

REFERENCES

- A Guide to the Project Management Body of Knowledge. Upper Darby, PA: Project Management Institute, 1996.
- Angus, R. B., and Gundersen, N. A. Planning, Performing, and Controlling Projects: Principles and Applications. International ed. Upper Saddle River, NJ: Prentice-Hall, 1997.
- Burke, R. Project Management: Planning and Control. 2nd ed. Chichester: John Wiley and Sons, 1979.
- Dieter, G. E. Engineering Design: A Materials and Processing Approach. 2nd ed. Singapore: McGraw-Hill, 1991.
- Dilworth, J. B. Production and Operations Management: Manufacturing and Services. 5th ed. Singapore: McGraw-Hill, 1993.
- Donnelly, J. H., Jr., and others. Fundamentals of Management. 5th ed. Plano, TX: Business Publications, 1984.
- Gaither, N. Production and Operations Management. 7th ed. New York: Duxbury Press, 1996.
- Lock, D. Project Management. 5th ed. Hants: Gower Publishing, 1992.
- Meredith, J. R., and Mantel, S. J., Jr. Project Management: A Managerial Approach. 3rd ed. New York: John Wiley and Sons, 1995.
- Morse, W. J., and Roth, H. P. Cost Accounting: Processing, Evaluating, and Using Cost Data. 3rd ed. Reading, MA: Addison-Wesley, 1986.

REFERENCES (Continued)

- Polimeni, R. S., and others. Cost Accounting: Concepts and Applications for Managerial Decision Making. 3rd ed. Singapore: McGraw-Hill, 1991.
- Project Planning Management and Control. University of Warwick, 1997.
- Seder, L. A., Job Shop Industries. In Juran, J. M. (ed.), Quality Control Handbook, 4th ed., pp. 32.1 - 32.31. New York: McGraw-Hill, 1988.
- Spinner, P. M. Project Management: Principles and Practices. Upper River Saddle, NJ: Prentice-Hall, 1997.

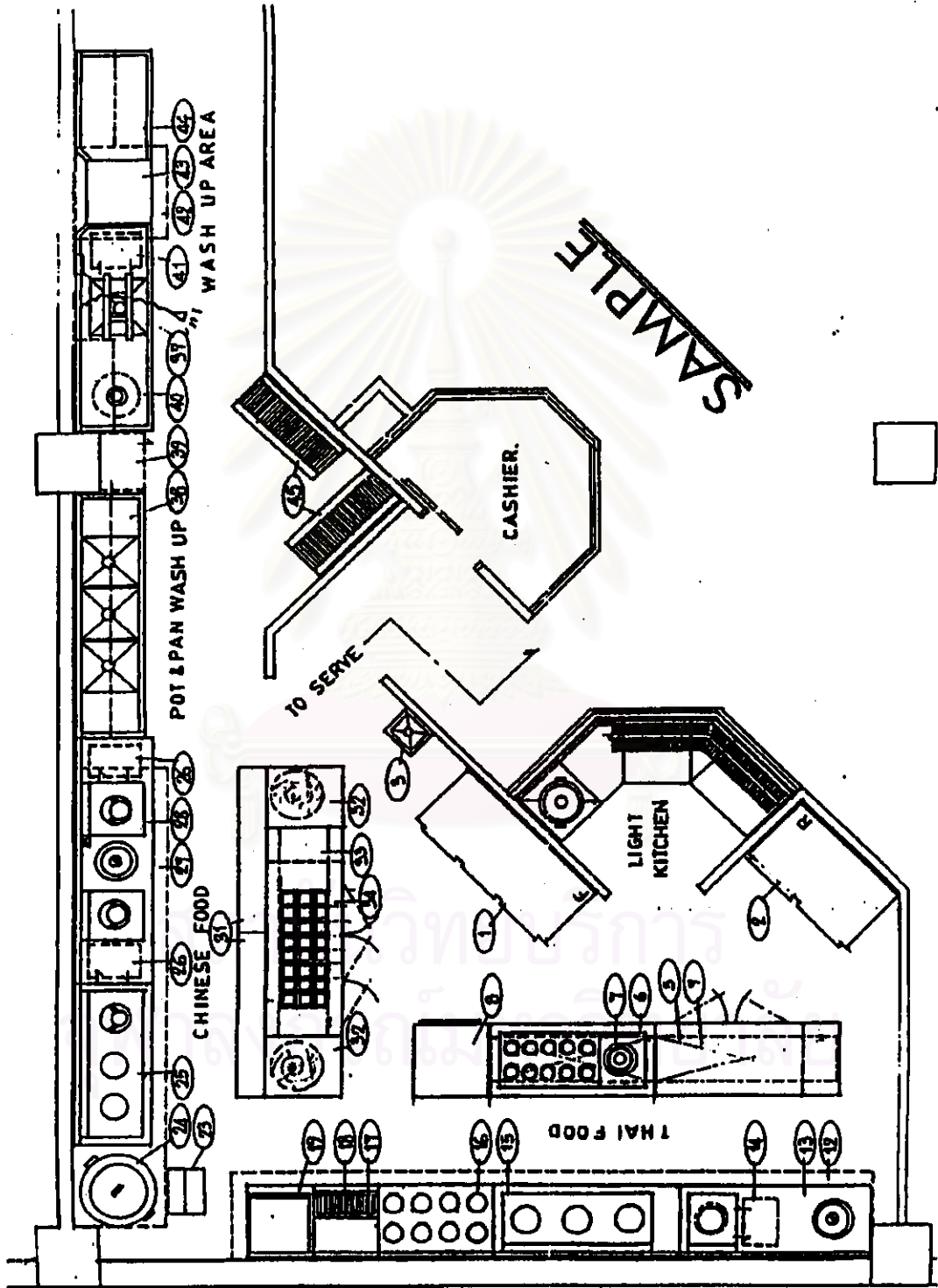
สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย



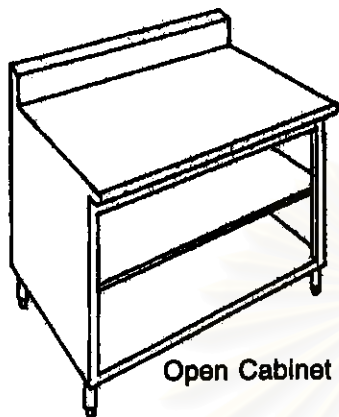
APPENDICES

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

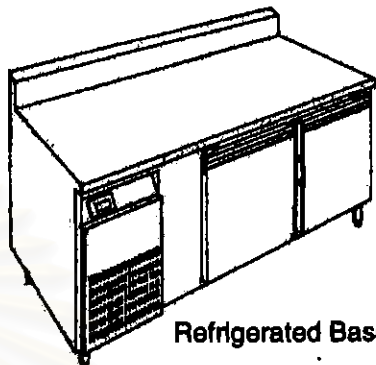
APPENDIX A: A Sample Kitchen Layout



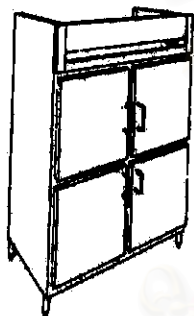
APPENDIX B: Samples of the Locally Fabricated Equipment



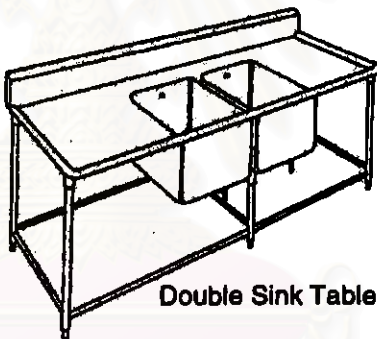
Open Cabinet



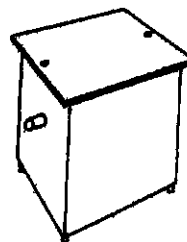
Refrigerated Base



4-Door Reach-in Refrigerator



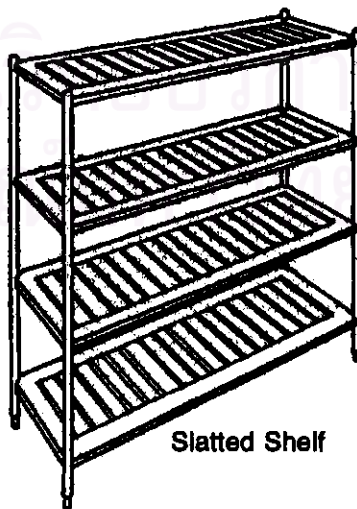
Double Sink Table



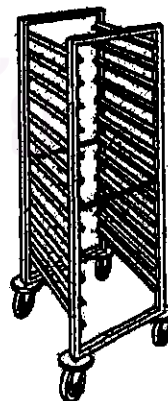
Grease Trap



2-Burner High Pressure Range

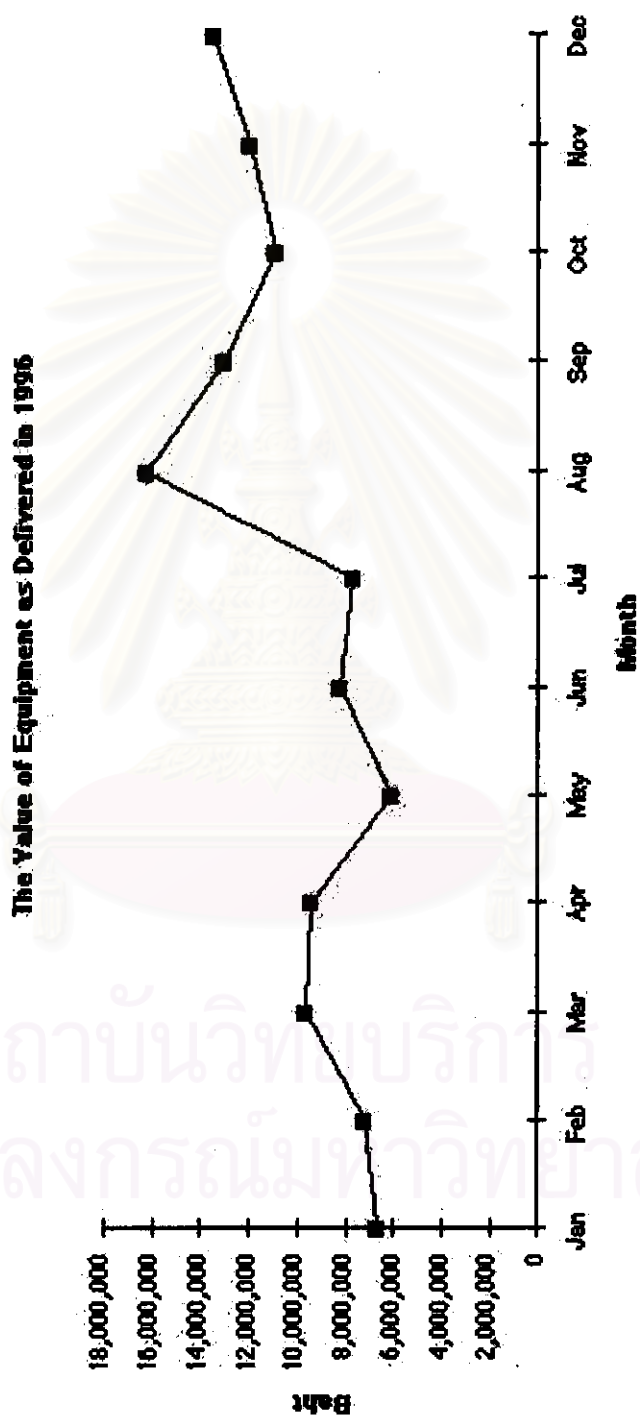


Slatted Shelf



G/N Trolley

APPENDIX E: The Value of Equipment as Delivered in 1996.



APPENDIX F: Cost Variances of the New Bangkok Hotel Project

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated	Install (est.)	Total Estimated	DM (Actual)	DL (Actual)	Total Actual
1	Upright Refrigerator Gn. Type	1	30,955	5,434	36,389	180	36,569	17,494	4,249	21,743
2.1	Ice Bin Cabinet	1	5,518	3,378	8,896	180	9,076	2,659	1,785	4,444
3	Work Table	1	3,875	1,217	5,092	0	5,092	2,233	665	2,898
6	Work Table	1	4,333	1,276	5,609	0	5,609	2,247	840	3,087
7	Double Wall Shelf	1	1,781	754	2,535	150	2,685	790	242	1,032
8	Service Cabinet	1	4,107	2,273	6,380	0	6,380	2,862	2,541	5,403
9	Refrigerated Base w/Drawers	1	25,665	5,859	31,524	60	31,584	16,017	6,006	22,023
10	Filler Top	1	1,536	772	2,308	204	2,512	531	441	972
12	Work Table w/Plastic Bin	1	7,620	1,697	9,317	0	9,317	2,495	1,217	3,712
15R	Deep Freeze Base	1	23,110	6,202	29,312	80	29,372	16,595	4,195	20,790
16	Double Sink Table	1	15,024	4,681	19,705	480	20,185	5,193	2,058	7,251
17	Sandwich Unit	1	32,508	6,202	38,710	60	38,770	20,932	5,215	26,147
19	Filler Top	1	1,536	772	2,308	204	2,512	553	441	994
20	Single Wall Shelf	1	2,641	1,590	4,231	186	4,417	1,225	294	1,519
21R	Work Table	1	2,958	1,098	4,056	0	4,056	1,308	623	1,931
23R	Ice Cream Deep Freezer	1	17,114	6,446	23,560	60	23,620	9,235	4,179	13,414
26	Single Wall Shelf	1	1,076	982	2,058	78	2,136	395	158	552
27	Work Table	1	4,333	1,276	5,609	0	5,609	2,733	938	3,672
28	Gn. Trolley	1	5,982	1,228	7,210	0	7,210	3,435	1,144	4,580
29	Hand Sink	1	3,435	1,789	5,224	240	5,464	821	1,460	2,281
30	Upright Freezer Gn.Type	1	41,944	5,289	47,233	60	47,293	23,587	3,243	26,830
31	Fish Sink	1	14,534	3,699	18,233	240	18,473	4,214	2,583	6,797
32	Work Table w/Plastic Bin	1	7,179	1,632	8,811	0	8,811	2,318	1,070	3,388
33	Single Wall Shelf	1	1,076	982	2,058	78	2,136	395	158	552
34	Upright Refrigerator Gn.Type	1	30,955	5,434	36,389	180	36,569	15,882	3,516	19,398
36	Work Table w/Plastic Bin	1	8,692	1,829	10,521	0	10,521	3,108	1,573	4,681
37	Fish Sink	1	14,534	3,699	18,233	240	18,473	4,040	2,432	6,472

APPENDIX F: Cost Variances of the New Bangkok Hotel Project (Cont.)

