DIGIVAC COMPANY OVERVIEW



Sales@digivac.com | (732)-765-0900 | digivac.com 1020 Campus dr. Morganville, NJ. 07751







DigiVac Vision and Mission

VISION: Our vision is to pioneer measurement and control innovations that simplifies science for the benefit of humanity.

MISSION: Engineer, manufacture and deliver reliable measurement and control solutions for the research, laboratory and processing communities.

VALUES:

- Pioneering- Simplify & advance science. We will fail forward, making it right with a growth mindset
- Do the Right thing- Show integrity and collaboration in all interactions with customers and employees.
- Nimble- Remain flexible to shifts in our customers' needs, markets and technology making adjustments aligned with our vision
- Rigorous- Design and deliver tested, proven products focusing on what is best for advancing the research and processing communities

COMPANY DYNAMICS

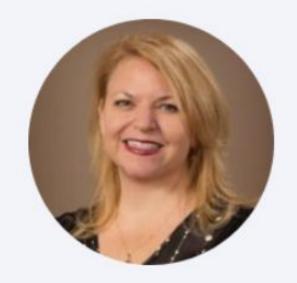
Since 1983, DigiVac has been on a mission to engineer, manufacture, and deliver top-of-the-line measurement and control instruments and solutions. We design and build electronics and systems to solve customer problems. Providing personal expert services by creating, recreating or enhancing any of our robust solutions. We create many different types of controls, offering new innovations that make processes easier. Through offering bundles for many applications and industrial needs we hope to keep Simplifying Vacuum Science through automation for YOU.

Our Leadership



Tim Collins

Chief Executive Officer



Jennifer Collins

Chief Customer Officer



Tom Bassi

Head of Research & Development



Christine Kraus

Operations Manager



WEST COAST | OREGON

LOCATION

Our west coast Engineering and Sales team

EAST COAST | NEW JERSEY

Head Quarters; ISO 9001 2015
Compliant. Made in the USA. Quality,
Design, & Manufacturing of scientific
measurement and control
instruments

COMPANY GOALS

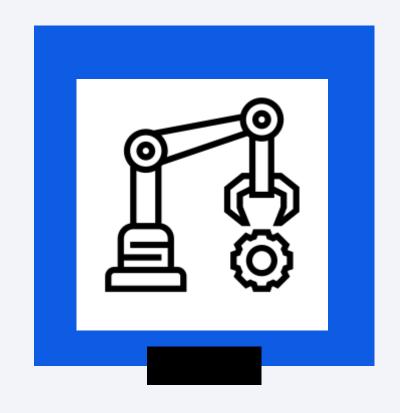
2023



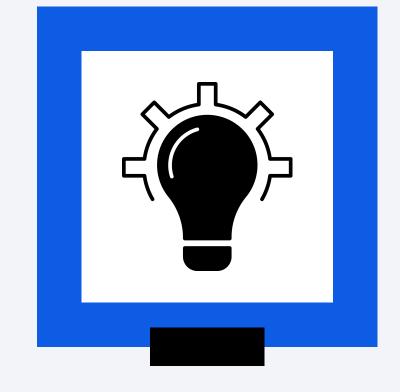
BE THE PROBLEM-SOLVING RESOURCE For Making Vacuum Science Simple



