

Lezione 6 -

Oggi - fine contabilità interna

Venerdì - decisioni di breve periodo

Esercizio 2 (Process Costing)

$$WIP_i = 0 \quad PF_i = 0$$

30 settembre

$$PF_x: 14000$$

$$PF_y = 3100$$

$$WIP_x = 40\%$$

Prodotto 2 a 80%

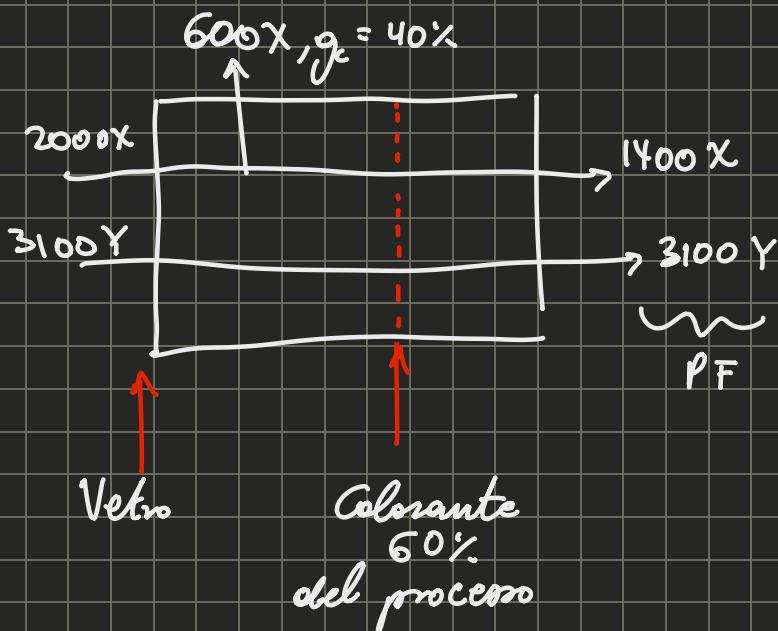
$$MDX = 2 MDY$$

10650 vetro

$$CC X = 0,6 CC Y$$

2950 colorante

14294 € CC



Coefficienti di Equivalenza

$$\text{Coeff. Eq. } x(\text{Vetro}) = \text{vetro } (\underline{\underline{\underline{1}}})$$

$$\text{Coeff. Eq. } y(\text{Vetro}) = \text{vetro } (\underline{\underline{\underline{1/2}}})$$

$$\text{II } x(\text{colorante}) = 2 \text{ Altr modo } (\underline{\underline{\underline{3}}})$$

$$\text{II } y(\text{colorante}) = 3 \text{ di scrivere } (\underline{\underline{\underline{1/2}}})$$

$$\text{II } x(\text{CC}) = 0,6$$

$$\text{II } y(\text{CC}) = \underline{\underline{\underline{1}}}$$

$$CPI (\epsilon/u)$$

\hookrightarrow Costo Pieno Industriale

• MD

• LD } OVM } Costo di conversione

Cerchiamo Neg (grado di conversione (40%) in questo caso)

$$Neg = (PF_x + WIP_x \cdot g_{cr}) \cdot \text{coeff eq. } x + (PF_y + WIP_y \cdot g_{cy}) \text{coeff eq. } y$$

\hookrightarrow Formula Generica

$$Neg(\text{vetro}) =$$

|

$$= \text{coeff. eq}_x(\text{vetro}) \cdot (1400 + 600) +$$

$$PF_x \quad WIP_x$$

↑

↑

$$+ \text{coeff. eq}_y(\text{vetro}) \cdot (3100) = 7100 \text{ u.eq. di y}$$

$$PF_y \rightarrow WIP_y = 0$$

\hookrightarrow Un'età che

avrebbe prodotto se avesse solo prodotto solo x o solo y

$$\begin{aligned}
 \text{Neg (colorante)} &= \text{coeff. eq. } x(\text{col}) \cdot (1400) + \\
 &\quad + \text{coeff. eq. } y(\text{col}) \cdot 3100 = \\
 &= 5900 \text{ u.eq.y}
 \end{aligned}$$

