

# BEAR ROBOTICS



ADVANCED WHEEL ALIGNMENT SYSTEM



**BEAR**

**A STRONG FOUNDATION**

*Bear Equipment and its predecessors have been setting the standard in automotive alignment equipment for over 100 years. Starting with the toe – in gauge, a basic metal device, to the advent of Bear Robotics showcased in this catalog, we strive to be on the cutting edge of service equipment technology. Passion for innovation building a heritage of excellence.*

**WORLDWIDE DISTRIBUTION**

*Being a leading force in the automotive diagnostic area, our sales distribution network has no boundaries. We have customers throughout the world and our international network is growing every day.*

**SERVICE AND CUSTOMER CARE**

*Bear's technical and customer service team is like no other. We are dedicated to quickly and efficiently handle all your needs from equipment purchase – to service and support required down the road.*



*The BEAR Robotic Wheel Alignment System was “Born” in the Car Factories of the world, where two elements are critical:*

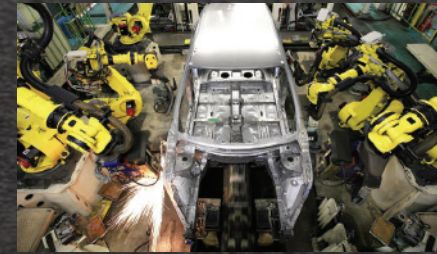
***Speed and Consistently Reliable Results.***

**BEAR ROBOTICS**

**+SWISS ENGINEERING**



*The BEAR Robotic System gives automotive shops the ability to have the same cutting edge technology as the world's vehicle manufacturers at affordable prices while achieving factory performance and accuracy.*



*This alignment technology has aligned more vehicles than any other system in the world. We have redesigned it to be ideal for high-end vehicle service work or dealerships where volume and repeatability are a must.*

# 70 Seconds to Readings

- The Robots will automatically find the vehicle and its position on the rack.
- They travel to the front axle. If needed, the Run Out compensation is performed and if required the operator will adjust the front axle.
- Different diameter sizes are automatically detected with the automatic height adjustment of the Robots.
- In only seconds and without intervention of the operator, the Toe and Camber values ( independent and total ) are displayed.
- If required a Caster Swing will be then performed and the Caster and Steering Axle data is acquired.



*Clamp-less System – Robotic never touches the Rim, safely taking measurements without the Risk of damage.*



*Robots glide across aluminum rail quickly touching rear wheel taking an accurate measurement.*



*Readings are recorded in 70 seconds making it the Fastest Wheel Alignment System in the industry!*

## Clampless System



*The unique design is truly a clampless system. No mounting rim clamps, wheel unit sensors, or targets. As soon as the vehicle is on the lift it's ready to be aligned.*

