

Fiberglass

HS / H / HL Flume



H FLUME APPLICATIONS

- Watershed Runoff
- Agricultural Water Runoff
- Snowmelt
- Pond Overflows
- Industrial Process Discharge
- Sanitary or Stormwater Flows
- Monitoring Irrigation Water
- Wastewater Treatment Plant Effluent Monitoring
- Combined Sewer Overflow (CSO) Monitoring

PRODUCT DESCRIPTION

Originally developed to measure agricultural runoff, H Flumes feature a unique V-shaped design that delivers accurate flow measurement across a wide range of flow conditions.

They are ideal for monitoring irrigation water, snowmelt, pond overflows, industrial process discharge, and sanitary or storm sewer flows.

Key Features of H / HS Flumes

- **Widest Operating Range:** Accurately measures a broad spectrum of flow rates, from low-flow conditions to high-volume discharge.
- **Low Head Loss:** Efficient hydraulic design minimizes upstream head requirements.
- **Self-Cleaning Geometry:** Steep sidewalls and streamlined flow path reduce sediment accumulation and maintenance.
- **Precision-Molded Fiberglass Construction:** Corrosion-resistant, dimensionally stable design ensures long-term hydraulic accuracy.



BENEFITS

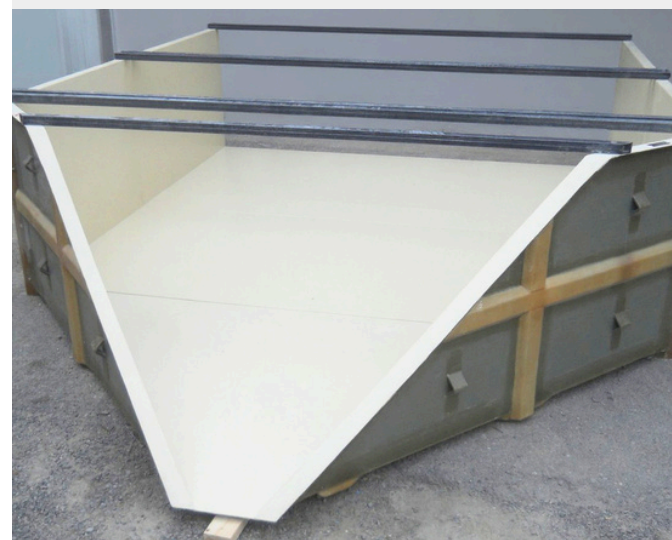
Wide Flow Range – Accurate from low to high flows.

One Flume, Any Flow – Reliable across extreme flow conditions.

Corrosion-Resistant Fiberglass – Built for harsh environments and long service life.

Size	Min. Flow Range	Max. Flow Range
HS 0.4 ft	.0718 GPM	36.04 GPM
HS 0.6 ft	.1032 GPM	99.18 GPM
HS 0.8 ft	.1346 GPM	205.1 GPM
HS 1.0 ft	.1661 GPM	360.4 GPM
H 0.50 ft	.1795 GPM	148.6 GPM
H 0.75 ft	.2693 GPM	429.5 GPM
H 1.0 ft	.3142 GPM	861.7 GPM
H 1.5 ft	.4937 GPM	2392 GPM
H 2.0 ft	.6283 GPM	4928 GPM
H 2.5 ft	.8078 GPM	8707 GPM
H 3.0 ft	.9425 GPM	13644 GPM
H 4.5 ft	1.391 GPM	37699 GPM
HL 3.0 ft	2.598 GPM	25637 GPM
HL 4.0 ft	2.244 GPM	52554 GPM

PRODUCT PHOTOS



CUSTOMIZATIONS AND OPTIONS

- **Staff Gauge:** available in various widths and markings, including flow data
- **Stilling Well:** integral or remote; 6", 8", 10", or 12" ID, with or without plug
- **Bubbler Tube:** stainless steel, 1/4" ID, integral to flume
- **Sampler Tube:** stainless steel, 3/8" ID, integral to flume
- **Inlet & Outlet End Connection:** integral or removable
- **Pipe Connection:** neoprene boot or ANSI pipe flange connection
- **Special Chemical Resistant Fabrication:** pH range of 1-14
- **Ultrasonic Transducer Bracket:** vertically adjustable
- **pH Sensor Cavity:** fabricated to fit most sensors
- **Wing Walls & Bulkheads:** custom fabricated to match channel width
- **Nesting Options:** standard or special designs
- **Energy Absorption Racks:** fixed or removable
- **Standard or Special Depths:** including surge boxes
- **Enclosed Flumes:** for odor control
- **Flume Covers:** grating, fiber sheeting, clear polycarbonate

