

Refrigeration Recommissioning

SIMULATION REPORT

Instructions:

Refrigeration trade partners should complete a Simulation Report showing data on the original operating conditions and energy consumed and on the improved operating conditions and energy used. We offer this template as a guide to the information we need – feel free to use your own format. If you use a software package to compile this information, please provide the actual input and output files. If you use hand calculations, please provide your calculations. A narrative should also be included to describe the specific system deficiencies that were found and the specific corrective actions that were taken. The Simulation Report needs to be submitted with Refrigeration Recommissioning rebate applications.

Project Description

Include a summary of what you found during your investigation and what repairs were made. For example:
“The system was found to have a number of blocked evaporators in the dairy cases which forced the suction temperature to be set unnecessarily low. By making this repair, the suction temperature was raised from 20F to 25F.”

Original Refrigeration Operation Information

LOW- TO MEDIUM-TEMPERATURE OPERATION										
INPUTS	Compressors					OUTPUTS	Month	Demand (kW)	Consumption (kW)	
	Capacity (Btu/hr)						1			
	Horsepower						2			
	Saturated Suction (F)						3			
	Saturated Discharge (F)						4			
	Condenser						5			
	Capacity (Btu/hr-F)						6			
	Fans (hp)						7			
	Temperature Difference (F)						8			
	Case Load						9			
Loads (Btu/hr)					10					
					11					
					12					

MEDIUM- TO HIGH-TEMPERATURE OPERATION										
INPUTS	Compressors					OUTPUTS	Month	Demand (kW)	Consumption (kW)	
	Capacity (Btu/hr)						1			
	Horsepower						2			
	Saturated Suction (F)						3			
	Saturated Discharge (F)						4			
	Condenser						5			
	Capacity (Btu/hr-F)						6			
	Fans (hp)						7			
	Temperature Difference (F)						8			
	Case Load						9			
Loads (Btu/hr)					10					
					11					
					12					

Optimized Refrigeration Operation Information

LOW- TO MEDIUM-TEMPERATURE OPERATION									
INPUTS	Compressors					OUTPUTS	Month	Demand (kW)	Consumption (kW)
	Capacity (Btu/hr)						1		
	Horsepower						2		
	Saturated Suction (F)						3		
	Saturated Discharge (F)						4		
	Condenser						5		
	Capacity (Btu/hr-F)						6		
	Fans (hp)						7		
	Temperature Difference (F)						8		
	Case Load						9		
	Loads (Btu/hr)						10		
							11		
							12		

MEDIUM- TO HIGH-TEMPERATURE OPERATION									
INPUTS	Compressors					OUTPUTS	Month	Demand (kW)	Consumption (kW)
	Capacity (Btu/hr)						1		
	Horsepower						2		
	Saturated Suction (F)						3		
	Saturated Discharge (F)						4		
	Condenser						5		
	Capacity (Btu/hr-F)						6		
	Fans (hp)						7		
	Temperature Difference (F)						8		
	Case Load						9		
	Loads (Btu/hr)						10		
							11		
							12		