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated	Install (est.)	Total Estimated	DM (Actual)	DL (Actual)	Total Actual
38	Double Sink Table	1	15,024	4,681	19,705	480	20,185	5,229	2,562	7,791
39	Work Table w/Plastic Bin	1	7,914	1,741	9,655	0	9,655	2,864	938	3,802
51	Double Shell Hood	1	17,144	3,844	20,988	888	21,876	7,144	2,674	9,818
52	Double High Shelf	1	4,819	1,457	6,276	228	6,504	1,763	1,302	3,065
54	Bain Marie Cabinet	1	16,616	5,814	22,430	300	22,730	11,677	3,094	14,771
55	Double High Shelf	1	3,469	942	4,411	150	4,561	1,130	805	1,935
57	Warming Cabinet	1	12,200	3,205	15,405	180	15,585	7,039	3,234	10,273
58	Serving Cabinet	1	3,138	1,916	5,054	0	5,054	2,033	924	2,957
59	Filler Top	1	2,615	1,489	4,104	0	4,104	1,962	3,064	5,025
60	Serving Cabinet	1	3,905	2,326	6,231	0	6,231	2,808	2,625	5,233
61	Serving Cabinet	1	5,015	2,336	7,351	0	7,351	3,172	1,309	4,482
62	Refrigerated Base w/Drawer	1	24,814	5,850	30,664	60	30,724	15,748	5,101	20,849
63	SS. Support (for salamander)	1	2,047	763	2,810	12	2,822	1,059	872	1,931
64	Sink Table	1	7,935	3,070	11,005	240	11,245	3,047	1,428	4,475
65	Refrigerated Base w/Drawer	1	24,814	5,850	30,664	60	30,724	13,656	5,535	19,191
68	GN. Trolley	1	5,982	1,228	7,210	0	7,210	3,360	1,144	4,505
69	Double Shell Hood	2	5,391	2,246	7,637	84	7,721	14,714	3,948	18,662
70	Equipment Stand	1	3,341	1,542	4,883	0	4,883	1,893	1,610	3,503
73	2-Low Pressure Range	1	6,606	2,645	9,251	180	9,431	3,553	1,796	5,349
74	1-Stock Pot Stove	1	4,520	2,327	6,847	180	7,027	2,645	1,761	4,406
75	3-Chinese Range	1	13,271	4,106	17,377	180	17,557	7,281	3,440	10,721
76	Soup Range	1	10,942	3,342	14,284	540	14,824	6,647	3,608	10,255
79	Slatted Shelf	1	5,338	1,853	7,191	0	7,191	2,342	247	2,589
80	GN. Trolley	4	5,982	1,228	7,210	0	7,210	13,151	4,786	17,939
81	Slatted Shelf	1	4,697	1,607	6,304	0	6,304	2,342	247	2,589
82	Slatted Shelf	1	5,338	1,853	7,191	0	7,191	2,342	247	2,589
83	Slatted Shelf	2	5,364	1,995	7,359	0	7,359	4,673	1,953	6,626

APPENDIX F: Cost Variances of the New Bangkok Hotel Project (Cont.)

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated	Install (est.)	Total Estimated	DM (Actual)	DL (Actual)	Total Actual
84	Slatted Shelf	2	6,944	2,343	9,287	0	9,287	6,190	2,667	8,857
87	Slatted Shelf	1	4,697	1,607	6,304	0	6,304	2,342	247	2,589
91	Hand Sink	1	3,435	1,789	5,224	240	5,464	817	1,149	1,966
92	Mobile Table	1	4,308	1,271	5,579	0	5,579	2,521	860	3,381
93	Double Sink Table w/Pot Rail	1	18,160	5,404	23,564	684	24,248	6,476	2,415	8,891
94	Mobile Table	1	4,057	1,231	5,288	0	5,288	2,556	801	3,357
95	Clean Dish Table w/Rack Shelf	1	4,122	1,483	5,605	54	5,659	2,229	1,050	3,279
97	Ventilator	1	2,220	1,238	3,458	300	3,758	1,205	630	1,835
98	Soiled Dish Table w/Poly Bin	1	31,378	5,893	37,271	390	37,661	9,813	5,418	15,231
104	Guest Laundry Cart	1	4,312	2,467	6,779	0	6,779	2,349	861	3,210
CS-01	Mobile Ice Bin	1	5,704	2,424	8,128	0	8,128	3,620	2,781	6,401
CS-08	Mobile Slatted Shelf	1	6,552	1,853	8,405	0	8,405	3,683	859	4,542
CS-09	Hand Sink	1	3,435	1,789	5,224	240	5,464	817	1,275	2,092
CS-11	Shelf for Service Warming Box	2	8,179	3,210	11,389	300	11,689	8,825	3,412	12,238
CS-12	Hinge Door Cabinet	1	4,789	1,746	6,535	0	6,535	3,885	1,512	5,397
CS-13	Wall Cabinet	1	3,908	1,828	5,736	150	5,886	2,320	1,764	4,084
CS-16	Plain Shelf	1	4,277	1,103	5,380	0	5,380	3,541	136	3,678
CS-16	Hand Sink	1	3,435	1,789	5,224	240	5,464	806	1,254	2,060
CS-19	Slatted Shelf	1	4,697	1,607	6,304	0	6,304	2,342	252	2,594
CS-20	Slatted Shelf	4	5,338	1,853	7,191	0	7,191	11,754	3,091	14,845
CS-21	Slatted Shelf	1	6,944	2,343	9,287	0	9,287	3,105	934	4,039
CS-25	Slatted Shelf	5	4,697	1,607	6,304	0	6,304	11,709	1,575	13,284
CS-26	Slatted Shelf	4	4,115	1,557	5,672	0	5,672	7,405	1,428	8,633
CS-27	Slatted Shelf	5	6,944	2,343	9,287	0	9,287	15,563	3,906	19,469
CS-30	Slatted Shelf	2	5,338	1,853	7,191	0	7,191	4,677	756	5,433
CS-36	Plain Shelf	2	3,890	1,039	4,929	0	4,929	3,421	1,034	4,455
CS-37	Slatted Shelf	3	5,338	1,853	7,191	0	7,191	8,004.82	651	8,655.62

APPENDIX F: Cost Variances of the New Bangkok Hotel Project (Cont.)

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated	Instal (est.)	Total Estimated	DM (Actual)	DL (Actual)	Total Actual
DB-01	Refrigerated Base	1	33,632	7,349	40,981	60	41,041	15,115.25	6,674.74	21,789.99
DB-02	Hinge Door Cabinet	1	4,554	1,829	6,383	0	6,383	3,147.74	1,418.74	4,566.48
DB-04	Sink Cabinet	1	13,138	3,965	17,103	180	17,283	4,727.93	4,539	9,266.93
DB-05	Refrigerated Base	1	21,646	6,457	28,103	300	28,403	10,317.31	3,575	13,892.31
DB-06	Cocktail Unit	1	6,853	3,944	10,797	180	10,977	4,073.4	1,971	6,044.4
DB-10	4-Tier Plain Shelf	2	4,857	1,199	6,056	0	6,056	8,534.74	237.72	8,772.46
BF-04	Hot Food Well	1	12,124	3,417	15,541	300	15,841	8,958.15	2,757	11,715.15
BF-08	Ice Cream Unit w/3-Containers	1	11,094	3,688	14,782	60	14,842	7,888.99	2,776	10,664.99
BF-09	Ice Cream Scoop Cleaner	1	671.41	360	1,031.41	0	1,031.41	531.87	1,029	1,560.87
BF-10	Refrigerated Plate	1	9,336	4,344	13,680	60	13,740	6,615.16	466.5	7,081.66
BF-11	Refrigerated Well	1	15,871	4,975	20,846	0	20,846	9,417.95	3,630	13,047.95
BF-16	Equipment Stand	1	4,577	2,210	6,787	0	6,787	3,166.25	2,732.5	5,898.75
BF-17	Exhaust Canopy	1	7,099	1,909	9,008	318	9,326	3,420.22	1,510	4,930.22
BQ-70	Soiled Dish Table w/Pre-Rinse	1	42,594	10,059	52,653	855	53,508	11,850.43	7,203	19,053.43
BQ-71	Ventilator	1	2,220	1,238	3,458	300	3,758	2,976.66	924	3,900.66
BQ-73	Clean Dish Table w/Rack Shelf	1	4,122	1,483	5,605	54	5,659	2,346.28	1,323	3,669.28
BQ-74	Mobile Table	1	4,685	1,330	6,015	0	6,015	2,880	1,113	3,993
BQ-75	2-Compartment Sink Table w/	1	17,772	5,120	22,892	636	23,528	4,040.49	6,216	10,256.49
BQ-76	4-Tier Slatted Shelf	2	5,338	1,853	7,191	0	7,191	5,854.22	1,377.6	7,231.82
BQ-80	Wine Refrigerator	1	27,904	4,539	32,443	180	32,623	22,329.02	4,021.5	26,350.52
BQ-81	Hinge Door Cabinet	1	6,462	1,973	8,435	0	8,435	3,612.05	2,478	6,090.05
BQ-82	SS. Filler	1	1,685	824	2,509	228	2,737	946.45	777	1,723.45
BQ-83	3-Tier Wall Shelf	1	5,792	3,021	8,813	282	9,095	2,958.08	357	3,315.08
BQ-84	Sink Cabinet	1	10,813	3,824	14,637	180	14,817	4,138.2	3,633	7,771.2
BQ-85	SS. Filler	1	1,774	850	2,624	234	2,858	1,423.08	1,470	2,893.08
BQ-86	Refrigerated Base w/Drawer	1	25,360	5,850	31,210	60	31,270	14,923.04	5,125.26	20,048.3
BQ-87	SS. Filler	1	1,420	747	2,167	210	2,377	234.03	920.64	1,154.67

APPENDIX F: Cost Variances of the New Bangkok Hotel Project (Cont.)

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated	Install (est.)	Total Estimated	DM (Actual)	DL (Actual)	Total Actual
BQ-88	Ice Bin Cabinet	1	5,420	3,378	8,798	180	8,978	5,259.18	4,216.86	9,476.04
BQ-89	3-Tier Wall Shelf	1	1,855	839	2,694	228	2,922	676.31	420	1,096.31
BQ-93	2-Door Upright Refrigerator	1	21,012	5,431	26,443	180	26,623	18,385.77	3,220.5	21,606.27
BQ-94	Hinge Door Cabinet	2	6,651	2,138	8,789	0	8,789	17,699.9	4,116	21,815.9
BQ-95	Mobile Ice Bin	1	3,935	1,964	5,899	0	5,899	3,645.62	1,995	5,640.62
BQ-98	Work Table	1	5,602	1,948	7,550	0	7,550	3,643.51	1,480.5	5,124.01
BQ-101	4-Tier Plain Shelf	3	4,857	1,199	6,056	0	6,056	12,719.55	598.5	13,318.05
01R	Hinge Door Cabinet	1	4,294	1,802	6,096	0	6,096	2,791.62	964	3,755.62
2.2	Refrigerated Base w/Drawer	1	29,316	6,615	35,931	60	35,991	17,176.74	7,293.86	24,470.6
3.1	Hinge Door Cabinet w/Filler	1	4,843	2,477	7,320	204	7,524	2,631.43	2,038.78	4,670.21
5	Double Sink Cabinet	1	13,254	4,610	17,864	180	18,044	6,377.31	2,614	9,191.31
8	Cocktail Unit w/Filler	1	6,785	3,999	10,784	180	10,964	4,675.79	2,667	7,342.79
10.1	Hinge Door Cabinet	1	4,780	1,839	6,619	0	6,619	3,267.1	1,226.5	4,493.8
LP-01	Hinge Door Cabinet	1	3,548	1,759	5,307	0	5,307	2,031.09	928.5	2,959.59
LP-02	Refrigerated Base w/Drawer	1	30,728	6,615	37,343	60	37,403	18,063.99	7,164.86	25,228.85
LP-06	Cabinet for Cup Basket	1	2,935	1,722	4,657	0	4,657	1,529.8	1,491	3,020.8
LP-08	Sink Cabinet	1	9,379	3,693	13,072	180	13,252	3,328.75	2,331	5,659.75
LP-11R	Hinge Door Cabinet	1	2,679	1,353	4,032	0	4,032	4,299.86	2,526	6,825.86
LP-12	Ice Bin Cabinet	1	5,420	3,378	8,798	180	8,978	2,346.61	1,592	3,938.61
LP-14	Wall Cabinet	1	2,575	1,535	4,110	102	4,212	1,231.34	735	1,968.34
LP-15	Mobile Table	1	4,308	1,271	5,579	0	5,579	2,539.61	541.64	3,081.25
SK-01L	Plain Shelf	1	4,277	1,103	5,380	0	5,380	3,541.2	136.5	3,677.7
SK-01L2	Plain Shelf	1	4,857	1,199	6,056	0	6,056	4,239.85	199.5	4,439.35
SK-02	Sink Table	1	8,893	2,838	11,731	240	11,971	2,384.15	1,617	4,001.15
SK-03R	High Shelf	1	2,877	1,381	4,258	226	4,486	1,487.59	1,113	2,800.59
SK-04R	Hinge Door Cabinet	1	8,811	2,438	11,249	0	11,249	5,051.6	2,163	7,214.6
SK-05R	2-Door Upright Freezer	1	27,789	4,428	32,217	60	32,277	26,011.89	3,005.64	29,017.53

APPENDIX F: Cost Variances of the New Bangkok Hotel Project (Cont.)

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated	Install (est.)	Total Estimated (Actual)	DM (Actual)	DL (Actual)	Total Actual
SK-06R	Single Wall Shelf	1	1,961	1,090	3,051	150	3,201	799	188	988
SK-07	Double Sink Table	1	12,889	4,681	17,570	480	18,050	5,138	2,572	7,710
SK-08R	4-Door Upright Refrigerator	1	32,280	8,699	40,979	300	41,279	27,557	3,570	31,127
SK-10R	Work Table	1	3,875	1,217	5,092	0	5,092	1,870	885	2,755
SK-11R	1-Stock Pot Stove	1	6,316	2,631	8,947	180	9,127	3,847	1,782	5,630
SK-12R	Exhaust Hood	1	13,878	3,570	17,448	720	18,168	3,799	1,406	5,205
SK-13R	3-Chinese Range	1	14,290	4,211	18,501	180	18,681	8,153	3,893	12,046
SK-16R	Open Cabinet w/Stock Pot	1	8,625	3,730	12,355	180	12,535	4,071	2,546	6,617
SK-18	4-Food Warmer	1	17,970	5,887	23,857	480	24,337	8,819	3,171	11,990
SK-19R	Open Cabinet	1	4,789	1,746	6,535	0	6,535	3,173	1,260	4,433
SK-20R	Beverage Stand	1	5,211	2,073	7,284	300	7,584	3,187	1,785	4,972
SK-23R	Tray Slide	1	5,035	1,322	6,357	228	6,585	1,428	312	1,740
SK-24	Cutlery Stand	1	3,507	1,976	5,483	0	5,483	2,073	1,428	3,501
SK-25R	Traffic Rail	1	6,239	3,131	9,370	780	10,150	2,258	1,463	3,721
SK-30R	Soiled Dish Table w/Plastic	1	29,637	7,969	37,606	705	38,311	9,804	5,059	14,863
SK-33R	Slatted Wall Shelf	1	1,456	736	2,192	96	2,288	658	609	1,267
SK-34	Slatted Shelf (1.2m x 4 tiers)	1	4,697	1,607	6,304	0	6,304	1,900	1,045	2,945
	Sub Total for Local made equipment		1,421,203	422,854	1,844,057	21,018	1,865,075	872,354	318,067	1,190,421
						variance w/o installation	548,849	104,787	674,654	
						% variance	38.62	24.78	35.45	
IMPORTED EQUIPMENT										
11R!	Bowl Cutter	1	40,000	0	40,000	0	40,000	33,316	0	33,316
13	Pop Up Toaster	1	4,100	0	4,100	0	4,100	3,930	0	3,930
14R!	Bread Slicer	1	20,000	0	20,000	0	20,000	19,305	0	19,305

