



# AkroDYNE® FXT

## Truck and Bus Tire Dynamic Balancing System

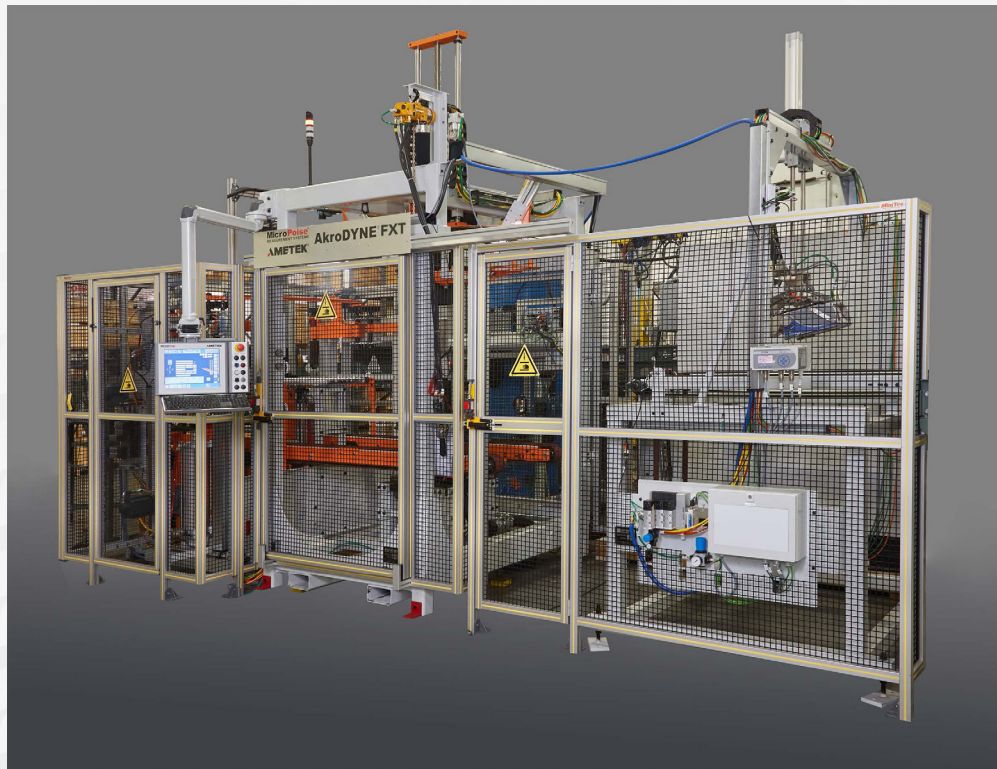
The AkroDYNE® FXT Tire Dynamic Balancing System from Micro-Poise® helps assure tire quality by measuring, grading, marking, and sorting tires according to static, couple, and upper and lower plane imbalance for medium radial truck and bus tires.

### 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

### 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 FS)



AkroDYNE® FXT



## Features and Benefits

The AkroDYNE® FXT 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 including:

- The force measuring system accurately measures the imbalance in a wide variety of tires providing the tire manufacturer with flexibility when using the AkroDYNE® FXT in the final finish process and aiding 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 FS. Confidence of a quality measurement system for each tire tested is assured.

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



Tire Test Station



Human Machine Interface





## Technical Specifications

Size and Range Specifications	Metric	US Customary
Outer Diameter (max/min)	1350/660 mm	53/26 inch
Bead Diameter (max/min)	622/407 mm	24.5/16 inch
Bead Width (max/min)	406/102 mm*	16/4 inch*
Section Width (max/min)	500/150 mm**	19.7/6 inch**
Inflation Pressure (max)	7.5 bar	110 psi
Tire Weight (max)	120 kg	264 lb

\*In 3/4 inch (19.05 mm) increments.

\*\* Option being developed to expand tire width to 23 5/8 inch (600 mm).

