



SUCCESS STORY

GLASCO manufactures vertical Retro-Fit UV disinfection systems for aging installations. Vertical modules using low pressure high output or amalgam UV lamps are integrated to improve disinfection and match existing footprint.



GLASCO UV

RETRO-FIT EXISTING VERTICAL UV SYSTEMS

Retro-Fit systems are pre-engineered to fit existing vertical plants that are using older Vertical UV open channel systems.

As systems come to the end of their lives (10 to 20 years), plants are tasked with upgrading. Glasco UV has manufactured Vertical UV systems since the 1980s. We have designed systems to fit into most operating vertical plants with both 30" and 60" water levels.

CUSTOMERS

Wastewater Treatment Facilities

SYSTEM

VC Series - Vertical Open Channel

WATER LEVELS

30" and 60"

PRE-ENGINEERED TO REPLACE

Ultraviolet Purification Devices

UltraTech

Ultra Dynamics

IDI/Degremont

Ozonia/Suez

Trojan 4000 medium pressure

TECHNOLOGIES

30" @ 85 watts high output

30" @ 150 watt amalgam

60" @ 155 watt high output

60" @ 320 watt amalgam



CUSTOMERS

Wastewater treatment facilities that currently use Vertically oriented UV disinfection systems. Many systems that have been operational for 10 years have older lamp technologies, inefficient ballasts, unsupported electronics, no automatic quartz cleaning and no controls for flow pacing.

CHALLENGES

Wastewater infrastructure is aging. The country's 15,000 treatment plants are in need of \$271 billion in investments over the next 25 years, according to the US EPA.

Since the UV disinfection market has grown over the last 30 years, there are many systems coming to the end of their useful lives. UV systems will start failing (10-20 years) depending on operating conditions.

Plants need to replace equipment, reduce downtime, evaluate new equipment solutions and budget construction expenses. Facilities also need to work with their Engineers on many other upgrades to existing equipment. The RetroFit UV Program allows plants to save considerable expense, which can be used on other critical projects.

SOLUTIONS

Glasco UV has visited many existing vertical plants. Some plants were operating over 20 years. After evaluating and measuring all the major equipment manufacturer's existing and new vertical modules and interviewing plant personnel, we have pre designed a line of equipment that fits existing channel dimensions. Width, height and water level are matched.

RESULTS

When installing a RetroFit system, wastewater plants have reduced downtime, reduced construction costs, improved disinfection, fewer lamps to manage, reduced maintenance, automated cleaning, improved UV monitor operations for today's reporting and integrated energy saving flow pacing solutions with our microprocessor equipped controls.



Existing 4 x 1 MGD low output modules



Replacement 2 x 2.5 MGD high output modules
Installed Structure Above Channel



Older technology served purpose



Replaced existing Power Distribution Center and provided flow
pacing and added automatic quartz cleaning



RETRO FIT BENEFITS

- Engineers have immediate solutions
- Saves new construction costs
- Limits or eliminates down time
- Uses same footprint
- Stronger lamps reduce overall lamp count
- Insures discharge permit is met
- Quartz sleeve and UV sensor cleaning
- Flow pacing to reduce electric and lamp costs
- UV sensor cleaned for more accurate reporting (% or dose)



8 Module system using 320 low output lamps.
No quartz cleaning or UV monitoring.



4 Module system using 96 amalgam UV-lamps. Added quartz sleeve cleaning and flow pacing. Matched footprint.

Contact us at info@glascouv.com or visit glascouv.com for more information