WIP_x non ha 60%
 di CC, dove
 colorante
 sarebbe
 aggiunto

$$\begin{aligned}
 \text{Neg (CC)} &= \text{coeff. eq. } x(\text{CC}) \cdot (1400 + 600 \cdot 0,4) + \\
 &\quad + \text{coeff. eq. } y(\text{CC}) \cdot (3100) = 4084 \text{ u.eq.y}
 \end{aligned}$$

Costo totale vetro = 16650 €

Costo totale colorante = 2980 €

Costo Conversione = 14294 €

$$\begin{aligned}
 C_u(\text{vetro}) &= 10650 \text{ €} / 7100 = 1,5 \text{ €/u.eq} \\
 C_u(\text{colorante}) &= 2980 \text{ €} / 5900 = 0,5 \text{ €/u.eq} \\
 C_u(\text{CC}) &= 14294 \text{ €} / 4084 = 3,56 \text{ €/u.eq}
 \end{aligned}$$

$$\begin{aligned}
 \text{CPI}_x &= C_u(\text{vetro}) \cdot \text{coeff. eq. } x(\text{vetro}) + C_u(\text{colorante}) \cdot \text{coeff. eq. } x(\text{col}) \\
 &\quad + C_u(\text{CC}) \cdot \text{coeff. eq. } x(\text{CC}) = 1,5 \frac{\text{€}}{\text{u}} \cdot 1 + 0,5 \cdot 3 + 3,5 \cdot 0,6 = 6 \frac{\text{€}}{\text{u}} \\
 &= 6,3 \text{ €/u}
 \end{aligned}$$

$$\begin{aligned}
 \text{CPD}_y &= C_u(\text{vetro}) \cdot \text{coeff. eq. } y(\text{vetro}) + C_u(\text{colorante}) \cdot \text{coeff. eq. } y(\text{col}) \\
 &\quad + C_u(\text{CC}) \cdot \text{coeff. eq. } y(\text{CC}) = 5,5 \text{ €/u}
 \end{aligned}$$

ValORIZZAZIONE WIP_{x,t}

$$L = \text{coeff. eq. x (vetro)} + C_u (\text{vetro}) + \text{coeff. eq. x (calore)} \\ \cdot C_u (\text{calore}) \cdot 0 + \text{coeff. eq. x (cc)} \cdot C_u (\text{cc}) \cdot g_{\xi x} = \\ = 3,84 \text{ €/u}$$

