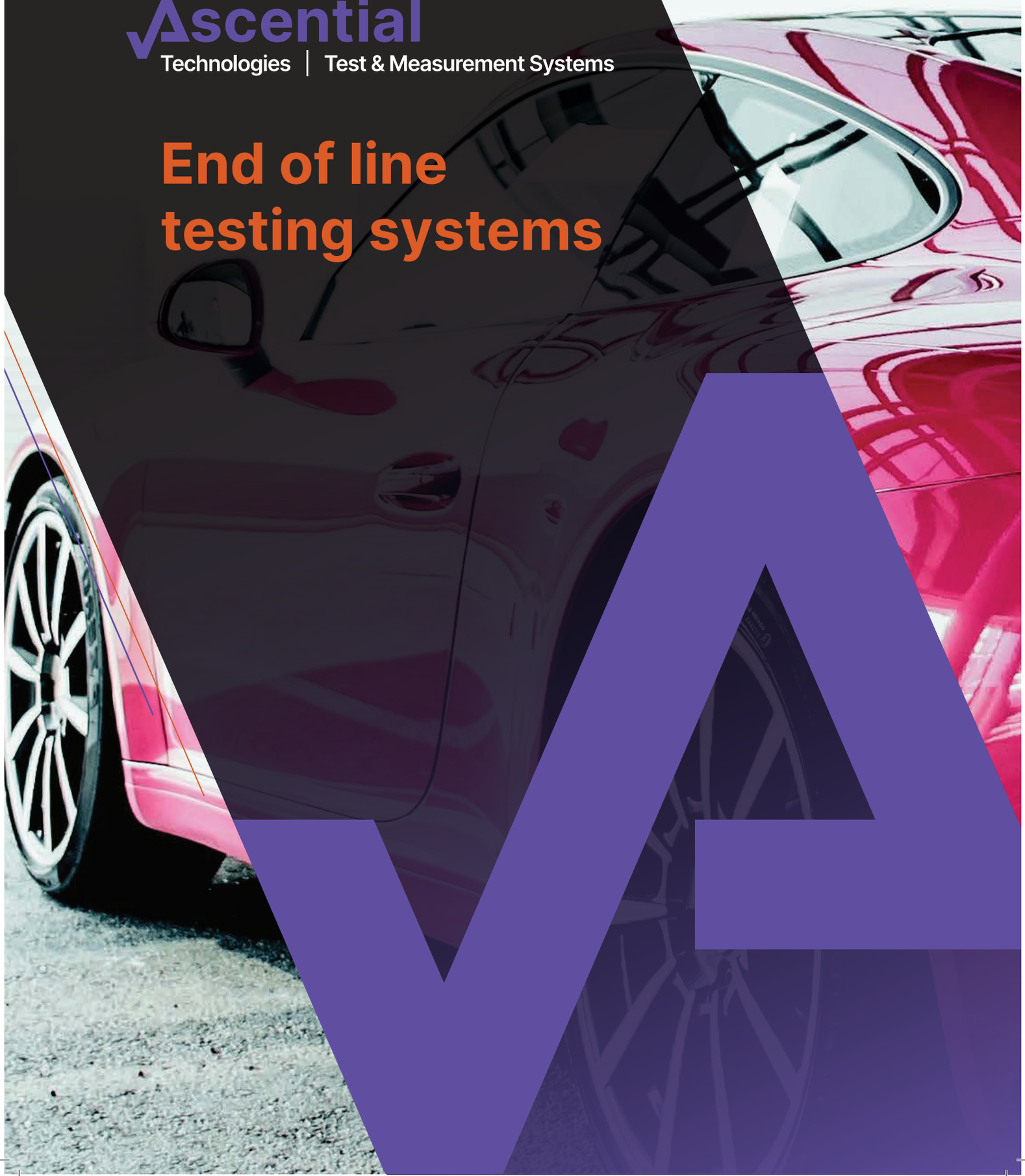
Ascential

Technologies | Test & Measurement Systems

End of line testing systems



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Burke Porter End of Line

Burke Porter is a premium supplier of end of line equipment for the automotive industry and offers a global solution for all your testing needs.

All machines can operate as stand-alone systems or can be controlled by an external master system. We ensure high-accuracy adjustment with the best possible cycle time in mind.

