

Space-Utilization

SPACE - UTILIZATION							
MAKING MONEY FOR OUR CUSTOMERS THROUGH PRODUCTIVE NARROW AISLE STORAGE							
Example with data entered for ABC Co. 4 high storage, Bendi and Drexel will load/unload trailers							
Justification Analysis for up to 4 Different Storage Systems - insert data in yellow blocks only							
1	System A	Front Loader					
2	System B	Reach					
3	System C	Bendi					
4	System D	Drexel					
5	Load Length	48	Loads stored calculator				
6	Load width	40					
7	Flue space	6	space available	60000	A	B	C
8	Aisle aize A	144	levels high	4	Front Loader	Reach	Bendi
9	Aisle aize B	108	Total loads stored		5,915	6,929	8,084
10	Aisle aize C	78	End aisles and cross aisle not included				
11	Aisle aize D	60					
12	Number of loads to be stored*	8,982					
13	Construction or 5 yr. Rental cost /sq. ft.	\$ 50.00					
14	Number of trucks A	4					
15	Number of trucks B	6	4 reach and 2 front loaders				
16	Number of trucks C	4					
17	Number of trucks D	4					
18	Average purchase cost per truck for A	\$ 25,000.00					
19	Average purchase cost per truck for B	\$ 27,000.00	=(4 x 28,000 + 2 x 25,000)/6				
20	Average purchase cost per truck for C	\$ 59,000.00					
21	Average purchase cost per truck for D	\$ 67,500.00					
22	Building maintenance cost per sq. ft. per year	\$ 1.25					
23	Number of operating hours expected in 5 years	10,000					
24	Average hourly cost of maintenance per truck A	\$ 1.60					
25	Average hourly cost of maintenance per truck B	\$ 2.27					
26	Average hourly cost of maintenance per truck C	\$ 1.95					
27	Average hourly cost of maintenance per truck D	\$ 2.00					
28	Number of forklift operators A	4					
29	Number of forklift operators B	6					
30	Number of forklift operators C	4					
31	Number of forklift operators D	4					
32	Operator cost per hour with burden	\$ 20.00					
5 year cost comparison							
	Front Loader	\$4,412,667	\$5,096,000	\$6,121,000	\$7,829,333	\$3,924,571	
	Reach	\$4,462,867	\$5,046,200	\$5,921,200	\$7,379,533	\$4,046,200	
	Bendi	\$3,646,000	\$4,146,000	\$4,896,000	\$6,146,000	\$3,288,857	
	Drexel	\$3,432,000	\$3,882,000	\$4,557,000	\$5,682,000	\$3,110,571	
Additional profit in 5 years vs system D							
	Front Loader	\$980,667	\$1,214,000	\$1,564,000	\$2,147,333	\$814,000	
	Reach	\$1,030,867	\$1,164,200	\$1,364,200	\$1,697,533	\$935,629	
	Bendi	\$214,000	\$264,000	\$339,000	\$464,000	\$178,286	
Cost per pallet							
	Front Loader	\$491.25	\$567.33	\$681.44	\$871.63	\$436.92	
	Reach	\$496.84	\$561.78	\$659.20	\$821.55	\$450.46	
	Bendi	\$405.90	\$461.57	\$545.06	\$684.22	\$366.14	
	Drexel	\$382.08	\$432.18	\$507.32	\$632.57	\$346.29	
Savings per pallet vs. system D							
	Front Loader	\$109.18	\$135.15	\$174.12	\$239.06	\$90.62	
	Reach	\$114.76	\$129.61	\$151.87	\$188.98	\$104.16	
	Bendi	\$23.82	\$29.39	\$37.74	\$51.66	\$19.85	