

COST & RETURNS SUMMARY FOR TOMATOES, FRESH
SAMPLE COSTS TO PRODUCE FRESH MARKET TOMATOES
FRESNO COUNTY
1980 COSTS

BY DON RAY,
 FARM ADVISOR

	UNIT	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST PER ACRE	YOUR COST
1. GROSS RECEIPTS FROM PRODUCTION:					
TOMATOES, FRESH	CTNS	4.450	536.000	2385.20	
CANNING TOMATOES	TON	47.000	10.000	470.00	
TOTAL RECEIPTS:				2855.20	
2. VARIABLE COSTS:					
PREHARVEST:					
PLANT SETS	EACH	0.020	5200.000	104.00	
N - P - K	LBS.	0.110	800.000	88.00	
HAND HOEING	HOUR	4.500	7.500	33.75	
PESTICIDE APP	ACRE	4.130	3.000	12.39	
FROST PROTECTION	ACRE	59.000	1.000	59.00	
TRACTOR (FUEL-LUBE-REPAIRS)	ACRE			31.49	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			7.59	
IRRIGATION (SYSTEM MAINT.)	ACIN	0.059	35.900	2.11	
MACHINERY LABOR	HOUR	5.500	4.444	24.44	
IRRIGATION LABOR	HOUR	4.500	13.000	58.50	
INTEREST ON OPERATING CAP.	DOL.	0.14000	167.185	22.55	
TOTAL PREHARVEST COSTS:				443.82	
PREHARVEST COST PER CTNS				0.8280	
HARVEST:					
HAND HARVEST	HOUR	4.500	160.000	720.00	
PACKING	CTNS	2.550	536.000	1366.80	
EQUIPMENT (FUEL-LUBE-REPAIRS)	ACRE			5.21	
MACHINERY LABOR	HOUR	5.500	2.059	11.33	
INTEREST ON OPERATING CAP.	DOL.	0.14000	172.087	24.09	
TOTAL HARVEST COSTS:				2127.42	
HARVEST COST PER CTNS				3.9681	
TOTAL VARIABLE COSTS:				2571.24	
VARIABLE COST PER CTNS				4.7971	
3. INCOME ABOVE VARIABLE COSTS:					
INCOME PER CTNS				283.96	
				0.5298	
4. OVERHEAD:					
PERSONAL PROPERTY TAXES:				5.93	
CASH RENT:				175.00	
MISC. OFFICE & BOOKKEEPING (8.00% OF TOTAL VARIABLE COSTS)				205.20	
TOTAL OVERHEAD:				386.63	
OVERHEAD COST PER CTNS				0.7213	
TOTAL CASH COSTS:				2957.87	
TOTAL CASH COST PER CTNS				5.5184	
5. INCOME ABOVE ALL CASH COSTS:					
INCOME PER CTNS				-102.67	
				-0.1915	
6. OWNERSHIP COSTS:					
DEPRECIATION:					
MACHINERY & EQUIPMENT	ACRE			18.39	
TOTAL DEPRECIATION:				18.39	
CAPITAL & INTEREST:					
MACHINERY & EQUIPMENT		0.14000	157.896	22.11	
TOTAL INTEREST CHARGE:				22.11	
TOTAL FIXED COSTS:				40.50	
FIXED COST PER CTNS				0.0756	
7. TOTAL OF ABOVE COSTS:					
TOTAL COST PER CTNS				2998.36	
				5.5940	
8. NET RETURNS:					
NET RETURNS PER CTNS				-143.16	
				-0.2671	

100 ACRES OF TOMATOES EARLY SUMMER HARVEST VINES NOT STAKED
 FURROW IRRIGATED -- DISTRICT WATER INCLUDED IN RENTAL FEE
 TENANT - LANDOWNER BASIS
 DATE PRINTED: 08/22/80 HARVEST MONTH: 8 BUDGET RECORD NUMBER 254

1980 default data

CASH FLOW & INVESTMENT SUMMARY FOR TOMATOES, FRESH
 SAMPLE COSTS TO PRODUCE FRESH MARKET TOMATOES
 FRESNO COUNTY
 1980 COSTS

