

Joint costs of the by-product = 7 000 € = MCFP of S

Or
MCFP of S = Potential sales value = specific costs = 500 tons x 16.5 – 500 tons x 2.5 = 7 000 €

2. Ascertainmet of MCFP of each one of the co-products

Joint costs to allocate to the co-products = 50 000 € (M1) + 10 000 € (Stage) + 15 000 (Stage 2) – 7 000 € (by-product S) = 68 000 €

- Net realizable value method:
  Sales value at split-off point (Co-product A) = 1 000 x 40 € = 40 000 €
  Sales value at split-off point (Co-product B) = 2 000 x 50 € - 30 000 € - 2 000 x 15 = 40 000 €

Allocation ratio of the joint costs of the co-products = 68 000/80 000 = 0.85

Joint costs of the co-product A = 0.85 x 40 000 € = 34 000 € = MCFP A
Joint costs of the co-product B = 34 000 €

MCFP B = 34 000 € + 30 000 € = 64 000 €

or

Products	PSV	Specific costs		SVSOP		Joint Costs	MCFP
		Manuf.	N-manuf	Value	%		
A	40 000	-	-	40 000	50	34 000	34 000
B	100 000	30 000	30 000	40 000	50	34 000	64 000
Total	140 000			80 000		68 000	98 000

PSV (A) = 1 000 x 40 = 40 000 €

PSV (B) = 2 000tons x 50 = 100 000 €
Specific costs of A = 0
Manufacturing specific costs of B = 10 000 (RMB) + 20 000 (Stage 3) = 30 000 €
Non-manufacturing specific costs of B = 15 € x 2 000 tons = 30 000 €

3.Profit and Loss Statement per Functions and Products

Description	Co-product A	Co-product B	By-product	Total
1-Sales and services rendered	38 000	100 000	7 425	145 425
2-Sales cost	32 300	64 000	6 300	102 600
3-Gross Profit	5 700	36 000	1 125	42 825
4-Selling (distribution) expenses		30 000	1 125	31 125
5-Administrative expenses				10 000
6-Operational profit				1 700

Unit MCFP of A = 34 000/1 000 = 34 €/ton

Unit MCFP of B = 64 000/2 000 = 32 /ton

MCPS of A = 950 ton x 34 = 32 300

MCPS of B = MCFP of B = 64 000 €

Unit MCFP of S = 7 000/500 = 14 €/ton

MCPS of S = 14 € x 450 ton = 6 300 €

Selling (distribution) expenses = 2.50 € x 450 ton + 15 € x 2 000 ton = 31 125 €

EXERCISE 13 – VIEWS company - SOLUTION

1.The production process is multiple and joint, since the products A and B and the by-product C are produced.

2. Ascertain the unit MCFP of the products A,B and C, using the net realizable value method.

Description	Value (€)
1. Sales value of the production	5 000
2. Specific manufacturing costs	0
3. Specific non-manufacturing costs	500
4. Joint cost to allocate to the by-product (1) – (2) – (3)	4 500

Unit MCFP of the by-product = 225€/ton

Description	Value (€)
1. Consumption of the material M1	8 750
2. Costs with S1	31 250
3. Joint costs of the period (1) + (2) + (3)	40 000
4. Joint costs to allocate to the by-product	4 500
5. Joint costs to allocate to the main products (4) – (5)	35 500

Products	Potential SV (1)	Specific costs		SV at SOP		Joint Costs (6)	MCFP	
		Manuf. (2)	Non-manuf. (*) (3)	Value (4) = (1) - (2) - (3)	% (5)		Global (7) = (2) + (6)	Unit (8) = (7) /Qp
Product A	150 000	2 500	7 500	140 000	0.55	19 525	22 025	110.125
Product B	250 000	123 125[(1)]	12 500	114 375	0.45	15 975	139 100	556.4
Total	400 000	125 625	20 000	254 375	1	35 500	161 125	

[(1)]Specif. Manuf. C = consumption M2 + S2 + Packing + FPW
= (100 x 25 + 1 500 x 20) + 25 000 + 62 500 + 3 125 = 123 125

3. P&L Stat. Per Functions

Description	Product A	Product B	By-product C	Total
Sales	135 000	200 000	3 750	338 750
MCPS	20 612.5[(1)]	118 460[(2)]	3 375	142 447.5
Gross Profit	**114 387.5**	**81 540**	**375**	**196 302.5**
Selling (Distribution) Costs				
Variable	6 750	10 000	375	17 125
Fixed	0	0	0	27 500
Administrative costs	0	0	0	17 500
Operational profit				**134 177.5**