Our extensive expertise and track record in providing customizable solutions tailored to your exact specifications ensures maximum efficiency and top-tier performance.

Brake tester

Drive aid system

Rattle & twist

Tire & wheel assembly

Wheel aligner

Roll & brake

Powertrain

E-Vehicle

Brake tester

Burke Porter brake testers come as twin roller machines. The machine is designed to test the vehicle brake force at low speed, maximum 10km/h. 4 motor/reductor assemblies, mounted directly on the roller shaft, a sensor roller for speed measurement guarantee effective brake force determination.

The moveable part on the rear or the front axle is set to adapt to the vehicle wheelbase. A fix or adjustable exhaust flap for exhaust extraction. Side rollers, vehicle detection and vehicle guiding is part of the package. The machine can be operated as a stand-alone system or is controlled by an external master system.

- Twin roller machines
- Test at low speed
- Moveable part on rear and front axle: adapt to wheelbase of vehicle
- Sensor roller for speed measurement: accurate brake force determination
- Exhaust flap for exhaust extraction
- Side roller
- Vehicle detection
- Vehicle guiding
- Stand-alone machine or controlled by an external master system

Roll & brake

Burke Porter roll and brake machine comes as a single or twin roller machine. Both machine types are equipped with the latest 4AC technology with energy recuperation. The moveable part on the rear or the front axle is set to adapt to the vehicle wheelbase. Side rollers, retaining rollers or safety rollers, vehicle detection and vehicle guiding is part of the package.

In general a sound insulation booth is installed for optimal testing conditions. The machine can be operated as a standalone system or is controlled by an external master system.

- Single or twin roller machine
- 2WD, AWD and e-vehicles
- 4AC technology with energy recuperation
- Fix or adjustable exhaust flap for exhaust extraction
- Side rollers/retaining rollers/safety rollers
- Vehicle detection
- Vehicle guiding
- Sound insulation booth
- Stand-alone machine or controlled by an external master system

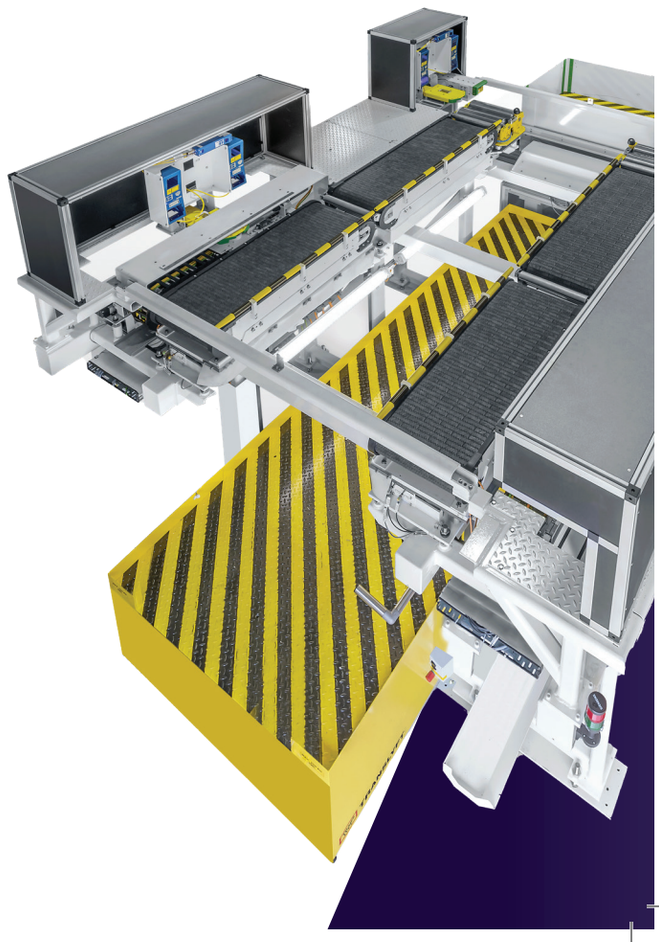
Rattle & twist

Burke Porter rattle and twist machines are designed to simulate a test-track environment. Road surface twisting effects are simulated by independently tilting the front and rear axle to approximately ±10°.

