

Aufgabe QR-9.11: Manufacturing Summary Account

(Manufacturing Summary Account)

TANNENBUSCH Ltd. ist ein Produktionsunternehmen. Es stellt Gartenmöbel, wie Tische und Stühle her. Der Produktionsprozess ist in 2 Stufen unterteilt: (a) Sintern (Teileherstellung) und (b) Montage. Zu Beginn der Abrechnungsperiode 20X9 gab es einen Anfangsbestand an Rohmaterial von 30.000,00 EUR. Das Rohmaterial ist Granulat zur Herstellung von Plastikmöbelteilen. Das Rohmaterial ist 6.000 kg Granulat. In den Herstellungskonten gibt es keinen Anfangsbestand. TANNENBUSCH Ltd. kauft weitere 6.000 kg Granulat und zahlt 28.200,00 EUR an den Lieferanten. In dem Sinterprozess werden die Teile für Stühle und Tische hergestellt. Die Bearbeitungszeit für einen Stuhl beträgt 7 min und für einen Tisch ist sie 10 min. TANNENBUSCH produziert in der Abrechnungsperiode 20X9 2.500 Tische und 10.000 Stühle. Ein Tisch benötigt 1,2 kg Granulat, ein Stuhl 0,4 kg. Die gesamten Gemeinkosten inkl. Lohngemeinkosten für die Sinterabteilung betragen 23.750,00 EUR. Die Kosten der Montageabteilung betragen 41.250,00 EUR (= Löhne) und 15.125,00 EUR (Fertigungsgemeinkosten). Die Montage eines Stuhls benötigt 2 min, ein Tisch wird in 3 min montiert. Es werden alle Gemeinkosten in 20X9 verrechnet. Zum Ende der Abrechnungsperiode werden alle Produkte fertiggestellt und auf das Fertigwarenlager gebucht. TANNENBUSCH verkaufte 1.700 Tische und 9.000 Stühle. Der Umsatz für einen Tisch beträgt 65,00 EUR/Stück und für einen Stuhl 46,00 EUR/Stück. Die Ausgaben für Verkauf und Werbung betrugen 9.791,00 EUR während 20X9.

Gefragt: Erstellen Sie 2 Herstellungskostenkonten und bewerten Sie den Bestand an Rohmaterial und Fertigwaren zum Jahresende von 20X9. Wie hoch ist der Gewinn nach Steuern für 20X9. Berücksichtigen Sie keine Umsatzsteuer. Wenden Sie die gewichteten mittleren Kosten als Verbrauchsfolgefiktion bei der Bestandsbewertung an.

English Version:

TANNENBUSCH Ltd. is in the production business. They produce garden furniture, like tables and chairs. The production process is divided into 2 steps: (a) sintering (= making parts) and (b) assembling. At the beginning of the accounting period 20X9 there is an opening value of raw materials inventory 30,000.00 EUR. Raw material is powder used to make plastic furniture parts. The raw material is 6,000 kg powder. In the work-in-progress account there is no opening value. TANNENBUSCH buys another 6,000 kg powder and pays 28,200.00 EUR to the supplier. In the sintering process parts for chairs and tables are produced. The production time for a chair is 7 min and for a table it is 10 min. TANNENBUSCH produces 2,500 tables and 10,000 chairs during the accounting period 20X9. A table requires 1.2 kg powder, a chair 0.4 kg. The total amount of overheads including labour for the Sintering department is 23,750.00 EUR. The costs of the assembling department are 41,250.00 EUR (= labour) and 15,125.00 EUR (= manufacturing overheads). Assembling of a chair takes 2 min. A table is assembled in 3 min. All overheads were applied in 20X9. At the end of the accounting period all goods were finished and transferred to the finish goods inventory. TANNENBUSCH sold 1,700 tables and 9,000 chairs. The

revenue for a table is 65.00 EUR/p and for a chair 46.00 EUR/p. Expenses for selling and advertising were 9,791.00 EUR during 20X9.

Required: Set up 2 manufacturing summary accounts and value inventories of raw materials and finished goods as at year ends 31.12.20X9. How much is profit after taxes for the period 20X9? Do not consider VAT for this task. Follow weighted average cost formula.