Need Help with a Project? Call Engineered Sales



Fiberglass

Palmer-Bowlus Flume



APPLICATIONS

- Sanitary Sewer Flow Monitoring
- Stormwater Flow Measurement
- Combined Sewer Overflow (CSO) Monitoring
- Wastewater Treatment Monitoring
- Industrial Wastewater Discharge
- Lift Station Flow Measurement
- Interceptor Sewer Monitoring
- Inflow & Infiltration (I&I) Studies



PRODUCT DESCRIPTION

The Palmer-Bowlus metering flume is used to measure water and wastewater flow in open channels or non-pressurized pipelines. It is typically installed in “U”-shaped channels fed by pipelines such as storm drains and sanitary sewers, requiring minimal modification to circular conduits.

Key Features of Palmer-Bowlus Flumes

- Low head loss design minimizes impact on upstream flow conditions
- Minimal flow restriction compared to other metering devices
- Smooth interior surfaces reduce debris buildup and maintenance requirements
- Compatible with ultrasonic, radar, and level-based flow measurement systems
- Available in a variety of standard sizes to fit existing pipe diameters

Available in both insert-type and cut-back configurations.

BENEFITS

Retrofit Friendly – Installs in existing pipes and manholes.

Low Head Loss – Minimizes upstream flow restrictions.

Accurate Flow Measurement – Designed for partially full pipe applications.

Corrosion-Resistant Fiberglass – Lightweight, durable, and long-lasting.

Size	Min. Flow Range	Max. Flow Range
4 in	1.9367 GPM	54.453 GPM
6 in	2.7191 GPM	132.44 GPM
8 in	3.4247 GPM	309.67 GPM
10 in	4.1417 GPM	502.36 GPM
12 in	7.3465 GPM	752.40 GPM
15 in	12.079 GPM	1,385.0 GPM
18 in	22.662 GPM	2,071.0 GPM
21 in	30.028 GPM	3,160.9 GPM
24 in	43.002 GPM	4,248.3 GPM
27 in	56.427 GPM	5,873.5 GPM
30 in	58.750 GPM	7,413.6 GPM
36 in	110.43 GPM	7,754.70 GPM
42 in	174.71 GPM	17,206 GPM
48 in	238.72 GPM	24,031 GPM

PRODUCT PHOTOS



CUSTOMIZATIONS AND OPTIONS

- **Staff Gauge:** available in various widths and markings, including flow data
- **Stilling Well:** integral or remote; 6", 8", 10", or 12" ID, with or without plug
- **Bubbler Tube:** stainless steel, 1/4" ID, integral to flume
- **Sampler Tube:** stainless steel, 3/8" ID, integral to flume
- **Inlet & Outlet End Connection:** integral or removable
- **Pipe Connection:** neoprene boot or ANSI pipe flange connection
- **Special Chemical Resistant Fabrication:** pH range of 1-14
- **Ultrasonic Transducer Bracket:** vertically adjustable
- **pH Sensor Cavity:** fabricated to fit most sensors
- **Wing Walls & Bulkheads:** custom fabricated to match channel width
- **Nesting Options:** standard or special designs
- **Energy Absorption Racks:** fixed or removable
- **Standard or Special Depths:** including surge boxes
- **Enclosed Flumes:** for odor control
- **Flume Covers:** grating, fiber sheeting, clear polycarbonate



Need Help with a Project? Call Engineered Sales



Fiberglass

Parshall Flume



APPLICATIONS

- Wastewater Treatment Plants
- Industrial Wastewater Monitoring
- Sewer Collection Systems
- Stormwater Management Systems
- Irrigation Canals and Water Distribution Systems
- Water Reuse and Reclaimed Water Systems
- Environmental Discharge Monitoring Stations

PRODUCT DESCRIPTION

Parshall Flumes are used in sewage treatment plants and industrial and municipal sewers. For fixed flow monitoring installations, they are one of the most widely used flume types. The **open-channel design** is installed in ditches or canals to measure flow rate.