WHAT WE DO







ENGINEERING



CREATE SIMPLE SOLUTIONS



DELIVER QUALITY

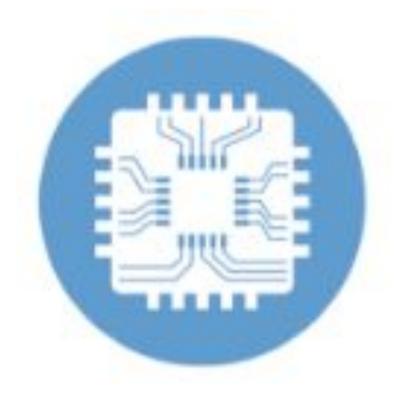
FACILITIES

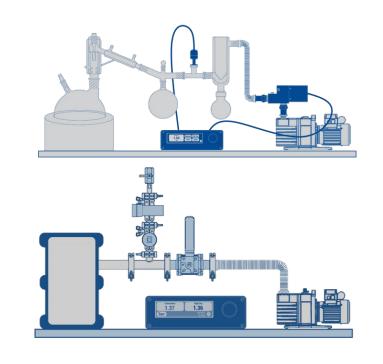
8500 SQUARE FEET OF PRODUCTION, MANUFACTURING, & DESIGNING













Vacuum Gauges

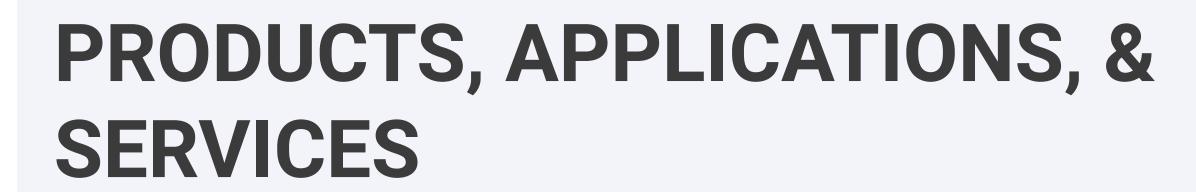
Vacuum Control

OEM & Engineering NRE

Vacuum System Accessories & Turn-Key Bundles

Calibration Services

DigiVac sells direct digivac.com and through reseller partners. Our devices are sold under DigiVac branding & private label. We also manufacture OEM control technology and have a healthy calibration service annuity channel.



INDUSTRIES SERVED

Our clients come from a wide range of industries including: Processing, Industrial, R&D, Semiconductor and many more!









Pharmaceutical

Research

Distillation

Solvent Recovery

Medical Vacuum | Industrial Rough Vacuum **Applications**

Sterilization for medical equipment is vitally important since this process is used to render a product free from viable microorganisms. Steam is used in the many sterilization processes. The steam is put under pressure that is higher than the atmospheric pressure (> 1 bar).

Transformer Maintenance | Energy and **Power Industries**

DigiVac has been helping utility companies and companies that serve them for their vacuum needs. Vacuum is used for transformer maintenance including transformer degas, transformer oil purification, transformer dry out and transformer leak detection.

Cryogenic

We find that Hastings vacuum gauge thermocouple tubes are often found permanently mounted in cryogenic vessels. Often, it's ideal to have a battery-operated vacuum gauge that enables you to walk along a cryogenic vessel and measure the vacuum at that point. We have a variety of gauges that can measure vacuum with Hastings tubes.

Distillation | Short Path, Wiped Film, etc.

Short path distillation is a process that occurs after extraction. It is a type of botanical processing, generally utilized for the molecular separation of botanical fluids to achieve high potency. "Short path" refers to the short distance the oil travels, relative to the notoriously large industrial distillation units most people know. Wiped film distillation is a type of short path distillation.

Altitude Simulation

We have been helping government agencies such as NASA and many private entities achieve effective altitude simulation for testing products.

Pharmaceutical Freeze-drying and Vacuum Drying

Pharmaceutical vacuum instrumentation is used in research and manufacturing to help create bulk and active ingredients for FDA approved drug products as well as for sterilization of medical devices and to increase the shelf-life of a drug product.

HVAC

The use of a digital vacuum gauge in HVAC and refrigeration maintenance can greatly increase the effectiveness of service calls and reduce the likelihood of unpaid return visits to customers. There are often 5 phases of an HVAC call: Refrigerant Recovery, REFR system repair, Leak Check, **Evacuation, and Charge.**

Solvent Recovery | RotoVap, Vacuum Oven, etc.

Solvent recovery is a process that removes (or "recovers") the solvent from a fluid after the extraction process. Solvent recovery is a type of post-processing, which can be performed with a rotary evaporator or falling film distillation unit. The solvent that is being removed is typically ethanol, or butane (i.e. whatever solvent that were used during the extraction process).