Lösung: (Solution)

(1) Calculation of raw materials:

Powder available for use in production is $6,000 + 6,000 = 12,000$ kg. Powder used up in production (sintering) is $1.2 \cdot 2,500 + 0.4 \cdot 10,000 = 7,000$ kg. The value of raw materials left over is $5,000 \cdot (30,000 + 28,200) / 12,000 = 24,250.00$ EUR. Materials for tables are $1.2 \cdot 2,500 \cdot (30,000 + 28,200) / 12,000 = 14,550.00$ EUR. Materials for chairs amount to $0.4 \cdot 10,000 \cdot (30,000 + 28,200) / 12,000 = 19,400.00$ EUR.

(2) Manufacturing accounting (calculation of finished goods)

Costs for sintering overheads are split up along the time spend on production. Sintering overheads for chairs are $23,750 \cdot 7 \cdot 10,000 / (7 \cdot 10,000 + 10 \cdot 2,500) = 17,500.00$ EUR. Accordingly the overheads for tables are $23,750 - 17,500 = 6,250.00$ EUR. The value of chair parts (pts-ch) transferred to Assembling department is $19,400 + 17,500 = 36,900.00$ EUR. The value of parts for tables (pts-tb) transferred to Assembling department is $14,550 + 6,250 = 20,800.00$ EUR.

Costs for assembling overheads and assembling labour are split up along the same method based on direct labour: Assembling labour for chairs is $41,250 \cdot 10,000 \cdot 2 / (10,000 \cdot 2 + 2,500 \cdot 3) = 30,000.00$ EUR. Assembling labour for tables is $41,250 - 30,000 = 11,250.00$ EUR. Assembling overheads assigned to chairs are $15,125 \cdot 10,000 \cdot 2 / (10,000 \cdot 2 + 2,500 \cdot 3) = 11,000.00$ EUR. Assembling overheads for tables is $15,125 - 11,000 = 4,125.00$ EUR.

Accordingly to the Sintering department, total cost for chairs (TC-ch) amounts to $36,900 + 30,000 + 11,000 = 77,900.00$ EUR. The total cost for tables (TC-tb) amounts to $20,800 + 11,250 + 4,125 = 36,175.00$ EUR. The unit cost for chairs are $77,900 / 10,000 = 7.79$ EUR/u and for tables $36,175 / 2,500 = 14.47$ EUR/u.

The sales of chairs requires to transfer the amount for chairs sold to the cost of sales account. The cost of sales for chairs are $9,000 \cdot 7.79 = 70,110.00$ EUR. The cost of sales for tables is $1,700 \cdot 14.47 = 24,599.00$ EUR. Closing stock of furniture amounts to $1,000 \cdot 7.79 + 800 \cdot 14.47 = 19,366.00$ EUR.

(3) The profit for the period requires bookkeeping entries for the revenue. Sales of chairs (Sls-ch) was $46 \cdot 9,000 = 414,000.00$ EUR. Sales for tables (Sls-tb) was $1,700 \cdot 65 = 110,500.00$ EUR. The profit for the period is $(414,000 + 110,500) - (70,110 + 24,599) - 9,791 = 420,000.00$ EUR.

See manufacturing accounts in exhibit 1 in order to achieve the overview.

D RM-Inventory C	
OV	30.000,00
(1)	28.200,00
	<u>58.200,00</u>
b/d	24.250,00

D Bank C	
(2)	110.500,00
(3)	414.000,00
	<u>524.500,00</u>
b/d	485.442,00

D Sales revenue C	
P&L	524.500,00
	<u>524.500,00</u>

D MSA Sintering C	
Mat-tb	14.550,00
Mat-ch	19.400,00
Ohs	23.750,00
	<u>57.700,00</u>

D MSA Assembling C	
Pts-tb	20.800,00
Pts-ch	36.900,00
Labour	41.250,00
Ohs	15.125,00
	<u>114.075,00</u>

D FG-Inventory C	
TC-tb	36.175,00
TC-ch	77.900,00
	<u>114.075,00</u>
b/d	19.366,00

D C.O.S. C	
Sls-tb	24.599,00
Sls-ch	70.110,00
	<u>94.709,00</u>

D Sales & Adv C	
(4)	9.791,00
	<u>9.791,00</u>

D P&L C	
COS	24.599,00
COS	70.110,00
S&A	9.791,00
EBT	420.000,00
	<u>524.500,00</u>
Tax	126.000,00
R/E	294.000,00
	<u>420.000,00</u>

D R/E C	
c/d	294.000,00
	<u>294.000,00</u>

D Tax Liabilities C	
c/d	126.000,00
	<u>126.000,00</u>

Exhibit 1: Accounts for TANNENBUSCH Ltd. in 20X9