Quincy COMPRESSOR

an EnPro Industries company

QCS

Condensate Purifiers

QCS SERIES
100-1600 CFM
Q SPLIT SERIES
700 – 9000 CFM

Environmentally Responsible Products

QUINCY CONDENSATE PURIFIERS

ENVIRONMENTALLY RESPONSIBLE PRODUCTS

Compressed air is one of the most common and versatile utilities in use today. Raw compressed air, however, contains high concentrations of contaminated gasses, dirty water and various lubricants. If allowed to enter a compressed air distribution system, these pollutants will slow down production, ruin processes, and damage air operated equipment. To prevent these occurrences from causing unscheduled business interruptions, commonly referred to as “down time”, most facilities employ such downstream air purification devices as aftercoolers, filters, and air dryers. The unavoidable by-product of such devices is a nasty brew of contaminate laced condensate. Oily, contaminated condensate is considered a hazardous material and should be handled and disposed of as such.

Over the years, commercial and industrial sites have struggled with how to properly dispose of this hazardous waste. Many have found that dumping condensate down the sewer, on to the ground, or into a lake, river or stream violates several environmental regulations and eventually results in significant penalties.

Section 309 of the Federal Water Pollution Control Act provides for fines of not less than $2,500 per day to $25,000 per day, or jail time, or both for first time violators. Such penalties can be assessed against the delinquent company and/or the person or persons responsible for plant operations and maintenance.

Quincy Condensate Purifiers use an environmentally responsible filtration process to remove contaminates from condensate. Contaminates are trapped in a special filter cartridge. The lightweight filter cartridge can be easily disposed of in accordance with local regulations.

Quincy Condensate Purifiers protect commercial and industrial sites and personnel from costly fines and penalties while helping to protect our waterways for future generations.

THE RESPONSIBILITY IS YOURS!

QCS SERIES 100 CFM - 1,600 CFM

- Removes all compressor lubricants, including polyglycol emulsions
- Light weight, easy change, disposable filter cartridge
- Clean, carbon-free filter media
- Versatile size range allows for single or multiple-unit configurations

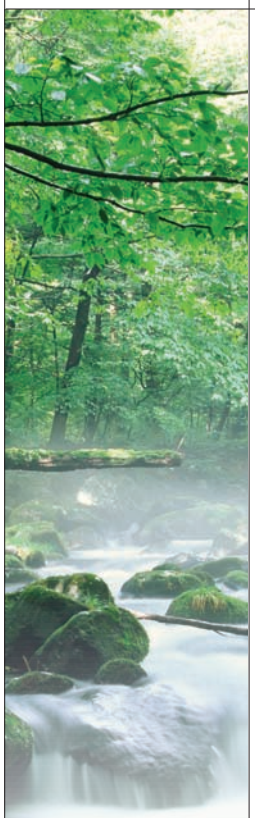
Quincy's new QCS condensate purifier replaces the old gravity separator and is superior to all gravity type separators, and is far superior to the big, black bottle pac's that trap dirty condensate in a heavy, rock-like media. The QCS is much lighter, much cleaner, and far easier to service than any other condensate processing device.

The QCS removes all compressor fluids including polyglycols. Several sizes are available to allow for single or multiple-unit configurations. QCS capacity can be extended for increased demand by installing additional units and operating them in parallel with the originals. Some maintenance programs will find the smaller cartridges used in multiple-unit installation easier to change than a single large unit.