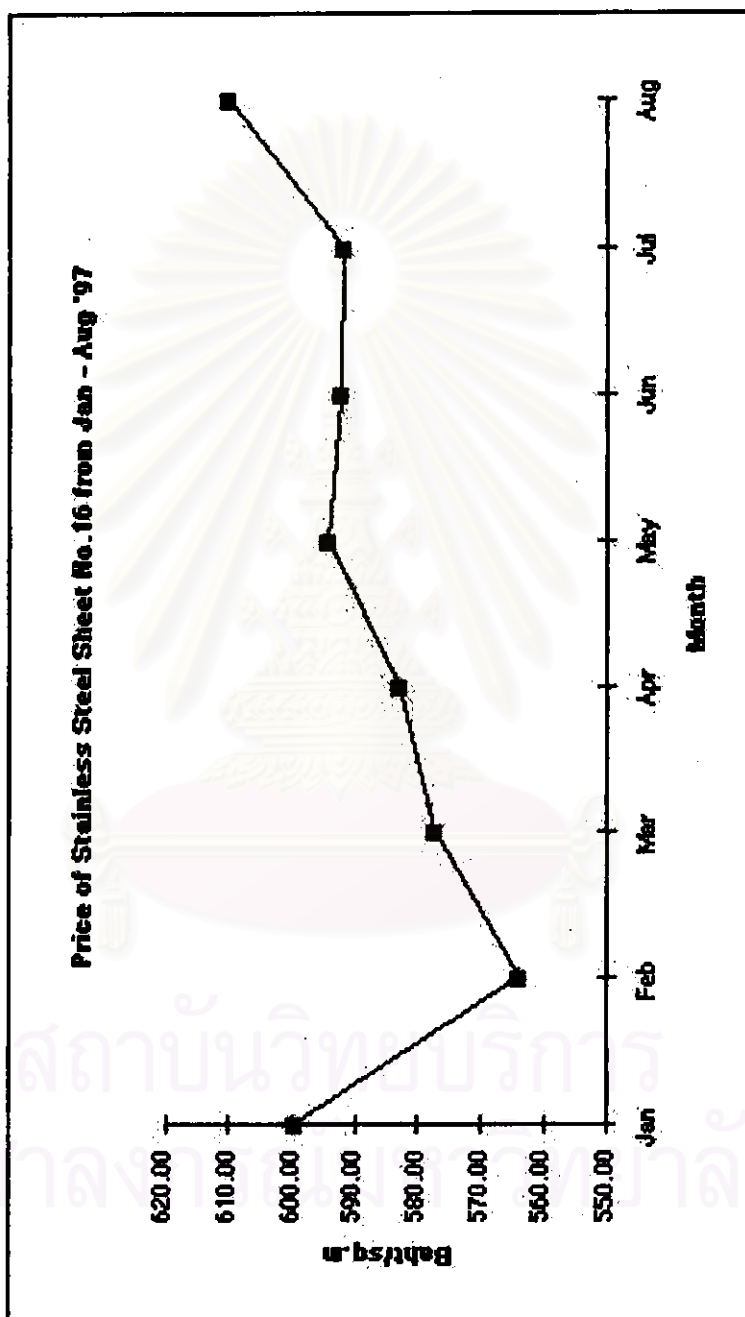
APPENDIX F: Cost Variances of the New Bangkok Hotel Project (Cont.)

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated (est.)	Install (est.)	Total Estimated	DM (Actual)	DL (Actual)	Total Actual
18	Small Mixer	1	20,000	0	20,000	0	20,000	10,120	0	10,120
22	Juice Extractor	1	16,000	0	16,000	0	16,000	13,607	0	13,607
24A	Slicer	1	10,000	0	10,000	0	10,000	8,786	0	8,786
35	Food Cutter	1	67,155	0	67,155	0	67,155	70,418	0	70,418
40	Mixer	1	70,400	0	70,400	0	70,400	70,400	0	70,400
44	Neutral Unit	1	19,000	0	19,000	0	19,000	15,366	0	15,366
45	Deep Fat Fryer	1	47,200	0	47,200	1,200	48,400	33,297	0	33,297
46	Griddle	1	36,200	0	36,200	1,200	37,400	23,851	0	23,851
47	Griller	1	39,500	0	39,500	1,200	40,700	32,891	0	32,891
48	Neutral Unit	1	25,400	0	25,400	0	25,400	20,492	0	20,492
49	Salamander	1	26,400	0	26,400	1,200	27,600	20,492	0	20,492
50	6-Burner W/Oven	1	71,200	0	71,200	1,200	72,400	60,422	0	60,422
53	Infrared Warmer	1	3,710	0	3,710	0	3,710	2,169	0	2,169
56	Infrared Warmer	1	3,710	0	3,710	0	3,710	2,169	0	2,169
71R	Combi. Oven	1	181,600	0	181,600	2,500	184,100	141,804	0	141,804
72	2-Deck Rice Cooker	1	71,500	0	71,500	2,500	74,000	58,916	0	58,916
85	Walk-In Chiller W/System	1	195,000	0	195,000	0	195,000	148,930	0	148,930
86	Walk-In Freezer W/System	1	215,000	0	215,000	0	215,000	148,930	0	148,930
96	Dish Washer	1	128,500	0	128,500	1,500	130,000	105,030	0	105,030
CS-2	Ice Cuber W/Bin	1	128,350	0	128,350	1,500	129,850	101,813	0	101,813
CS-3	Water Filter	1	9,200	0	9,200	0	9,200	6,767	0	6,767
CS-17	Floor Scale	1	19,800	0	19,800	0	19,800	18,000	0	18,000
CS-24	Fresh Meat Cold Room	1	225,000	0	225,000	0	225,000	148,930	0	148,930
CS-29	Fresh Fish Cold Room	1	199,000	0	199,000	0	199,000	148,930	0	148,930
CS-31	Dairy Product Cold Room	1	221,000	0	221,000	0	221,000	148,930	0	148,930

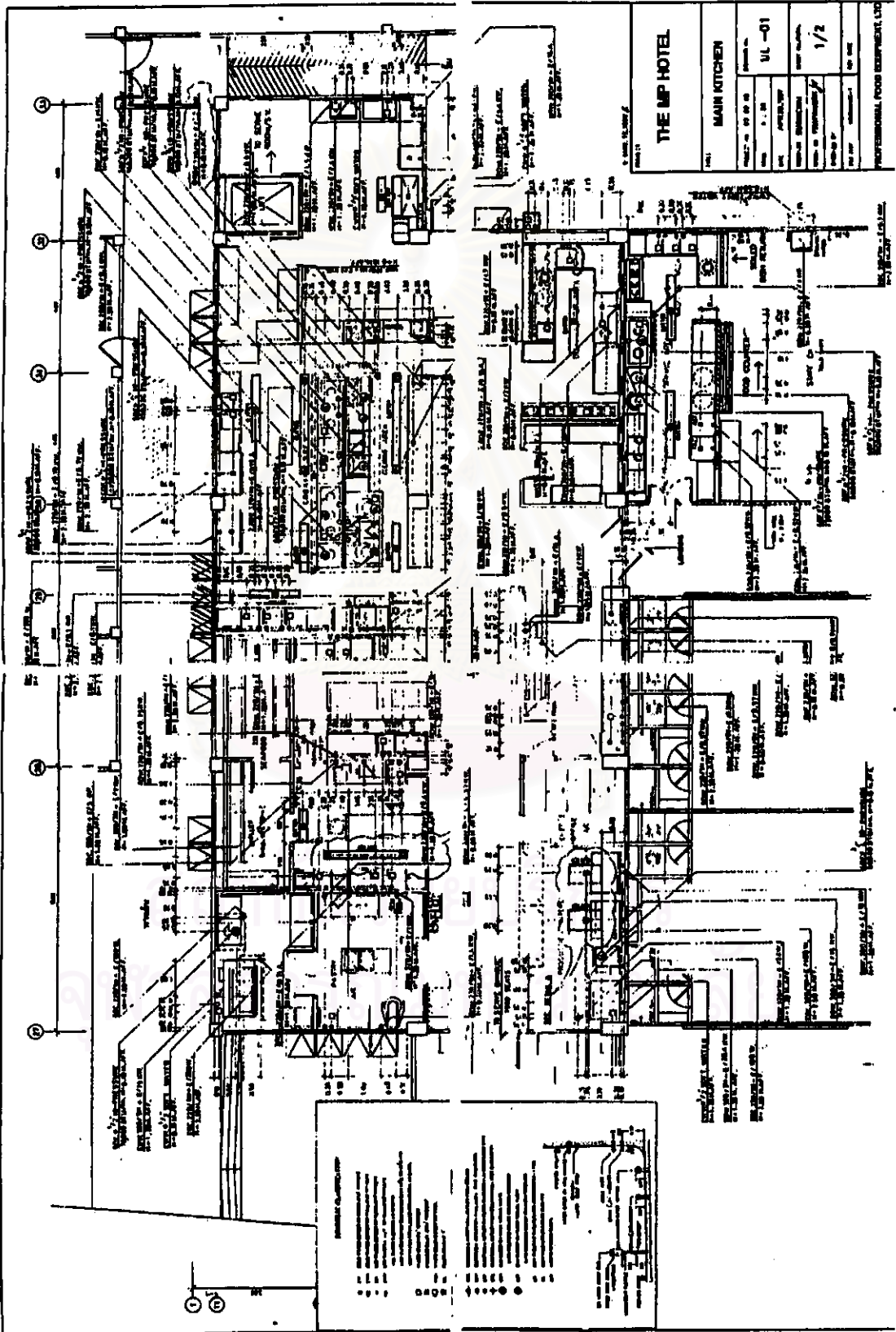
APPENDIX F: Cost Variances of the New Bangkok Hotel Project (Cont.)

Item No.	DESCRIPTION	QTY	DM (est.)	DL (est.)	Total Estimated	Install (est.)	Total Estimated	DM (Actual)	DL (Actual)	Total Actual
CS-32	Deep Freezer	1	220,000	0	220,000	0	220,000	280,761	0	280,761
DB-7	Bar Blender	1	4,100	0	4,100	0	4,100	3,488	0	3,488
BF-1	Carvery Unit	1	40,000	0	40,000	0	40,000	40,000	0	40,000
BF-2	Heated Plate Dispenser	1	13,000	0	13,000	0	13,000	11,264	0	11,264
BF-3	Unheated Plate Dispenser	1	8,500	0	8,500	0	8,500	7,189	0	7,189
BF-5	1/1 Gn. Chafing Dish W/Roll	1	39,650	0	39,650	0	39,650	38,044	0	38,044
BF-7	Soup Station	1	22,100	0	22,100	0	22,100	22,324	0	22,324
BF-14	Ribbed Griddle	1	16,000	0	16,000	0	16,000	24,575	0	24,575
BF-15	Boiling Unit	1	24,000	0	24,000	0	24,000	13,781	0	13,781
BF-19	6-Slice Bread Toaster	1	6,000	0	6,000	0	6,000	17,144	0	17,144
BF-22AD	Refrigerator	1	5,700	0	5,700	0	5,700	4,800	0	4,800
BQ-11	Mobile Stacker	2	27,500	0	27,500	0	27,500	52,750	0	52,750
BQ-25*	Coffee Brewer	1	55,000	0	55,000	0	55,000	61,483	0	61,483
BQ-64*	Hot Food Trolley	3	95,000	0	95,000	0	95,000	283,973	0	283,973
BQ-72	Dish Washing Machine	1	110,000	0	110,000	1,500	111,500	105,030	0	105,030
BQ-96	Ice Cuber W/Bin	1	126,850	0	126,850	1,500	128,350	101,813	0	101,813
BQ-97	Water Filter	1	6,000	0	6,000	0	6,000	3,936	0	3,936
6	Bar Mixer	1	4,100	0	4,100	0	4,100	3,488	0	3,488
LP-4	Water Boiler	1	7,326	0	7,326	0	7,326	7,733	0	7,733
LP-7R*	Dish & Glass Washer	1	52,200	0	52,200	1,200	53,400	57,251	0	57,251
LP-9	Bar Mixer	1	4,100	0	4,100	0	4,100	3,488	0	3,488
SK-14R	Rice Cooker 9 LITRES	1	6,200	0	6,200	0	6,200	4,400	0	4,400
SK-22	Water Boiler	1	7,722	0	7,722	0	7,722	8,267	0	8,267

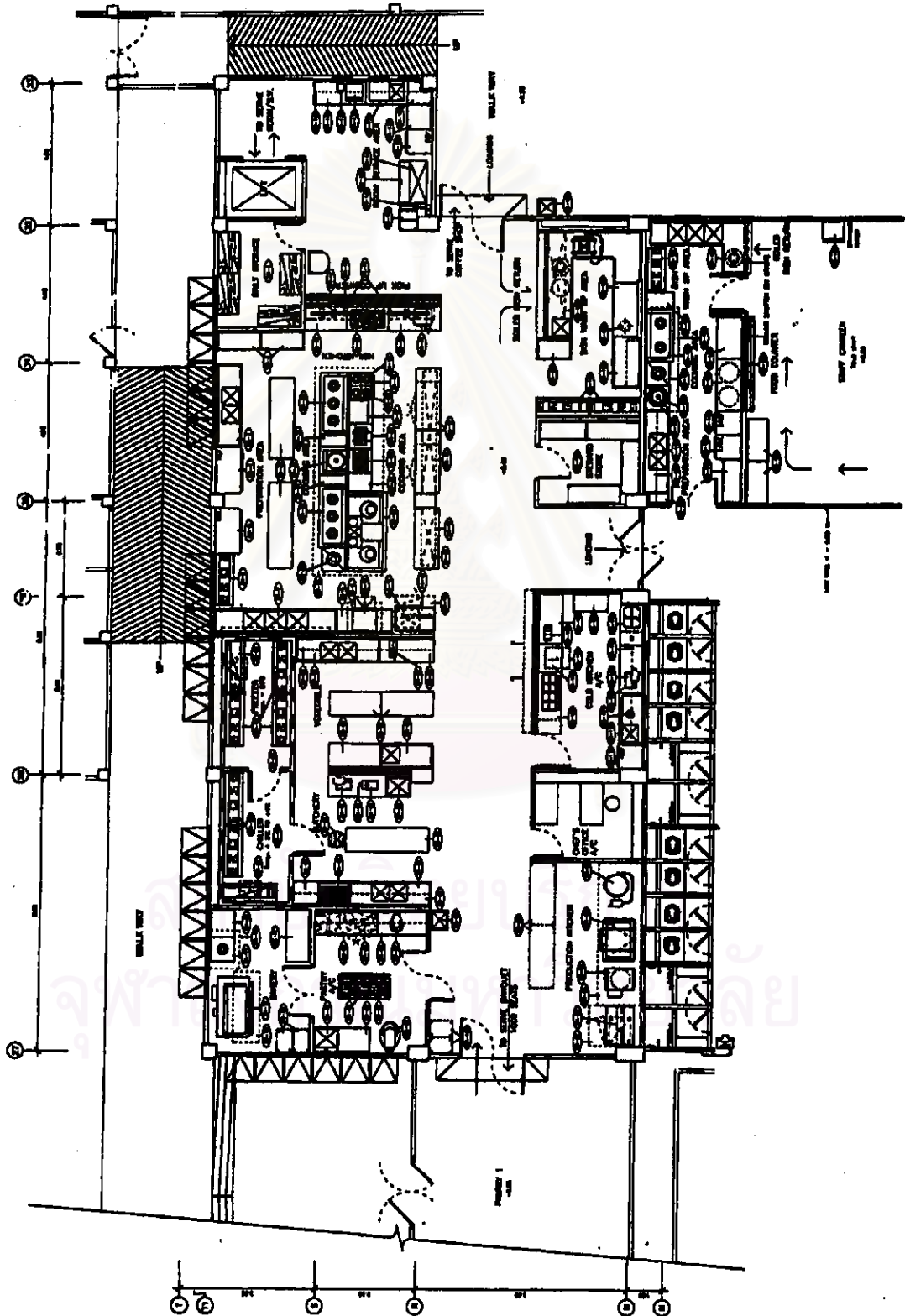
APPENDIX G: The Price of Stainless Steel Sheets No. 16 between Jan - Aug 1997.



