

Miracle Company

The Markens Group

VARIABLE OVERHEAD ALLOCATION

SQUARE FOOTAGE	CURRENT MARKET COST	BUDGETED HOURS	DIRECT LABOR BUDGET	PRODUCTION CENTER	VARIABLE OCCUPANCY	VARIABLE MACHINERY	VARIABLE PLANT GENERAL	VARIABLE NON-MFG OVERHEAD	TOTAL VARIABLE OVERHEAD	VARIABLE OVERHEAD PER HOUR
A	B	C	D		E	F	G	H	I	J
Prod Ctr Data Column A	Prod Ctr Data Column B	Annual Hours Column I	Direct Labor Budget		Overhead Budget x Factor	Overhead Budget x Factor	Overhead Budget x Factor	Overhead Budget x Factor	Sum of + F + G +	I ÷ C
1,000	200	2,009	34,107	Sheeter	0	3,611	11,134	0	14,745	7.34
1,400	800	3,885	273,384	6 Color	0	14,444	21,530	0	35,974	9.26
1,300	500	1,821	84,818	4 Color	0	9,028	10,092	0	19,120	10.50
1,200	275	1,829	54,689	49" Die Cutter	0	4,965	10,136	0	15,101	8.26
1,200	600	3,930	118,728	55" Die Cutter	0	10,833	21,780	0	32,613	8.30
750	5	6,174	112,529	Stripping	0	90	34,216	0	34,306	5.56
1,100	500	8,117	316,867	Gluers	0	9,028	44,983	0	54,011	6.65
7,950	2,880	27,765	995,122	TOTALS	0	52,000	153,870	0	205,870	205,874

ALLOCATION FACTORS:

Square Feet	Curr Mkt Cost	Budgeted Hrs	Dir Labor
0 ÷ 7,950	52,000 ÷ 2,880	153,870 ÷ 27,765	0 ÷ 995,146
0.0000000	18.0556	5.5419	0.0000000

Allocation distributes cost using a "logical" factor common to the elements incurring that cost. To calculate an Allocation Factor using Current Market Cost, divide the total amount to be allocated by the total value of the allocating factor. \$52,000 of Variable Machinery cost divided by 2,880 of CMC. By multiplying the resulting factor of 18.055556 by the CMC of each machine, the \$52,000 will be distributed and weighted by each production center's CMC.

Job Classification: Pressman Four Color

A. Hourly Rate	\$14.00
B. Shift Differential	0.00
C. Annual Increase	3.0%
D. Gross Rate (A x (1 + C)) + B	\$14.42
E. Downtime Percentage	19.0%
F. Inefficiency Percentage	0.0%

Please note: formulas apply to Hours column only. Payroll dollars are calculated by multiplying the Gross Rate times the appropriate hours.

	Hours	Dollars	
		OOP	EXCESS
GROSS PAYROLL COSTS			
G. Regular Clock Hours (40 hrs x 52 weeks)	2,080.0	29,994	
H. Projected Annual Overtime Hours	320.0	6,922	2,307
I. Gross Paid (G + H)	2,400.0	\$36,916	
EXCESS PAYROLL COSTS			
J. Vacation Hours (40 x 2)	80.0		1,154
K. Holiday Hours (9 x 8)	72.0		1,038
L. Punched-In (I – J – K)	2,248.0		
M. Downtime: (E x L)	427.1		6,159
N. Chargeable (L – M)	1,820.9		
O. Inefficiency: (F x N)	0.0		0
P. Budgeted (N – O)	1,820.9		
Q. Break Hours (L ÷ 8 x .5)	140.5		2,026
R. Net Chargeable (P – Q)	1,680.4		\$12,684
OTHER BENEFITS			
Payroll Tax/FICA	(.0765 up to \$53,400)+(.0145 over \$53,400)	2,824	2,824
Other Taxes	SUTA: \$84, FUTA: \$56	140	140
Worker's Comp.	0.0600 times Gross Pay	2,215	2,215
Group Insurance	Average	2,500	2,500
Life Insurance	Average	125	125
Pension	0.0200 times Gross Pay	738	738
		\$8,542	\$8,542
TOTAL OOP & EXCESS COSTS		\$45,458	\$21,226
per Budgeted Hour	1,820.9	\$24.96	\$11.66
per Net Chargeable Hour	1,680.4	\$27.05	\$12.63
		100%	47%