BY DON RAY,
 FARM ADVISOR

BUDGET RECORD NUMBER 254

CATEGORY	UNIT	MONTHLY SUMMARY OF RECEIPTS AND EXPENSES												TOTAL
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
TOTAL RECEIPTS	\$/AC	0.00	0.00	0.00	0.00	0.00	120.15	122.65	612.40	0.00	0.00	0.00	0.00	2855.20
OPERATING EXPENSES														
PLANT SETS	\$/AC	0.00	0.00	104.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	104.00
N - P - K	\$/AC	0.00	66.00	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	88.00
HAND HOEING	\$/AC	0.00	0.00	0.00	16.88	16.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.75
PESTICIDE APP	\$/AC	0.00	0.00	4.13	0.00	4.13	0.00	4.13	0.00	0.00	0.00	0.00	0.00	12.39
FROST PROTECTION	\$/AC	0.00	0.00	59.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.00
HAND HARVEST	\$/AC	0.00	0.00	0.00	0.00	0.00	36.00	639.00	45.00	0.00	0.00	0.00	0.00	720.00
PACKING	\$/AC	0.00	0.00	0.00	0.00	0.00	68.85	1216.35	81.60	0.00	0.00	0.00	0.00	1366.80
MACHINE LABOR COST	\$/AC	0.00	3.35	4.46	6.31	2.18	0.12	0.12	11.45	0.00	0.00	4.44	3.35	35.77
INTEREST ON OPER. CAP.	\$/AC	0.00	4.98	10.48	2.83	1.35	2.76	21.85	0.00	0.00	0.00	1.57	0.82	46.64
TRACTOR COST	\$/AC	0.00	3.14	5.64	7.10	2.75	0.00	0.00	0.00	0.00	0.00	7.90	4.96	31.49
EQUIPMENT COST	\$/AC	0.00	1.03	0.26	1.72	0.59	0.12	0.12	5.33	0.00	0.00	2.90	0.72	12.79
IRRIGATION COST	\$/AC	0.00	0.00	0.32	0.32	0.49	0.49	0.49	0.00	0.00	0.00	0.00	0.00	2.11
IRRIG LABOR COST	\$/AC	0.00	0.00	9.00	9.00	13.50	13.50	13.50	0.00	0.00	0.00	0.00	0.00	58.50
TOTAL EXPENSES	\$/AC	0.00	78.50	197.30	66.16	41.85	121.84	1895.56	143.38	0.00	0.00	16.81	9.85	2571.24

MONTHLY IRRIGATION AND LABOR REQUIREMENTS														
	HR/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
MACHINE LABOR	HR/AC	0.00	0.61	0.81	1.15	0.40	0.02	0.02	2.08	0.00	0.00	0.81	0.61	6.50
IRRIGATION LABOR	HR/AC	0.00	0.00	2.00	2.00	3.00	3.00	3.00	0.00	0.00	0.00	0.00	0.00	13.00
IRRIG. WATER APPLIED	ACIN	0.00	0.00	5.50	5.50	8.30	8.30	8.30	0.00	0.00	0.00	0.00	0.00	35.90