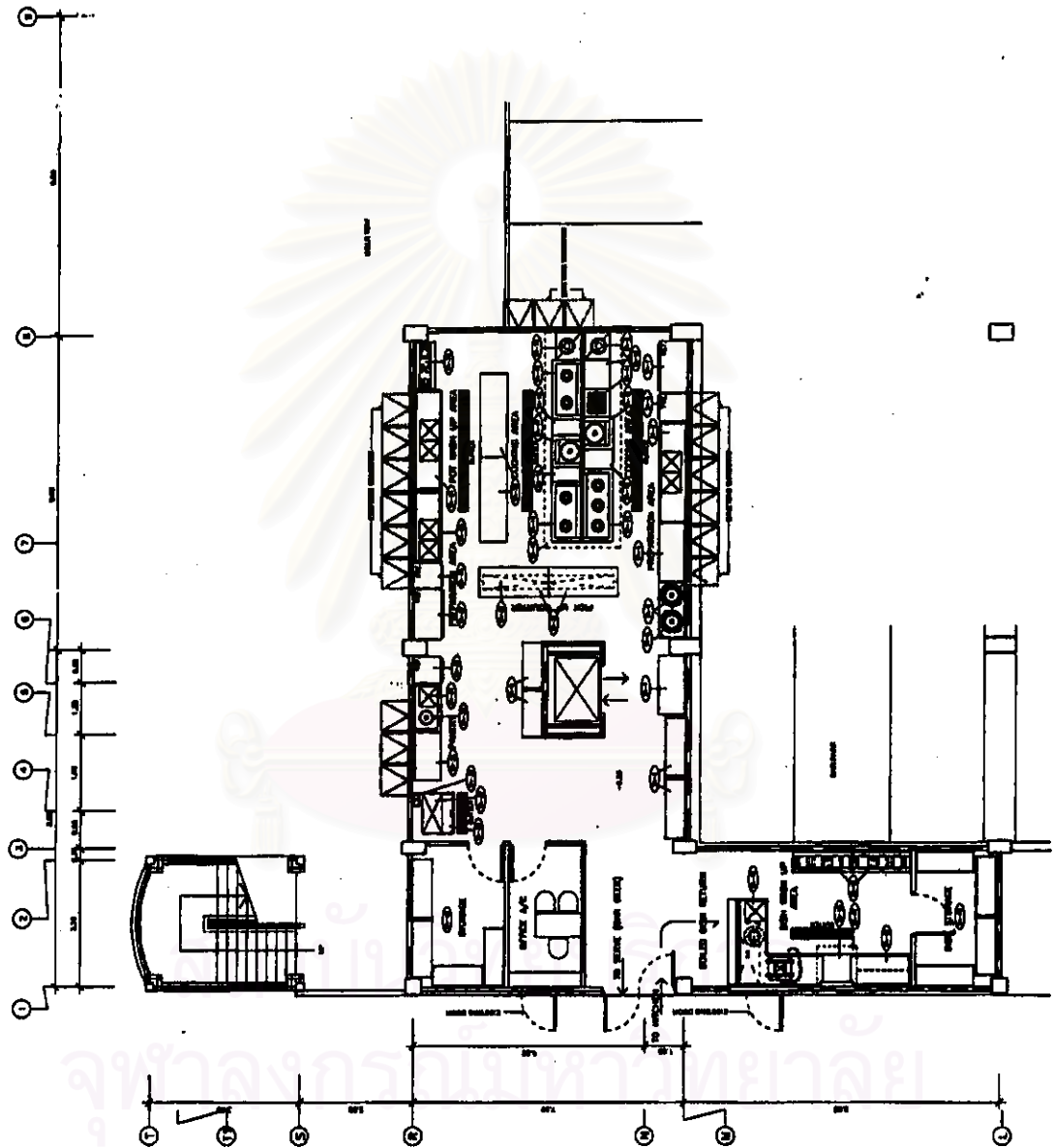
APPENDIX H: A Sample Utility Layout



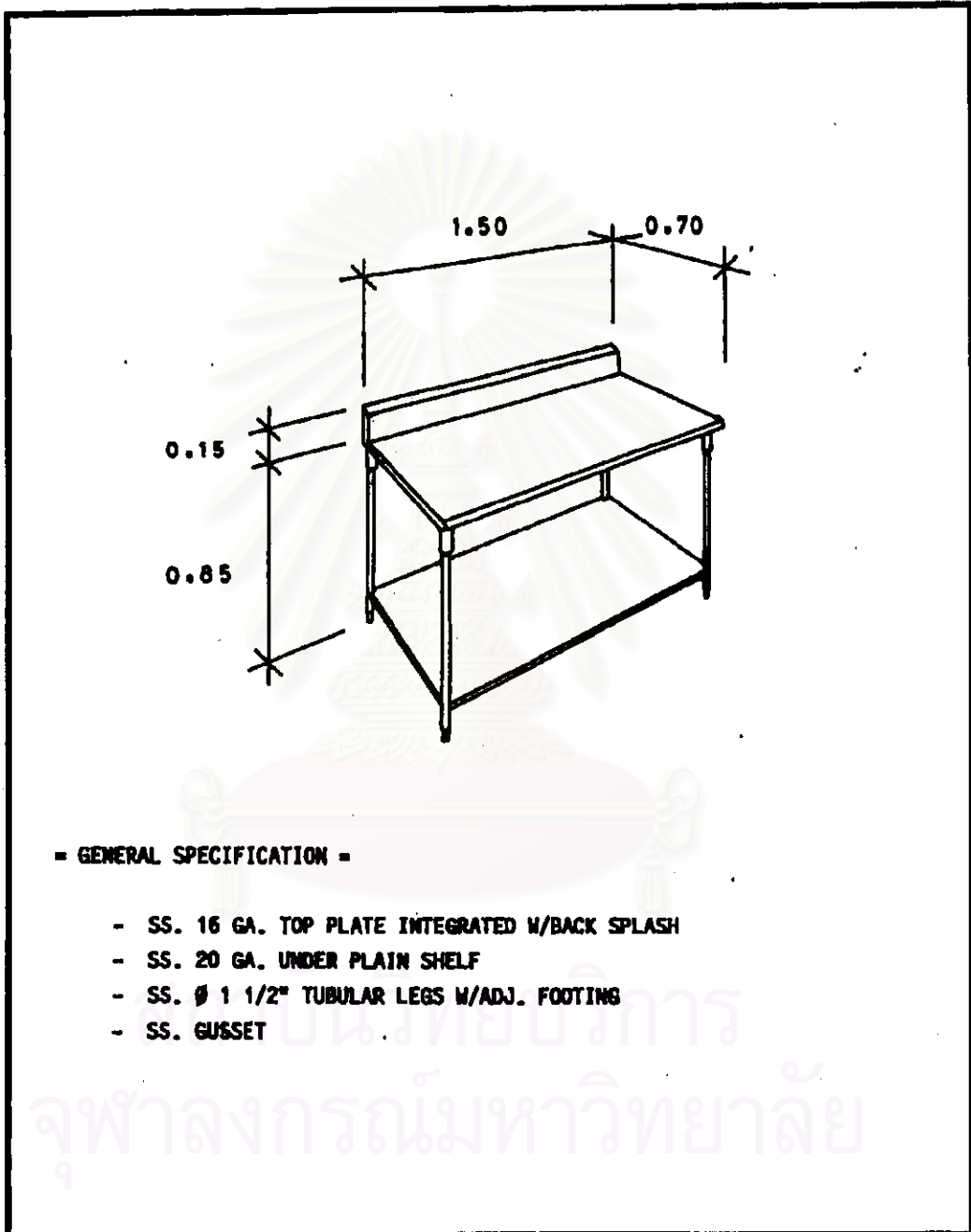
APPENDIX I: The Main Kitchen Layout of the MP Hotel Project.



APPENDIX J: The Satellite Kitchen Layout of the MP Hotel Project.



APPENDIX K: A Sample Perspective Drawing and Specification of a Foodservice Equipment.



PFE	MK-55	REV. -1-	DATE	DRAWN BY
	CUSTOMER FINE HOTELS GROUP	PROJECT No. P205/97	DATE 18/5/97	CHECKED BY
	PROFESSIONAL FOOD EQUIPMENT, LTD.		DRAWN BY <i>[Signature]</i>	CHECKED BY <i>[Signature]</i>

Actual Production DLH Consumption

P135/97 MP Hotel
 Project ID

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-161	SS.Filler Top	1	1A	2.25	2.00	1.25	0.00	0.00
MK-162	Tray Slide	1	1A	3.83	5.25	3.00	0.00	0.00
MK-24	SS.Filler Top	1	1B	2.92	2.00	1.00	0.00	0.00
MK-31	SS.Filler Top	2	1B	6.50	16.00	4.00	0.00	0.00
MK-136	SS.Filler Top	1	1D	2.25	6.00	2.00	0.00	0.00
SA-16R	SS.Filler Top	1	2A	2.42	4.00	0.50	0.00	0.00
Man-Hours				20.17	35.25	11.75	0.00	0.00

	Forming		Assy.		Finishing		Tech.		Refrig.	
	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned	27/11/97	28/11/97	29/11/97	29/11/97	1/12/97	2/12/97				
Actual	27/11/97	28/11/97	28/11/97	29/11/97	28/11/97	1/12/97				

Actual Production DLH Consumption

P135/97

MP Hotel

Project ID

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-159	Open Cabinet	1	1A	9.50	6.00	3.00	0.00	0.00
MK-160	Open Cabinet	1	1A	11.50	12.00	2.50	0.00	0.00
MK-38	Open Cabinet	1	1B	8.50	5.50	3.00	0.00	0.00
MK-40	Warming Cabinet	1	1B	20.00	20.00	4.00	6.00	0.00
MK-43	Serving Cabinet	1	1B	18.00	13.50	7.50	0.00	0.00
MK-108	Open Cabinet	1	1C	13.00	7.50	5.50	0.00	0.00
MK-113	Open Cabinet	1	1C	11.50	6.00	3.50	0.00	0.00
MK-86	Open Cabinet W/Chocolate Drawers	1	1C	14.50	36.00	4.00	0.00	0.00
MK-135	Open Cabinet	1	1D	9.00	5.00	3.00	0.00	0.00
MK-140	Open Cabinet	1	1D	12.50	7.50	5.50	0.00	0.00
SA-36	Open Cabinet	1	2B	9.00	20.00	5.50	0.00	0.00

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

Actual Production DLH Consumption

P135/97 MP Hotel
Project ID

		Man-Hours									
		Forming		Assy.		Finishing		Tech.		Refrig.	
		Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned		18/11/97	20/11/97	21/11/97	28/11/97	28/11/97	1/12/97	29/11/97	29/11/97		
Actual		18/11/97	20/11/97	19/11/97	26/11/97	20/11/97	27/11/97	26/11/97	26/11/97		
										Man-Hours	
										137.00	139.00
										47.00	6.00
										0.00	

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.			
MK-17R	2-Door Refrigerated Base	1	1B	30.00	33.50	3.00	0.00	34.00			
MK-84	2-Door Refrigerated Base W/Marble Top	1	1C	29.00	26.00	1.00	0.00	38.00			
				Man-Hours							
				59.00	59.50	4.00	0.00	72.00			
		Forming		Assy.		Finishing		Tech.		Refrig.	
		Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned		19/11/97	19/11/97	24/11/97	26/11/97	27/11/97	27/11/97			1/12/97	1/12/97
Actual		19/11/97	20/11/97	26/11/97	28/11/97	29/11/97	1/12/97			1/12/97	8/12/97

Actual Production DLH Consumption

P135/97 MP Hotel
Project ID

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-22	Deep Fat Fryer	1	1B	10.50	32.00	3.00	6.00	0.00
MK-39	Bain Marie Cabinet	1	1B	14.34	35.00	4.00	6.00	0.00
Man-Hours				24.84	67.00	7.00	12.00	0.00

	Forming		Assy.		Finishing		Tech.		Refrig.	
	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned	17/11/97	17/11/97	19/11/97	20/11/97	21/11/97	24/11/97	25/11/97	26/11/97		
Actual	17/11/97	17/11/97	19/11/97	21/11/97	24/11/97	24/11/97	25/11/97	25/11/97		

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-154	1-Stock Pot Stove	1	1A	7.92	8.50	2.00	4.00	0.00
MK-21	Griddle	1	1B	9.00	24.00	3.00	8.00	0.00
MK-23	Char Broiler(Gas+Lava)	1	1B	10.17	24.50	3.50	8.00	0.00
MK-25	2-Kwali Range	1	1B	12.25	10.00	12.00	22.00	0.00

Actual Production DLH Consumption

P135/97		MP Hotel									
Project ID											
MK-29	1-Stock Pot Stove	1	1B	7.92	8.50	2.00	4.00	0.00			
MK-30	3-Chinese Range	1	1B	12.75	38.00	4.50	6.00	0.00			
MK-32	1-Soup Range	1	1B	13.34	36.50	3.75	6.00	0.00			
MK-33	3-Chinese Range	1	1B	12.75	30.50	6.00	6.00	0.00			
SA-09	1-Stock Pot Stove	1	2A	7.92	9.25	3.50	6.00	0.00			
SA-11	Char Broiler(Gas+Lava)	1	2A	10.17	25.50	3.00	8.00	0.00			
SA-12	1-Soup Range	1	2A	13.34	20.00	2.50	6.00	0.00			
SA-14	3-Chinese Range	1	2A	12.75	26.00	7.00	8.00	0.00			
SA-15R	2-Chinese Range	1	2A	11.50	21.00	6.00	8.00	0.00			
SA-17	Soup Range	1	2A	13.84	25.00	2.00	6.00	0.00			
SA-18	1-Stock Pot Stove	1	2A	7.92	9.25	3.50	6.00	0.00			
				Man-Hours	163.54	316.50	64.25	112.00	0.00		
		Forming		Assy.		Finishing		Tech.		Refrig.	
		Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned		10/11/97	11/11/97	12/11/97	20/11/97	21/11/97	26/11/97	27/11/97	4/12/97		
Actual		10/11/97	12/11/97	11/11/97	20/11/97	14/11/97	21/11/97	15/11/97	25/11/97		

Actual Production DLH Consumption

P135/97 MP Hotel
Project ID

07/01/97 - 01/12/97

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-100	GN.Trolley	2	1B	3.00	34.50	8.00	0.00	0.00
MK-98	Mobile Table	2	1B	6.67	18.00	7.00	0.00	0.00
MK-125	Mobile Sorting Table	1	1C	5.25	20.50	5.00	0.00	0.00
MK-83	Mobile Flour Bin	2	1C	9.34	51.60	8.00	0.00	0.00
Man-Hours				24.26	124.60	28.00	0.00	0.00

	Forming		Assy.		Finishing		Tech.		Refrig.	
	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned	24/11/97	25/11/97	27/11/97	28/11/97	29/11/97	1/12/97				
Actual	24/11/97	25/11/97	25/11/97	29/11/97	28/11/97	1/12/97				

07/01/97 - 01/12/97

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-150	Single Wall Shelf	1	1A	2.00	10.20	5.50	0.00	0.00
MK-52	Single Wall Shelf	1	1A	1.59	27.00	5.00	0.00	0.00

Actual Production DLH Consumption

P135/97		MP Hotel									
Project ID											
MK-62	Chopping Block W/Stand	1	1A	1.00	10.00	1.00	0.00	0.00			
MK-67	Single Wall Shelf	1	1A	1.59	18.00	5.50	0.00	0.00			
MK-14	Over Shelf	1	1B	3.50	4.50	2.00	0.00	0.00			
MK-16R	Over Shelf	1	1B	7.00	14.00	4.50	0.00	0.00			
MK-42	Double High Shelf	1	1B	5.50	18.50	5.00	0.00	0.00			
MK-109R	Plain Shelf	1	1C	3.50	2.50	1.00	0.00	0.00			
MK-111	Single Wall Shelf	1	1C	2.09	17.00	1.00	0.00	0.00			
MK-85	Single Wall Shelf	1	1C	1.50	17.00	1.50	0.00	0.00			
MK-141	Single Wall Shelf	1	1D	1.59	14.00	2.00	0.00	0.00			
SA-22	Double High Shelf	1	2A	5.50	16.50	5.00	0.00	0.00			
				Man-Hours	36.36	169.20	39.00	0.00	0.00		
		Forming		Assy.		Finishing		Tech.		Refrig.	
		Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned		20/11/97	21/11/97	24/11/97	26/11/97	27/11/97	28/11/97				
Actual		20/11/97	21/11/97	21/11/97	27/11/97	24/11/97	28/11/97				