[(1)] 80x120 + 100x110.125 = 20 612.5
[(2)] 50x700 + 150 x 556.4 = 118 460

EXERCISE 14 – PROFISH company - SOLUTION

Table of the Conversion Costs

Description	Unit Cost	S1 – 2 500 Mh		S2 – 5 000 Lh		S3 – 1 500 Lh		S4 -	
		Q	€	Q	€	Q	€	Q	€
Direct Costs			6 000		13 000		2 500		4 300
Reallocations									
S3	2	800	1 600	700	1 400	-	-	-	
S4	0.2		1 200		2 600		500		
Subtotal			2 800		4 000				
Total Costs			8 800		17 000		3 000		4 300
WU			3.52		3.4		2		-
AU									0.2
CU									143.333

AU of S4 = 4 300/ (6 000 + 13 000 + 2 500) = 0.2

EXERCISE 14– PROFISH company - SOLUTION

Table of the production costs

Description	MU	Unit Cost	A1 – (3 500 x 1.2) + 200= 4 400 tons		A – 3 500 tons	
			Q	€	Q	€
Materials						
M1	ton	5.9	1 000	5 900	-	-
M2	ton	2.86	-	-	750	2 145
A1	ton	3.34			4 200	4 028
Subtotal				5 900		16 173
Conversion Costs						
S1	Mh	3.52	2 500	8 800	-	-
S2	Lh	3.4	-	-	5 000	17 000
Subtotal				8 800		17 000
MCMP = MCFP				**14 700**		**33 173**
Unit MCFP				**3.34**		**9.478**

Consumption of M1 = 120 + 1 500 – 620 = 1 000 tons; RMC (M1) = (120 x 4.65 + 1 500 x 6)/1 620=5.9

Purchases of M2 = 750 + 50 – 200 = 600 tons;

RMC (M2) = (200x 2.44 + 600 x 3)/800 = 2.86

EXERCISE 14 – PROFISH company - SOLUTION

Profit and loss statement per functions

Description	A1-200 tons	A – 2 500 tons	Total
Sales	2 000	62 500	64 500
MCPS	668	23 750	24 418
Subtotal	1 332	38 750	40 082
NPMC			
Gross Profit	1 332	38 750	40 082
Selling (distribution) expenses			
▪ variable	100	1 875	1 975
▪ fixed			1 200
Administrative expenses			2 500
Operational Profit			34 407
Financial income			
Financial expenses			3 000
Profit before Taxes			31 407

MCPS (A1) = 200 tons x 3.34 = 668 €
MCPS (A) = 2 500 tons x 9.5 = 23 750 €

RMC (A) = 350 x 9.8 + 3 500 x 9.478) /3 850 = 9.5

EXERCISE 15 – EASY company - SOLUTION

a) Table of the Conversion Cost

(euros)

Description	Unit Cost	Preparation 12 000 Mh		Mixture 10 000 Mh		Repair shops 8 000 Mh		Common Expenses 30 000 Mh	
		Q	€	Q	€	Q	€	Q	€
1. Direct Costs									
Variable Costs			100 000		80 000		75 000		-
Fixed Costs			80 000		40 000		25 000		60 000
Total (1)			180 000		120 000		100 000		60 000
2. Reallocations									
Repair shops	14.5	5 000	72 500	3 000	43 500		-		-
Common Expenses	2		24 000		20 000		16 000		-
Total (2)			96 500		63 500		16 000		-
3. Total Cost			276 500		183 500		116 000		60 000
WU			23.04		18.35		14.5		
AU									2

(euros)

Description	RMW 180 tons		FPW 150 tons	
	Q	€	Q	€
1. Direct Costs				
Variable Costs		-		-
Fixed Costs		36 000		30 000
Total (1)		36 000		30 000
2. Reallocatins		-		-
3. Total Cost		36 000		30 000
AU		200		200

Mat. A

Opening stock	0
Purchases	80 tons x (500 + 200)
Consumption	70 tons x 700 = 49 000
Closing stock	10 tons x 700

Mat. B

Opening stock	50 tons x 775
Purchases	100 tons x (600 + 200)
Consumption	(50 tons x 775) + (70 tons x 800€) = 94 750
Closing stock	30 tons x 800

EXERCISE 15 – EASY company - SOLUTION

Table of the MCMP

Description	MU	Unit Cost €	Product X 150 tons	
			Q	€
1. RM				
Mat. A	Ton			49 000[(1)]
Mat. B	Ton			94 750[(2)]
Total(1)				**143 750**
2. Conv. Costs				
Preparation		23.04	12 000	276 500
Mixture		18.35	10 000	183 500
FPW		200	150	30 000
Total(2)				**490 000**
3. MCMP = MCFP				**633 750**
Unit MCFP				**4 225**

