



***Performing Instruments***

*Pius Ileogben, CEO*

**2018 Product Catalog**

*Website-<http://www.pinstruments.expert>*



# About Us

We are committed to creating and improving efficient methodology for the testing of HVAC systems. By transforming complex mathematical models into user friendly tools, we provide our clients with products that enable uniformity, enhance equipment performance, and save time and energy. Our products conform to and complement ASHRAE and SMACNA standards.

We are pleased to offer the following products:

- ◆ **Auto Duct Traverse** – most efficient and accurate method to measure airflow in ducts
- ◆ **Commissioner Rule** – tool to corroborate correct duct traversing
- ◆ **VPP** - GPS to navigate the performance of a fan that is driven by a variable pitch pulley at all operating positions
- ◆ **FPP** – GPS to navigate the performance of a fan that is driven by a fixed pitch pulley; doubles as gauge for measuring diameter of a cylinder without straddling it
- ◆ **Hood frame** – provides the best means of attaching airlock gasket to hood frame for accurately measuring airflow
- ◆ **Variable Hood cover** – adjusts to fit non-standard diffusers and grilles in seconds
- ◆ **Robi Eye** - enables remote operation of airflow measuring instruments
- ◆ **Mobile Reach** – lightweight work-center
- ◆ **Portable Laser Alignment** - aligns fans driven with variable pitch pulleys



# VPP Digital



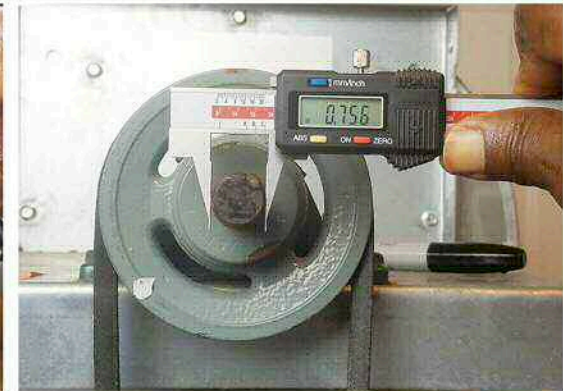
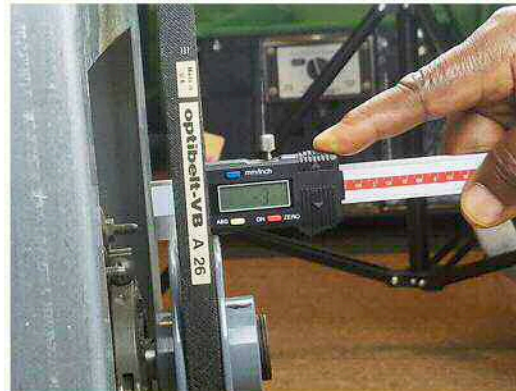
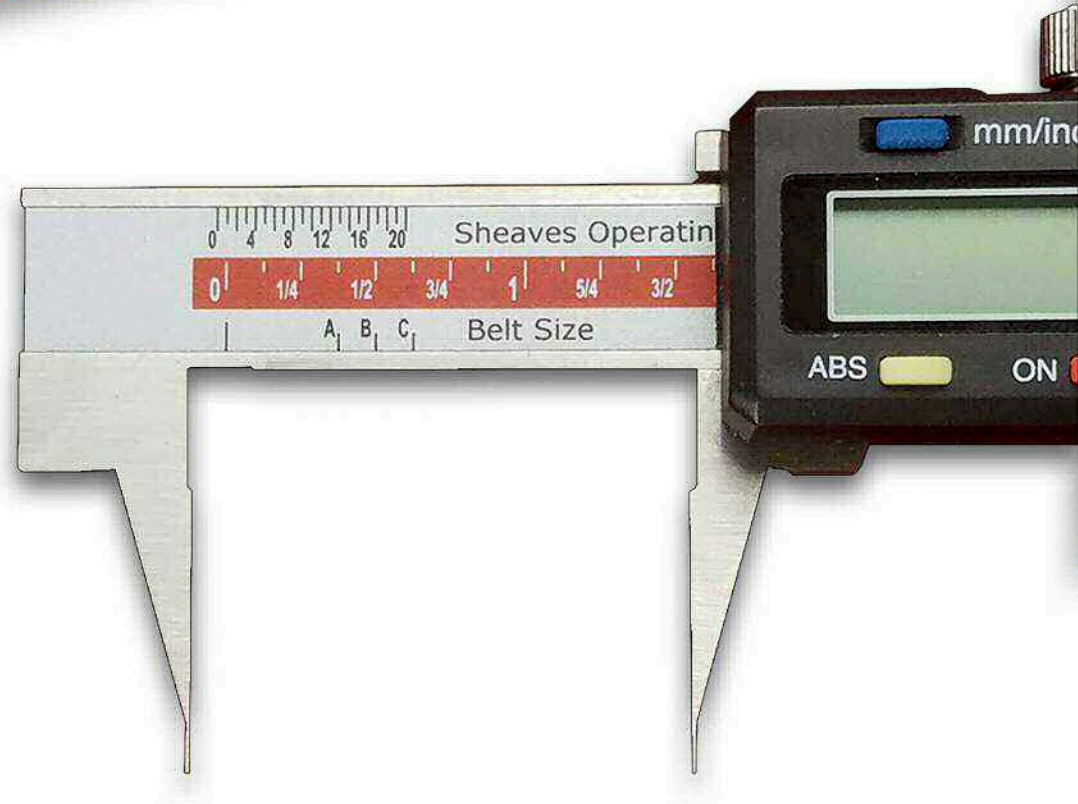
VPP, Variable Pitch Pulley Digital Instrument is our GPS for navigating equipment driven with variable pitch pulley especially for fans associated with airflow. It reduces complex airflow engineering to a simple user friendly instrument.