Balance Measurement Range	Metric	US Customary
Range - Plane	144 g-m per plane	200 oz-inch per plane
Range - Static	288 g-m	400 oz-inch
Range - Runout	10 mm	0.4 inch

Measurement Accuracy	Metric	US Customary
Static	≤ 54 g-cm	≤ 0.75 oz-inch
Couple	≤ 72 g-cm	≤ 1.0 oz-inch
Planes	≤ 72 g-cm	≤ 1.0 oz-inch

Cycle Times	90 psi balance	With Geometry 90 psi balance
Time for complete cycle plus one orient for external marking preparation	35 seconds	39 seconds

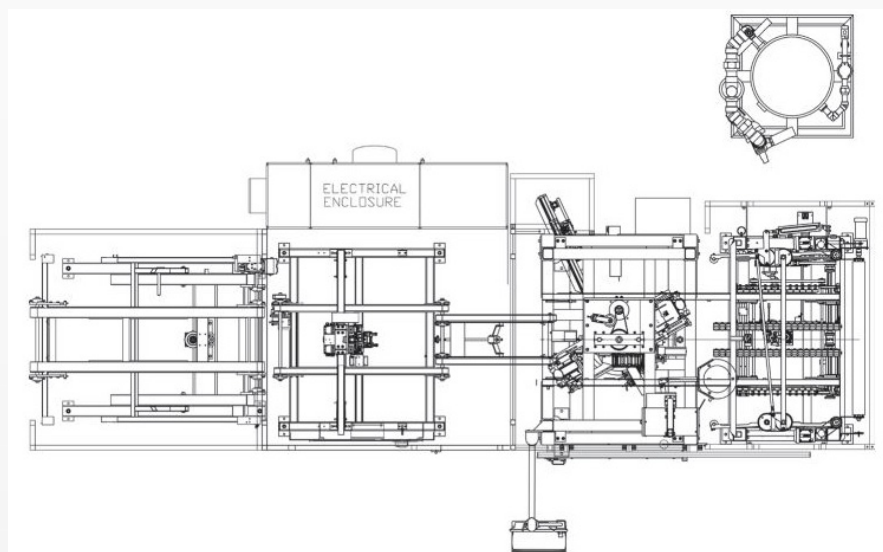
\*Cycle times are specified using a 295/75R22.5 tire. Cycle time varies with tire size.



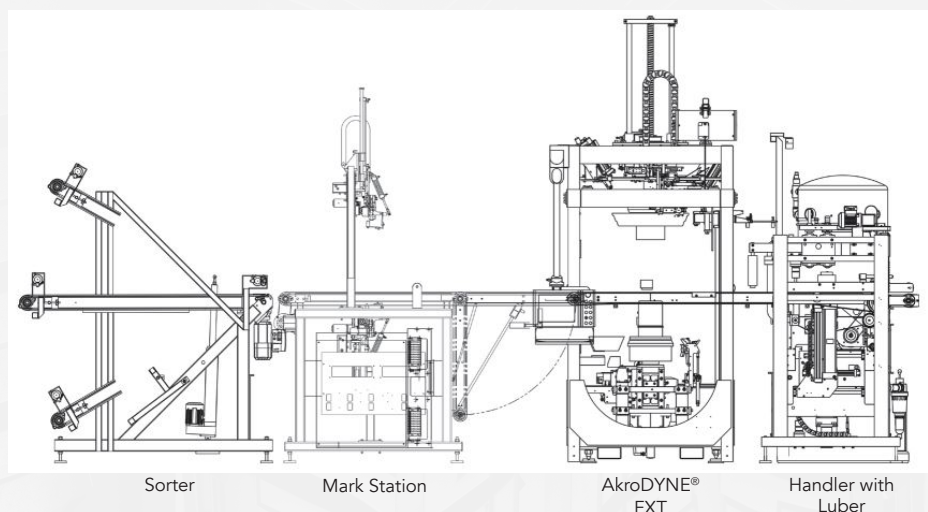
Spindle with measurement devices and transfer conveyor



## Layout Options



Layout showing base AkroDYNE® FXT with entrance conveyor and integrated Tire Geometry Inspection System (TGIS FS). The illustration also shows the exit drop conveyor for ease-of-access during maintenance, optional remote marking station and optional sorter.



With more than 105 years of innovation behind us,  
we continue pushing leading-edge tire measurement systems forward.  
Micro-Poise®. Better by every measure.

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