Actual Production DLH Consumption

P135/97
Project ID

MP Hotel

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-149	Double Sink Table	1	1A	8.50	33.00	8.00	2.00	0.00
MK-53	Double Sink Table	1	1A	8.50	33.00	8.50	2.00	0.00
MK-58	Single Sink Table	1	1A	8.50	16.00	5.00	1.00	0.00
MK-59	Sink Unit	1	1A	7.50	22.00	6.50	1.00	0.00
MK-65	Fish Sink	1	1A	7.25	31.00	5.00	1.00	0.00
MK-66	Double Sink Table	1	1A	8.50	23.00	11.00	2.00	0.00
MK-03	Double Sink Table	1	1B	8.50	23.00	10.00	2.00	0.00
MK-07	3-Compartment Sink Table W/Pot Rail	1	1B	10.33	80.00	19.00	3.00	0.00
MK-99	Hand Sink	1	1B	4.00	13.17	3.00	1.00	0.00
MK-115	Single Sink Table	1	1C	7.68	16.50	4.00	1.00	0.00
MK-79	Sink Table W/Accessories Hanger	1	1C	8.00	28.50	6.00	1.00	0.00
MK-137	Sink Cabinet	1	1D	14.34	19.00	4.00	1.00	0.00
SA-03	Double Sink Table	1	2A	8.50	30.00	9.00	2.00	0.00
SA-24	Double Sink Table	1	2A	8.50	33.00	10.00	2.00	0.00

Actual Production DLH Consumption

P135/97		MP Hotel							
Project ID									
SA-25	Double Sink Table	1	2A	8.50	25.50	7.00	2.00	0.00	
SA-34	Sink Cabinet	1	2B	16.50	23.00	7.50	1.00	0.00	
Man-Hours				143.60	449.67	123.50	25.00	0.00	

	Forming		Assy.		Finishing		Tech.		Refrig.	
	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned	3/11/97	5/11/97	7/11/97	19/11/97	20/11/97	25/11/97	25/11/97	27/11/97		
Actual	3/11/97	5/11/97	4/11/97	19/11/97	6/11/97	21/11/97	7/11/97	24/11/97		

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-151	Low Table	1	1A	4.25	6.50	1.00	0.00	0.00
MK-158R	Soiled Dish Table W/3-Sink&Plastic Bin	1	1A	15.00	44.00	12.00	2.00	0.00
MK-163	Condiment Table	2	1A	10.00	10.50	5.00	0.00	0.00
MK-55	Work Table	1	1A	5.50	7.00	2.00	0.00	0.00
MK-56	Work Table	2	1A	6.00	14.00	4.25	0.00	0.00
MK-57	Work Table	1	1A	5.50	7.00	2.50	0.00	0.00

Actual Production DLH Consumption

P135/97		MP Hotel							
Project ID									
MK-63	Work Table	1	1A	6.00	8.00	5.50	0.00	0.00	
MK-64	Work Table	1	1A	5.50	5.00	1.50	0.00	0.00	
MK-68R	Work Table	1	1A	5.50	7.00	2.50	0.00	0.00	
MK-08	Work Table	1	1B	5.50	7.00	2.00	0.00	0.00	
MK-12	Equipment Stand (for Combi)	1	1B	2.00	15.00	3.00	0.00	0.00	
MK-15	Work Table	1	1B	5.00	6.50	2.75	0.00	0.00	
MK-34	Work Table	2	1B	12.00	19.00	5.00	0.00	0.00	
MK-120	Soiled Dish Table W/Pre-Rinse&2-Poly Bin	1	1C	23.00	84.00	28.00	2.00	0.00	
MK-123	Clean Dish Table W/Rack Shelf	1	1C	7.00	16.00	5.50	0.00	0.00	
MK-80	Work Table	1	1C	6.00	7.00	2.50	0.00	0.00	
MK-82	Wooden Top Table	1	1C	2.50	7.00	0.50	0.00	0.00	
SA-04R	Work Table	1	2A	6.00	6.50	2.00	0.00	0.00	
SA-06	Low Table	1	2A	4.25	8.50	2.50	0.00	0.00	
SA-07	Work Table	1	2A	4.25	9.00	2.50	0.00	0.00	
SA-10	Work Table	1	2A	6.25	7.50	1.00	0.00	0.00	
SA-13	Work Table	1	2A	6.25	6.50	1.00	0.00	0.00	

Actual Production DLH Consumption

P135/97		MP Hotel							
Project ID									
SA-20	Work Table	2	2A	12.00	15.00	6.00	0.00	0.00	
SA-21	Work Table	2	2A	11.00	14.50	5.50	0.00	0.00	
SA-45	Soiled Dish Table&Pre-Rinse W/Poly Bin	1	2C	17.00	68.00	18.00	2.00	0.00	
SA-48	Clean Dish Table W/Rack Shelf	1	2C	7.00	17.00	8.00	0.00	0.00	
Man-Hours				200.25	423.00	132.00	6.00	0.00	

	Forming		Assy.		Finishing		Tech.		Refrig.	
	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned	17/11/97	21/11/97	21/11/97	1/12/97	2/12/97	4/12/97	5/12/97	5/12/97		
Actual	17/11/97	21/11/97	18/11/97	1/12/97	19/11/97	3/12/97	25/11/97	4/12/97		

[Redacted]

Item No.	Description	Qty.	Zone	Forming	Assy.	Finish	Tech.	Refrig.
MK-153	Exhaust Hood	1	1A	10.17	11.00	4.00	2.00	0.00
MK-09	Exhaust Hood	1	1B	13.50	9.50	3.50	2.00	0.00
MK-13	Exhaust Hood	1	1B	14.00	9.50	3.50	2.00	0.00
MK-26	Exhaust Hood	1	1B	20.51	28.00	10.00	6.00	0.00

Actual Production DLH Consumption

P135/97		MP Hotel							
Project ID									
MK-95	Exhaust Hood	1	1B	11.50	17.00	5.00	3.00	0.00	
MK-97	Exhaust Hood	1	1B	9.25	10.00	2.00	1.00	0.00	
MK-122	Condensate Canopy	1	1C	2.26	4.00	1.25	0.00	0.00	
MK-73	Exhaust Hood	1	1C	9.25	10.00	4.25	2.00	0.00	
MK-75	Exhaust Hood	1	1C	6.75	9.50	3.50	2.00	0.00	
SA-19	Exhaust Hood	1	2A	19.00	30.00	10.00	8.00	0.00	
SA-47	Condensate Canopy	1	2C	7.50	5.50	3.50	0.00	0.00	
				Man-Hours	123.69	144.00	50.50	28.00	0.00

	Forming		Assy.		Finishing		Tech.		Refrig.	
	Start	Finish	Start	Finish	Start	Finish	Start	Finish	Start	Finish
Planned	11/11/97	12/11/97	14/11/97	17/11/97	18/11/97	19/11/97	20/11/97	21/11/97		
Actual	11/11/97	12/11/97	12/11/97	17/11/97	12/11/97	19/11/97	13/11/97	21/11/97		

จุฬาลงกรณ์มหาวิทยาลัย



APPENDIX O

The Project Management Information System Databases

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

Buy and Import Estimates

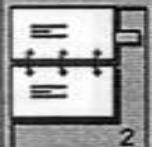
Buy-outs and Imported Equipment Estimation

Project ID Project Name

Item No.	Product ID	Description	
MK-44	ir1300w	Infrared Food Warmer	
	1300W	2,105.00	EA.
Brand	Model	Unit Price	Unit
Options		Total Price	2,105.00

Enter Estimated Unit Prices for Buy-out and Imported Items

Data Entry



Records:
6

Unsorted

D) Buy and Import Estimates

Estimate and Actual Cost Comparison

P135/97

Project ID

MP Hotel

Project Name

28/10/97

Date Received

MK-54

Item No.

1092130002

Product ID

VEGETABLE SLICER

Description

Brand

Model

EA.

Unit

Estimated Cost

28,722.95

Actual Cost

30,698.26

Variance

-1,975.31

% Variance

-6.88

All Imported Equipment

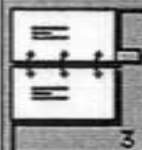
Estimated Cost

Total 521,827.95

Estimated Cost

643,955.69

Estimate an...

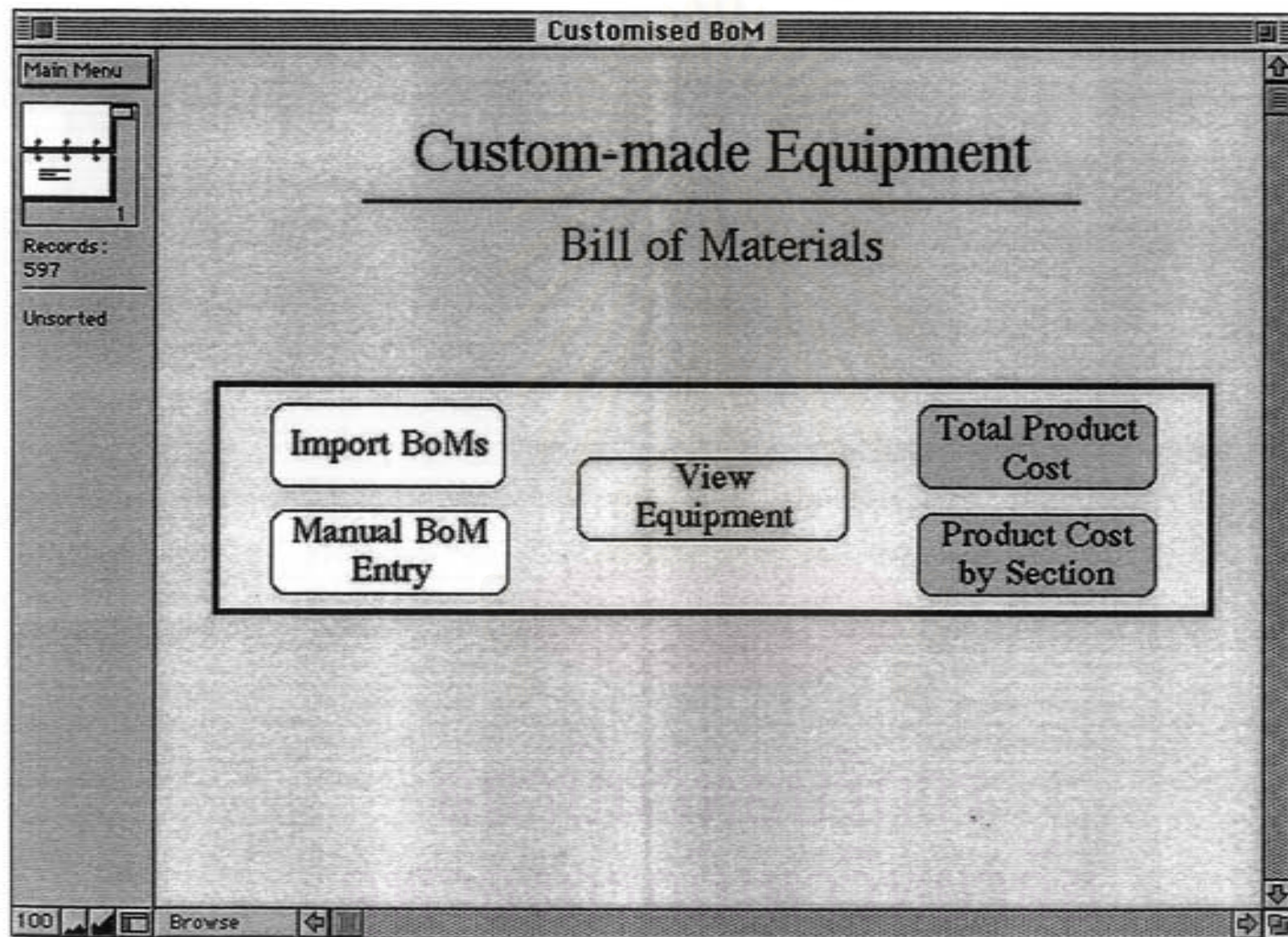
Records:
6

Unsorted











Comparison between Estimated and Actual Prices

100

Browse



Equipment Data Entry

Form View          

Close View As Form View As List Reports New Job Delete Record Find Record Your Own Button Your Own Button


Equipment Data Entry Equipment Records

P135/97 MP Hotel 3/11/97 23/12/97 Completed
Project ID Project Name Start Finish Status

Equipment List Resources & Notes Product Costs Labour Usage

Item No.	Description	Qty.	Finish	Status
MK-02	Plain Shelf Size:0.50*1.20*1.50	2	1/10/97	Completed/Arrived
MK-03	Double Sink Table	1	12/11/97	Completed/Arrived
MK-04	4-Door Upright Refrigerator	1	1/10/97	Completed/Arrived
MK-05	4-Door Upright Freezer	1	1/10/97	Completed/Arrived
MK-06	Slatted Shelf Size:0.50*1.50*1.50	1	1/10/97	Completed/Arrived
MK-07	3-Compartment Sink Table W/Pot Rail	1	15/11/97	Completed/Arrived
MK-08	Work Table Size:0.70*1.50*(0.85+0.15)	1	21/11/97	Completed/Arrived
MK-09	Exhaust Hood Size:0.90*1.00*0.50	1	13/11/97	Completed/Arrived

Enter data for Projects

100 Browse 

Equipment Data Entry

Project Cos..