## Use

- Measuring the operating position of an adjustable pulley
- Measuring the width of belt used for driving a pulley
- Verifying that adequate belt is used to drive a pulley
- Provides a means of determining the volume of air that can be achieved within the range of a pulley without complex engineering, costs and downtime.

The benefits include:

- ✓ Energy saving
- ✓ Reduce engineering cost
- ✓ Reduce building renovation cost
- ✓ Reduces downtime and maintenance cost
- ✓ Reduces premature equipment failure



**The VPP is an indispensable instrument for Engineers, Facility Manager and Maintenance Technicians**



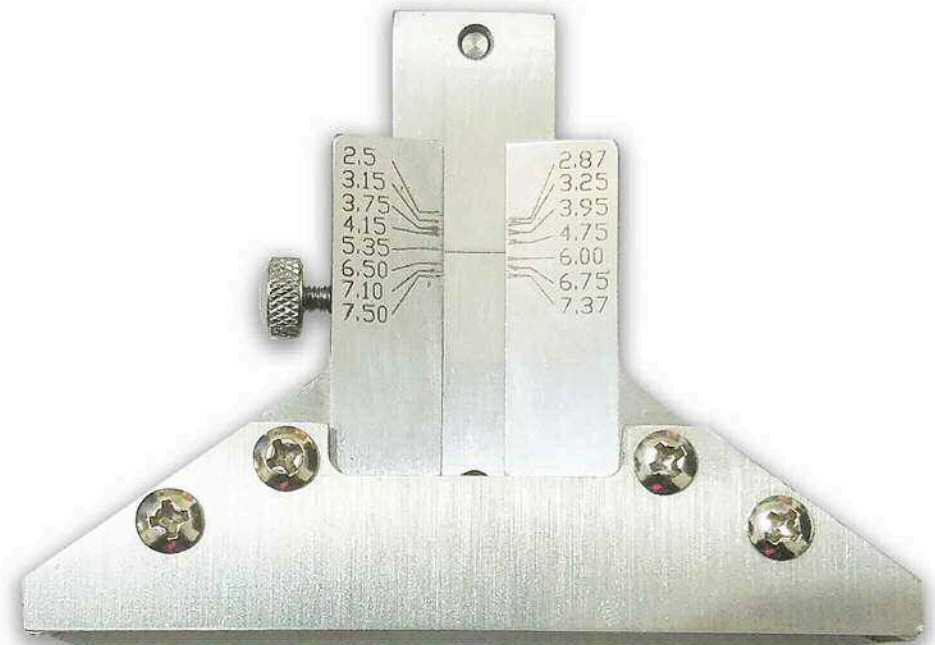
# FPP Instrument



Our FPP is a gauge primarily used like a GPS for fixed pulley. The gauge is portable, and unlike other devices, does not straddle an object to measure its diameter. Additionally, when used with our provided chart or mobile app, it navigates airflow of other pulleys. In other words, when you know the airflow with the present pulley you can use our chart to determine the size of a pulley needed to get any other airflow. No calculation or complex engineering is required.

