



# **Blending/Dilution Systems**

## Some systems are simply built. Ours are engineered.

Our Blending/Dilution Systems are engineered to accurately and safely combine multiple raw material streams at different proportions and flow rates into consistent finished products. Finished products from our systems are continuously transferred at high volumes into bulk storage tanks for in-house packaging lines, or directly into tank trucks and railcars for shipment.

These skid-mounted systems come fully assembled, complete with controls, piping, valves, and instrumentation. They are programmed to monitor and instantly autoadjust flow rates, ensuring consistent product quality.

We build our systems from the ground up to provide stateof-the-art, efficient, and custom-engineered machines with unparalleled customer support.

## **Advantages**



### Capacity

Designed to produce several gallons per hour to several hundred gallons per minute.



#### Accuracy

Dependent of the flow measurement device, an accuracy  $\pm 0.15\%$  weight percent can be achieved.



### **Efficiency**

Engineered to dilute with 99.0% efficiency.

## **Custom Engineered**

- Available in various production rates to meet project capacity requirements.
- Engineered to have a repeatable final product strength with less than 1% variance.
- Has a turndown ratio of 10:1.
- Automatically stops in the event of a process upset.

## **System Performance**

- Fully assembled, programmed and electrically and hydrostatically tested.
- Skid mounted design engineered for transport via truck or shipping container.
- Meets international and domestic standards.
- Heat exchangers can be integrated into the design if cooling is required.

## **Process Design**

- Automatic operation for limited operator intervention.
- Touch screen HMI (Human Machine Interface) to view all critical process data.
- Easily networks to other Powell equipment or an existing DCS system and Powell Data Solutions™.
- Utilizes VPN devices to provide a secure, remote connection, for troubleshooting, programming updates, and training.

### **Automation**



## **Raw Materials & Utilities**



Concentrated solution such as:

- Acids
- Alcohols
- Bases
- Oxidizers



Three phase for motors Single phase for control system



Clean, dry, oil-free instrument air 5.5 bar minimum



Cooling water of 29.4°C maximum (when required)