Records: 1
Unsorted

Close View As Form View As List Reports New Record Delete Record Find Record Production Costs Installation Costs

Project Costs Information

Equipment Records

P135/97 **MP Hotel** **Fine Hotels Group**
Project ID **Project Name** **Customer**

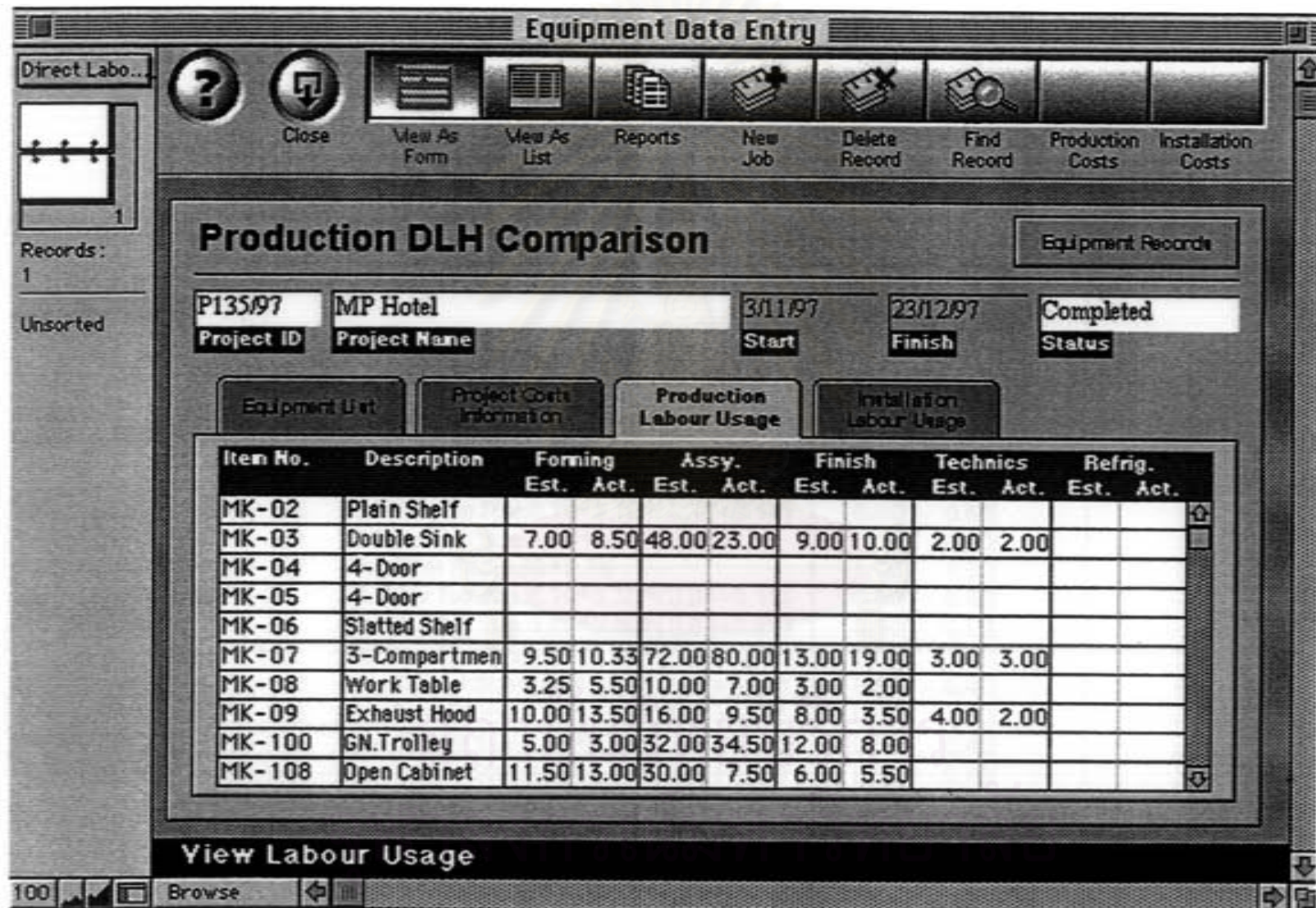
Equipment List **Project Costs Information** Production Labour Usage Installation Labour Usage

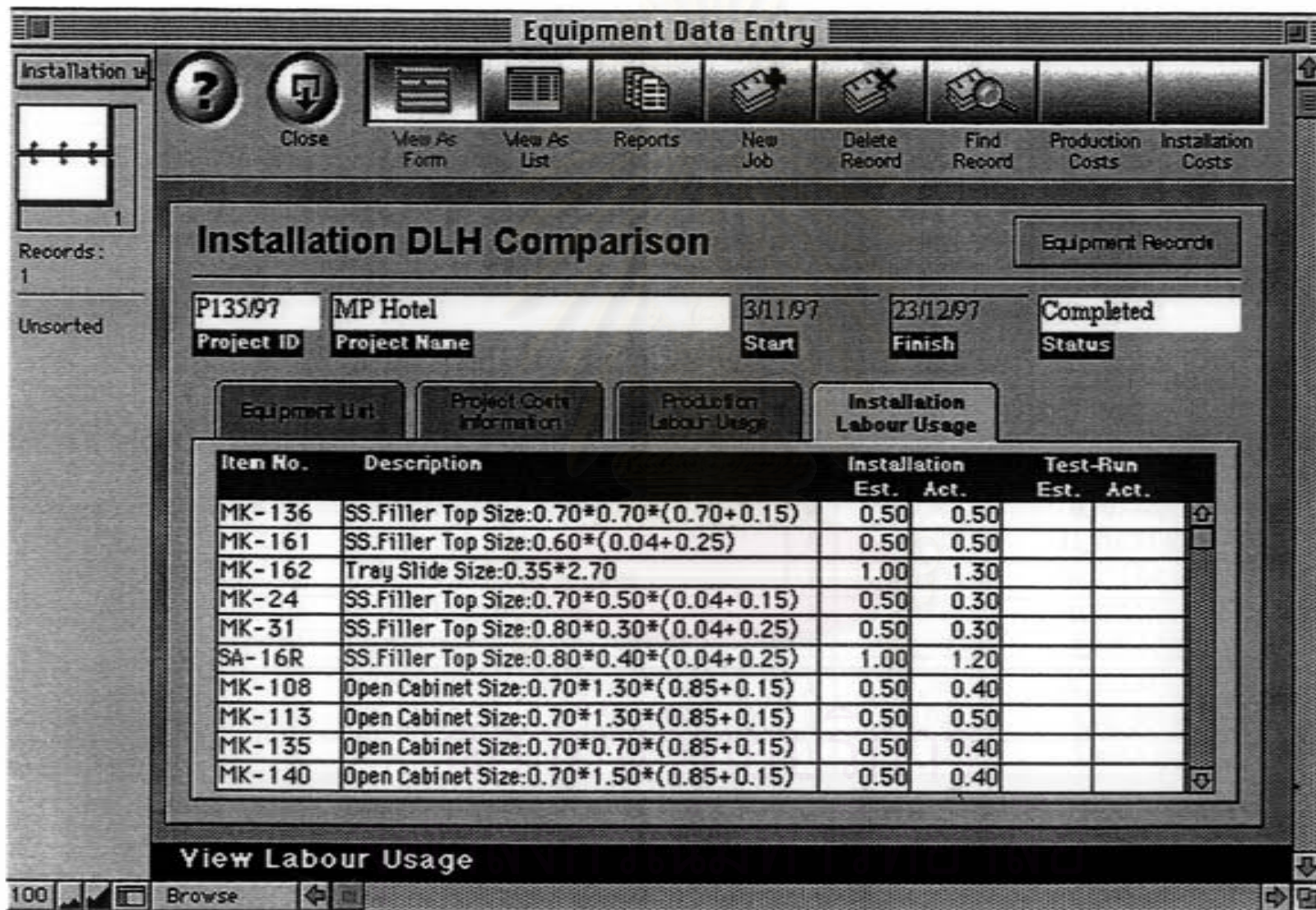
Khun Annuay **23 Dec 1997** **30 Dec 1997** **Completed**
Project Supervisor **Finish** **Date Required** **Project Status**

Project Notes	Estimated	Actual Costs	Variance
	฿2,715,150 Production Costs	฿2,726,462 Production Costs	(฿11,312) Production Costs
	฿51,510 Installation Costs	฿46,856 Installation Costs	฿4,654 Installation Costs
	฿2,766,660 Project Costs	฿2,773,317 Project Costs	(฿6,657) Project Costs

Display Project Costs Information

100 Browse





Equipment Data Entry

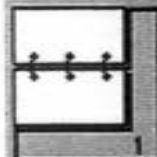
Product Cos.



Close

View As
FormView As
List

Reports

New
JobDelete
RecordFind
RecordProduction
CostsInstallation
CostsRecords:
1

Unsorted

Production Costs Comparison

Equipment Records

P135/97

MP Hotel

3/11/97

23/12/97

Completed

Project ID

Project Name

Start

Finish

Status

Equipment List

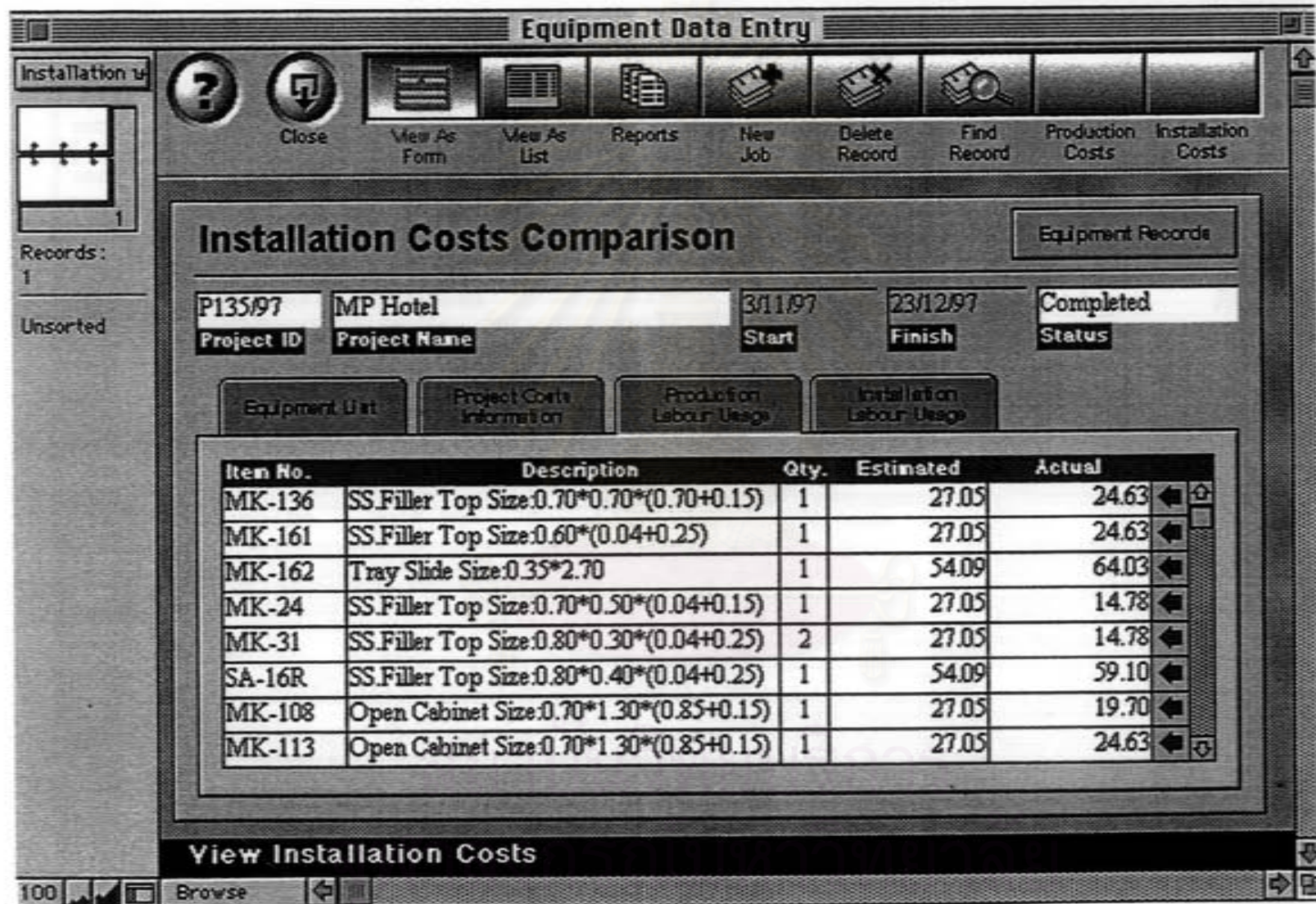
Project Costs
InformationProduction
Labour UsageInstallation
Labour Usage

Item No.	Description	Qty.	Estimated	Actual	
MK-02	Plain Shelf Size:0.50*1.20*1.50	2	6,767.48	6,767.48	◀
MK-03	Double Sink Table	1	13,417.00	11,316.91	◀
MK-04	4-Door Upright Refrigerator	1	36,835.64	36,835.64	◀
MK-05	4-Door Upright Freezer	1	40,786.15	40,786.15	◀
MK-06	Slatted Shelf Size:0.50*1.50*1.50	1	8,947.44	8,947.44	◀
MK-07	3-Compartment Sink Table W/Pot Rail	1	21,762.95	21,075.31	◀
MK-08	Work Table Size:0.70*1.50*(0.85+0.15)	1	3,921.83	3,565.95	◀
MK-09	Exhaust Hood Size:0.90*1.00*0.50	1	6,793.73	5,260.83	◀

View Product Costs

100

Browse



Equipment Records

Form View

Close View As Form View As List Reports New Record Delete Record Find Record Installation Requirements Take Off Non-Standard

Equipment Records Production Status Equipment Data Entry

PI35/97 MP Hotel Fine Hotels Group
Project ID **Project Name** **Customer**

MK-08 Work Table Size:0.70*1.50*(0.85+0.15) 1
Item No. **Description** **Qty.**

TB115000 Tables Standard Non-Standard
Product Code **Type** **Order ID**

18/11/97 21/11/97 Completed/Arrived Make Buy Import Stock
Start Date **Finish Date** **Status** **Zone**

Estimated DLH Required for Production

3.25	10.00	3.00
Forming	Assembly	Finishing
0.00	0.00	16.25
Technics	Refrigeration	Production Mtr.


3,921.83 3,565.95
Estimated Cost **Actual Cost**

Enter data for Equipment

100 Browse

Equipment Records					
List View 	Close View As Form View As List Reports New Record Delete Record Find Record Your Own Button Your Own Button				
	Item No.	Description	Qty.	Status	Date Completed
Records: 135	MK-161	SS Filler Top Size:0.60*(0.04+0.25)	1	Completed/Arrive	29/11/97
Found: 105	MK-162	Tray Slide Size:0.35*2.70	1	Completed/Arrive	29/11/97
Sorted	MK-24	SS Filler Top Size:0.70*0.50*(0.04+0.15)	1	Completed/Arrive	28/11/97
	MK-31	SS Filler Top Size:0.80*0.30*(0.04+0.25)	2	Completed/Arrive	29/11/97
	MK-136	SS Filler Top Size:0.70*0.70*(0.70+0.15)	1	Completed/Arrive	1/12/97
	SA-16R	SS Filler Top Size:0.80*0.40*(0.04+0.25)	1	Completed/Arrive	1/12/97
	MK-159	Open Cabinet Size:0.70*1.20*(0.85+0.15)	1	Completed/Arrive	20/11/97
	MK-160	Open Cabinet Size:0.70*1.50*(0.85+0.15)	1	Completed/Arrive	20/11/97
	MK-38	Open Cabinet Size:0.70*1.20*0.85	1	Completed/Arrive	20/11/97
	MK-40	Warming Cabinet Size:0.70*1.50*0.85	1	Completed/Arrive	26/11/97
	MK-43	Serving Cabinet Size:0.35*3.90*(0.75+0.03)	1	Completed/Arrive	25/11/97
	MK-108	Open Cabinet Size:0.70*1.30*(0.85+0.15)	1	Completed/Arrive	24/11/97
↑ Click to see more information for an Equipment					
100	Browse				

Equipment Records

Production  3

Records: 135
Found: 105
Unsorted

Close View As Form View As List Reports Find Record Form View Schedule Tracking Costs Tracking Equipment Data Entry

All Partial

P135/97 MP Hotel Fine Hotels Group
Project ID Project Name Customer

MK-08 Work Table Size:0.70*1.50*(0.85+0.15) 1
Item No. Description Qty.

Order ID 1B Make Completed/Arrived 15 Dec 1997
Zone Source Status Today's Date

Actual DLH	Start Date	Finish Date	R.T.	O.T.	18/11/97	21 Nov 1997
Forming	18/11/97	18/11/97	5.50	0.00	Start Date	Finish Date
Assembly	20/11/97	20/11/97	7.00	0.00	2,921.42	2,859.13
Finishing	21/11/97	21/11/97	2.00	0.00	DM Estimated	DM Actual
Technics			0.00	0.00	540.48	498.87
Refrigeration			0.00	0.00	DL Estimated	DL Actual

Enter data for Equipment

100 Browse

Equipment Records

Schedule & Labour Usage Tracking

P135/97
 Project ID Project Name Customer

MK-08
 Item No. Description Qty.