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PRODUCTION CENTER DATA

PRODUCTION CENTER	TOTAL SQUARE FOOTAGE	TOT CURR MARKET COST (M)	INSIDE MAINTENANCE ALLOC. FACTOR	HORSE POWER PER UNIT	CHARGE-ABLE HOURS	% OF RUN TO TOTAL HOURS	HORSE POWER HOURS	KILOWATT HOURS
	A	B	C	D	E	F	G	H
	Workbook Three Page 4	Workbook Three Page 4	Workbook Three Page 5	Workbook Three Page 4	Annual Hours Column G	Workbook Three Page 6	D x E x F	G x .746
Sheeter	1,000	200	10%	15.0	2,029	90.9%	27,665	20,638
6 Color	1,400	800	23%	50.0	3,885	59.5%	115,579	86,222
4 Color	1,300	500	20%	35.0	1,821	64.8%	41,300	30,810
49" Die Cutter	1,200	275	13%	15.0	1,886	70.8%	20,029	14,942
55" Die Cutter	1,200	600	16%	15.0	3,930	67.7%	39,909	29,772
Stripping	750	5	2%	2.0	6,174	100.0%	12,348	9,212
Gluers	1,100	500	16%	10.0	8,117	86.0%	69,806	52,075
TOTALS	7,950	2,880	100%		27,842		326,636	243,671

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MACHINE VARIABLE BUDGET

PRODUCTION CENTER	SPECIFIC PLANT SUPPLIES	SPECIFIC REPAIR & MAINT	INSIDE MAINTENANCE STAFF LABOR	VAR ELECT \$0.140 PER KW HR	TOTAL MACHINE VARIABLE	MACHINE VARIABLE PER HOUR
	F	G	H	I	J	K
	A x B	A x C	D times Result from Indirect Labor Budget	E times \$0.140	Sum of F + G + H + I	J ÷ A
Sheeter	10,045	10,045	4,155	2,889	27,134	\$ 13.51
6 Color	69,930	58,275	9,557	12,071	149,833	\$ 38.57
4 Color	30,047	25,494	8,310	4,313	68,164	\$ 37.43
49" Die Cutter	15,547	12,803	5,402	2,092	35,844	\$ 19.60
55" Die Cutter	35,370	29,475	6,648	4,168	75,661	\$ 19.25
Stripping	6,174	617	831	1,290	8,912	\$ 1.44
Gluers	34,497	36,527	6,648	7,291	84,963	\$ 10.47
TOTALS	201,610	173,236	41,550	34,114	450,510	\$ 450,523

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MACHINE HOUR RATE SUMMARY

BUDGETED HOURS	PRODUCTION CENTER	DIRECT LABOR	MACHINE VARIABLE	VARIABLE OVERHEAD	DIRECT MHR	TARGET MHR
		PER HOUR	PER HOUR	PER HOUR		<i>FACTOR</i> <i>2.11362</i>
		B	C	D	E	F
A		Direct Labor Budget Column F	Mach Variable Budget Column K	Var O'head Allocation Column J	Sum of B + C + D	E x Profit Plan Tgt MHR Factor
Annual Hours Column I						
2,009	Sheeter	16.98	13.51	7.34	37.83	79.96
3,885	6 Color	70.37	38.57	9.26	118.20	249.83
1,821	4 Color	46.58	37.43	10.50	94.51	199.76
1,829	49" Die Cutter	29.90	19.60	8.26	57.76	122.08
3,930	55" Die Cutter	30.21	19.25	8.30	57.76	122.08
6,174	Stripping	18.23	1.44	5.56	25.23	53.33
8,117	Gluers	39.04	10.47	6.65	56.16	118.70
27,765	TOTALS	995,122	450,510	205,870	1,651,502	3,490,654
	PERCENTAGE	60.26%	27.28%	12.47%	100.00%	211.36%