



Innovative Environmental Products

Quick-Change™ Orifice Plate Wellhead

The First Engineered Solutions
for LFG Measurement & Control



Quick-Change™ Orifice Plate Wellhead

Revolutionary orifice plate technology for the control and direct measurement of landfill gas.

QED's new Quick-Change™ Orifice Plate Wellhead (U.S. Patent Number 8,800,597 & Patents Pending) combines easy plate exchanges for accurate flow measurements with precise adjustment control over a broad flow range.

The Quick-Change Orifice Plate feature makes it as easy as 1-2-3 for the operator to change to the most appropriate size plate for the given conditions. The accessible plate housing allows for easy confirmation of plate size and placement giving you the highest confidence in your flow reading.

Accessible housing allows easy viewing of installed plate

Changing to the correct orifice plate can be done in seconds, and there is no time wasted shutting down the control valve or rebalancing the wellfield. These benefits all save valuable field time and help reduce labor costs.


The Wellhead's control valve design allows you to finely control gas flow even at rates under 10 scfm. The unique design will change the way operators adjust gas flow. Wells can now be tuned by flow rather than by vacuum.

Quick-Change Orifice Plate (Patent Pending) Advantages:

- Saves time – plates can be changed in seconds
- Accurate flow measurements – match the right plate with the gas flow
- Reduces reporting errors – easy to identify the plate size in use

Specifications:

	vertical			horizontal
Model:	1 1/4" (32 mm) ORP115M	2" (50 mm) ORP215M	3" (80 mm) ORP315	2" (50 mm) ORP215MHV
Optimal Flow Range:	0-60 scfm (0-102 m³/h)	0-125 scfm (0-212 m³/h)	30-300 scfm (50-500 m³/h)	0-125 scfm (0-212 m³/h)
Wellhead Materials:	PVC, Stainless Steel, Viton®, glass-filled polypro for 1.25" and 2"			
Fitting Options:	Brass barbs, quick connects			

Quick-Change Orifice Plates	Nylon Plate Kit	1 1/4" vertical Plate Kit	2" vertical Plate Kit	3" vertical Plate Kit	2" horizontal Plate Kit
	40770 set of 6 Nylon plates: 0.40" (10 mm) 0.50" (13 mm) 0.75" (19 mm) 1" (25 mm) 1.25" (31 mm) 1.40" (35 mm)	40747 set of 4 SS plates: 0.26" (6.6 mm) 0.40" (10 mm) 0.75" (19 mm) 0.95" (24 mm)	40640 set of 6 SS plates: 0.40" (10 mm) 0.50" (13 mm) 0.75" (19 mm) 1" (25 mm) 1.25" (31 mm) 1.40" (35 mm)	40660 set of 3 SS plates: 1.25" (31 mm) 1.75" (44 mm) 2.10" (53 mm)	40690 set of 6 SS plates: 0.40" (10 mm) 0.50" (13 mm) 0.75" (19 mm) 1" (25 mm) 1.25" (31 mm) 1.40" (35 mm)

QED's Quick-Change Orifice Plates are constructed of fiber reinforced nylon or 1/16" stainless steel. With several sizes of orifice plate available, it is easy to select the right plate for the appropriate pressure drop allowing for accurate flow measurement readings.



PRECISION



Precision Fine Tune™ Control Valve Advantages:

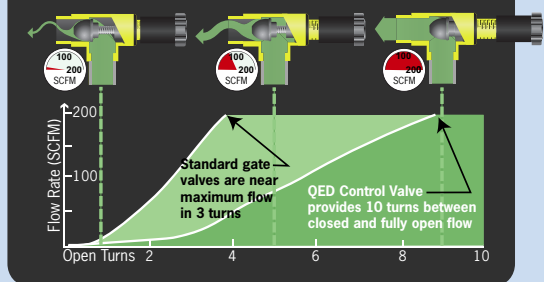
- Fine adjustment over entire range of valve movement
- Position scale shows exact valve setting for easy reset
- Rugged stainless steel stem/handle for long-term durability

All Precision Wellheads include the Precision Fine Tune™ Control Valve (U.S. Patent Number 8,800,597). This Control Valve is a breakthrough in landfill gas wellfield tuning. Unlike traditional “gate” type valves, this valve allows you to easily and precisely adjust the gas flow from a well, rather than just turning the flow on or off. The revolutionary design gives you the ability to achieve linear flow adjustment across the entire range of valve movement.

Heavy duty stainless-steel stem and glass filled polypropylene handle outlasts plastic used in standard gate valves

The valve also has a high visibility metered scale that allows you to easily observe the flow setting, and quickly and accurately return to the exact setting after a shutdown. The rising stem valve exposes more of the metered scale as it is opened, allowing you to see and record numerically exactly how far the valve is open.

New QED control valve design outperforms common globe and gate valves



The rugged valve stem and handle make the Fine Tune™ Control Valve much more durable in the harsh outdoor environment to which landfill gas wells are exposed.



STEP 1
Remove dust cover and loosen collar with a quarter-turn



STEP 2
Change plate



STEP 3
Tighten collar and replace dust cover



Stabilizer™ LFG Well Caps

QED's innovative Stabilizer™ LFG Well Caps (US Patent number 9,068,421) feature a unique support ring molded directly into the Cap that aligns and stabilizes the LFG wellhead. This takes pressure off the flexible coupling and the flex hose and, along with watertight threads, reduces leaks from the wellhead. The caps are molded in a bright yellow, which helps identify and protect the entire well from damage.



ORIFICE PLATE TOOLS

ORIFICE PLATE SELECTOR GUIDE



Download a printable and foldable Orifice Plate Guide at www.qedenv.com/files/ORPcurvecard-WEB.pdf. Or contact QED to have one mailed to you.

ORIFICE PLATE FLOW CALCULATOR

Use the mobile version of the Orifice Plate Flow Calculator at www.qedenv.com/orpcalculator



LANDFILL GAS CALCULATOR

	Starting Value
Landfill Gas Flow (SCFM)	34
Annualized LFG Collected (SCF)	17,870,400
Methane Content (percent)	51
Annualized Methane Collected (SCF)	9,113,904
(mmBtu)	9,113
Annual Total \$	36,455.61

Measure the value of your increased gas flow with our innovative Landfill Gas Calculators:

Calculate increased methane value using landfill dewatering pump systems at www.qedenv.com/landfillgas.

QED Union Orifice Plate Wellhead



Set of interchangeable orifice plates

QED's new Traditional Orifice Plate Wellhead is available for both 2" and 3" pipes. The wellhead is constructed of sturdy, economical Schedule 80

PVC and QED's Orifice Plates are constructed of 1/16" stainless steel. Using the most appropriate orifice plate size with minimal pressure drop is essential to generate stable flow readings with the best resolution. Using the right size plate means you will always have confidence in your flow reading and you will be sure to meet your compliance regulations.

A wellhead for those looking for sensitive flow adjustment capability and a lower cost assembly.

Specifications:	2" (50 mm)	3" (76 mm)
Model:	OPU200	OPU300
Optimal Flow Range:	0-125 scfm (0-212 m ³ /h)	30-300 scfm (50-500 m ³ /h)
Materials:	304 Stainless Steel, PVC, Viton®	

40572 2" Orifice Plate Kit includes all 6 orifice plates for OPU200
40600 3" Orifice Plate Kit includes 3 orifice plates for OPU300

(Visit www.qedenv.com/landfillproducts for more for details.)

Products for Environmental Cleanup
 Remediation, Landfills and Groundwater Sampling



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