



PROVIDING THE WORLD WITH  
INTELLIGENT SYSTEMS



SYSTEMS FOR TESTING  
**AUTOMOTIVE POWERTRAIN ELEMENTS**

# SYSTEMS FOR TESTING AUTOMOTIVE POWERTRAIN ELEMENTS

Burke Porter Group (BPG) is leading the movement to supply cutting-edge test equipment that is fully integrated with noise and vibration-analysis capabilities. We work with the foremost noise and vibration equipment suppliers to incorporate accelerometers, transducers, microphone arrays, laser vibrometers and complete analysis software into a single, seamless test cell package. Our custom-designed acoustic booths maximize the efficiency of any noise analysis system. BPG will work with you to develop the ideal testing environment for your product.

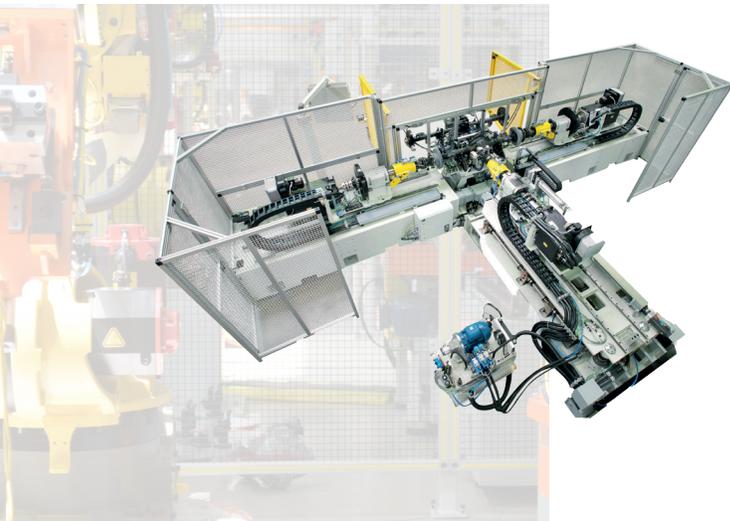
## NOISE, VIBRATION, AND HARSHNESS TESTING

As overall vehicle quality continues to improve, so do driver expectations for a quiet ride. Such high expectations have significantly increased the number of warranty returns associated with noise and vibration from powertrain components. As a result, the industry is calling on test equipment suppliers to integrate noise analysis equipment into the test stand. Our noise, vibration, and harshness testing systems are used to test axles, power take-off units (PTUs), manual transmissions, transfer cases and more. We test both light and heavy duty vehicles for noise, vibration, and harshness (NVH) ratio verification, speed & torque sweeps, transmission error (TE), and drag functionality.



Our NVH software package provides a real-time, visual display that allows the operator to immediately access the sound profile of the test part. Data can also be stored for review at a later date. The software enables the system to intelligently make pass/fail decisions and pinpoint reasons for failure.

At Burke Porter Group, it is our goal to make the integration of the noise analysis package and test equipment a smooth, simple process. Our specialists will manage the procurement, installation and run-off of the test stand prior to shipment from our plant. As the turnkey system supplier, we take full responsibility for the integration and proper set-up of your chosen noise analysis package.



Real-time display gives immediate access to sound profile



System intelligently makes pass/fail decisions pinpointing reason(s) for failure



BPG specialists manage procurement, installation and run-off of your test stand

# CLUTCH TESTING

Burke Porter Group's clutch burnishing and characterizing stations are able to test clutches in transfer cases and axles. Our systems burnish the clutch to remove the outer surface, stabilizing the part. BPG clutch stations apply and measure torque and provide matching data to calibrate ECU. Additional tests such as temperature, drag, disconnect, and activation are also possible with our globally manufactured stations.

Much like the design of our NVH machinery, BPG clutch testers take advantage of standard designs, loading options, and flexibility for your future product. Typical testing lines incorporate both clutch and NVH machinery from Burke Porter Group. In lower volume situations, we are capable of combining the two disciplines into a single, efficient machine to save floor space in your facility.

Our software engineering department will work hand-in-hand with your team during the design and release of your testing requirements, even simultaneously to the build of the machine. Our team is well-versed in testing changes and limits, so a production test profile can be created. At the end of the day, we are an extension of your team.



Take advantage of standard designs, loading options, and flexibility for your future product



Combine clutch & NVH machinery into one efficient machine to save floor space



A service-oriented software engineering department becomes part of your team

## FAST FACTS

- Real-time NVH data
- Industry leader in test repeatability
- Fast & easy (automatic) changeover
- Compatible with most NVH software packages
- Numerous loading/unloading methods, ranging from manual to fully automatic
- Built to standard design for flexibility of future products
- Manufactured globally
- In-house modal analysis
- Full end of line test loop offerings





# BURKE PORTER GROUP

## A TRULY GLOBAL REACH

Burke Porter Group's entrepreneurial brands leverage core capabilities around scoping, engineering, building and deploying intelligent instrumentation and machine solutions to grow our customer base and geographic reach.

[www.burkeportergroup.com](http://www.burkeportergroup.com)

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