Q SPLIT SERIES 700 CFM - 9000 CFM

- High Capacity Condensate Purifier (as high as 9,000 cfm at 6,000 operating hours)
- Unique condensate splitting process removes all compressor fluids including polyglycols
- Electronic monitoring ensures consistent perfomance and environmental protection
- Alarm messages can be processed externally via the dry contact output
- Lowest operating cost
  - Routine service in under 10 minutes
  - Splitting process requires no electrical power

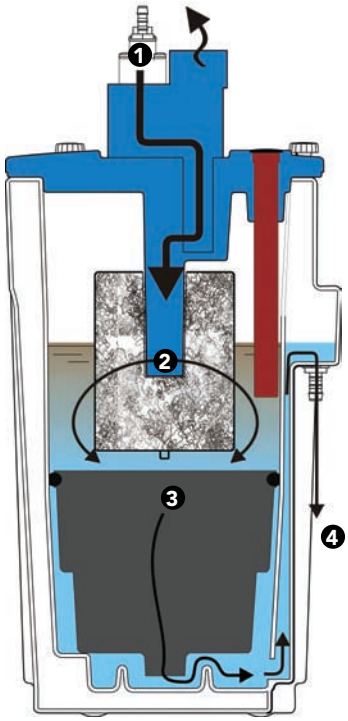
Q Split Condensate Purifiers employ a unique splitting agent to remove dirty, emulsions and lubricants from contaminated condensate. The Q Split is equipped with a microprocessor and alarm to electronically monitor, splitting agent condition, filter pack condition and condensate levels.



QUINCY CONDENSATE PURIFIERS

QCS OPERATION

1. Untreated condensate flows into the integral pressure relief chamber where line pressure is released
2. The depressurized condensate then flows into the 1st stage prefilter where bulk contaminates and oil are trapped in the oliophilic filter material
3. The prefilterd condensate is then directed into the polishing filter cartridge where the remaining contaminates are removed
4. Clean water exits the disposable cartridge, rises to the outlet port and is discharged from the QCS purifier



QCS 900-1600

LIGHTWEIGHT FILTER CARTRIDGE FACILITATES EASY REMOVAL

The QCS 100 and QCS 450 employ a lightweight, disposable, single cartridge while the QCS 900 and QCS 1600 use a lightweight, disposable, two-piece cartridge assembly. Both configurations are very easy to change.

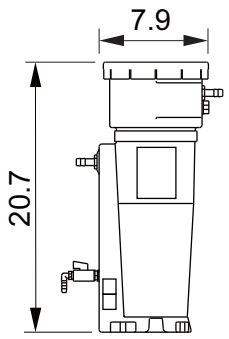
QCS 450 shown

QCS ENGINEERING DATA

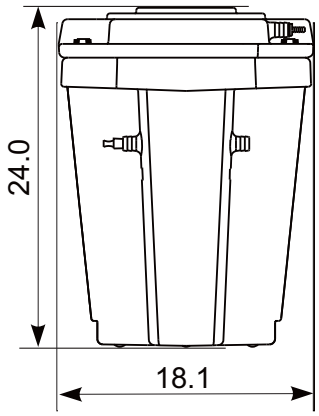
	Tank Capacity	Filling Capacity	Condensate Inlet	Water Outlet	Weight Empty	Min/Max Temp	Max Operating Pressure at Inlet
QCS 100	2.64 gal	1.14 gal	(2) 1/2"	1/2"	7.7 lbs.	41 to 140 °F	232 psi
QCS 450*	17.73 gal	12.46 gal	(1) 1/2" & (1) 1"	1"	19.5 lbs.	41 to 140 °F	232 psi
QCS 900*	30.51 gal	19.15 gal	(3) 1/2" & (1) 1"	1"	70.6 lbs.	41 to 140 °F	232 psi
QCS 1600*	60.34 gal	36.24 gal	(3) 1/2" & (1) 1"	1"	92.6 lbs.	41 to 140 °F	232 psi

* 1/2" inlet can be modified for 1" inlet
Capacity can be expanded by operating multiple units in parallel using flow splitter