[(1)]700 x 70
[(2)]50 x 775 + 70 x 800

b) Profit and Loss Statement per Functions

(euros)

Description	Product X	Total
Sales	935 000	935 000
MCPS	719 750[(3)]	719 750
Subtotal	215 250	215 250
NPMC	0	0
Gross Profit	215 250	215 250
Selling (distribution) Expenses		
Variable	18 700	18 700
Fixed	30 000	30 000
Operational Profit	166 550	166 550

(3) 20*4 300 + 150*4 225

EXERCISE 16 – GAFA company - SOLUTION

a) Ascertainment of the Conversions Cost

(euros)

Description	MU	S1 2 250 Mh		S2 8 250 Mh		S3 750 Lh		S4 67 350€		RMW 1 785 tons.	
		Q	€	Q	€	Q	€	Q	€	Q	€
1. Direct Costs	€		18 000		49 350		3 375		5 388		3 930
2. Reallocations											
S3	Lh	450	2 025	300	1 350		-		-		-
S4	€		1 440		3 948		-		-		-
Total (2)			3 465		5 298		0		0		0
3. Total Cost			21 465		54 648		3 375		5 388		3 930
WU			9.54		6.624		4.5		-		-
AU			-		-		-		0.08		2.2
CU			-		-		-		179.60		131

Activity of the Sections:

S1: 1.5 x 1 500 = 2 250
S2: (3.5 x 1 500) + (2.5 x 1 200) = 8 250
S3: 450 + 300 = 750
S4: 18 000 + 49 350 = 67 350
RMW: (0.75 x 1 500) + (0.55 x 1 200) = 1 785

b) Table of the Production Costs

M1

Opening Stock	800 tons x 7.5€
Purchases	950 tons x 8€
Consumption	(950 tons x 8€) + (175 tons x 7.5€) = 8 912.50€
Closing Stock	625 tons x 7.5€

M2

Opening Stock	230 tons x 6.25€
Purchases	530 tons x 6.5€
Consumption	(530 tons x 6.5€) + (130 tons x 6.25€) = 4 257.50€
Closing stock	100 tons x 6.25€

EXERCISE 16 – GAFA company - SOLUTION

Tables of the MCMP

(euros)

Description	MU	Unit Cost €	Intermediate product P1 1 500 tons	
			Q	€
1. RM				
M1	ton		1 125	8 912.50
2. Conversion Costs				
S1		9.54	2 250	21 465
S2		6.624	5 250	34 776
RMW		2.2	1 125	2 475
Total (2)				58 716
3. Total MCFP				67 628.50
Unit MCFP				45.09

Description	MU	Unit Cost €	Product X 1 200 tons	
			Q	€
1. RM				
M2	ton		660	4 257.50
Intermediate product 1		45.09	1 440	64 929.60
Total (1)				69 187.10
2. Conversion Costs				
S2		6.624	3 000	19 872
RMW		2.2	660	1 452
Total (2)				21 324
3. MCMP				90 511
4. Opening Stock PiP				3 000
5. Closing Stock PiP				9 511
6. MCFP				84 000
Unit MCFP				70

EXERCISE 16 – GAFA company - SOLUTION

c) Profit and Loss Statement

(euros)

Description	Product X	Total
Sales	147 250	147 250
MCPS	108 325	108 325
Gross Profit	38 925	38 925

Product X

Opening Stock	500 tons x 69.5€
Production	1 200 tons x 70€
Sales	(1 200 tons x 70€) + (350 tons x 69.5€) = 108 325€
Closing Stock	150 tons x 69.5€

EXERCISE 17 – OSL Company – Solution

Table of the manufacturing conversions costs

Description	MU	Unit Cost	SI 2 000 Lh		SII 1 600 Mh		SIII 400 Lh	SIV -
			Q	€	Q	€		
1 Direct Costs				30 000		20 000	8 000	1 450
Total 1				30 000		20 000	8 000	1 450
2 Reallocations								
SIII	Lh	20.5	180	3 690	120	2.460	-	
SIV		0.025		750		500	200	-
Total (2)				4 440		2 960	200	-
3 Conversion Costs				34 440		22 960	8 200	1 450
WU				17.22		14.35	20.5	-
AU								0.025

AU SIV = 1 450/58 000 = 0,025

Table of the costs of the warehouse conversions

Description	MU	Unit Cost	RMW 805 tons		FPW 300 units	
			Q	€	Q	€
1 Diret Costs				6 000		4 826
Total (1)				6 000		4 826
2 Reallocations						
SIII	Lh	20.5	100	2 050		
Total (2)				2 050		
3 Conversion Costs				8 050		4 826
AU				10		16.0866

2.

