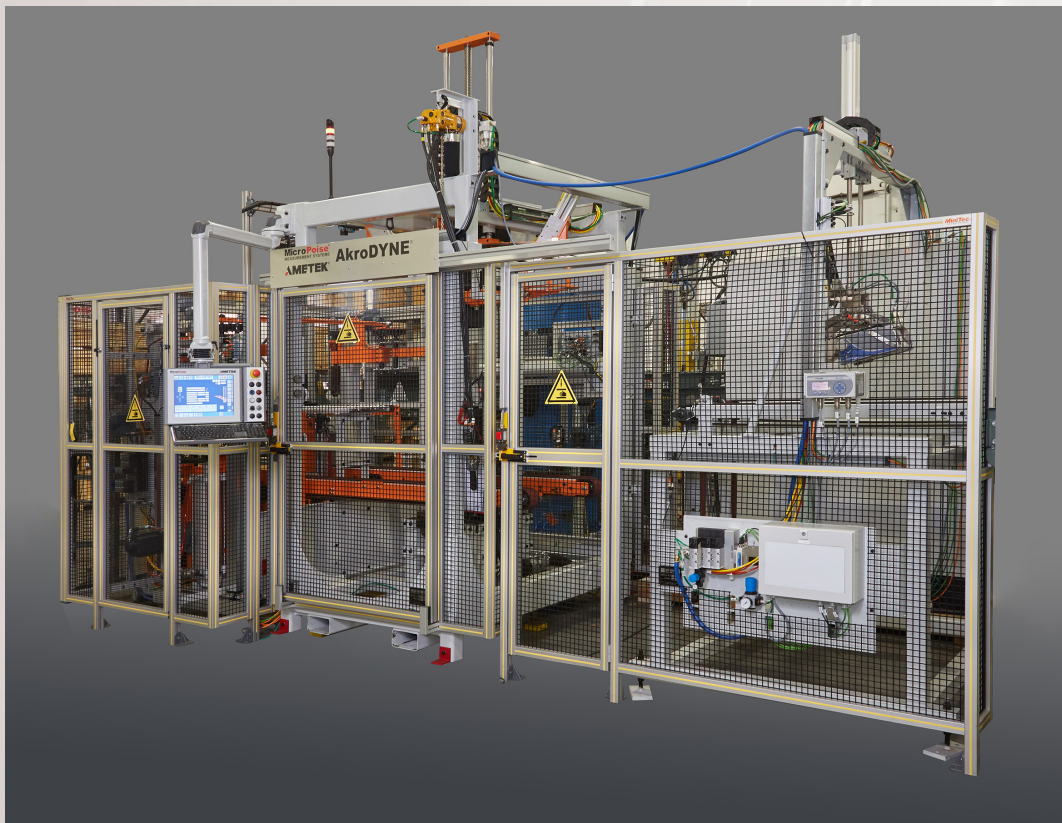


AkroDYNE[®]

Passenger and Light Truck Tire Dynamic Balancing System

The AkroDYNE[®] Tire Dynamic Balancing System from Micro-Poise[®] helps assure tire quality by measuring, grading, marking and sorting tires according to static, couple, and upper and lower plane imbalance for passenger and light truck tires.

- Your Key Process Advantages
 - Lowest cost of ownership through the system lifecycle
 - Operator friendly and efficient
 - Fastest cycle time of any commercially available dynamic balance system
- Your Key Technical Advantages
 - Best accuracy and precision due to the tight machining specifications of our spindle drive system
 - Patented direct drive spindle
 - Reliable tire inflation techniques
 - Fully integrated with our Tire Geometry Inspection Systems (TGIS-SL[®])



Features and Benefits

The AkroDYNE® Tire Dynamic Balance System is a fully automatic system used for 100% tire checking in production.

- Automatically adjusts to different tire widths and test conditions while processing a variety of tires with various bead diameters (adapter dependent), outside diameters, section widths and weights.

All Micro-Poise® dynamic balancers utilize a “force measuring” imbalance-sensing system in conjunction with computer based software. There are several advantages to this system.