MACHINERY FIXED AND VARIABLE COSTS PER ACRE															
MACHINE	CODE	SIZE	PURCHASE PRICE	YEARS OWNED	ANN HOURS USED	FIXED COST PER ACRE				VARIABLE COST PER ACRE					HRS PER ACRE
						DEPR.	INTER.	TAX & INS	TOTAL	FUEL	LUBE	REPAIRS	TOTAL		
TRACTOR 40 HP	2	40.0	11400.	12.	1000.	0.52	0.73	0.19	1.44	2.11	0.32	1.00	3.43	0.732	
TRACTOR 90 HP	5	90.0	27600.	12.	1000.	3.25	4.54	1.17	8.96	7.80	1.17	6.23	15.21	1.882	
TRACT 4WD 175HP	8	135.0	62400.	12.	1000.	0.64	0.89	0.23	1.76	1.54	0.23	1.02	2.79	0.164	
CRAWLER 85 HP	11	85.0	66000.	17.	900.	3.90	6.48	1.79	12.17	4.95	0.74	4.37	10.06	1.084	
TRUCK 2 TON	13	2.0	18000.	4.	1400.	0.36	0.22	0.05	0.63	1.33	0.20	0.59	2.12	0.178	
PICKUP 1/2 T	14	0.5	9000.	3.	1350.	0.21	0.11	0.02	0.35	0.79	0.12	0.20	1.10	0.164	
FORKLIFT*	20	6.5	11400.	8.	540.	3.14	2.79	0.73	6.66	1.88	0.28	0.93	3.09	1.538	
SUBSOILER	46	10.0	6000.	10.	250.	0.99	0.99	0.27	2.25	0.00	0.03	1.60	1.63	0.500	
CULTIVATOR 4 ROW	52	10.0	2640.	13.	190.	0.87	1.01	0.29	2.17	0.00	0.03	1.37	1.39	0.927	
DISC OFFSET HDTY	63	21.0	11160.	15.	110.	0.91	1.16	0.34	2.41	0.00	0.02	1.13	1.15	0.149	
LIQ FERT APPLIC.	70	10.0	2830.	15.	140.	0.77	0.96	0.28	2.01	0.00	0.03	1.30	1.33	0.625	
LISTER 6 ROW	83	15.0	2400.	13.	190.	0.15	0.17	0.05	0.37	0.00	0.00	0.24	0.24	0.173	
4 WH PLANE 12X45	85	12.0	8520.	7.	340.	1.29	1.07	0.27	2.63	0.00	0.01	0.59	0.60	0.485	
4 R TRANSPLANTER	119	15.0	1800.	5.	110.	1.35	0.93	0.22	2.50	0.00	0.00	0.12	0.12	0.611	
FURROW IRIG SYS*	132	2.0	0.	10.	5000.	0.00	0.00	0.00	0.00	0.00	0.04	2.06	2.11	17.950	
TRAILER FLATBED	149	5.0	3420.	15.	200.	0.04	0.05	0.02	0.11	0.00	0.00	0.01	0.01	0.041	
MACHINERY & EQUIPMENT			2446.				18.39	22.11	5.93	46.42	20.40	3.23	22.76	46.39	

INVESTMENT & COSTS PER ACRE
 TOTAL INVESTMENT 244570.
 100 ACRES OF TOMATOES EARLY SUMMER HARVEST VINES NOT STAKED
 FURROW IRRIGATED -- DISTRICT WATER INCLUDED IN RENTAL FEE
 TENANT - LANDOWNER BASIS

FUEL USE SUMMARY FOR BUDGET RECORD NUMBER 254
 SAMPLE COSTS TO PRODUCE FRESH MARKET TOMATOES
 FRESNO COUNTY
 1980 COSTS

BY DON RAY,
 FARA ADVISOR

FUEL USED IN GALLONS PER HOUR

TRACTOR 40 HP	2.400
TRACTOR 90 HP	4.320
TRACT 4WD 175HP	9.800
CRAWLER 85 HP	4.760
TRUCK 2 TON	6.250
PICKUP 1/2 T	4.000
FORKLIFT*	1.270

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED

MACHINE	GALLONS	POWER UNIT
TRUCK 2 TON	0.139	
PICKUP 1/2 T	0.073	
FORKLIFT*	0.195	
DISC OFFSET HDTY	1.604	TRACT 4WD 175HP
SUBSOILER	2.618	CRAWLER 85 HP
4 WH PLANE 12X45	1.270	CRAWLER 85 HP
LISTER 6 ROW	0.821	TRACTOR 90 HP
TRAILER FLATBED	0.108	TRACTOR 40 HP
LIQ FERT APPLIC.	0.825	TRACTOR 40 HP
CULTIVATOR 4 ROW	1.468	TRACTOR 90 HP
4 R TRANSPLANTER	2.904	TRACTOR 90 HP

FUEL ALLOCATED TO OPERATIONS FOR THE BUDGET UNIT

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	FUEL TYPE
DISC OFFSET HDTY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.604	0.000	1.604	DIESEL
SUBSOILER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.618	0.000	2.618	DIESEL
4 WH PLANE 12X45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.540	2.540	DIESEL
LISTER 6 ROW	0.000	0.821	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.821	DIESEL
TRAILER FLATBED	0.000	0.000	0.108	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.108	GAS
LIQ FERT APPLIC.	0.000	0.825	0.000	0.825	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.650	GAS
CULTIVATOR 4 ROW	0.000	0.000	0.000	2.937	1.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.405	DIESEL
FORKLIFT*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.954	0.000	0.000	0.000	0.000	1.954	DIESEL
TRUCK 2 TON	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.111	0.000	0.000	0.000	0.000	1.111	GAS
PICKUP 1/2 T	0.000	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.000	0.000	0.073	0.073	0.655	GAS
4 R TRANSPLANTER	0.000	0.000	2.904	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.904	DIESEL
TOTALS	0.000	1.718	3.084	3.834	1.541	0.073	0.073	3.138	0.000	0.000	4.295	2.612	20.368	