Table of the production costs

Description	MU	Unit Cost	Interm. product X 300 tons		Product Y 300 units	
			Q	€	Q	€
1 Materials						
RMA	ton		425	44 325		
RMB					300	10 500
Interm. product X					300	78 714
Total (1)				44 325		89 214
2.Conversion Costs						
SI	Lh	17.22	2 000	34 440		
SII	Mh	14.35			1 600	22 960
FPW	ton					4 826
Total (2)				34 440		27 786
3 MCMP		100		78 765		117 000
4.By-product Z					30	(3 000)
1.MCFP				78 765		114 000
4 Unit MCFP				262.55		380

Consumption of RMA = 60 + 455 – 90 – 425 tons
Value Consumption of RMA = 60x 100 + 365 x (95 + 10) = 44 325 €

Consumption of RMB = 350 – 50 = 300 tons
Value Consumption of RMB = 300 x (25+10)= 10 500 €

Value Consumption of the intermediate product X = 20 x 260 + 280 x 262.55 = 78 714 €

3.

Profit and loss statement per functions

Description	Product Y 300 units	By-product Z 25 units	Total
Sales	144 000	2 750	146 750
Sales cost	115 200	2 500	117 700
Gross Profit	28 800	250	29 050
Selling (Distribution) Costs			
Variable	2 688	250	2 938
Fixed			10 000
Administrative Costs			5 000
Operational Profit			11 112
Financial Costs			2 000
Profit before Taxes			9 112

MCPS (Y) = 80 x 395 + 220 x 380 = 115 200 €
MCPS (Z) = 25 x 100 = 2 500 €

EXERCISE 18 – DELTA company - SOLUTION

Table of the Conversions Cost

Description	MU	Unit Cost	S1- 2 000 Mh		S2 – 2 500 Lh		S3 – 1 200 Lh	
			Q	€	Q	€	Q	€
1- Direct Costs								
Variable				18 000		45 100		7 200
Subtotal 1				18 000		45 100		7 200
2- Reallocations								
S3	Lh	6	500	3 000	400	2 400		-
Subtotal 2				3 000		2 400		-
Total Cost				21 000		47 500		7 200
WU				10.5		19		6

EXERCISE 18 – DELTA company - SOLUTION

Table of the production costs

Description	MU	Unit Cost	ALFA 1 4 000 tons		ALFA 2 000 tons	
			Q	€	Q	€
1.Materials						
A				38 400		
B						48 500
ALFA 1		14.85				59 400
Subtotal 1				38 400		107 900
2. Conv. Costs						
S1	Mh	10.5	2 000	21 000		-
S2	Lh	19			2.500	47 500
Subtotal 2				21 000		47 500
3. MCMP				59 400		155 400
4. By-product	ton	4		-	200	(800)
5. MCFP				59 400		154 600
Unit MCFP				14.85		77.3

Consumption of A = 400 + 1 200 – 100 = 1 500 tons
Consumption value of A = 400 x 30 + 1 100 x 24 = 38 400€

Purchases of B = 950 + 150 – 100 = 1 000 tons
Consumption value of B = 100 x 60 + 850 x 50 = 48 500€

EXERCISE 18 – DELTA company - SOLUTION

Profit and loss statement per functions

Description	ALFA	S	Total
Sales	350 000	1 500	351 500
MCPS	139 545	600	140 145
Subtotal	210 455	900	211 355
NPMC			91 000
Gross Profit			120 355
Selling (distribution) expenses			
▪ variable	10 500	900	11 400
▪ fixed			42 000
Administrative expenses			10 000
Operational Profit			56 955

Sales of ALFA: 100+ 2 000 – 350 = 1 750 tons
MCPS (ALFA) = 100 x 120 + 1 650 x 77.3 = 139 545
MCPS (S) = 150 x (10-6) = 600€

NPMC = 12 000 + 31 000 + 4 800 + 34 200 + 7 800 + 200 Hh x 6€ = 91 000€

Fixed selling (distribution) expenses = 25 000 + 16 400 + 100 Lh x 6€ = 42 000€

EXERCISE 19 – RENAVY company - SOLUTION

Table of the conversion costs

Description	Unit Cost	S1 - 400		S2 - 500		A1 – 1 000		A2 - 750	
		Q	€	Q	€	Q	€	Q	€
1 Direct Costs	€		150 000		250 000		40 000		15 000
2 Reallocations									
A1	40	100	4 000	-	-		-	900	36 000
A2	68	350	23 800	400	27 200		-	-	-
Total (2)			27 800		27 200		-		36 000
3.Conversion costs			177 800		277 200		40 000		51 000
WU			444.5		554.4		40		68

