



QUINCY EFFICIENCY QUOTIENT WORKSHEET



Performance You Demand.
Reliability You Trust.

Supply Side EQ® Rating	score	enter value for each condition that applies
Rotary / Recip Control Mode	0	VSD or Variable Displacement
	3	Load/Unload
	8	Modulation
Centrifugal Compressor Blowoff	0	No blowoff valves ever open
	3	One blowoff valve open occasionally
	5	One blowoff valve open often
	7	Two blowoff valves open at times
	10	More than two blowoff valves open
Supply Side Storage	0	10 gallons / cfm of largest compressor
	1	5 gallons / cfm of largest compressor
	2	3 gallons / cfm of largest compressor
	4	2 gallons / cfm of largest compressor
	6	1 or less gallons / cfm of largest compressor
Multiple Compressor Sequencing	0	Intelligent Energy Control
	2	Single Pressure Band Sequencer
	4	Pressure switch sequencer
	6	None - manual rotation
Compressor & Equipment Maintenance	0	Professional Service Contract
	1	In-house preventive maintenance
	3	Repair only maintenance
	6	Repair only maint.; experiencing reliability issues
Compressor Room Conditions <i>(Use all that apply)</i>	0	Clean and well ventilated
	2	Elevated temperatures
	2	Dusty or dirty air
	2	Poor cooling water treatment
Air Treatment - Dryers	0	Cycling refrigerated dryers or no dryers
	1	Non-cycling refrigerated dryers
	2	Heat of compression dryers
	4	Heated blower desiccant dryers
	6	Heated desiccant dryers
	10	Heatless desiccant dryers
Air Treatment - total pressure drop	0	< 2 psid
	1	< 5 psid
	4	< 10 psid
	7	> 10 psid

EQ Rating conducted by —

Name: _____
 Company: _____
 Phone: _____
 Email: _____

EQ Rating conducted for —

Company: _____
 Contact: _____
 Title: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____
 Email: _____

Total Supply System Score	_____	Add up all scores above
Supply System EQ Rating	_____ %	Subtract total from 100 (relative to 100% of potential efficiency)

Energy Calculations							
compressors	*hp		kW	refrig dryers	cfm capacity	**divide by	kW
#1		x .746/.92		#1		200	
#2		x .746/.92		#2		200	
#3		x .746/.92		#3		200	
#4		x .746/.92		#4		200	
#5		x .746/.92		#5		200	
#6		x .746/.92		#6		200	
compressor kW subtotal			_____	dryer kW subtotal			_____
***cooling kW subtotal			_____				
compressor + dryer + cooling = total kW			_____				
x operational hours per year			_____				
x \$ per kW-Hr local rate			_____				
= Operating Costs Estimate			\$ _____				

* enter nominal motor hp if on, leave blank if off
 ** divide by 60 for heated desiccant dryers
 *** calculated as 3% of compressor kW



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Demand Side EQ® Rating	score	enter value for each condition that applies
Artificial Demand/ Header Pressure	1	<80 psig plant header pressure
	3	80-90 psig plant header pressure
	5	90-100 psig plant header pressure
	8	>100 psig plant header pressure
Open Blowing Applications	0	No compressed air blowing or use low pressure blowers only
	2	Minimal blowing applications using engineered nozzles
	5	Some compressed air blowing using tubing or pipe manifolds
	8	Significant use of comp air blowing on product or equipment
Inappropriate or Inefficient Uses <i>(Use all that apply)</i>	0	No inappropriate or inefficient uses identified
	2	Vacuum generators and venturis driven by compressed air
	2	Sparging, mixing of liquids with compressed air
	2	Vibrators or agitators powered by compressed air
	2	Other: diaphragm pumps, filter presses
	4	Large or multiple pulse type baghouses or dust collector
	5	Conveying of material with compressed air (not blowers)
Leak Management	1	Aggressive leak repair program including ultrasonic scanning
	3	Semi or annual leak repair effort
	5	No leak management but do repair large or obvious leaks
	7	Minimal effort on leak repairs
Idle Production Equipment	0	Automatic shutoff of air to idle production equipment
	2	Manual shutoff of air to idle production equipment
	4	No shutoff of air to idle production equipment
Condensate Drain Losses	0	All demand style drains well maintained
	2	Mix of demand and solenoid drains
	4	Timed solenoid drains
	6	Partially open valves or drain bypasses
Total Demand Side Score		Add up all scores above
Demand Side EQ Rating	%	Subtract total from 100 (relative to 100% of potential efficiency)

Efficiency Quotient Summary

Supply Side EQ Rating	%	
Demand Side EQ Rating	%	
(Demand EQ + Supply EQ) / 2	%	System EQ Rating
System EQ Rating of	>95%	5% Opportunities exist, but Return On Investment may be limited
	>90%	10% Operating cost reductions of 5-10% exist, providing an attractive ROI
	>85%	20% Operating cost reductions of 15-20% exist, providing an attractive ROI
	>80%	25% Operating cost reductions of 20-25% exist, providing an attractive ROI
	>75%	30% Operating cost reductions of 25-30% exist, providing an attractive ROI
	>70%	35% Operating cost reductions of 30-40% exist, providing an attractive ROI
	>65%	45% Operating cost reductions of >40% exist, providing an attractive ROI
OPERATING COSTS ESTIMATE <i>(From Energy Calculations Worksheet)</i>	\$	
Cost reduction opportunity based on EQ Rating	%	<i>(copy in reduction opportunity based on system EQ rating)</i>
Cost Reduction Opportunity	\$	ROI payback required _____ years Project funding available \$ _____