***An unprecedented time saver!***

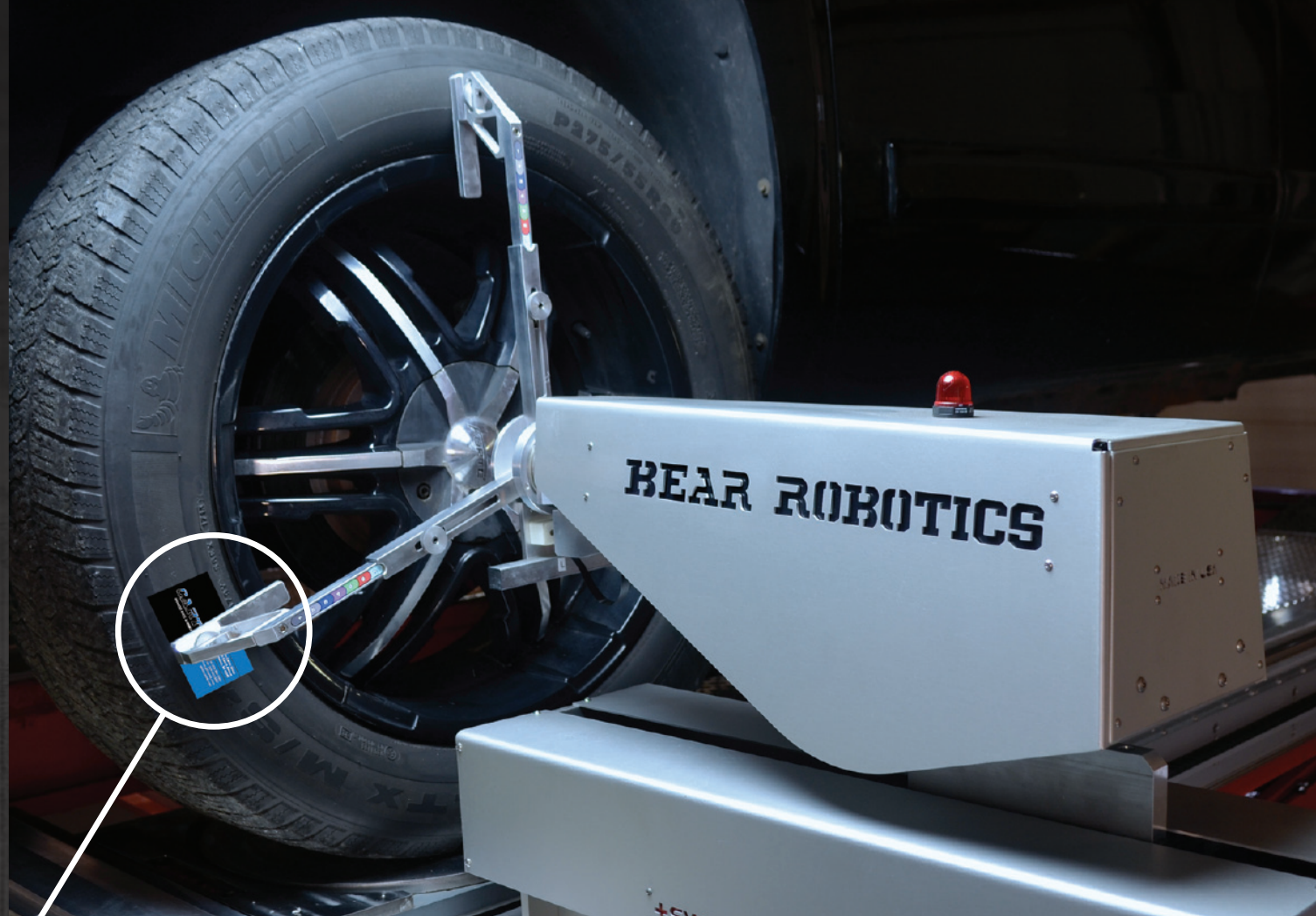
# *Extreme Accuracy and repeatability*

*The Bear Robotics system is software driven eliminating human error and achieving high levels of accuracy and repeatability*

*Toe and Camber sensors are accurate up to .005 degrees. They can sense and record even the slightest amount of movement.*

*Even the width of a standard business card will change readings!*

*Perform a quick rolling runout compensation to compensate for any raised lettering or tire imperfections.*



## Caster Swing

*Caster swing is also simple to perform. Each robot continuously changes its position to stay accurately attached to the wheel.*



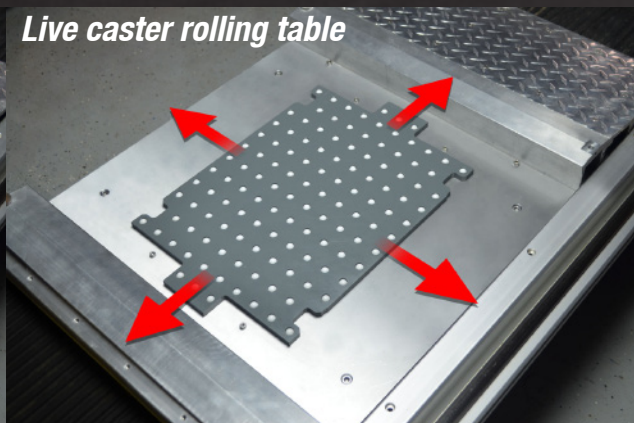
## Live Caster

*Our turn plate configurations offer True Live Caster readings. The round turnplate floats and rotates on top of the turn plate assembly and Live Caster is achieved by the entire turnplate assembly floating on top of its own rolling table.*

