

EXAMPLE 2

Formula using estimated air flow of 24,000 CFM with a 2,500,000 BTU burner

Painting Cycle Temp of 75 Degrees	75			
Outside Temp in Degrees	50			
Temperature Rise in Degrees	25	H	BTU	
CRM	Temp Rise	1.08	648,000	
24,000	25			
1 Therm =	100,000 BTU	Therms		
BTU Per Hour	100,000 = 1 Therm	6.48		
648000	100,000	Cost per hour		
Therms per Hour	Cost per Therm	\$3.24		
6.48	\$0.50			
Current Hours per day Paint Cycle	Cost per Day Spray cycle			
12	\$38.88			

Sample formula using 24,000 CFM example; outside temp 50 degrees; painting temp 75 degrees; temperature rise 25 degrees

Current Curing Temp (Max Metal Temp)	120			
Outside Temp in Degrees	50			
Temperature Rise in Degrees	70			
CRM	Temp Rise	H	BTU	
24,000	70	1.08	1,814,400	
1 Therm =	100,000 BTU			
BTU Per Hour	100,000 = 1 Therm	Therms		
1,814,400	100,000	18.14		
Therms per Hour	Cost of Therm	Cost per hour		
18.14	\$0.50	\$9.07		
Current Hours per Day Cure Cycle	Cost per Day Cure cycle			
6	\$54.43			

Average work days per month in 2021	20.9			
Daily Gas Expense Paint and Cure	\$93.31			
Monthly Gas Expense	\$1,950.22			
Current capacity Units per day	3			
Current estimated gas cost per Unit painted	\$31.10			
US AutoCure System				
BTU Per Hour	100,000 = 1 Therm	Therms		
308,000	100,000	3.08		
Distance of Run for 40 foot unit in feet	Run Speed in Ft/min	Time per Cycle	Therms/Min	Therms per Cycle
50	1	50.00	0.05133	2.57
US AutoCure System Passes per Unit	Therm Use per Unit	Cost of Therm	Gas Cost per Unit	
2	5.13	\$0.50	\$2.57	
Estimated future capacity units per day	5			
Gas Cost per Day Cure US Autocure System	\$12.83			
Hour per day Paint Cycle	Cost per Day Spray cycle			
10	\$32.40			
Cost per day using US Autocure System	\$45.23			
Gas cost per unit (5 unit per day)	\$9.05			

Current Daily Capability	Daily Gas Expense	Monthly Gas Expense	Annual Gas Expense	Gas Cost Per Unit
3	\$93.31	\$1,950.22	\$23,402.65	\$31.10
With US Autocure System	Daily Gas Expense	Monthly Gas Expense	Annual Gas Expense	Gas Cost Per Unit
5	\$45.23	\$945.38	\$11,344.52	\$9.05