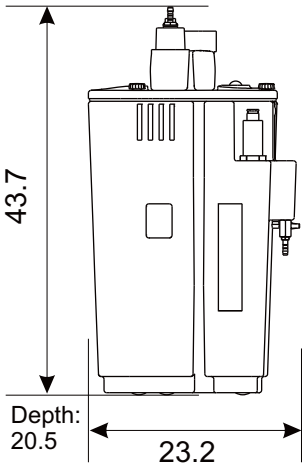
QCS 100



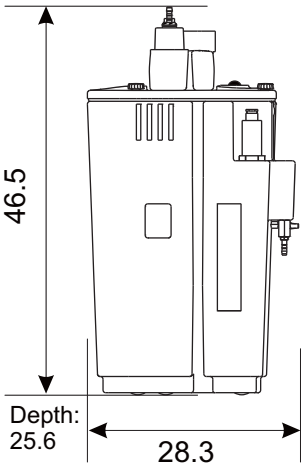
QCS 450



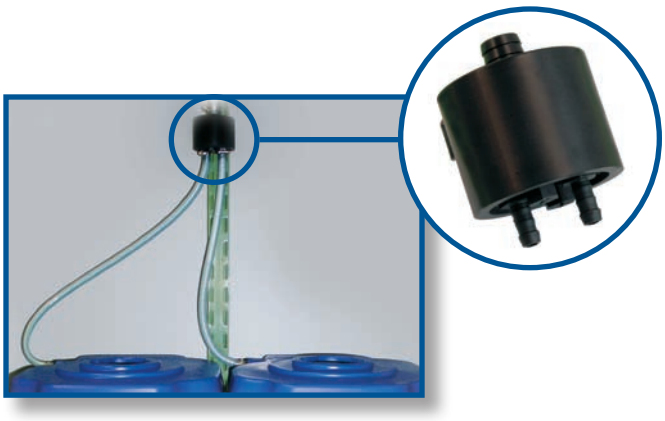
QCS 900



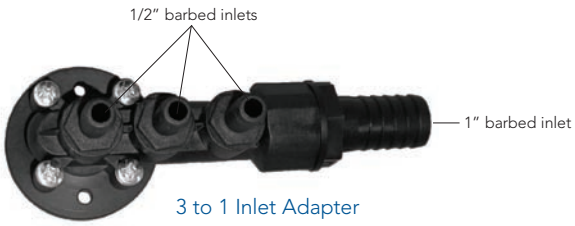
QCS 1600



Available Accessories

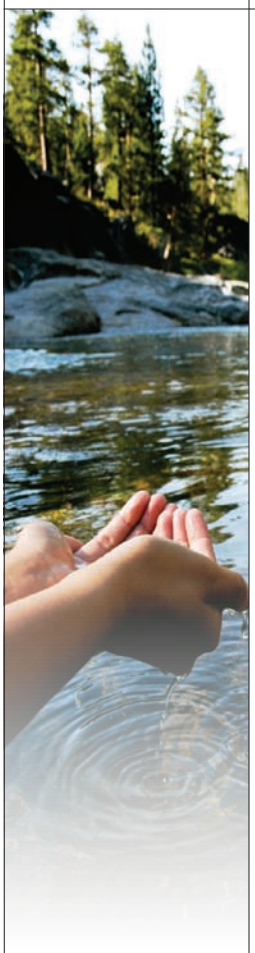


1 to 4 Flow Splitter



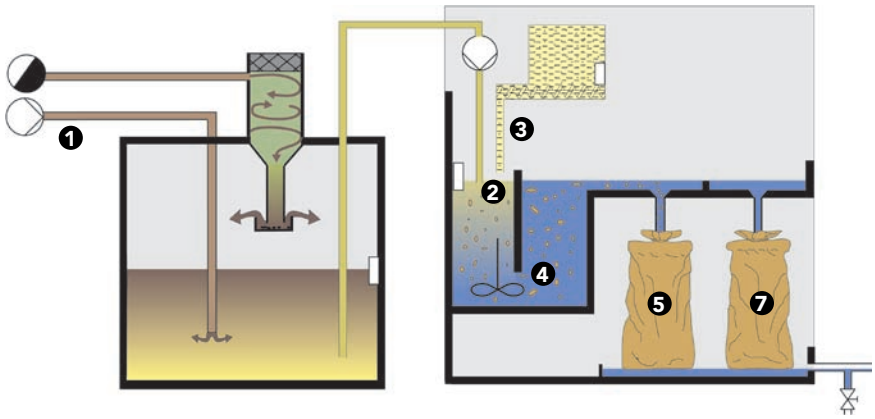
3 to 1 Inlet Adapter

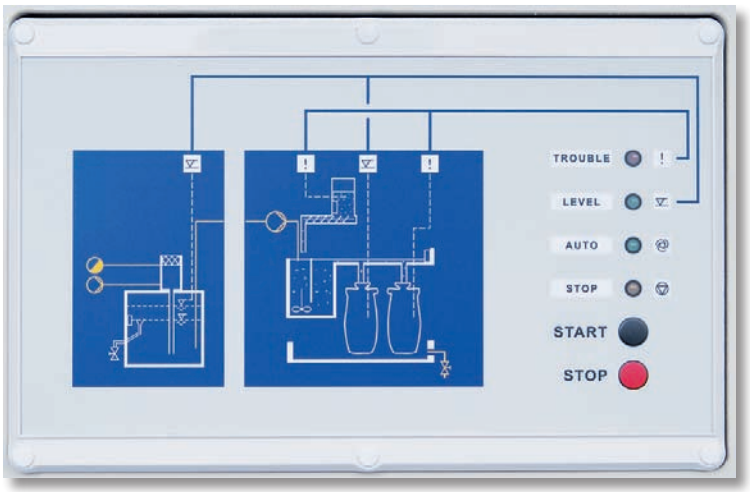
- Four Port Multiple Inlet Adaptors are standard on QCS 900 and QCS 1,600 and optional on QCS 100 and QCS 450
- Additional Multiple Inlet Adaptors are available for applications where more than four inlets are required. Two Adaptors can be installed in series to accommodate up to seven drain lines



Q SPLIT OPERATION

1. Untreated condensate flows through a pressure relief chamber into a pre separation tank where the liquid level is monitored by the controller
2. The condensate is then directed into the reaction chamber where it is mixed with a non-toxic, natural alumina, bentonite splitting agent
3. The splitting agent is precisely metered and automatically released into the reaction chamber
4. The splitting agent encapsulates liquid oil and dirt particles, transforming them into an easily filtered, macro flocs material
5. The macro flocs are trapped in the carbon-free filter bags and clean condensate is discharged from the Q Split purifier
6. The electronic monitor will indicate when filters need to be changed or when splitting agent needs to be added
7. Filter bag replacement is easy and clean





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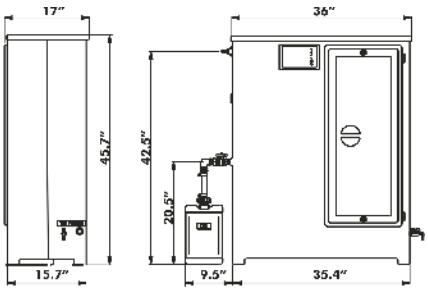
Control Panel