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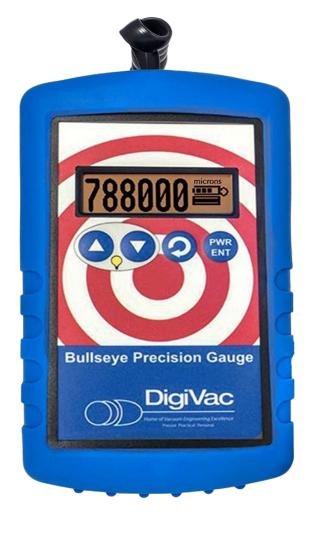
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EARLY INNOVATIONS

Model 200 Model 215 Bullseye VPC

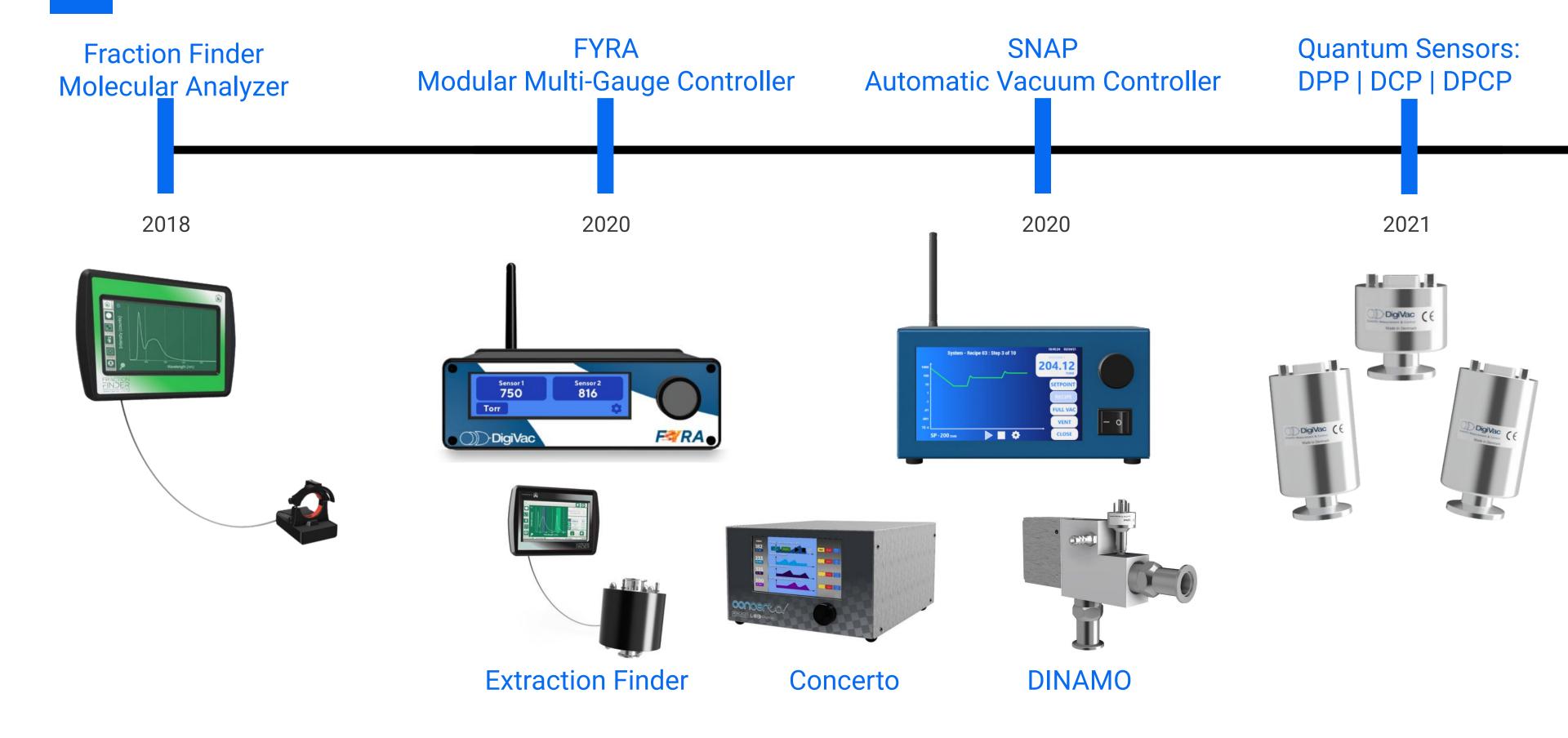








NEWEST INNOVATIONS



Vacuum Pressure Controllers



Our award-winning vacuum pressure controllers can read and control pressure levels or institute failsafe actions when appropriate. Our vacuum controllers are calibrated to NIST standards

Easily control your vacuum process with onboard recipes, ramping abilities and venting with the touch of a button or the twist of a knob. Mission control at your fingertips with the SNAP (Simple, Nimble, Automatic Process Controller).

SNAP

Range of Control 2 Torr to 760 Torr

Accuracy/ Control +/- 5% of reading

Integral Sensor: Isolated Piezo sensor | SEN - 775i