GALLONS FUEL BY TYPE
 3.52 GAS
 0.00 LP
 16.85 DIESEL
 0.00 NAT. GAS
 0.00 KWHR

FUEL TYPES
 1=GAS
 2=L.P.
 3=DIESEL
 4=NAT. GA
 5=ELECTRIC

MACHINERY OPERATIONS SUMMARY
SAMPLE COSTS TO PRODUCE FRESH MARKET TORATOES
FRESNO COUNTY
1980 COSTS

BUDGET RECORD NUMBER 254
BY DON MAY,
FARM ADVISOR

OPERATION	ITEM NO.	DATE	TIMES OVER	LABOR HOURS	MACHINE HOURS	FUEL, OIL, LUB., REP. PER ACRE	FIXED COSTS PER ACRE
DISC OFFSET HDTY	8,	63 NOV	1.00	0.180	0.149	3.94	4.17
SUBSOILER	11,	46 NOV	1.00	0.605	0.500	6.74	8.42
PICKUP 1/2 T		14 NOV	1.00	0.022	0.018	0.12	0.04
4 WH PLANE 12X45	11,	85 DEC	2.00	0.587	0.485	5.56	8.63
PICKUP 1/2 T		14 DEC	1.00	0.022	0.018	0.12	0.04
LISTER 6 ROW	5,	83 FEB	1.00	0.209	0.173	1.78	1.27
LIQ FERT APPLIC.	2,	70 FEB	1.00	0.378	0.313	2.27	1.68
PICKUP 1/2 T		14 FEB	1.00	0.022	0.018	0.12	0.04
TRAILER FLATBED	2,	149 MAR	1.00	0.049	0.041	0.22	0.20
PICKUP 1/2 T		14 MAR	1.00	0.022	0.018	0.12	0.04
4 R TRANSPLANTER	5,	119 MAR	1.00	0.739	0.611	5.56	5.70
LIQ FERT APPLIC.	2,	70 APR	1.00	0.378	0.313	2.27	1.68
CULTIVATOR 4 ROW	5,	52 APR	2.00	0.748	0.618	6.42	4.68
PICKUP 1/2 T		14 APR	1.00	0.022	0.018	0.12	0.04
CULTIVATOR 4 ROW	5,	52 MAY	1.00	0.374	0.309	3.21	2.34
PICKUP 1/2 T		14 MAY	1.00	0.022	0.018	0.12	0.04
PICKUP 1/2 T		14 JUNE	1.00	0.022	0.018	0.12	0.04
PICKUP 1/2 T		14 JULY	1.00	0.022	0.018	0.12	0.04
FORKLIFT*		20 AUG	10.00	1.846	1.538	3.09	6.66
TRUCK 2 TON		13 AUG	8.00	0.213	0.178	2.12	0.63
PICKUP 1/2 T		14 AUG	1.00	0.022	0.018	0.12	0.04