IB
 Zone Source Status

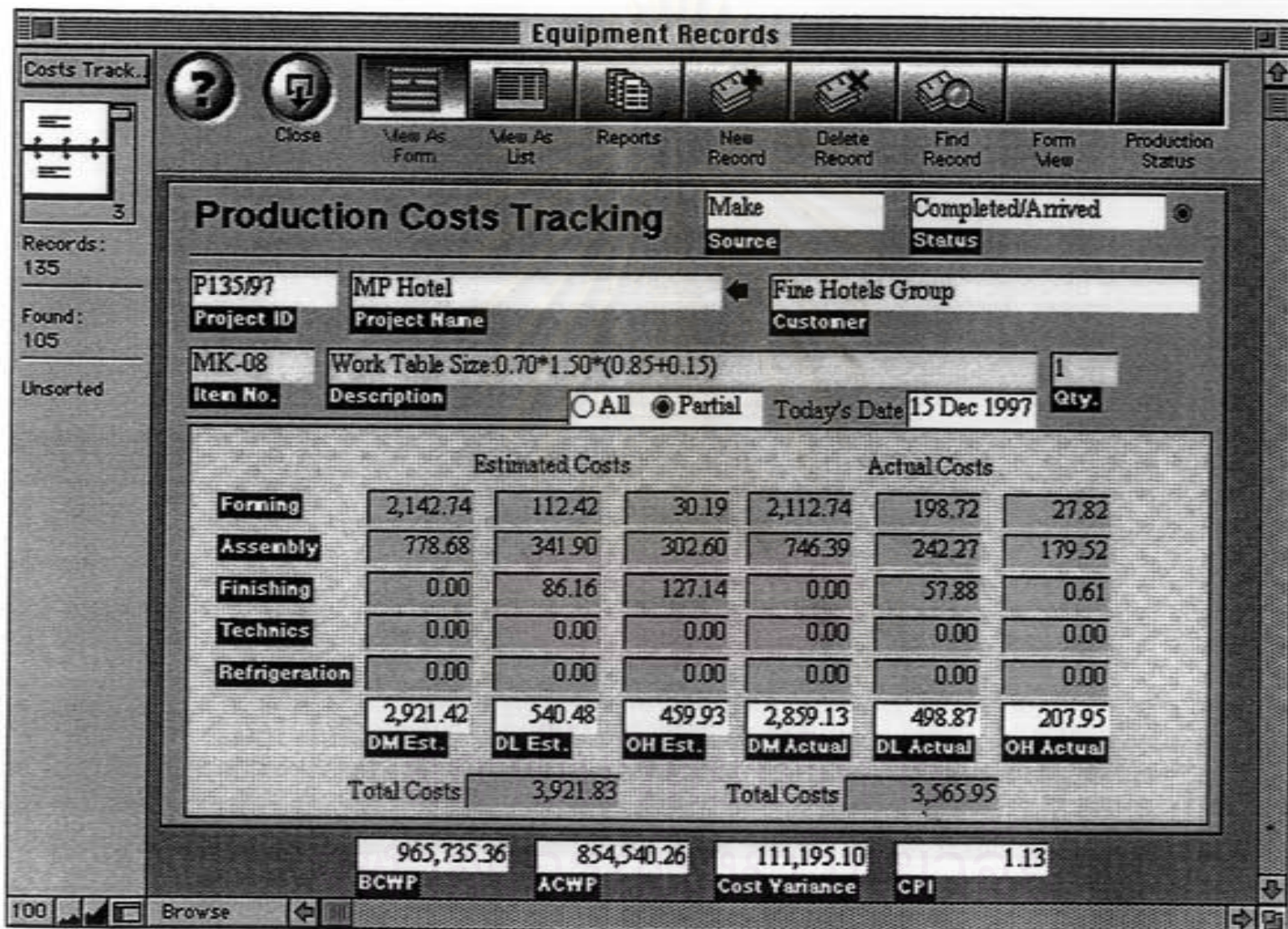
Colour Code

	Start Date	Finish Date	Start Date	Finish Date	Est DLH	Actual R.T.	Actual O.T.
Forming	17/11/97	21/11/97	18/11/97	18/11/97	3.25	5.50	0.00
Assembly	21/11/97	1/12/97	20/11/97	20/11/97	10.00	7.00	0.00
Finishing	2/12/97	4/12/97	21/11/97	21/11/97	3.00	2.00	0.00
Technics					0.00	0.00	0.00
Refrigeration					0.00	0.00	0.00

Enter data for Equipment

100 Browse





Equipment Records

Report Menu

Close View As Form View As List Reports Your Own Button

Records: 135
Found: 105
Sorted

Production DLH Requirements

Project Costs Estimation

Production Status Summary

Production Schedule Monitor

Production Cost Comparison

Actual Product Costs

Production Cost Variations

Actual Production DLH Consumption

Click on any of these buttons to preview the respective report.

Select a report

100 Browse

Finished Goods Inventory

Stock Price

2974

Records: 2978

Unsorted

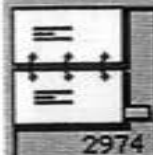
Finished Goods Inventory

TB115000	Work Table Size:0.70*1.50*(0.85+0.15)		
Product ID	Description		
SSS	TB115000	ea.	7,035.59
Brand	Model	Unit	Stock Price

Add New Product
Stock Price List
Find Products

V) Finished Goods Inventory

Estimate Prv

Records:
2978

Unsorted

Update Estimate Prices

TB115000	Work Table Size:0.70*1.50*(0.85+0.15)		
Product ID	Description		
SSS	TB115000	ea.	7,035.59
Brand	Model	Unit	Estimate Price

Add New Product

Estimate Price List

Find Products

Installation Requirements

Estimated L... Close

Find Record
Delete Record
Reports
Import Equipment Records
Sort
Estimated DMRequired
Actual DLHUsed
Actual DMUsed

P135/97 **MP Hotel**
 Project ID Project Name

MK-149 **Double Sink Table Size:0.70*2.40*(0.85+0.15)** **1**
 Item No. Description Qty.

Estimated Labour Requirement

Estimated Man-Hours Required

Installation	5.00	Test-Run	1.00
Start Date	12/12/97	Start Date	16/12/97
Finish Date	13/12/97	Finish Date	16/12/97

Zone: **1A** Priority: **2**

Estimated DL Cost **324.54**

Enter Labour Hours Required for the Equipment

100 Browse

Installation Requirements

Estimated L...

Close Find Record Delete Record Reports Import Equipment Records Sort Estimated DM Required Actual DLH Used Actual DM Used

Records: 135
Sorted

P135/97 MP Hotel
Project ID Project Name

MK-149 Double Sink Table Size: 0.70*2.40*(0.85+0.15) 1
Item No. Description Qty.

Estimated Labour Requirement

Estimated Man-Hours Required

Installation	5.00	Test-Run	1.00
Start Date	12/12/97	Start Date	16/12/97
Finish Date	13/12/97	Finish Date	16/12/97

Zone: 1A Priority: 2

Estimated DL Cost 324.54

Enter Labour Hours Required for the Equipment

100 Browse

Installation Requirements

Actual Labo..

Close Find Record Delete Record Reports Import Sort Estimated DLH Required Estimated DM Required Actual DM Used

Records: 135
Sorted

P135/97 **MP Hotel**
Project ID Project Name

MK-149 **Double Sink Table Size:0.70*2.40*(0.85+0.15)** **1**
Item No. Description Qty.

Actual Labour Used

Installation		Test-Run	
R.T.	O.T.	R.T.	O.T.
5.10	0.00	0.60	0.00
Start Date	4/12/97	Start Date	11/12/97
Finish Date	4/12/97	Finish Date	11/12/97

Zone: **1A** Priority: **2**

Actual DL Cost **280.73**

Enter Actual Labour Hours Used for the Equipment

100 Browse

Installation Requirements

Installer: v1

Records: 135

Sorted

Project ID **Project Name**

Item No. **Description** **Item Cost** **Qty.**

All Parent

Installation Costs Monitoring

	Estimated Costs	Actual Costs	variance	% variance
DM	697.88	708.85	(10.98)	(1.57)
DL	324.54	280.75	43.82	13.50
Total	1,022.42	989.59	32.83	3.21

Installation Finish Date **Test-run Finish Date**

BCWP **ACWP** **Cost Variance** **CPI**

Installation Requirements

Installation u

Records: 135

Sorted

Close
Find Record
Delete Record
Reports
Import Equipment Records
Sort
Estimated DLH Required
Estimated DM Required
Actual DM Used

P135/97
MP Hotel
Monitor Costs

Project ID
Project Name

MK-149
Double Sink Table Size: 0.70*2.40*(0.85+0.15)
1

Item No.
Description
Qty.

Show Costs

 All Partial

Today's Date

31/12/97

Installation Schedule Monitoring

	Installation		Test-run	
	Start Date	Finish Date	Start Date	Finish Date
Planned	12/12/97	13/12/97	16/12/97	16/12/97
Actual	4/12/97	4/12/97	11/12/97	11/12/97
Man-Hour	5.00	5.10	1.00	0.60

Zone: 1A Priority: 2

100

Browse

Installation Requirements

Report Layo... ? Info Close View As Form View As List Reports Your Own Button

Records: 135
Sorted

Estimated Labour-Hours Required **Estimated Installation Costs** **Actual Installation Schedule Summary** **Actual Installation Costs**

Click on any of these buttons to preview the respective report

Select a report

100 Browse

Assembly

Records:
105

Unsorted

MISCELLANEOUS CONSUMABLES -- ASSEMBLY

Forming

Assembly

Finishing

Technics

Refrig.

P135/97

MP Hotel

Project ID

Project Name

MK-03

Double Sink Table Size:0.70*2.40*(0.85+0.15)

1

Item No.

Qty

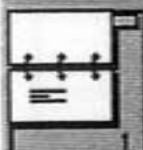
Part ID	Description	U.Price	Qty	Unit	Price
U41020005	Sand paper disc #100	13.87	13.00	ea.	180.31
U44001020	Grinding Wheel, Thin, d 4in. x 2mm	13.91	2.00	ea.	27.82
U44001005	Sanding Knob	27.00	3.00	ea.	81.00
U51005020	Saw blade 1/2" x 12" x 24 teeth "ECLIPSE"	23.66	2.00	ea.	47.32

Actual Overhead 336.45

100

Browse

Technics

Records:
105

Unsorted

MISCELLANEOUS CONSUMABLES -- TECHNICS

Forming

Assembly

Finishing

Technics

Refrig.

P135/97

Project ID

MP Hotel

Project Name

MK-03

Item No.

Double Sink Table Size:0.70*2.40*(0.85+0.15)

1

Qty

Part ID	Description	U.Price	Qty	Unit	Price
U11501055	Seal Tape, "KINGER"	7.33	1.00	ea.	7.33

Actual Overhead

7.33

100

Browse

Miscellaneous Consumables

View by Part

93

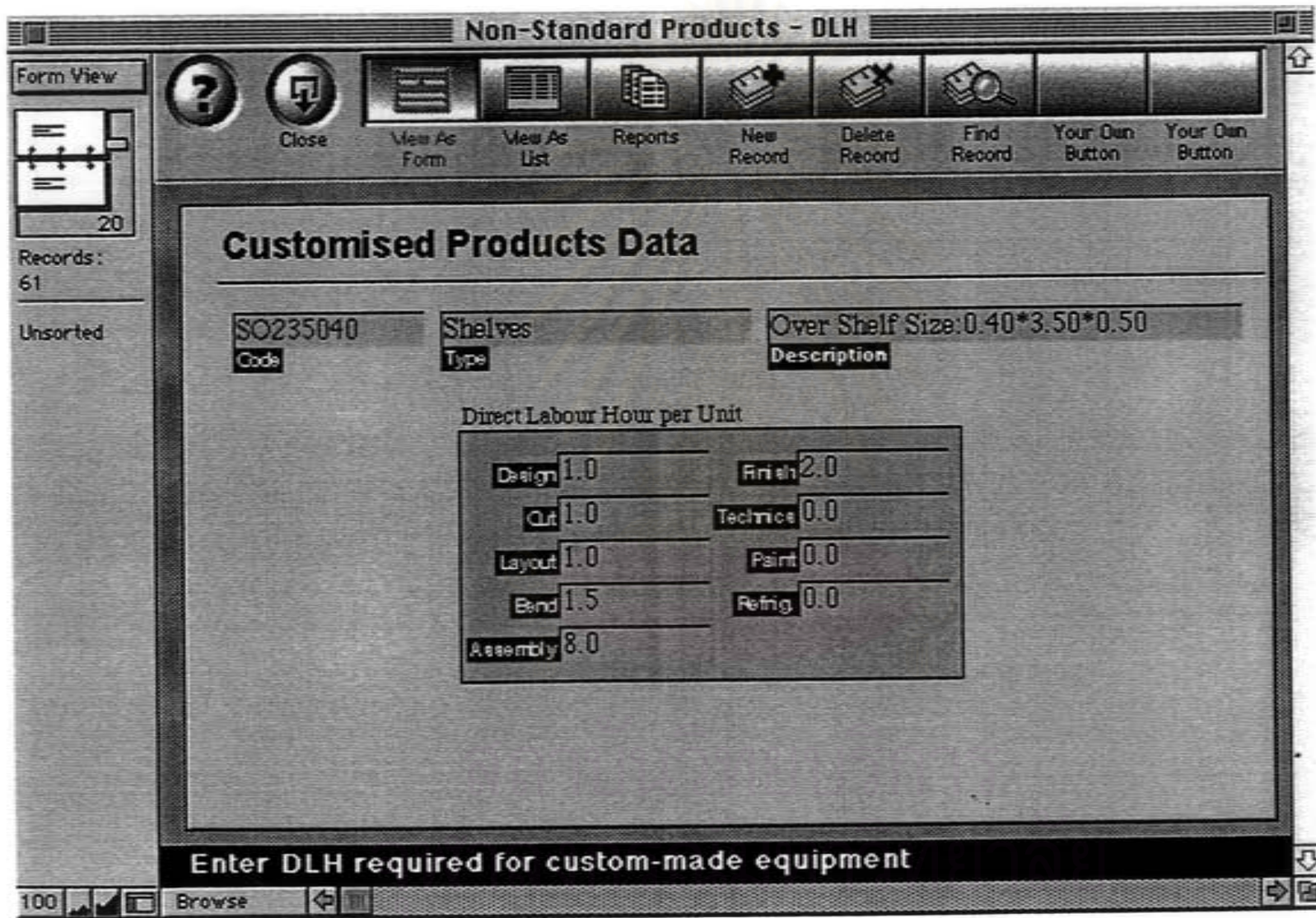
Records: 228

Unsorted

View Part Details

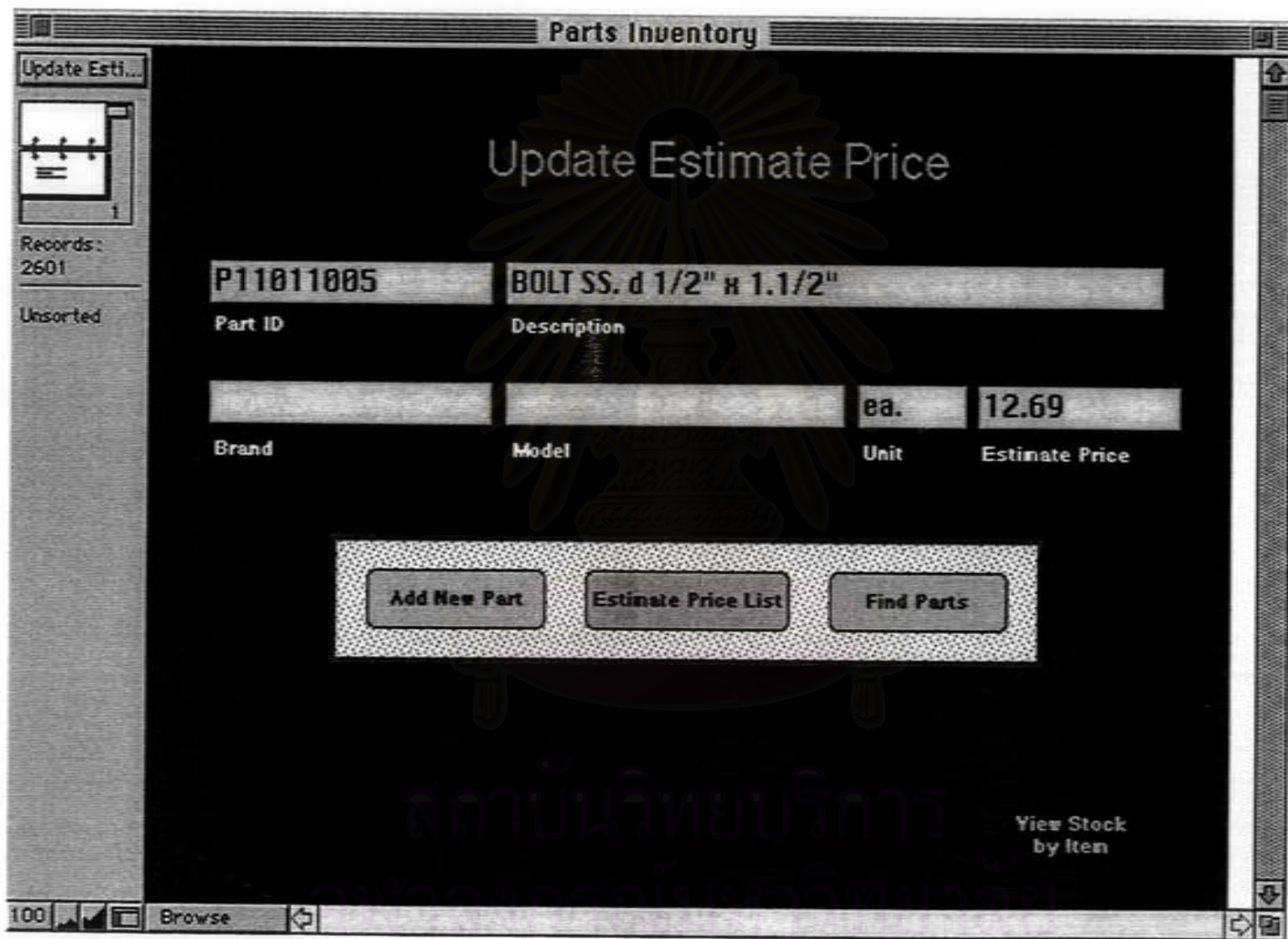
U55001045	Drill bit, d 4.0 mm.
Part ID	Description
ea.	23.71
Unit	Unit Price