Q SPLIT ENGINEERING DATA

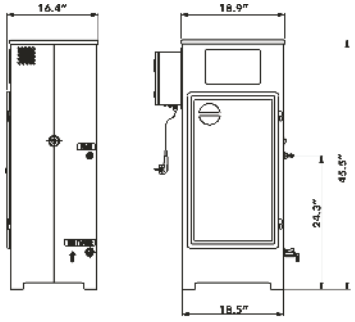
	Q Split 11	Q Split 12	Q Split 13	Q Split 14	Q Split 15	Q Split 16
Peak compressor performance	675 cfm	1238 cfm	2700 cfm	4050 cfm	5625 cfm	6750 cfm
Peak throughput	4 g/h	8 g/h	16 g/h	24 g/h	32 g/h	40 g/h
Max operating pressure at inlet	360 psi	360 psi	360 psi	360 psi	360 psi	360 psi
Integrated pre separation tank	18.5 gal	-	-	-	-	-
Reaction tank capacity	2.6 gal	2.6 gal	5.8 gal	5.8 gal	14.3	14.3 gal
Splitting agent container capacity	0.5 gal	2.3 gal	2.3 gal	2.3 gal	10.6 gal	10.6 gal
Filter bag capacity	6.6 gal	6.6 gal	(2) 15.9 gal	(2) 15.9 gal	(2) 15.9 gal*	(2) 15.9 gal*
Weight empty (approximate)	106 lbs.	150 lbs.	195 lbs.	195 lbs.	242 lbs.	242 lbs.
Input voltage	100-240 V	115 V **	115 V **	115 V **	115 V **	115 V **
	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Power input	<100 VA	<100 VA	<100 VA	<100 VA	<100 VA	<100 VA
Condensate inlet	(3) 1/2" & 1"	1/2" & 1"	1/2" & 1"	1/2" & 1"	1/2" & 1"	1/2" & 1"
Water outlet	1"	1"	1"	1"	1"	1"