Ability to add external transducer to measure and control down to 50 microns





FYRA Bleed Control

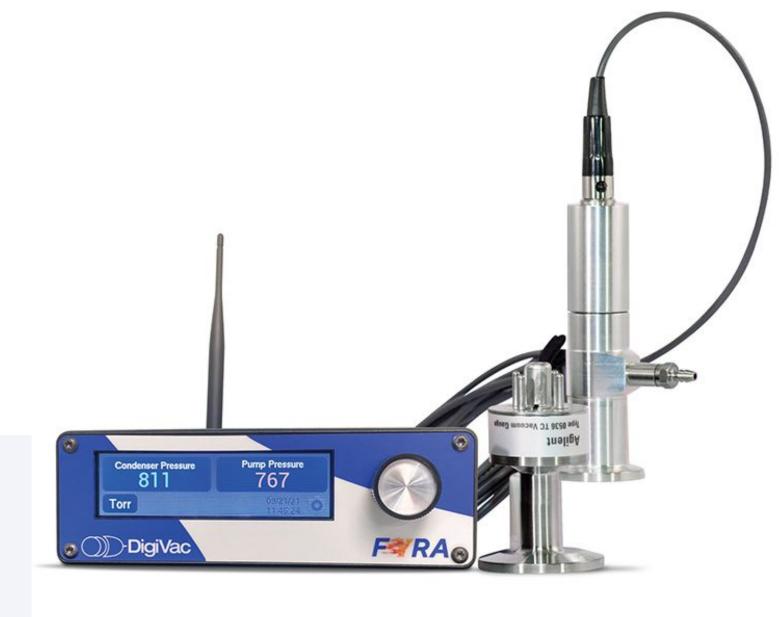
Break through one-of-a -kind Tech



Accuracy: 0.1 to 100 Torr

FYRA Bleed Vacuum Controller for venting or bleeding in gases like room air, argon or nitrogen during vacuum processing applications. Increases molecular flow and speeds up vacuum drying.

Proven for optimization of electron scanning microscopy image resolution







FYRA End of Drying Detection

FYRA End of Primary Drying Detection for indicating that the end of primary drying has occurred in freeze dryers and vacuum ovens.

Specs

Accuracy:

Range dependent on sensor(s) installed:

- DCP Quantum (Capacitance
 - Piezo) 50 mT to 100 Torr
- 275 Convection enhanced
 Pirani 0.1 mT to 1000 Torr