- The force measuring system accurately measures the imbalance in a wide variety of tires. This feature gives the tire manufacturer flexibility when using the AkroDYNE® in the finishing process and aids in maximizing production yields.
- The electronics are very stable and allow the machine to be set up for all types of production tires. Recalibration for varying tire sizes is not necessary.
- Tires are measured while inflated and rotating, simulating tire & wheel assembly conditions, and enabling bulge and dent detection by TGIS-SL®. Confidence of a quality measurement system for each tire tested is assured.

These features make the AkroDYNE® a high up-time, high-throughput and ergonomically friendly machine.

Technical Specifications

Size and Range Specifications	Metric	US Customary
Outside Diameter (max/min)	1100/500 mm**	43.3/19.6 inch**
Bead Diameter (max/min)		28/12 inch**
Bead Width (max/min)	406/51 mm*	16/2.0 inch*
Section Width (max/min)	457/135 mm	18/5.3 inch
Inflation Pressure (max)	4 bar**	60 psi**
Tire Weight (max)	55 kg	120 lb

*In 1/2 inch (12.7 mm) increments.

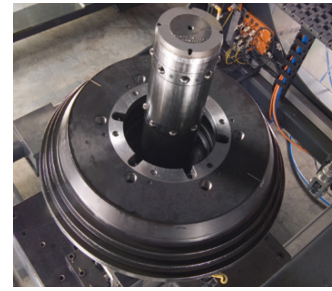
** Availability limited to specific inflation limits and dimensions.

Balance Measurement Range	Metric	US Customary
Range	3000 g-cm per plane	40.0 oz-in per plane
Resolution	1 g-cm	0.013 oz-in

Measurement Accuracy	Metric	US Customary
Static	≤ 8.6 g-cm	≤ 0.12 oz-inch
Couple	≤ 10.8 g-cm	≤ 0.15 oz-inch
Planes	≤ 10.8 g-cm	≤ 0.15 oz-inch

Cycle Times	30 psi balance	4 bar geometry/ 30 psi balance
Time for complete cycle plus one orient for external marking preparation	18 seconds	22 seconds

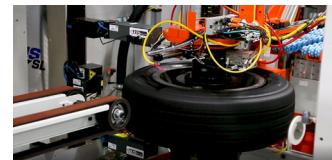
*Cycle times are specified using a P215/60R16 tire. Cycle time varies with tire size.



Three Step Rim Adapter enhances production flexibility



Our ability to incorporate the Tire Geometry Inspection System (TGIS-SL®) into the dynamic balancer station is unique

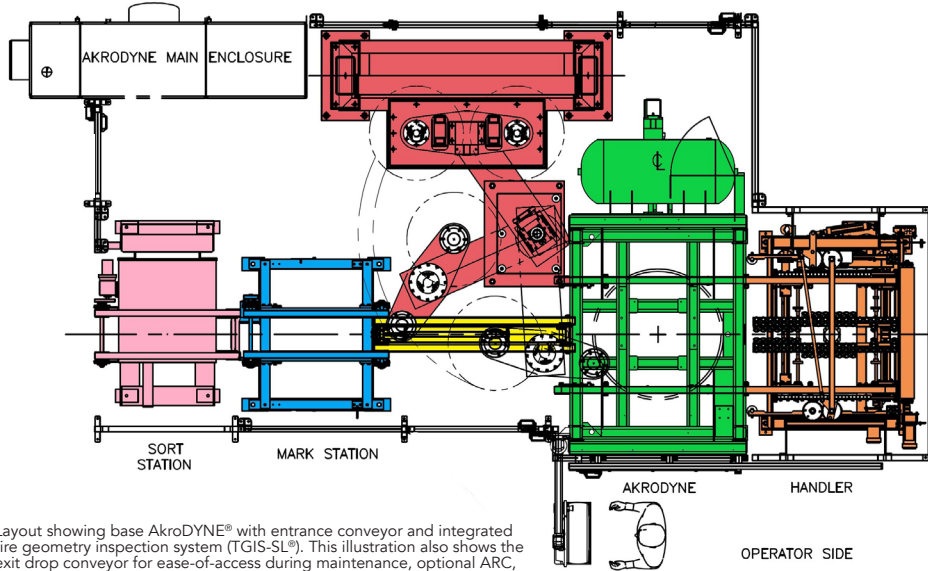


Spindle with measurement devices and transfer conveyor are the heart of the system



Convenient pendant station with simple, intuitive display

Layout Options



Layout showing base AkroDYNE® with entrance conveyor and integrated tire geometry inspection system (TGIS-SL®). This illustration also shows the exit drop conveyor for ease-of-access during maintenance, optional ARC, optional remote marking station and optional sorter.