Parshall flumes are sized by throat width and conform to standardized dimensions published by the U.S. Department of the Interior, Bureau of Reclamation.

Key Features of Parshall Flumes

- **Reduced Sediment Buildup:** High-velocity throat section helps keep the flume clear of debris and solids.
- **Ideal for Wastewater Applications** – Self-cleaning characteristics improve performance in flows containing sediment and suspended solids.
- **Versatile Installation Solution:** Suitable for a wide range of open channel flow measurement applications.



BENEFITS

Low Head Loss Design – Provides accurate flow measurement while requiring less upstream water depth than many alternative primary flow devices.

Corrosion-Resistant Fiberglass – Built for harsh environments and long service life.

Throat Width	Min. Flow Range	Max. Flow Range
1 in	1.4601 GPM	87.271 GPM
2 in	2.9201 GPM	174.54 GPM
3 in	12.635 GPM	833.64 GPM
6 in	24.318 GPM	2,764.1 GPM
9 in	40.662 GPM	3,978.9 GPM
12 in	154.98 GPM	7,240.6 GPM
18 in	226.56 GPM	11,021 GPM
24 in	296.31 GPM	14,858 GPM
30 in	365.06 GPM	18,726 GPM
36 in	433.16 GPM	22,616 GPM
42 in	500.21 GPM	26,541.59 GPM
48 in	566.66 GPM	30,486 GPM
60 in	994.53 GPM	38,429 GPM
72 in	1,181.0 GPM	46,434 GPM
84 in	1,828.6 GPM	54,492 GPM
96 in	2,075.9 GPM	62,596 GPM
120 in	2,713.5 GPM	131,180 GPM
144 in	3,221.4 GPM	232,812 GPM

PRODUCT PHOTOS



CUSTOMIZATIONS AND OPTIONS

- **Staff Gauge:** available in various widths and markings, including flow data
- **Stilling Well:** integral or remote; 6", 8", 10", or 12" ID, with or without plug
- **Bubbler Tube:** stainless steel, 1/4" ID, integral to flume
- **Sampler Tube:** stainless steel, 3/8" ID, integral to flume
- **Inlet & Outlet End Connection:** integral or removable
- **Pipe Connection:** neoprene boot or ANSI pipe flange connection
- **Special Chemical Resistant Fabrication:** pH range of 1-14
- **Ultrasonic Transducer Bracket:** vertically adjustable
- **pH Sensor Cavity:** fabricated to fit most sensors
- **Wing Walls & Bulkheads:** custom fabricated to channel width
- **Nesting Options:** standard or special designs
- **Energy Absorption Racks:** fixed or removable
- **Standard or Special Depths:** including surge boxes
- **Enclosed Flumes:** for odor control
- **Flume Covers:** grating, fiber sheeting, clear polycarbonate