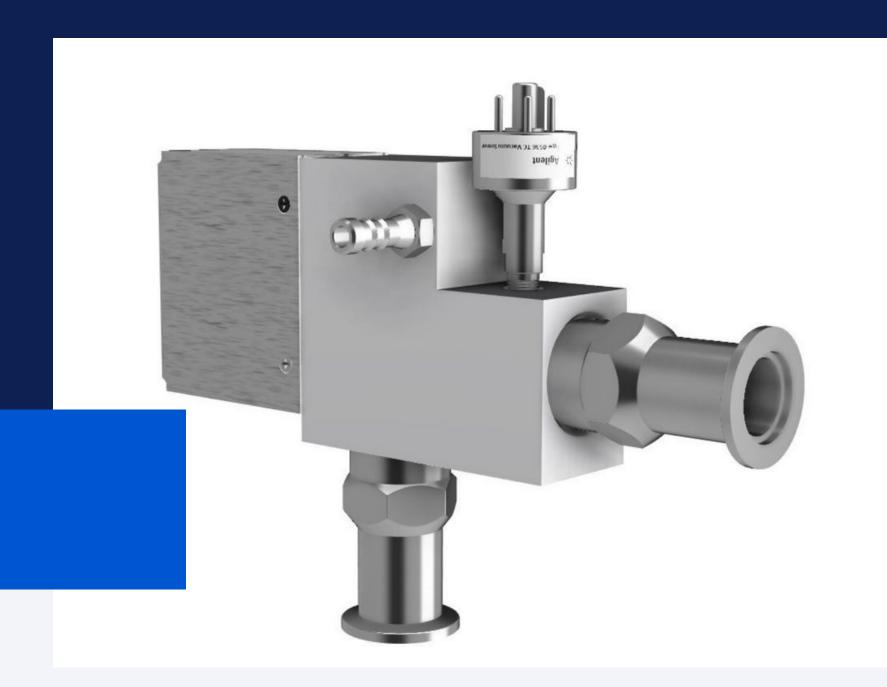
This bundle is set-up to allow for vacuum drying applications like freeze-drying and vacuum ovens to help determine the end of drying. Will help you detect when most of the water or residual solvent from a product has been removed or the end of primary drying has been reached in a vacuum drying application.

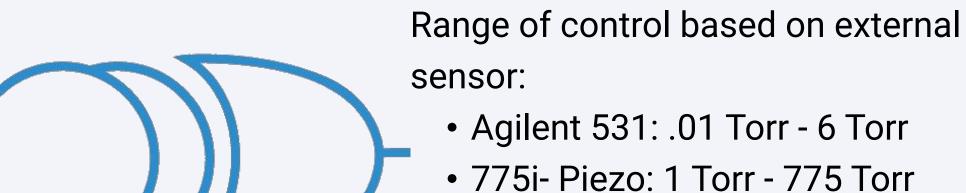




DINAMO VALVE

Patent-Pending Dual Valve Design |
Unmatched Precision Control
Fine proportional downstream and vent
control all in one valve. Allows you to
pipe in dry gas for clean venting during
both purging and vacuum control.
Delivers precise vacuum control with
the benefit of being able to pump down
large vacuum chambers very quickly.





Digital Vacuum Gauges

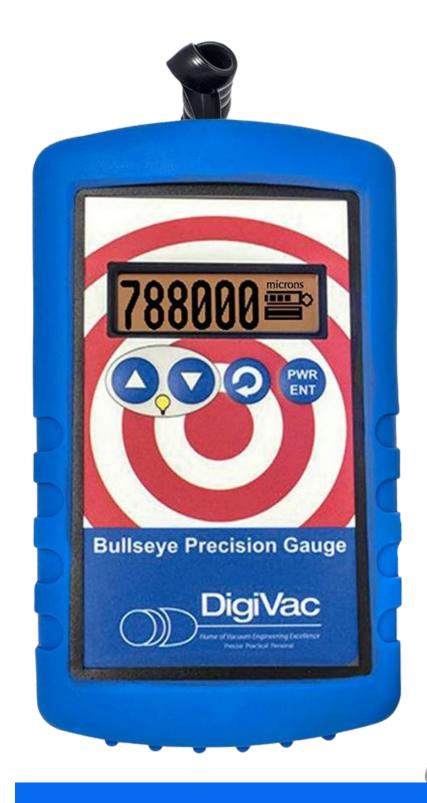
We specialize in innovative and custom vacuum gauges with diverse selections of features for both rough, medium and high-pressure ranges.