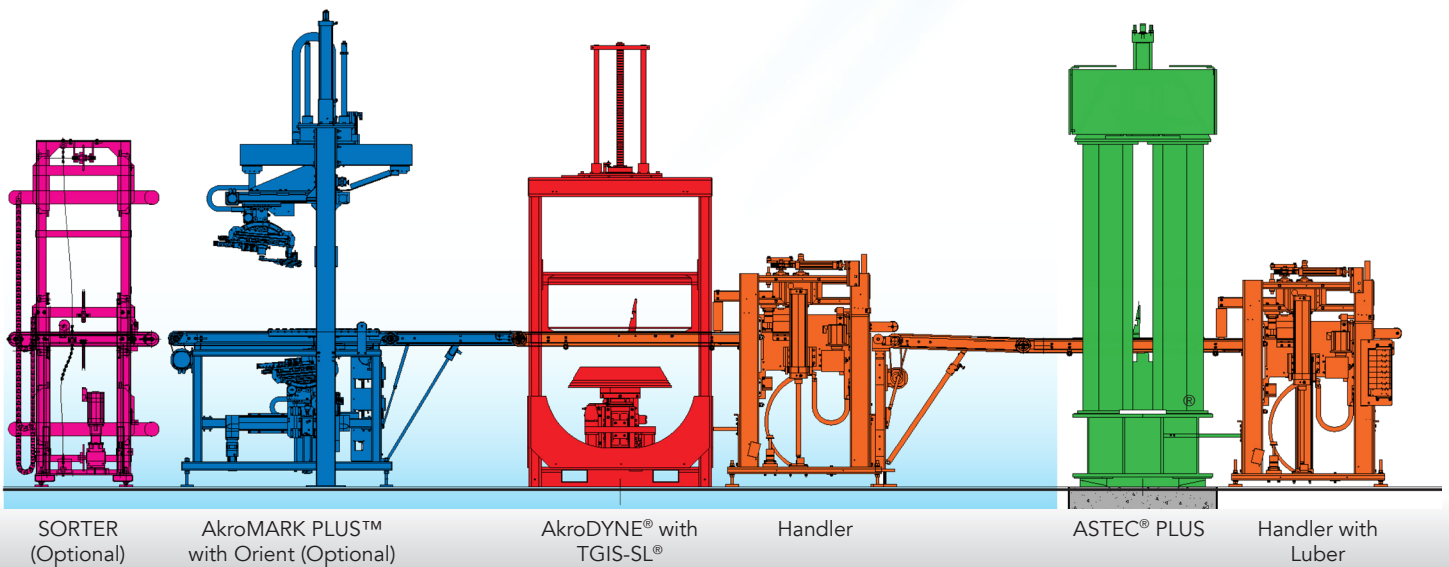
AkroDYNE® Handler with Luber and tire centering

Modular Tire Measurement Systems

AkroDYNE® is a critical component of our Modular Tire Measurement System (MTMS), designed to optimize the tire measurement process for uniformity and dynamic balance measurements.

MTMS combines tire uniformity, dynamic balance measurement and tire geometry inspection into a single process. In its most efficient configuration, the total system cycle time is the fastest in the industry. In addition, each individual measurement station ensures the best measurement with no compromise in precision and accuracy.

Auxiliary features include manufacturing operations communications (Level II), barcode reading, angular referencing, marking and sorting.



Aftermarket Products & Services

To protect and maximize the return of your investment, Micro-Poise® has an established global Aftermarket Products & Services network that is unsurpassed in the industry. Our responsive and knowledgeable group will exceed your expectations for cost savings, performance and reliability.

- Technical services for start-up, on-going maintenance, preventative and predictive maintenance and training
- Spare parts and precision tooling, kits and repairs
- Machine modernization and upgrades



When you have a company with 100 years of innovative work behind you, you have a measurement system that puts the leading edge of tire finishing technology in front of you. Micro-Poise®. *Better by every measure.*

MicroPoise®
MEASUREMENT SYSTEMS

AMETEK®

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