perché non assorbito

→ Costo Complessivo di WIP_{x,t}

$$= 3,84 \frac{\text{€}}{\text{u}} \cdot 600 \text{ u} = 2304 \text{ €}$$

$$\text{Costo } \varnothing = 8540 \text{ €}$$

$$\text{Costo } \times = 17050 \text{ €}$$

$$\text{Costo WIP}_x = 2304 \text{ €}$$

$$\text{Costo Totale} = 27894 \text{ €}$$

⇒ Tot. Costi da Allocare = costi tot. vetro + costi tot. cal +

costi tot. conversione =

$$= 10650 + 2980 + 14294 -$$

$$= 27894 \text{ €}$$

↪ Coincide, va bene ✓



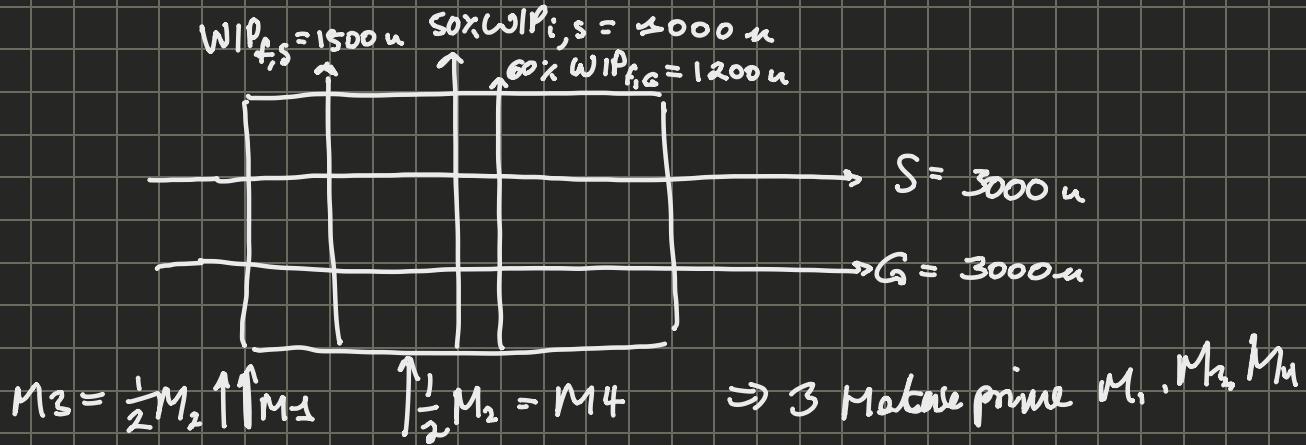
Coefficienti di equivalenza

Vetro

⇒ fine ultimo → Costo unitario = $\frac{\text{costi tot.}}{\text{unità}}$

Si usa coefficiente di equivalenza per fruire corso unitario di una materia prima, bilanciando a risorse il coefficiente di conversione aiutando a risolvere il problema.

Esercizio 3 (Process Costing)



$$\text{Costo Tot } M_1 = 517440 \text{ €}$$

$$\text{Costo Tot } M_2 = 840775 \text{ €}$$

$$\text{Costo CC} = 341648 \text{ €}$$

$$\text{coeff. eq. } S(M_3) = 1$$

$$\text{coeff. eq. } G(M_3) = 1$$

$$\text{coeff. eq. } S(M_2) = 1$$

$$\text{coeff. eq. } G(M_2) = 2 \quad 1G = 2M_2 \quad 1S = \frac{1}{2}M_2$$

$$1G = 2S$$

$$\text{coeff. eq. } S(CC) = 2$$

$$\text{coeff. eq. } G(CC) = 3$$

Distribuzione $M_2 \rightarrow M_3 + M_4$

$$\Rightarrow \text{Costo tot } M_3 = \frac{\text{costo tot. } M_2}{2} = 270387,5 \text{ €}$$

$$\text{costo tot M4} = \frac{\text{costo tot M4}}{2} = 270387,5 \text{ €}$$

Neg

$$M1 = \frac{WIP_f}{P_f \text{ iniciadas nel período}}$$

$$Neg(M1) = \text{coeft. eq. S}(M1) \cdot (1500 + (3000 - 1000)) +$$

$$\text{coeft. eq. G}(M1) \cdot \left(\underbrace{3000}_{Pf_G} + \underbrace{1200}_{WIP_G} \right) = 7700 \text{ u.eq.}$$

$$Neg(M2) = \text{coeft. eq. S}(M2) \cdot (1500 + (3000 - 1000)) +$$

$$+ \text{coeft. eq. G}(M2) \cdot (3000 + 1200) = 15900 \text{ u.eq.}$$

$$Neg(M3) = \text{coeft. eq. S}(M3) \cdot ((3000 - 1000)) +$$

$$+ \text{coeft. eq. G}(M3) \cdot (3000 + 1200) = 10400$$

$$Neg(CC) = \text{coeft. eq. S}(CC) \cdot \left(\underbrace{(1000 \cdot (1 - 0,8)}_{WIP_{CC} (\text{al } 50\%)}) + 2000 + 1500 \cdot 0,2 \right) +$$

$$+ \text{coeft. eq. G}(CC) \cdot (3000 + 1200 \cdot 0,6) =$$

$$= 6520 \text{ u.eq.}$$

$$\Leftrightarrow M1, Neg(M1) = 7700 \text{ u.eq}$$

$$Cn(M1) = \frac{\text{Costo Tot M1}}{Neg(M1)} = 67,2 \frac{\text{€}}{\text{u.eq.}}$$

Formule
completate

$$C_{\text{MIS}} = C_{\text{u MIS}} \cdot \text{coeff. eq. S (MIS)} \cdot (3000 - 1000) = \\ = 134400 \text{ €}$$

$$C_{\text{u MIS}} = C_{\text{u MIS}} - \text{coeff. eq. G (MIS)} \cdot 3000 = \\ = 205600$$

$$C_{\text{MIS}_{\text{WIP}, f, s}} = C_{\text{u MIS}} \cdot \text{coeff. eq. S (MIS)} \cdot 1500 = 100800 \text{ €}$$

$$C_{\text{MIS}_{\text{WIP}, f, G}} = C_{\text{u MIS}} \cdot \text{coeff. eq. G (MIS)} \cdot 1200 = 80640 \text{ €}$$