Bullseye

Patented portable vacuum gauge with innovative visual graphing features helps pinpoint the problem in real time (Leak, Pump, Outgas, Stable)

Specs.

1 to 99 millitorr +/- 2 millitorr or 20%
100 to 2000 millitorr +/- 10%
2 to 6 Torr +/- 25%
Above 6 Torr continuous and monotonic (increasing reading indicates increasing pressure)



digivac.com

Capacitance manometers

Our capacitance manometer gauges and sensors offer superior accuracy when measuring absolute pressure levels for rough, medium, or high vacuum range.

Bullseye Dash | Capacitance manometer controller

First Portable High VAC and CM Gauge

Power

4 AA Batteries

3 Meter Sensor Cable Length

Long cable length for portability & field use

Sensor Support

Options - Inficon: Porter, Sky Ambient;

MKS: AA01, 722B; Setra 730B

Quantum sensors

Accuracy

0.05% of reading for instrument. (Add sensor accuracy to get total accuracy)

Bullseye DASH is the 1st Portable Capacitance Manometer and HIGH VACUUM Gauge that both powers and displays the vacuum readings of capacitance manometers. Portable and battery operated, great for confirming readings of multiple capacitance manometers on a system Rugged design of gauge with solid state electronics for durability and long lifespan

D – Direct Measurement of Capacitance Manometer

A – Active Monitoring

S – Scientific Applications

H - Historical Data Tracking, High (Vacuum)



Quantum Sensors



DPP | Piezo-Pirani

The DigiVac DPP Quantum Gauge is an ultra wide range vacuum sensor that combines the novel Quantum pirani with piezo technology to deliver a measurement range of 7.5 x 10⁻⁶ to 1000 Torr. 0-10V output, RS232 and 1 relay included. Drop-in replacement for MKS901, 925 and 910 gauges, and Pfeiffer PKR 251

DCP | Capacitive-Piezo

The DigiVac DCP Quantum: Capacitive Piezo Vacuum Sensor for Highly Accurate Process Control Delivered Simply. 5 decades of gas independent vacuum measurement. Range 0.01 to 1000 Torr (+/- 3%)

DPCP | Pirani-Capacitive-Piezo

The DigiVac TriSENS vacuum sensor delivers deep and wide vacuum measurement + process control + overpressure indication all in one gauge where multiple gauges were required before.

Range: 7.5×10 -6 to 1000 Torr

Mobile Calibration Station with Turbo

The DigiVac EXACT is a turnkey automated pumping system that enables an operator to easily connect a vacuum chamber to it, and could immediately pump down to high vacuum, vent to Atmosphere, and with the *Calibration Station* can control at any point between 1 mTorr and 760 Torr.

Technical Specifications

Depth of vacuum: 10-6

Range of Vacuum: 10-6 to 760 Torr)

Range of Control: 1 mTorr to 760 Torr

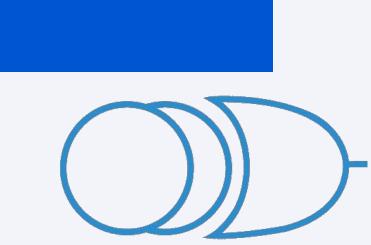
External Control options: RS232, USB and Analog

Sensors: Quantum TriSENSE, .1,10,1000

Torr CM

Monitoring locations: Customer vessel, foreline,

roughing line







Mobile Turbo Pump-down Station

The DigiVac EXACT is a turnkey automated pumping system that enables an operator to easily connect a vacuum chamber to it, and could immediately pump down to high vacuum, vent to Atmosphere, and with the *Turbo Station* can control at any point between 50 millitorr and 760 Torr.