The benefits include:

- The most practical and accurate tool to measure the diameter of pulleys
- Reduced engineering costs
- Reduced time to calculate airflow production among pulleys
- Saves time
- Saves energy





# Pulley Alignment Apparatus



Our laser alignment instrument is the most effective tool to align systems driven with variable pitch pulley. Our tool recognizes pulley operating positions and compensates for the pulley opening. In other words our instrument aligns the pulleys along the center of the belt. Specifically, our instrument:

- Align pulleys
- Provide the most effective tool to align systems driven with variable pitch pulley.
- Determine equipment operating position

## Benefits

- ✓ Reduce maintenance cost
- ✓ Reduce premature equipment failure
- ✓ Enhance equipment performance
- ✓ Saves energy
- ✓ Reduction of equipment vibration





# Auto Duct Traverse



Duct traverse is the standard method for measuring airflow in ducts. It involves measuring the velocity of air at predetermined coordinates within the duct and multiplying the average by the cross sectional area of the duct to get the volume. It is a two step process:

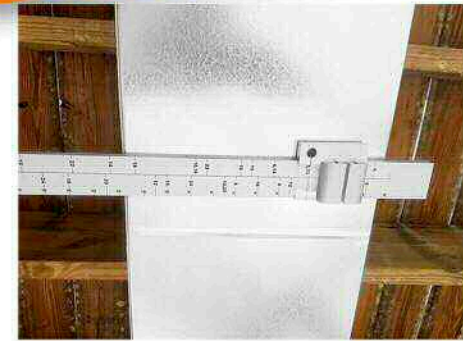
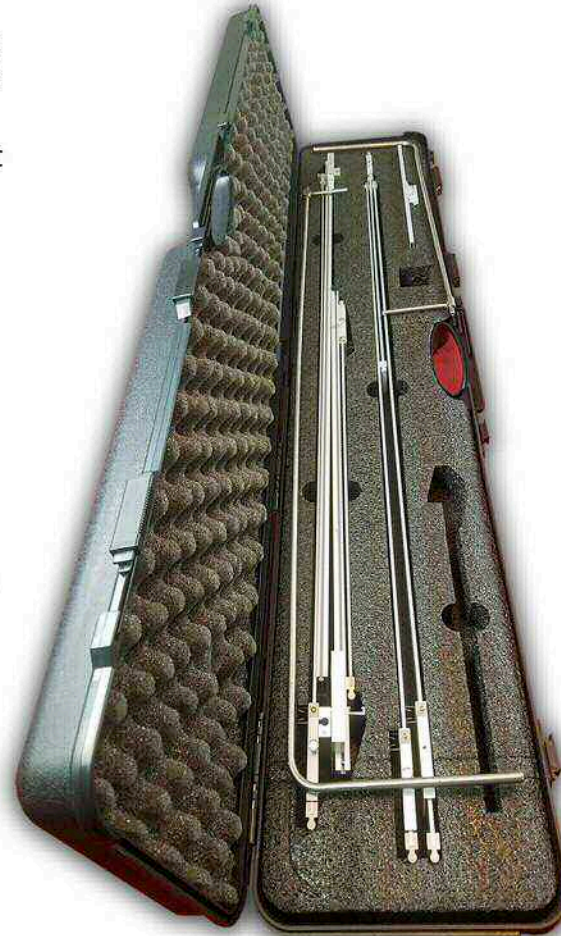
**Duct preparation** – drilling holes at precise locations across the surface of the duct

**Measurement** – measuring the air velocity at specific coordinate within the duct.

(The present method involves the use of reference materials, calculations and working at awkward positions. The process is time consuming and the results cannot be duplicated.)

Auto Duct Traverse converted all the complex engineering computations and standards into a basic tool:

- ✓ It is safer
- ✓ It enables uniformity
- ✓ Saves time up to 50%
- ✓ Enable remote monitoring
- ✓ Gives unparalleled accuracy
- ✓ Gives repeatable results all the time
- ✓ Tool attaches itself to duct for hand free operation
- ✓ It eliminates the use of reference materials and calculations



**Auto Duct Traverse makes traversing is so easy that anyone with anemometer can do it**



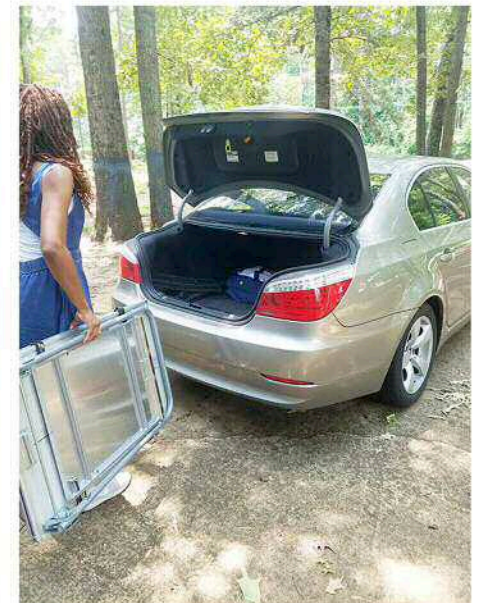
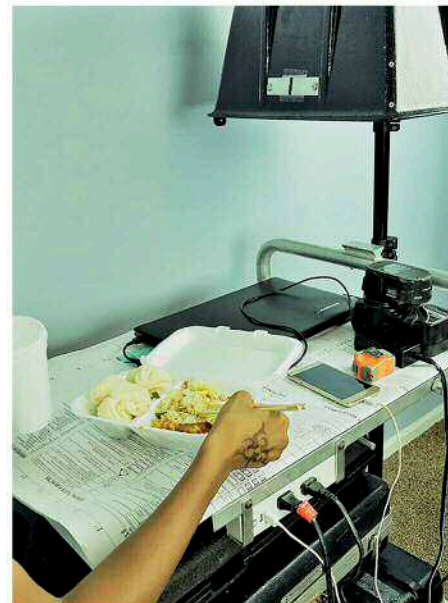