* Can be increased through optional filter module ** Other voltages available

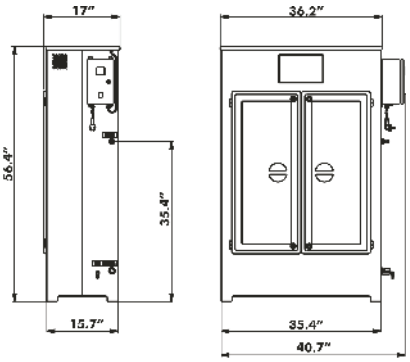
Q Split 11



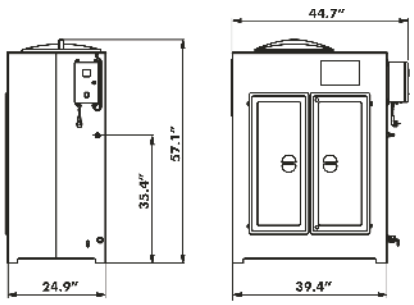
Q Split 12



Q Split 13 - 14



Q Split 15 - 16



COMPRESSED AIR SYSTEMS BEST PRACTICE

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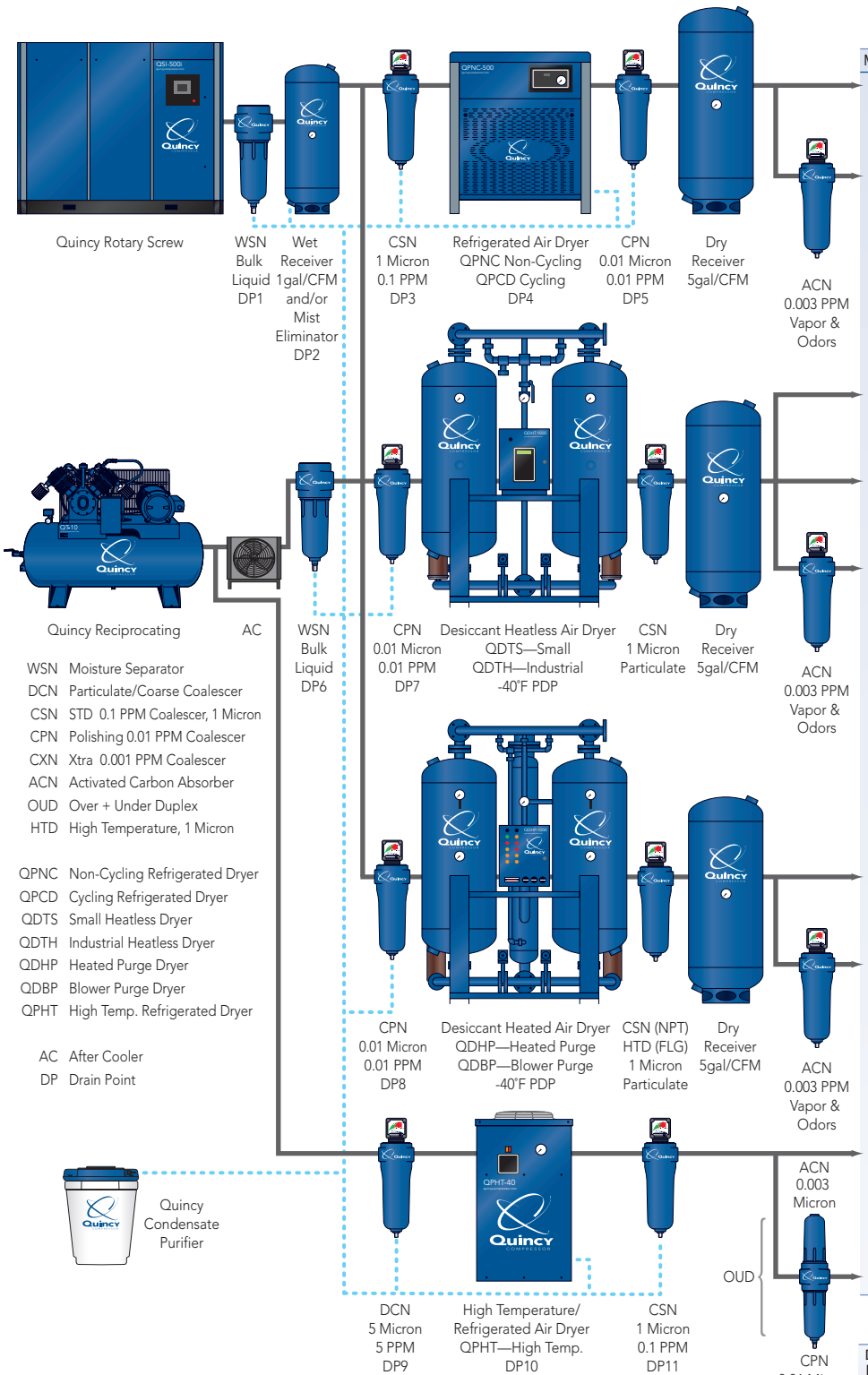

WSN Moisture Separator
DCN Particulate/Coarse Coalescer
CSN STD 0.1 PPM Coalescer, 1 Micron
CPN Polishing 0.01 PPM Coalescer
CXN Xtra 0.001 PPM Coalescer
ACN Activated Carbon Absorber
OUD Over + Under Duplex
HTD High Temperature, 1 Micron

QPNC Non-Cycling Refrigerated Dryer
QPCD Cycling Refrigerated Dryer
QDTS Small Heatless Dryer
QDTH Industrial Heatless Dryer
QDHP Heated Purge Dryer
QDBP Blower Purge Dryer
QPHT High Temp. Refrigerated Dryer

AC After Cooler
DP Drain Point

Air Quality Classification ISO 8573.1						Wet System Avg. DP	
Solids		Moisture		Oil			
Micron	ISO	PDP	ISO	PPM	ISO	psi	Mbar
0.01	1	+38°F	4	0.01	1	10.7	738
0.01	1	+38°F	4	0.003	1	11.8	814
0.01	1	-100°F	1	0.001	1	14.2	979
NOTE: Requires CXN (.001 PPM) filter in series with standard CPN prefilter.							
1	2	-40°F	2	0.01	1	9.2	634
0.01	1	-40°F	2	0.003	1	10.3	710
1	2	-40°F	2	0.01	1	9.2	634
0.01	1	-40°F	2	0.003	1	10.3	710
1	2	+50°F	6	0.01	2	7.8	538
0.01	1	+50°F	6	0.003	1	10.0	689

Approximate Liquid Removal
100 CFM, 100 psi, 80°F, 4000 hrs./yr., 2 PPM

Drain Point	Gallons per Year	Drain Point	Gallons per Year	Drain Point	Gallons per Year
1	3000	5	140	9	300
2	2000	6	3000	10	4320
3	305	7	310	11	120
4	1300	8	310		

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