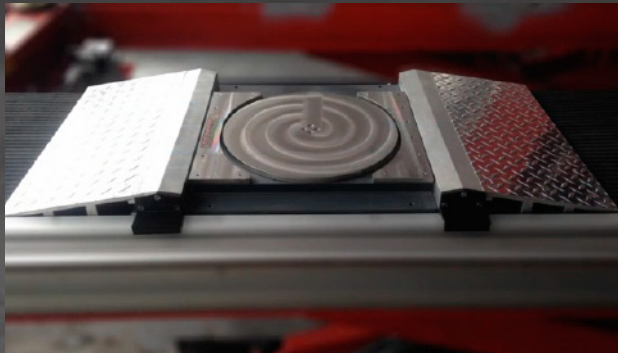
Turnplate Assembly



Live caster rolling table



*The turnplate assemblies are constructed of non-corrosive materials including Stainless Steel, ABS, Aluminum and Nylon, and are easy to disassemble and clean. Its 72 high impact nylon bearings provide smooth movements in all directions.*



*Easily position the rear turnplate ramps with built-in spring loaded rollers along the robust aluminum rails.*

*Rails can be configured to fit any 4 post or scissor type lift.*



**Robotics Systems include a Sturdy USA built all-aluminum cabinet with:**

- Smooth rolling caster,
- Heavy duty Stainless Steel handles.
- 22" Touch screen monitor
- High Performance compact PC
- Brilliant illuminated Logo
- Printer

### BEAR ROBOTIC SYSTEM PERFORMANCE SPECIFICATIONS

#### Angles That Can Be Read

Toe – One side and total	Front and Rear
Camber – Two sides	Front and Rear
Caster – Indirect measurement at 20°	Front
King Pin – Indirect measurement at 20°	Front
Steering Angle – Measured at 20°	Front
Thrust Line	Degrees and Minutes
Wheel Base (in mm)	Left/Right/Comparison

#### Ranges

Toe (One Side)	+/- 8°
Camber	+/- 8°

#### Precision and Tolerance

Toe (One Side) Measured against the Star	+/- 1 Minute
Camber Measured against the Star	+/- 1 Minute
Caster	+/- 5 Minute
King pin in accordance to the vehicle	+/- 10 Minute
Toe out angle	+/- 5 Minute

#### Driving Speed of the Robots

11.9" (300 mm) per second

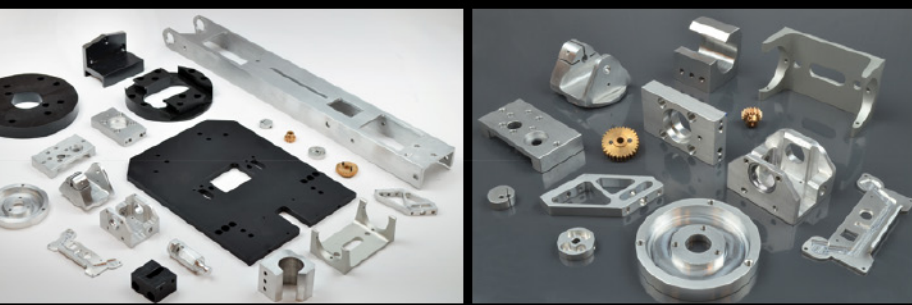
#### Size Specifications

Robot Weight (Each):	90 Lbs (.)
Robot Dimension (Each):	27" x 16" x 16.5"



**Zero Light Intrusion**

*There is no risk of light intrusion as in camera based systems.*



★ 2 YEAR ★  
**WHEEL ALIGNMENT  
WARRANTY**

*Unique Industry-Wide 2 Year Parts warranty  
Exceptions: Computer (motherboard, RAM, hard drive, floppy drive, power supply) and Computer Peripherals (mouse, keyboard, printer, monitor, camera) which are covered under their respective manufacturer's warranty. Consumable parts such as Power Cables, Wheel Unit Cables and batteries, which are covered under warranty for 90 days.*

**BEAR**®

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