# Mobile Reach – Work Center



Our mobile reach is your silent partner. It does more than an individual. Between our mobile reach Work Center and Rover you may never strain your muscles again with the ups and downs of flow hood. You will save a lot of time and money.

- ✓ It is a light weight work-center
- ✓ Portable enough to fit in the trunk of a car
- ✓ It keeps you organized
  - It hold all of your equipment
  - Your equipment are always within reach
- ✓ It lifts and hold the flow hood for up to 13 feet
- ✓ Enhances safety.
  - No more carry hood on a ladder
- ✓ It is a table
  - Spread your blueprint
  - Holds your laptop
- ✓ Recharge Station
  - USB outlets for phone, tablets
  - 110V outlets for drills, meters, laptops
  - Lunch table to recharge yourself





# Mobile Reach – Rover



The Rover goes everywhere

- ✔ It is light weight
  - Carry on stairs
  - Carry horizontally through low doors
- ✔ It can stand on a table for hard to reach devices
- ✔ It lifts and hold the flow hood for up to 13 feet
- ✔ Plus your height, the rover can reach over 20 feet





# Robi Eye



The Robi Eye turns your smart phone into a command center to monitor your manometer or equipment in real time and operate it by remote control. It enables you to work more efficiently, saves you time and make you a lot of money.

When you use the Robi Eye along with any of our mobile reach you can say goodbye to flowhood ups and down to read and operate the airflow meter, digital or analog meters.

The Robi Eye when used with our Auto Duct Traverse equipment enables you monitor and read air velocity changes in the duct remotely. This saves you time and make you money.

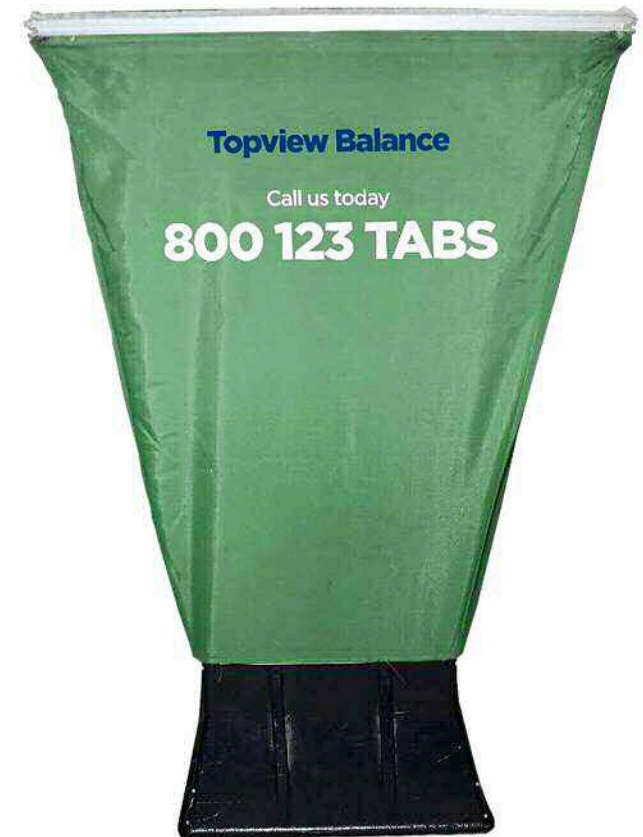




# Personalized Flowhood Funnel



Flowhood is the HVAC industry standard for measuring the volume of airflow at supply diffusers and return grilles. The Flowhood funnel channels the air through a sensor where it is measured by a flow meter. The funnels comes in a package branded with manufacturers' names and logos.



Our Replacement Flowhood Funnel

**Personalized** – provides maximum exposure through self-advertising

**Branding** – offers choice of color

**Fabric** – lightweight and durable material

**Washable** – easily cleaned after use in contaminated facilities

**Protection** – prevents theft

# Variable Flowhood Cover



Our flowhood cover facilitates airflow measurements on diffusers and grilles that are smaller than standard hood openings. The hood covers can be adjusted to fit most standard diffusers and grilles including rectangular ones. They are installed in seconds.

## Hood Frame

Our flowhood frame provides the best means of attaching airlock gasket to hood frame to capture the maximum airflow. Replacing the gasket is done in seconds.