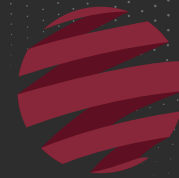


Need Help with a Project? Call Engineered Sales

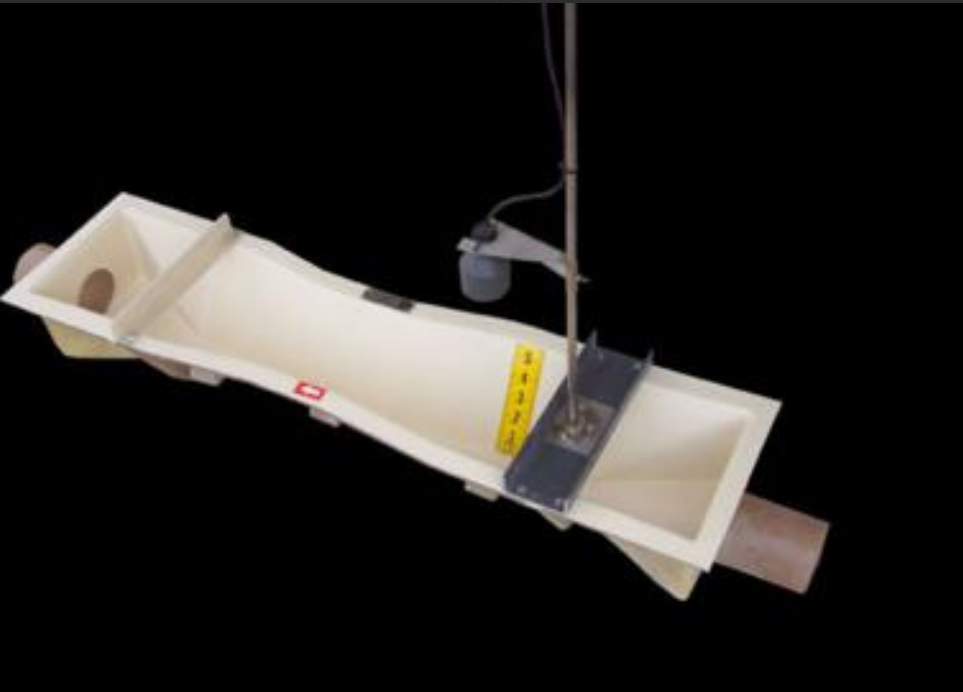


Fiberglass

60° - V Trapezoidal Flumes



VPC
FIBERGLASS



APPLICATIONS

- Agricultural Irrigation Systems
- Stormwater Runoff Monitoring
- Wastewater Treatment Plant Effluent Measurement
- Industrial Process Discharge Monitoring
- Environmental & Watershed Monitoring



PRODUCT DESCRIPTION

All Trapezoidal Flumes exhibit similar flow characteristics and have application advantages over other flumes and weirs. VPC offers a full line of standard flumes, along with countless custom structures used for open channel flow measurement.

Sizes are available to measure flows ranging from intermittent trickles to full canal flow.

Key Features of Trapezoidal Flumes

- Flat bottom from entrance to exit for improved head conversion
- Does not require a free-fall discharge for proper operation.
- Staff gauge and instrument mounting brackets located within flume and factory installed
- Natural shape of the flume mimics many earthen and concrete-lined ditches.
- Flat floor and sloping walls allow solids to pass through the throat without being trapped.

BENEFITS

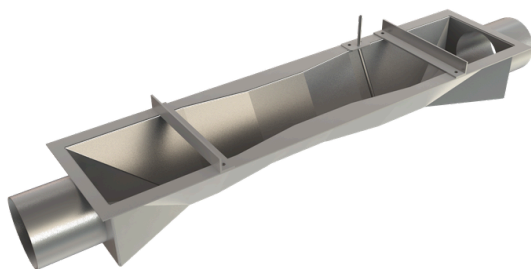
- **Excellent low-flow accuracy** – Reliable measurement at very low flows where other flumes lose precision.
- **Wide Flow Range in a Single Structure** – Handles both low and high flows without needing multiple flume sizes or configurations.
- **Smooth Hydraulics** – Gradual trapezoidal shape reduces turbulence vs. restrictive flume designs.

PRODUCT PHOTOS

Size	Min. Flow Range	Max. Flow Range
Small 60 Degree V	1 GPM	43 GPM
Large 60 Degree V	1 GPM	156 GPM
Extra Large 60 Degree V	1 GPM	663 GPM

CUSTOMIZATIONS AND OPTIONS

- **Staff Gauge:** available in various widths and markings, including flow data
- **Stilling Well:** integral or remote; 6", 8", 10", or 12" ID, with or without plug
- **Bubbler Tube:** stainless steel, 1/4" ID, integral to flume
- **Sampler Tube:** stainless steel, 3/8" ID, integral to flume
- **Inlet & Outlet End Connection:** integral or removable
- **Pipe Connection:** neoprene boot or ANSI pipe flange connection
- **Special Chemical Resistant Fabrication:** pH range of 1-14
- **Ultrasonic Transducer Bracket:** vertically adjustable
- **pH Sensor Cavity:** fabricated to fit most sensors
- **Wing Walls & Bulkheads:** custom fabricated to match channel width
- **Nesting Options:** standard or special designs
- **Energy Absorption Racks:** fixed or removable
- **Standard or Special Depths:** including surge boxes
- **Enclosed Flumes:** for odor control
- **Flume Covers:** grating, fiber sheeting, clear polycarbonate



Need Help with a Project? Call Engineered Sales