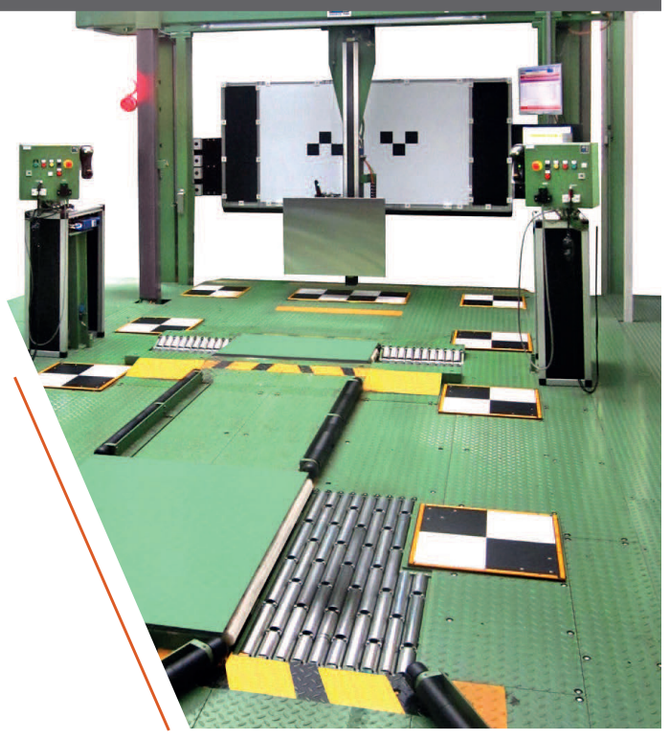
The vehicle wheelbase is set by moving the rear part of the machine which makes this machine perfectly suited for use in a production line environment as well as in pilot plants. Rattle and squealing noises are easily detected.

Side rollers, retaining rollers, vehicle detection and vehicle guiding is part of the package. The cobble stone pattern on the rolls can be defined to the customers specification.

- Machines designed to simulate a test-track environment
- Road surface twisting effects simulated by independently tilting the front and rear axle to approximately ±10°
- Rattle and squealing noises are easily detected
- Fix or adjustable exhaust flap for exhaust extraction
- Side rollers/retaining rollers/vehicle detection/vehicle guiding
- Cobble stone pattern on the rolls can be defined to customers specifications
- Fully servo-controlled



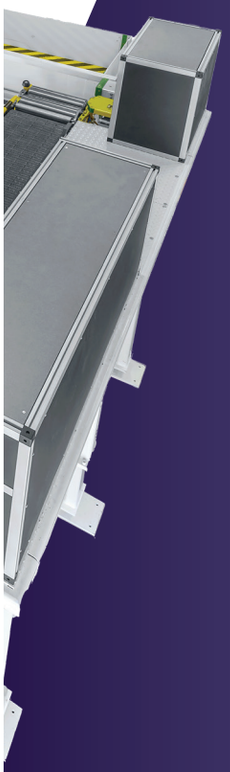
Drive aid system



- Modular concept
- Roller bed or floating plates to center the vehicle
- Adaptive Cruise Control (ACC)
- Lane Departure Warning (LDW)
- Height measurement
- Area view camera (360°)
- Head Up Display (HUD)
- Night vision (NV)
- Multiple Purpose camera
- Corner radar
- Rear radar and camera
- Interior camera
- Others

Burke Porter drive aid system calibration machines are equipped to handle the latest technological features that can be found on today's vehicles. Our drive aid system machines are designed as a modular concept and meet customers requirements.