Technical Specifications

Depth of vacuum: 10-6

Range of Vacuum: 10-6 to 760 Torr)

Range of Control: 50 mtorr to 760 Torr

External Control options: RS232, USB and Analog

Sensors: Quantum TriSENSE, 2 Agilent 536

Monitoring locations: Customer vessel, foreline,

roughing line





Fraction Finder

Our line of Fraction Finders feature brand new ultra sensitive sensors and are well suited for chromatography, extraction conversion reactions, C1D1 & C1D2, and distillation processes, not to forget they can also analyze Psilocybin and Hops

The Arometrix FRACTION FINDER is the first and only in-line molecular sensor for botanical extraction and fractional distillation.

Now, with the FRACTION FINDER ULTRA (short for "ultra-sensitive") Arometrix is serving new processes that require extreme detection, such as Chromatography and Conversion Reaction.

The Arometrix EXTRACTION FINDER is the world's first and only portable real-time molecular analyzer for ethanol and centrifuge extraction.



Software & Apps

Bullseye gauge app



The Vacuum Gauge App for Apple and Android devices (Versions 10+) can be used to extend the functionality of all Bullseye Precision Gauges equipped with Bluetooth

StrataCapture Vacuumnetwork.org **DigiVac** StrataCapture

StrataCapture is an easy-to-use desktop software that allows users to seamlessly capture, view and record their system performance in real time (can record one or more sensors, allowing a full view of operations)

DAB APP



The Data Analysis Breakdown (DAB) App is our new computer application for users to easily upload & review logged Arometrix run data after your process.

We represent high quality vacuum equipment to the research and processing communities

New Additions

Rotovaps & Turbo pumps are now Available!

Authorized Reseller

Agilent

Cascade

Across International

Pfeiffer

Edwards

Welch

Anest Iwata

Vacuum Pumps and Ovens







DigiVac

Accessories

We aim to be one stop shop by providing accessories













Vacuum hoses

Vacuum fittings

Two stage vacuum pump exhaust

Centering rings

Hose barb adapters

Sensor Transducers

Vacuum sensors

Oil mist eliminator filter kits

Vacuum sensors

Exhaust filters

Vacuum Grease

Cold Traps

Vacuum pump oil

Services





Gauge Calibration



Full Vacuum Solutions





Why NIST Calibrated?

DigiVac Calibration services for High Vacuum & NIST Calibration for Low, Medium, & High Vacuum

Most well run ISO certified factories send the instruments for <u>calibration</u> every year to verify the measurements are accurate as part of their overall quality process.

A NIST calibrated gauges yields 2 things:

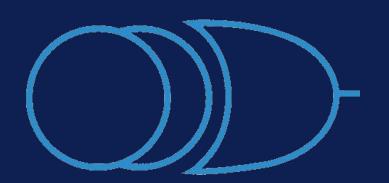
- **1.)** It makes sure that your gauge comes back to you calibrated; and it tells you how accurate the gauge was when the calibration lab received it.
- **2.)** Knowing how accurate the gauge is can help you determine what the calibration interval can be, and how accurate the gauge was when you last used it.

Note: It should be as accurate as it you specify for your process; and if it isn't you can adjust accuracy requirements, calibration interval, or sensor protection.





Calibration Services



Calibration is a good troubleshooting step.

- Are you concerned your process isn't getting low enough?
- Perhaps you aren't getting low enough in pressure?
- Perhaps your measurement instrument is off?

The as found calibration readings that come as part of a NIST calibration service can illuminate this for you.



Custom Solutions

Electron Microscopy: FYRA Bleed Control



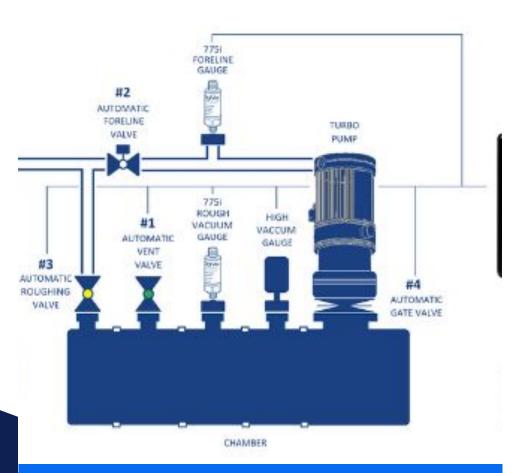
Optimized Image Resolution

Unified telemetry for R&D Flow and Pressure Applications



Vacuum Leak Detection by Simulating Human Suction

Automatic Pump Down Dinamo Valve Setup



Automated Vacuum Control System using Advanced Software



Certifications

We are a NRTL inspected production facility and UL/CSA certified factory with several of products having UL, CSA and CE certifications