TOTALS
 100 ACRES OF TORATOES
 FURROW IRRIGATED -- DISTRICT WATER INCLUDED IN RENTAL FEE
 TENANT - LANDOWNER BASIS

6.503 5.390 44.28 46.42

EARLY SUMMER HARVEST VINES NOT STAKED

STORED DATA PAGE (NO CALCULATIONS) FOR TOMATOES, FRESH

BUDGET RECORD NUMBER 254

SAMPLE COSTS TO PRODUCE FRESH MARKET TOMATOES
FRESNO COUNTY
1980 COSTS

BY DON MAY,
FARM ADVISOR

COSTS AND RETURNS WILL BE
DIVIDED BY 536.0 CTNS
TO OBTAIN PER CTNS COSTS

LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PRICE	SHARE	UNIT	ITEM	TYPE	XXXX
PRODUCTION																		
NUMBER OF UNITS																		
1 TOMATOES, FRESH	0.00	0.00	0.00	0.00	0.00	27.00	477.00	32.00	0.00	0.00	0.00	0.00	4.450	0.000	28.	96.	2.	0.
2 CANNING TOMATOES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	47.000	0.000	3.	97.	2.	0.
OPERATING INPUTS																		
RATE/UNIT																		
PRICE																		
SHARE																		
UNIT																		
ITEM																		
TYPE																		
HARV																		
CODE																		
CODE																		
6 PLANT SETS	0.00	0.00	*****	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.020	0.000	23.	161.	3.	0.
7 N - P - K	0.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.110	0.000	12.	213.	3.	0.
8 HAND HOEING	0.00	0.00	0.00	3.75	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.500	0.000	8.	335.	3.	0.
9 PESTICIDE APP	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	4.130	0.000	7.	357.	3.	0.
10 FROST PROTECTION	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.000	0.000	7.	419.	3.	0.
13 HAND HARVEST	0.00	0.00	0.00	0.00	0.00	8.00	142.00	10.00	0.00	0.00	0.00	0.00	4.500	0.000	8.	347.	3.	9.
14 PACKING	0.00	0.00	0.00	0.00	0.00	27.00	477.00	32.00	0.00	0.00	0.00	0.00	2.550	0.000	28.	345.	3.	9.

MACHINERY REQUIREMENTS	IMPLEMENTS =	TIMES OVER,	TRUCKS = #	MILES/ACRE,	TRACTORS =	HRS/ACRE	# CREW	POWER	MACH	TYPE	HARV
							LABOR	UNIT	CODE		CODE
26 DISC OFFSET HDTY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
27 SUBSOILER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
28 4 WH PLANE 12X45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
29 LISTER 6 ROW	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30 TRAILER FLATBED	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31 LIQ FERT APPLIC.	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32 CULTIVATOR 4 ROW	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
33 FORKLIFT*	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00
34 TRUCK 2 TON	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
35 TRUCKUP 1/2-T	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
36 R TRANSPLANTER	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHARE											
FIXED %											
SHARE											
POWER											
SYSR											
LIFT											
49 ACIN IRRIG WATER	0.00	0.00	5.50	5.50	8.30	8.30	8.30	0.00	0.00	0.00	0.00
50 NO. TIMES IRRIG	0.00	0.00	2.00	2.00	3.00	3.00	3.00	0.00	0.00	0.00	0.00

EQUIPMENT REQUIREMENTS	NUMBER	PROPORT	XXX	EQUIP	TYPE	XXXX
	UNITS	OF COST		CODE		
NONE STORED WITH BUDGET						
COLUMNS --->	2	3	4	5	6	7
LAND REQUIREMENTS	CHARGE		NUMBER	VALUE OR	TAXES	PERENNIAL CROPS
	METHOD		OF ACRES	COST/ACRE	PER ACRE	YRS LIFE COST/ACRE
71	2.		100.00	175.00	0.00	0.0
ENTERPRISE 2-96 REGION/COUNTY 10 UNASSIGNED 0000 MACH COMP 3 IRIG SYST 6 UNASSIGNED 2 EQUIP SET 1 HARVEST MONTH 8						

100 ACRES OF TOMATOES EARLY SUMMER HARVEST VINES NOT STAKED
FURROW IRRIGATED -- DISTRICT WATER INCLUDED IN RENTAL FEE
TENANT - LANDOWNER BASIS

MACHINERY COMPLEMENT 3
EQUIPMENT COMPLEMENT 1

LINE CHANGE	LINE CHANGE	LINE CHANGE	LINE CHANGE	LINE CHANGE
GENERAL NAME CHANGE->419	FROST PROTECTION			
PARAMETER CHGS-->11.	4.500000 12.	4.500000 10.	5.500000 28.	0.080000

1980 default data

13. Buildings and Equipment:

Farm Shop	3000 sq.ft.	\$42,120
Tools and shop equipment		12,284
Fuel tank	550 gal.	468

40% of above costs allocated to watermelon

No packing shed - melons usually handled in the open.

14. Labor rates include benefits:

Tractor	\$5.25/hr
Crew	4.50/hr
Irrigators	5.25/hr

15. Bookkeeping and misc. office: 1.5% of total variable costs

16. Land owned:

Land value	\$4500/acre	Land tax	\$23/acre
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17. Machinery costs calculated by computer:

For implements, the width, speed, field efficiency and number of passes through the field are all used in determining the number of hours necessary to complete an operation. Tractor hours are then calculated by taking into consideration all implements pulled.

Per hour cost of depreciation, interest, taxes, insurance, repairs, fuel and lube are calculated by the computer using purchase price, annual hours of usage, years of life, etc. and this rate is multiplied by the total hours of usage for each machine.