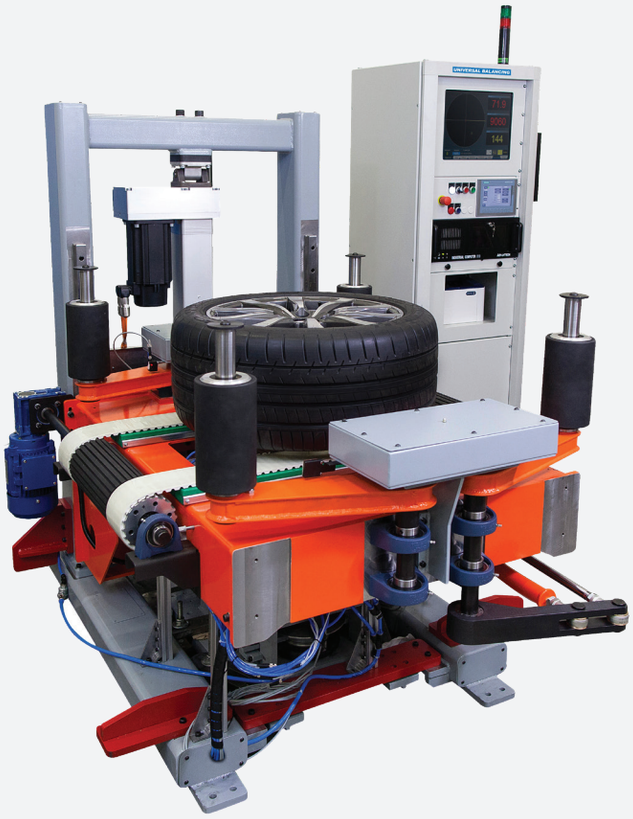
Various drive aid systems can be integrated as a stand-alone machine. Burke Porter has a long time expertise in the testing and calibration of drive aid systems and can supply you with level 2 up to level 5 DAS calibration machines.



Wheel aligner

The wheel aligner machine is equipped with Burke Porter developed 3D laser technology for high accuracy toe, camber and caster measurement. Our wheel alignment machines are designed as a modular concept and meet customers requirements. The moveable part on the rear axle is set to adapt to the vehicle wheelbase. The vehicle is positioned on 4 floating plates and centered. Front, rear and/or side slides offer optimal clearance for under body adjustment. The height and weight measurement are also available as well as the integration of several drive aid test systems. A headlight aiming facility can be fully integrated. The machine can be operated as a stand-alone system or is controlled by an external master system. Burke Porter also supplies robotic automatic toe and headlamp adjustment.

- Modular concept
- 3D laser technology
- High accuracy toe, camber and caster measurement
- Exhaust extraction
- 4 floating plates position the vehicle
- Height and weight measurement
- Integration of drive aid systems
- Headlight aiming
- Stand-alone machine or controlled by an external master system
- Manual or automatic transport



Automatic wheel balancing line

- Fully automated car wheel balancing line for adhesive weights
- Primary balancer for initial unbalance measurement
- Automatic cut-to-length weight dispensing system
- Weight transfer system to application head
- Automatic weight application system
- Audit balancer for final unbalance measurement
- Multi-color weight dispensing and transferring system
- ISO compliant balancing performance
- Fast cycle time
- Full variation of wheel types in one line
- Central wheel parametrization for all machines
- Semi-automated solutions available for knock-on and adhesive weight application

Truck wheel assembly

- Robotic wheel assembly system with rim handling robot, tire handling robot and mounting robot incl. mounting force monitoring
- Rim and tire vision solutions for type identification and valve angle measurement and driving direction recognition
- Fully automatic wheel inflation with double-bell system for 17.5" till 24" wheels
- Bead Seat Optimizer for best balancing and uniformity results
- Uniformity evaluation with radial and lateral run-out and force variation measurement
- Semi-automatic wheel balancing with pick-by-light weight rack.
- Full variation of wheel types in one line
- Central wheel parametrization for all machines
- Central software and PLC system for the full line

Truck NCA & ADAS

- A combination of wheel alignment, automatic headlight aiming and ADAS calibrations (mirrorcam, radars, cameras) in 1 single test stand
- A complete range of medium to heavy trucks is allowed, from 2 to 5 axles
- Static wheel alignment measurements with run-out compensation
- Steering wheel balance feeding system
- Automatic headlight aiming with robots and vision systems
- Robotic ADAS target positioning for both camera and radar calibrations

Global service & support

We take pride in our customer support network, helping to maximize your machine uptime and ensure production.