ISO 9001 Certified



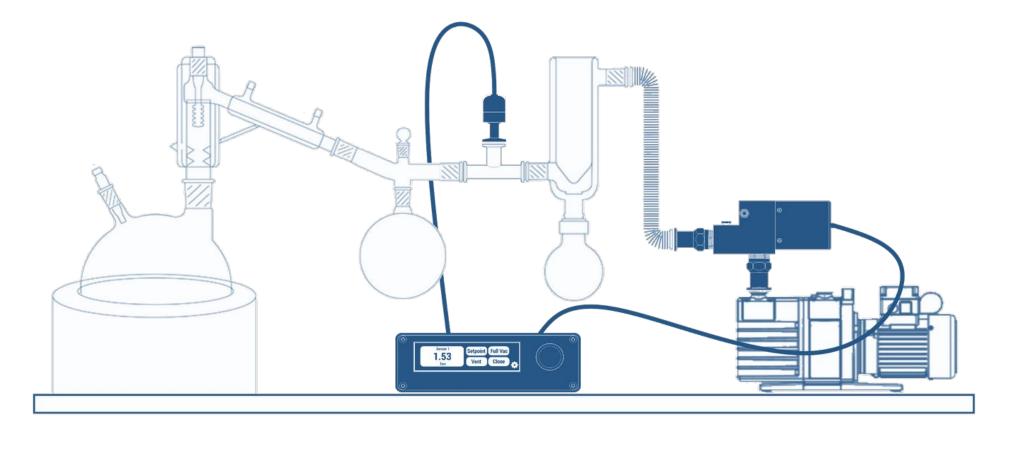
UL| CSA | CE

Patent Arometrix Fraction Finder, VPC & Bullseye Piezo UL | CSA | CE

2020

2014

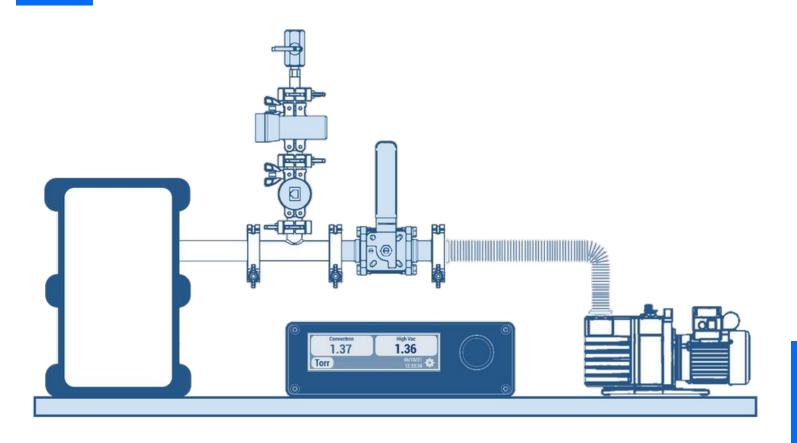
Model 215 & **Bullseye Precision Gauge** CE



See how we can simplify vacuum science for you!

Engineering Solutions that Keeps Vacuum Science Simple

Simplifying the science so you don't have to





Contact Us

Phone:

732 765 0900

Email:

Sales@digivac.com

Address:

1020 campus drive morganville nj 07751

Website

www.digivac.com

Social Media:

@digivac

NAICS

Generally 33451, specifically: 334513, 334516, and 334519

SAM.gov

CAGE: 5G1N5

DUNS

96-162-4186



ISO