Table of the work cost

Description	Unit C	R 501		R 502		R 503	
		Q	€	Q	€	Q	€
1 Direct Materials	€		75 000		40 000		65 000
2 Conversion costs							
S1	444.5	250	111 125	-	-	150	66 675
S2	554.4	100	55 440	100	55 440	300	166 320
Total (2)			166 565		55 440		232 995
3.Monthly costs			241 565		95 440		297 995
4. WiP cost in the beginning			10 000		-		-
5. Work cost when finished			251 565		-		297 995
6. Work cost not finished			-		95 440		-

Profit and loss statement per functions

Description	R 501	R 503	Total
Sales	350 000	400 000	750 000
Sales cost	251 565	297 995	549 560
Subtotal	98 435	102 005	200 440
NPMC			0
Gross profit			200 440

EXERCISE 20 – BETA company - SOLUTION

Firstly, to calculate the Unit MCFP of the month it is necessary to ascertain the value of the Closing Stocks PiP.

As it regards a regime of continuous production, that value can be ascertained by the method of the equivalent units.

Calculation of the monthly production cost:

Monthly production, in Equivalent Units:

10 000 Units + 5 000 Units x 0.6 – 2 500 Units x 0.8 = 11 000 Equiv.Units

Cost of each Equiv. Unit produced in the monthly: (MCMP/No. Equiv. Units produced in the month)

Mat + Conv.C / 11 000 Equiv. Units

(27 000 + 45 000) / 11 000 = 6.545 € / Equiv. Unit

Calculation of the Closing Stocks Value PiP (FIFO):

It means that the non-finished units which existed at the beginning of the month were the first ones to be finished. Therefore, the Closing Stocks PiP are priced at the cost of the monthly Equiv. Unit.

5 000 x 0.6 x 6.545 = 19 635 €

A. Calculation of the Gross Profit (with the Closing Stocks PiP priced by FIFO)

Sales: 8 000 x 12 = 96 000 €

MCPS: Unit MCFP x Units Sold

MCFP = Opening Stocks PiP + MCMP – Closing Stocks PiP = 7 000 + 72 000 – 19 635 = 59 365 €

Unit MCFP = 59 365 / 10 000 = 5.9365 € / Un

MCPS = 5.9365 x 8 000 = 47 492 €

Gross Profit = 96 000 – 47 492 = 48 508 €

Calculation of the Closing Stocks Value PiP (LIFO):

It means that the non-finished units which existed at the end of the month were the first ones to be finished. Therefore, the Closing Stocks PiP are priced at the cost of the Equiv. Unit at the beginning of the month (2 000 Equiv. Units), being the remaining units (1000 Equiv. Units), of the monthly production.

7 000 € + 1 000 x 6.545 = 13 545 €

B. Calculation of the Gross Profit (with the Closing Stocks PiP priced by LIFO)

Sales: 8 000 x 12 = 96 000 €

MCPS: Unit MCFP x Units Sold

MCFP = Opening Stocks PiP + MCMP – Closing Stocks PiP = 7 000 + 72 000 – 13 545 = 65 455 €

Unit MCFP = 65 455 / 10 000 = 6.5455 € / Unit

MCPS = 6.5455 x 8 000 = 52 364 €

Gross Profit = 96 000 – 52 364 = 43 636 €

Calculation of the Closing Stocks Value PiP Weighted average cost (WAC):

It means that the non-finished units which existed at the end of the month are estimated by the average cost of the production non-finished in the beginning and of the month..

WAC = (7 000 € + 11 000 x 6 545) / (2 000 + 11 000) = 6.077 € / Equiv. Unit

Closing Stock PiP = 3 000 x 6.077 = 18 231 €

C. Calculation of the Gross Profit (with the Closing Stocks PiP valued by the RMC)

Sales: 8 000 x 12 = 96 000 €

MCPS: Unit MCFP x Units Sold

MCFP = Opening Stocks PiP + MCMP – Closing Stocks PiP = 7 000 + 72 000 – 18 231 = 60 769 €

Unit MCFP = 60 769 / 10 000 = 6.0769 € / Unit

MCPS = 6.0769 x 8 000 = 48 615.2 €

Gross Profit = 96 000 – 48 615.2 = 47 384.8 €