Si può condurre dal costo unitario al CPS.
dal costo totale a CPS

Esercizio 1 - Job Order Costing

Borse di affacciato \rightarrow ore di lavoro diretto

Lotto A , 780 un
Lotto B , 500 un

• MD \rightarrow carrello

JOB A

$$\begin{aligned} \text{- Reporto 1: } & 174 \text{ kg} \cdot 4,2 \text{ €/kg} + \\ & + 62 \text{ kg} \cdot 6,5 \text{ €/kg} = 133,8 \text{ €} \end{aligned}$$

- Reparto 2 : 55 kg · 4,2 €/kg + 18 kg · 6,5 €/kg

$$= 348 \text{ €}$$

Job B

- Reparto 1 : 96 kg · 4,2 $\frac{\text{€}}{\text{kg}}$ + 124 kg · 6,5 $\frac{\text{€}}{\text{kg}}$ = 1209,2 €

- Reparto 2 : 62 kg · 4,2 €/kg + 22 kg · 6,5 €/kg = 403,4 €

Lavoro Direttivo → Consuale

- LDST $\rightsquigarrow C_{\text{LDST}} = \frac{1125 \text{ €}}{175 \text{ h}} = 7 \frac{\text{€}}{\text{h}}$

- LDQ $\rightsquigarrow C_{\text{LDQ}} = \frac{1925}{175 \text{ h}} = 11 \frac{\text{€}}{\text{h}}$

Job A - Rep 1 : 80h · 7 $\frac{\text{€}}{\text{h}}$ + 28h · 11 $\frac{\text{€}}{\text{h}}$ = 868 €

- Reparto 2 : 75h · 7 $\frac{\text{€}}{\text{h}}$ + 46h · 11 $\frac{\text{€}}{\text{h}}$ = 1031 €

Job B

- Reparto 1 : 69h · 7 $\frac{\text{€}}{\text{h}}$ + 28h · 11 $\frac{\text{€}}{\text{h}}$ = 791 €

- Reparto 2 : 42h · 7 $\frac{\text{€}}{\text{h}}$ + 87h · 11 $\frac{\text{€}}{\text{h}}$ = 1251 €

Overhead \rightarrow Proporzionale a ore di lavoro diretto per reparto 2
a manutie prime per reparto 1

- Overhead \textcircled{K}
Rep 1

$$\text{Ovh Rep1} = 14058\text{€}$$

$$\text{Overhead rep1, Job A} = 14058\text{€}$$

costi materiali
 primi rep.1 per Job A

 costi complessivo
 materiali primi rep.1

$$= 14058\text{€} \cdot \frac{1133,8\text{€}}{1133 + 1209,2\text{€}} = 6802,8\text{€}$$

$$\text{Overhead rep1, Job B} = 14058\text{€} - 6802,8\text{€} = 7255,2\text{€}$$

$$\text{Overhead rep2, } = 11410\text{€ base LD}$$

$$\text{Ovh rep2, Job A} = 11410\text{€} \cdot$$

 ore LD nel
 rep2 relativa Job A

 ore LD
 complessive
 nel rep2

$$= 11410\text{€} \cdot \frac{75+46}{75+46+82+82} = 5522,4\text{€}$$

$$\text{Ovh, rep.2, Job B} = 11410\text{€} - 5522,4\text{€} = 5887,56\text{€}$$

Valori dei letti

$$\begin{aligned}
 \text{Job A} &= \text{Costo MD rep1 Job A} + \text{costo MD rep2 Job A} + \\
 &\quad \left| \text{costo LD} \cdot \text{rep1} \cdot \text{Job A} + \text{costo LD rep2} \cdot \text{Job A} \right. \\
 &\quad \left. \rightarrow \text{Overhead rep1} \cdot \text{Job A} + \text{ovh rep2} \cdot \text{Job A} \right.
 \end{aligned}$$

$$= 1133,8 + 348 + 868 + 1031 + 6802,8 - 5522,4 = 15706,04$$

€

Job B = 16796,36 €