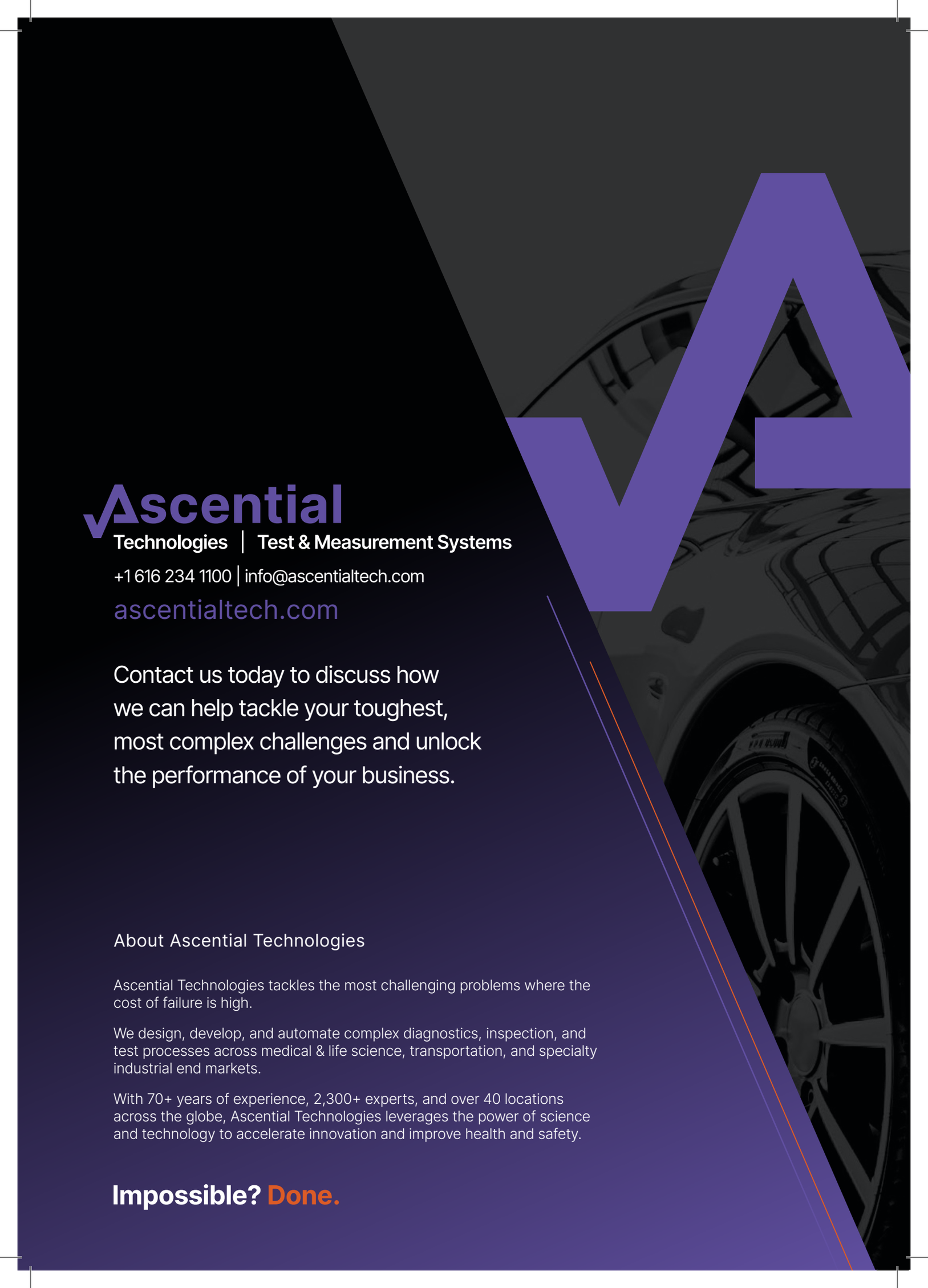
- Winbal's industry 4.0 self-diagnostics allows over 90% of issues to be resolved remotely.
- 24/7 remote support from a service engineer.
- Global network for site support.

Skilled project team

Highly skilled project management team, dedicated ownership and single point contact throughout the life of any project.

Training

We provide dedicated professional training for operators, maintenance staff and engineers, either at a customer's site or at one of our training facilities.



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+1 616 234 1100 | info@ascentialtech.com

ascentialtech.com

Contact us today to discuss how we can help tackle your toughest, most complex challenges and unlock the performance of your business.

About Ascential Technologies

Ascential Technologies tackles the most challenging problems where the cost of failure is high.

We design, develop, and automate complex diagnostics, inspection, and test processes across medical & life science, transportation, and specialty industrial end markets.

With 70+ years of experience, 2,300+ experts, and over 40 locations across the globe, Ascential Technologies leverages the power of science and technology to accelerate innovation and improve health and safety.

Impossible? Done.