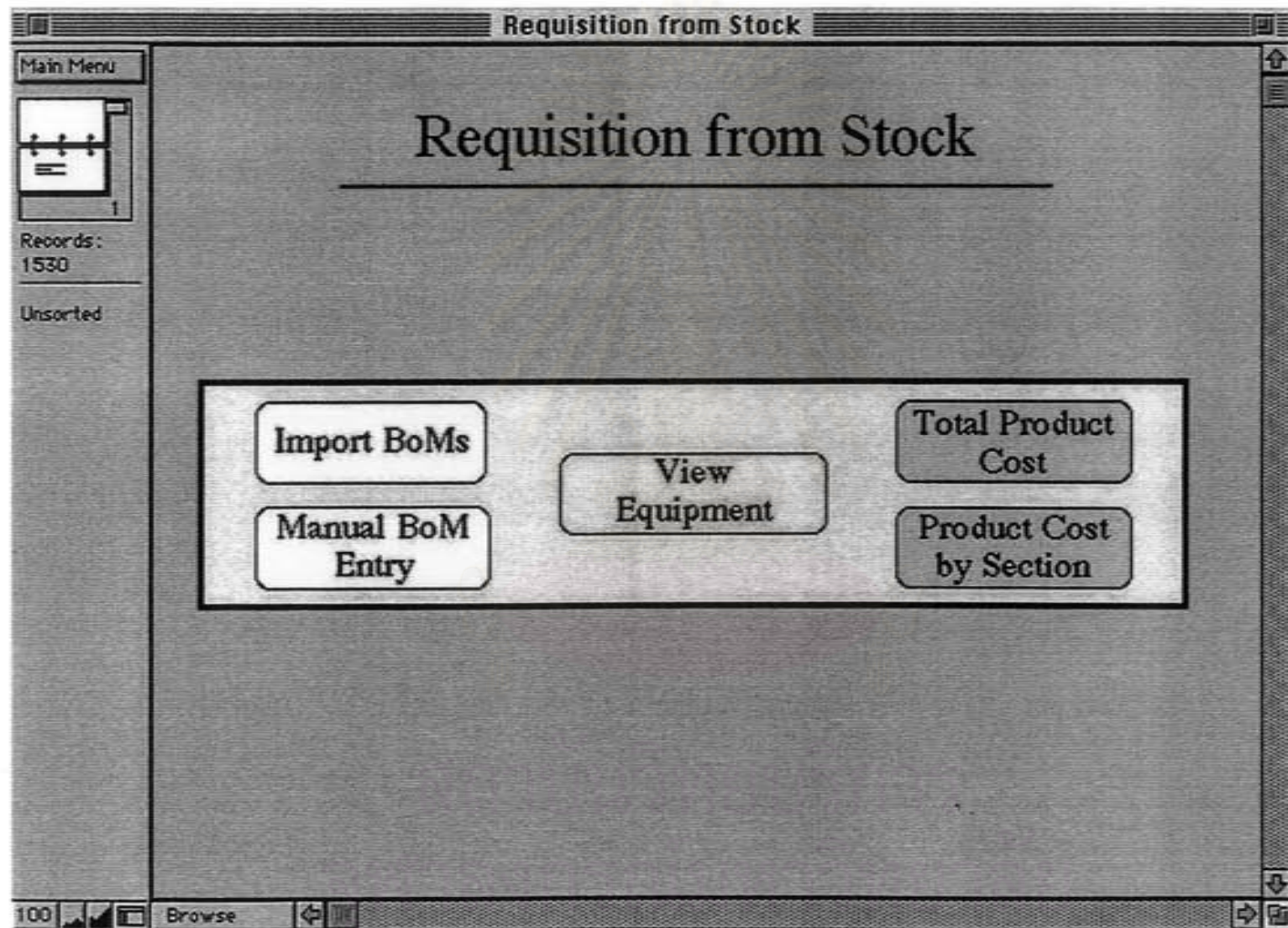
100 Browse



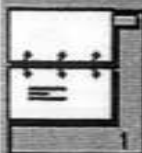
IX Non-Standard Product - DLH







Find items

Records:
1530

Unsorted

Product Details by Parts

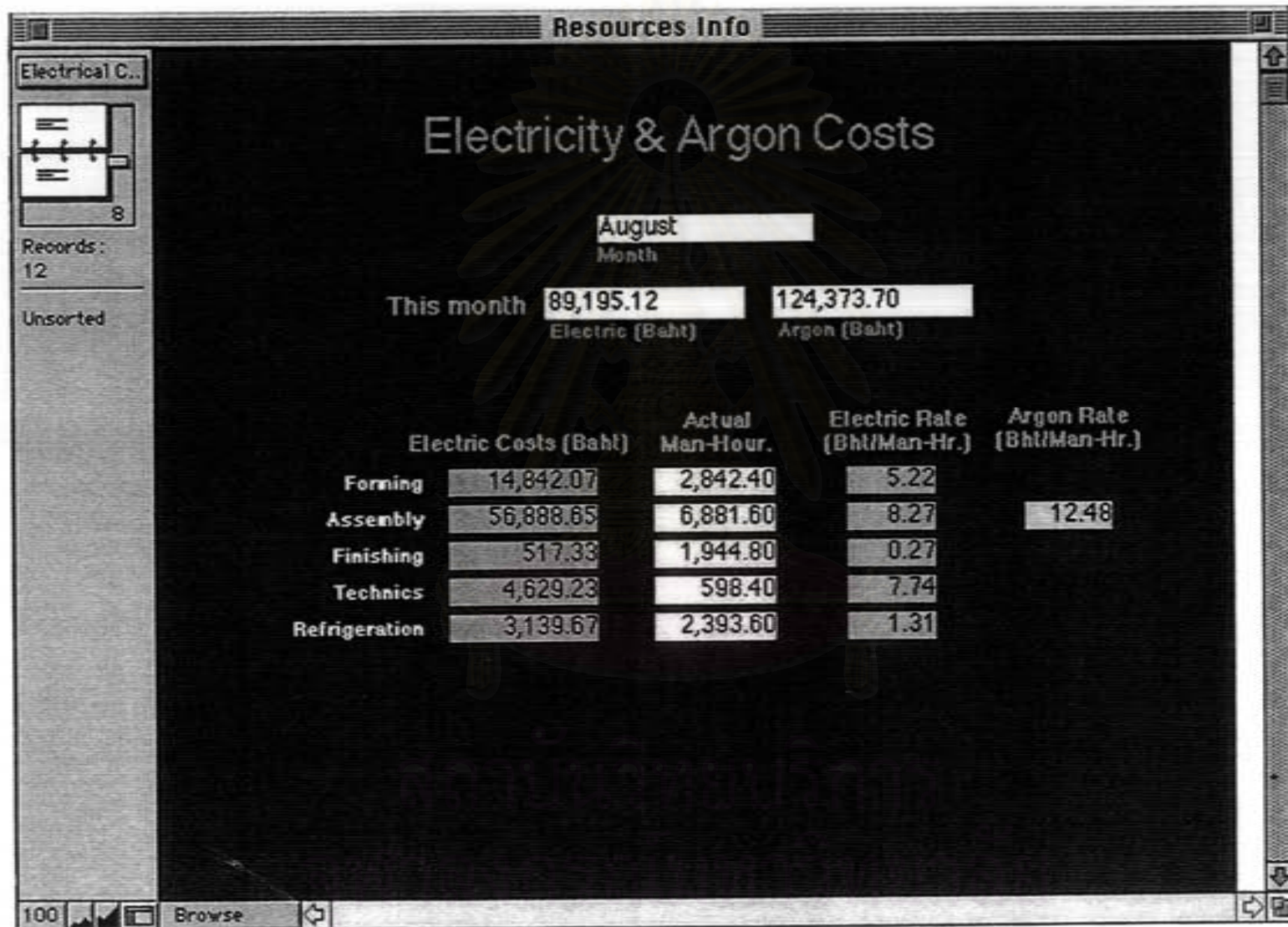
Item No.	Product ID	
MK-03	WS224000	
Description		
Double Sink Table Size:0.70*2.40*(0.85+0.15)		1.00
Part ID	Part Description	Part Qty.
R111016040	SS. Sheet No. 16 size 4' x 8'	4.95
	Section	
2	Forming	

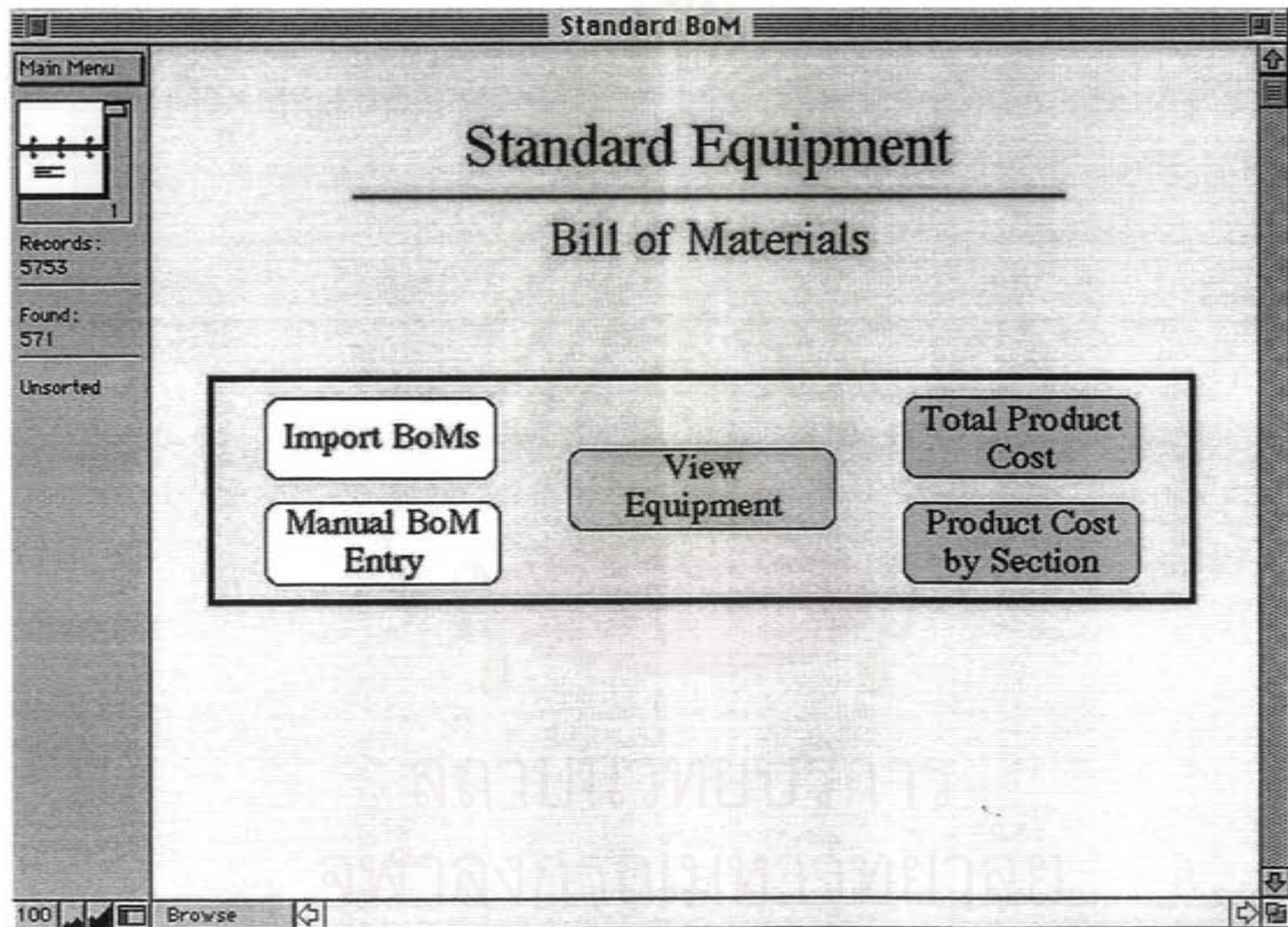
100

Browse

Resources Info				
Resources Information				
August Month				
This month		22	176.0	
		Working Days	Working Hour	
	No. of Labour	Actual Man-Hour.	Wages	DL Rate (Bht/Man-Hr.)
Forming	19	2,842.40	106,880.66	37.60
Assembly	46	6,881.60	254,347.66	36.96
Finishing	13	1,944.80	55,532.83	28.55
Technics	4	598.40	27,955.00	46.72
Refrigeration	16	2,393.60	78,370.00	32.74
Installation	32	3,942.40	214,334.00	54.37

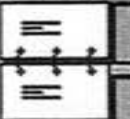
XII) Resources Info





Standard Time

Form View



166

Records: 281

Unsorted

?
Close
View As Form
View As List
Reports
New Record
Delete Record
Find Record
Your Own Button
Your Own Button

Product Data

TB115000	Tables	Table	
Code	Type	Description	

70 mm	150 mm	70 mm	17.3 Man-Hour
Depth	Length	Height	Standard Time

Direct Labour Hour

Design 1.0	Finish 3.0
Cut 0.5	Technic 0.0
Layout 0.8	Paint 0.0
Band 2.0	Refrig 0.0
Assembly 10.0	

Remark

Enter data for standard equipment

100
Browse



BIOGRAPHY

Atikom Jitcharoongphorn was born on March 9th, 1967 in Bangkok, Thailand. He graduated from Florida Institute of Technology in 1990 with a Bachelor degree in Space Sciences. He has been working with a foodservice equipment fabricator in Thailand as the Quality Assurance Manager since 1992.



สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย