



TechnoVector Group

TechnoVector '7

Wheel Alignment Systems

Precision in Motion

OUR HISTORY



TechnoVector Group

1997

First wheel aligner had been produced



2005

Production of TechnoVector 5 CCD wheel aligners with PRRC (Precise Rolling and Runout Compensation) technology.

2009

Introduced our first 3D wheel aligner for cars: TechnoVector 7 with WideScope technology.



2012

The mobile wheel aligner TechnoVector 6 with 3D Free Motion technology allowing smaller workshops to use the benefits of 3D technology.



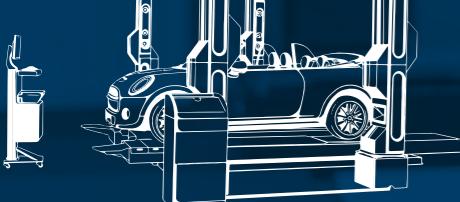
2013

The first worldwide 3D wheel aligner for trucks had been introduced.



2016

Released the 5-camera 3D mobile wheel aligner for cars and trucks and the 3-camera cars mobile aligner.



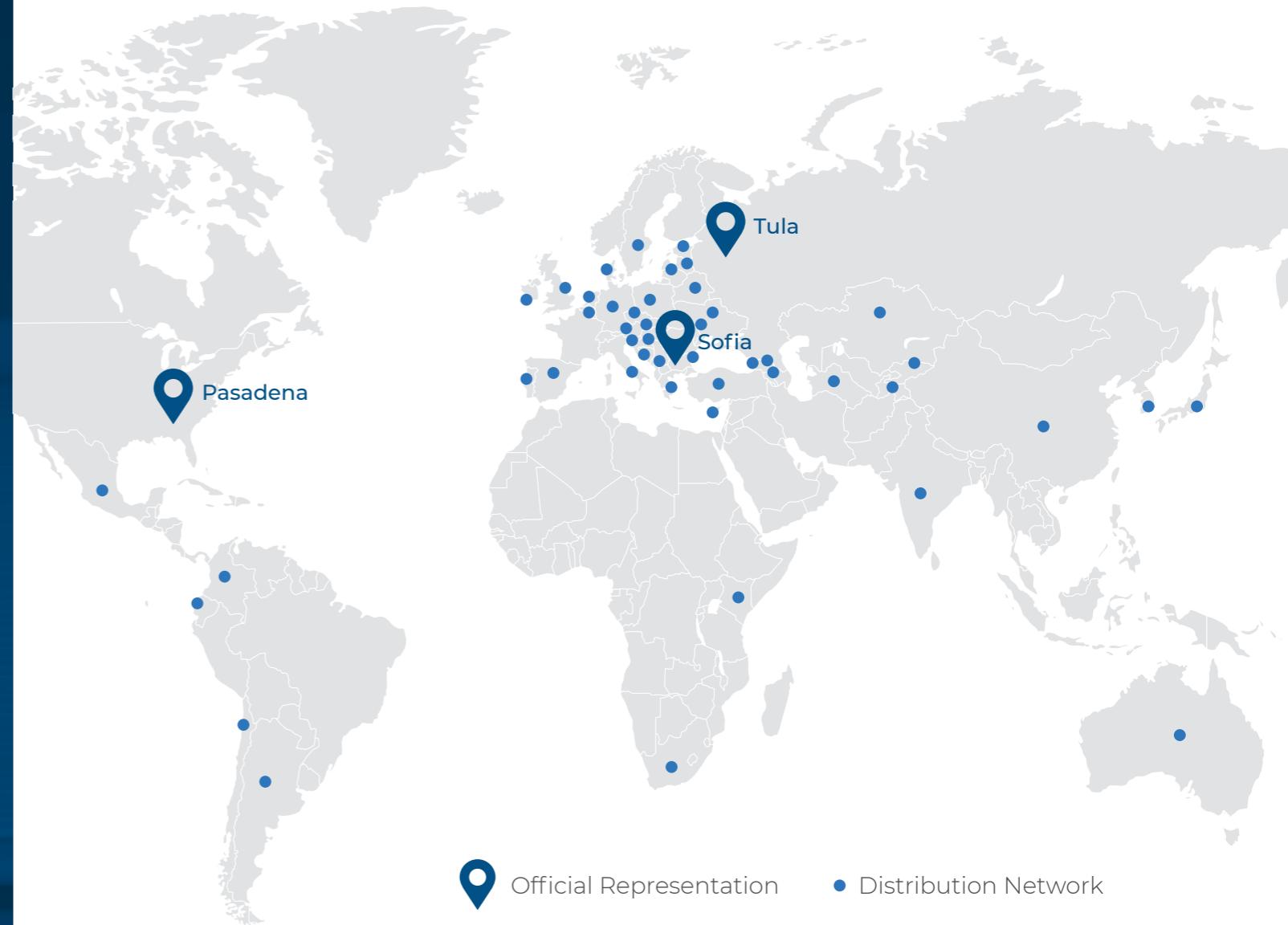
2018

New unique Contactless wheel aligner TechnoVector 8 with SmartLight technology.



Precision in Motion

GLOBAL PRESENCE



TECHNOVECTOR INC.

USA 10535, Red Bluff Rd, Pasadena, TX, 77507.
Status: Official representation in the USA
technovector.us

TECHNOCAR LLC

300020 Russia, Tula,
Zheleznodorozhnaya st., 55.
Status: Headquarter
and main production
technovector.ru

TECHNOVECTOR EUROPE

21, Oborishte str.,
1504 Sofia, Bulgaria.
Status: Official representation
in Europe
technovector.com

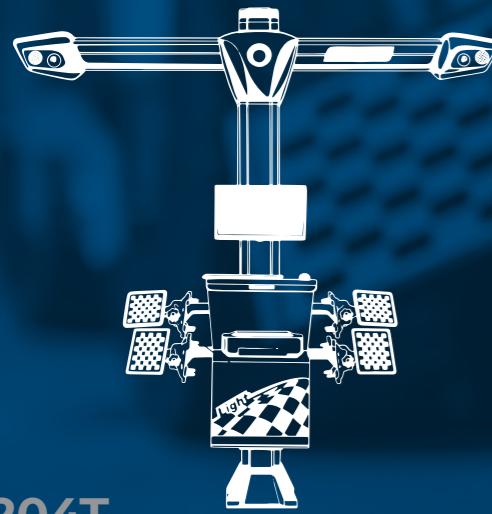
WHAT WE PRODUCE

MANUFACTURING

- Technovector is ISO 9001:2015 certified with production facilities of 86000 sq.ft. (8000 sq.m.) located in the area of 215000 sq.ft. (20000, sq.m.).
- All main components of Technovector wheel aligners such as cameras, consoles, measuring blocks, metal parts, etc., are designed by TechnoVector Group and manufactured at own production plant.
- All products are the origin of Russia and the EU.

INNOVATIONS

Groundbreaking technologies such as PRRC, WideScope, and SmartLight have become worldwide unrivaled. The only industry manufacturer who produces all types of wheel alignment systems: 3D, CCD, Touchless. Company is the only producer of Heavy Duty vehicle reliable Machine Vision System.



7204T

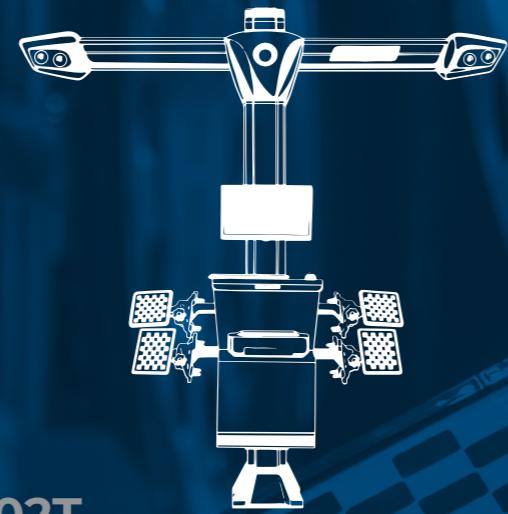
TECHNOVECTOR 7 SERIES 4-CAMERA MACHINE VISION WHEEL ALIGNER SYSTEM WITH WIDESCOPE TECHNOLOGY

Angle readings at any rack height and distance up to 384".

Fast and accurate readings.

Compact installation without loss of accuracy and significantly.

Automatic rack incline correction.



7202T

TECHNOVECTOR 7 SERIES 2-CAMERA MACHINE VISION WHEEL ALIGNER SYSTEM WITH WIDESCOPE TECHNOLOGY

AFFORDABLE PRICE

Fast and accurate readings.

Compact installation without loss of accuracy and significantly.

Automatic rack incline correction.

7404HTS

TECHNOVECTOR 7 SERIES HD 4-CAMERA MACHINE VISION WHEEL ALIGNER SYSTEM WITH WIDESCOPE TECHNOLOGY

Only Heavy Duty vehicle reliable Machine Vision System on the market.

All heavy-duty vehicles wheelbases of up to 630 inches.

Up to four axles simultaneous rolling compensation and adjusting.



VELOX

CLAMPLESS WHEEL ALIGNMENT EXPRESS CHECK MACHINES

No wheel adapters or targets on wheels.

Auto Readings in seconds.

Express full alignment check.



SMARTLIGHT

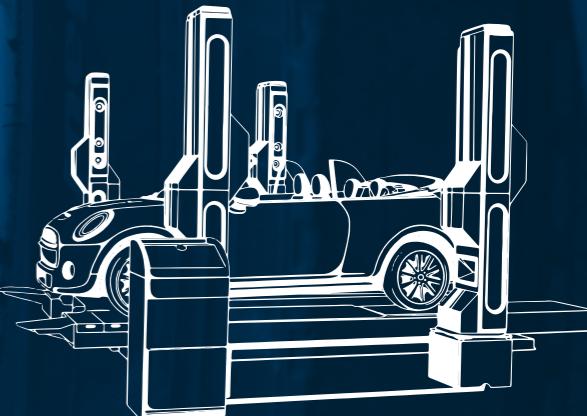
UNIQUE, CLAMPLESS WHEEL ALIGNMENT MACHINES FOR PIT OR RACK FULL RISE INSTALLATIONS

No wheel adapters or targets on wheels.

Readings in seconds.

More space in front and back of the vehicle.

Express full alignment check. Wheel Bases from 79" up to 154". Auto rear measuring posts aiming. Several alignment bay configurations are available.



MACHINE VISION SYSTEMS INTRODUCTION



TECHNOLOGY

Readings are taken by processing measured data obtained with flash light emitters on special targets placed on the wheels of the vehicle and reading radiation pulses reflected from targets with video cameras. Video cameras and emitters are built using CMOS technology. Measurement results obtained with video cameras are processed using the microprocessor system.

OUR MACHINES

- Measuring systems with Four or Two Widescope high-resolution cameras which are securely located in special housing patterns to be installed in front of the vehicle with high-precision image targets clamped on the car wheels;
- Cameras are used to obtain the spatial position of the image targets with a high-precision, real-time target video processing allows getting all the necessary live wheel angles parameters readings;
- Allows all wheels simultaneous rolling compensation and adjustment.

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TECHNOVECTOR 7 SERIES 4-CAMERA MACHINE VISION WHEEL ALIGNER SYSTEM

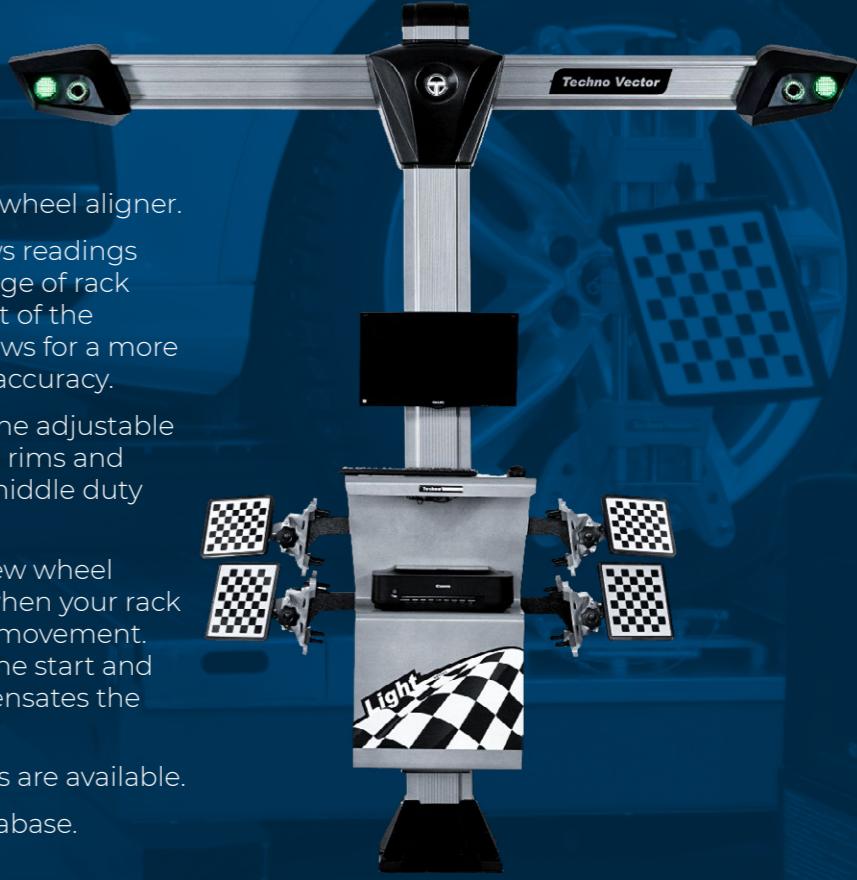
- Traditional 4 camera machine vision wheel aligner.
- Faster readings.
- Unique WideScope technology allows readings and adjusts angles in a very wide range of rack heights, without adjusting the height of the measuring system, which in turn allows for a more compact installation without loss of accuracy.
- Self-centering wheel adaptors with the adjustable central mechanism fit 12" - 24" wheel rims and are compatible with light duty and middle duty vehicles.
- Automatic rack incline correction. New wheel alignment software function helps when your rack doesn't remain horizontal during its movement. The software automatically detects the start and end of the lift movement and compensates the angle values changes.
- Several alignment bay configurations are available.
- Complete the US market vehicle database.



7202T

TECHNOVECTOR 7 SERIES 2-CAMERA MACHINE VISION WHEEL ALIGNER SYSTEM WIDE SCOPE

- Traditional 2 camera machine vision wheel aligner.
- Unique WideScope technology allows readings and adjusts angles in a very wide range of rack heights, without adjusting the height of the measuring system, which in turn allows for a more compact installation without loss of accuracy.
- Self-centering wheel adaptors with the adjustable central mechanism fit 12" - 24" wheel rims and are compatible with light duty and middle duty vehicles.
- Automatic rack incline correction. New wheel alignment software function helps when your rack doesn't remain horizontal during its movement. The software automatically detects the start and end of the lift movement and compensates the angle values changes.
- Several alignment bay configurations are available.
- Complete the US market vehicle database.



WIDE SCOPE

- Unique WideScope technology allows readings and adjusts angles in a very wide range of rack heights, without adjusting the height of the measuring system, which in turn allows for a more compact installation without loss of accuracy and significantly increases the productivity of your wheel alignment bay.
- The operational range of the visible heights of the lift is twice as big as that of similar competitors. The four-camera systems allow to take readings and perform alignments on the rack from the adjustment height of 67" to the floor level* without using any cameras beam movement. Two-camera systems allow taking readings and perform adjustments on the rack in the range of the first lift lock up to 67".

*Depends on the installation distance of camera housings



AUTOMATIC RACK INCLINE CORRECTION

New wheel alignment software function helps when your rack doesn't remain horizontal during its movement. The software automatically detects the start and end of the lift movement and compensates the angle values changes.

WHEEL ADAPTORS

Self-centering wheel adaptors with the adjustable central mechanism fit 12" - 24" wheel rims and are compatible with light duty and middle duty vehicles.

Double sided studs for easy installation on both steel and light-alloy rims.

SOFTWARE /POWERFUL AND RELIABLE ALIGNER CONTROL TOOL*

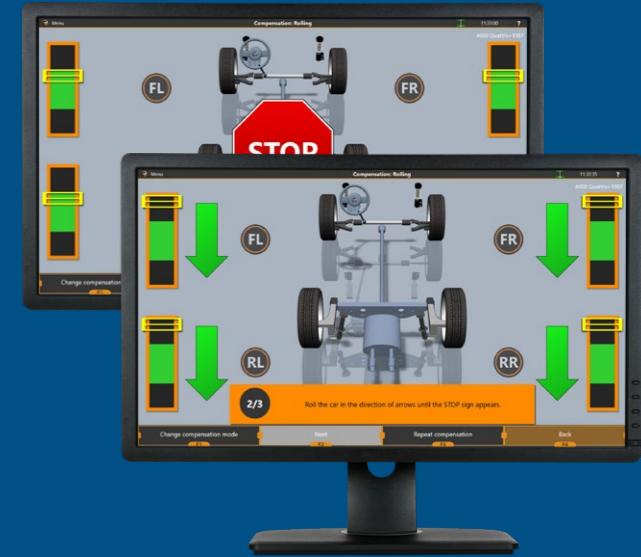
*Runs under Windows 10

- Live data processing and readings display. Easy remotely operated using system color indicators.
- Readings are automatically compared with OEM vehicle specifications.
- Quick program modes access: Database View; Target Setup & Rolling Compensation Mode; Reading Mode; 3D Adjustment; 3D visualization; 2D Adjustment; 2D visualization; Report View.

- Aligner program database for 55000+ includes OEM wheel alignment specifications, tire pressure specifications, 3D animation, adjustment diagrams & images.
- The Electronic Help system contains thorough data on working with the wheel alignment machine and software: video manuals for working with equipment and program, adjustments data, diagrams, images, video and 3D animation.

■ The software employs all the modern techniques to improve the accuracy of calculating targets positions in 3-dimensional space. Multiframe smoothing reduces data instability due to vibrations, lighting conditions, yet swiftly reacts to any bigger changes. The software automatically detects lift movement during adjustment and corrects the live values if the lift skews. Two readings coordinate systems are supported: calibrated horizon and vehicle plane. Additional jacking wheels mode for adjustment or runout compensation.

■ 3D gauges during the adjustment procedures allow better visualization of measured wheel alignment values. Live 3D performed data. Software-generated Print-outs can include 3D rendered images illustrating positions of wheels before and after the adjustment.



- Extremely fast readings refresh. The software keeps up with the cameras' live data speed of 40 frames per second. Multiple target detection passes allow operation at extremely bright bays. The multithreaded architecture utilizes all the capabilities of modern multi-core processors. Scales correctly on every modern display, including 4K monitors. All the screens are preloaded to ensure that there are no pauses during readings & adjusting.



- Animated 3D model of a generic car chassis. The wheels positions are illustrated according to measured values of toe, camber & caster. The adjustment mode has several views: for each wheel, for each axle, general view, geometry view and a 2D mode.
- Comprises over than 40000 vehicles. Totally compliant US market. Vehicle entries contain angles data specifications, images, and videos on identification and preparatory procedures, and OEM illustrated instructions of adjustment. Consistently database updates are available. The software allows adding an unlimited amount of custom specifications and export/import them.



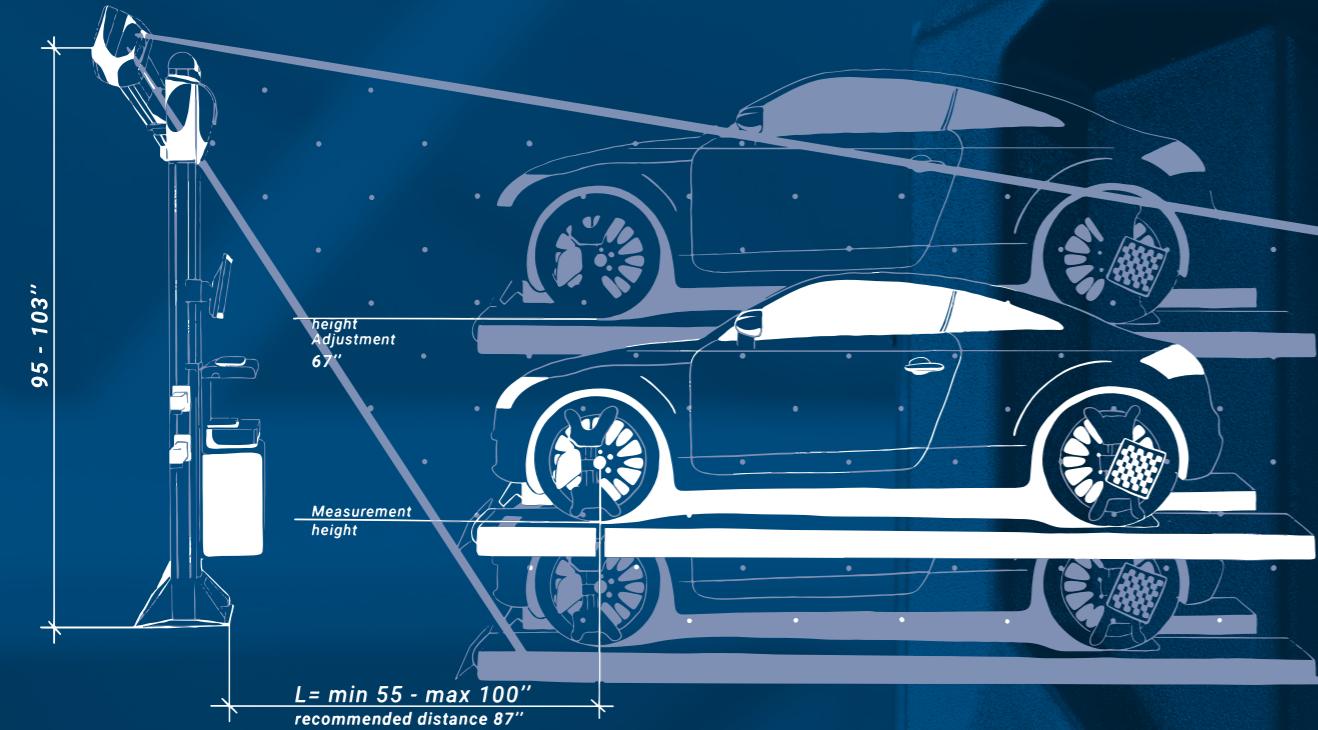
- Default modes for compensation, measurement, or adjustment could be selected as well as several other fine-tuning for adjustment, compensation and measurement modes. Statistics screen with valuable information about wheel aligners productivity: how many adjustments were made over a given period, what was the average adjustment time, etc. Tire pressure tables for most of the models in the database.



7202T OR 7204T

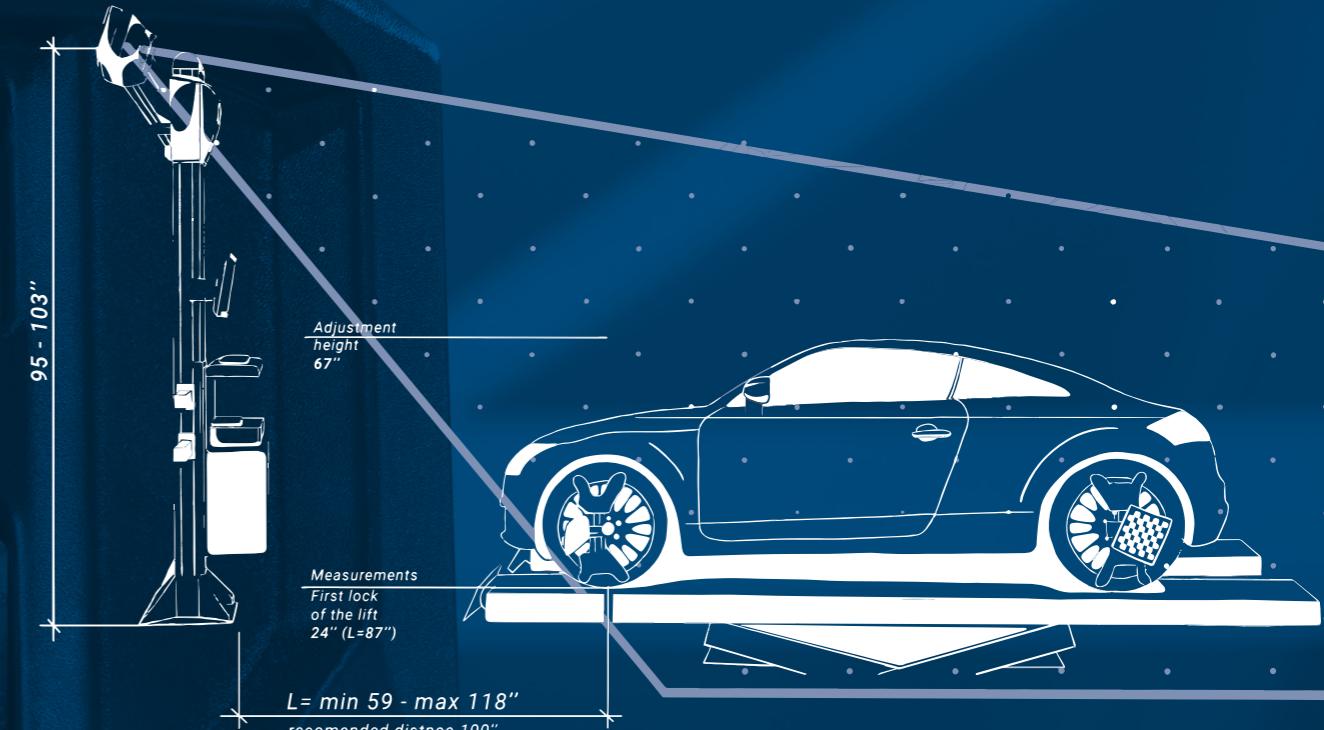
Unmatched four-camera systems capabilities

Aligners with four high-resolution Widescope cameras – the best choice for shops that gives you an opportunity of angle readings at any rack height and distance up to 384". This type of machines gives massive opportunities to maintain any wheel base vehicles.

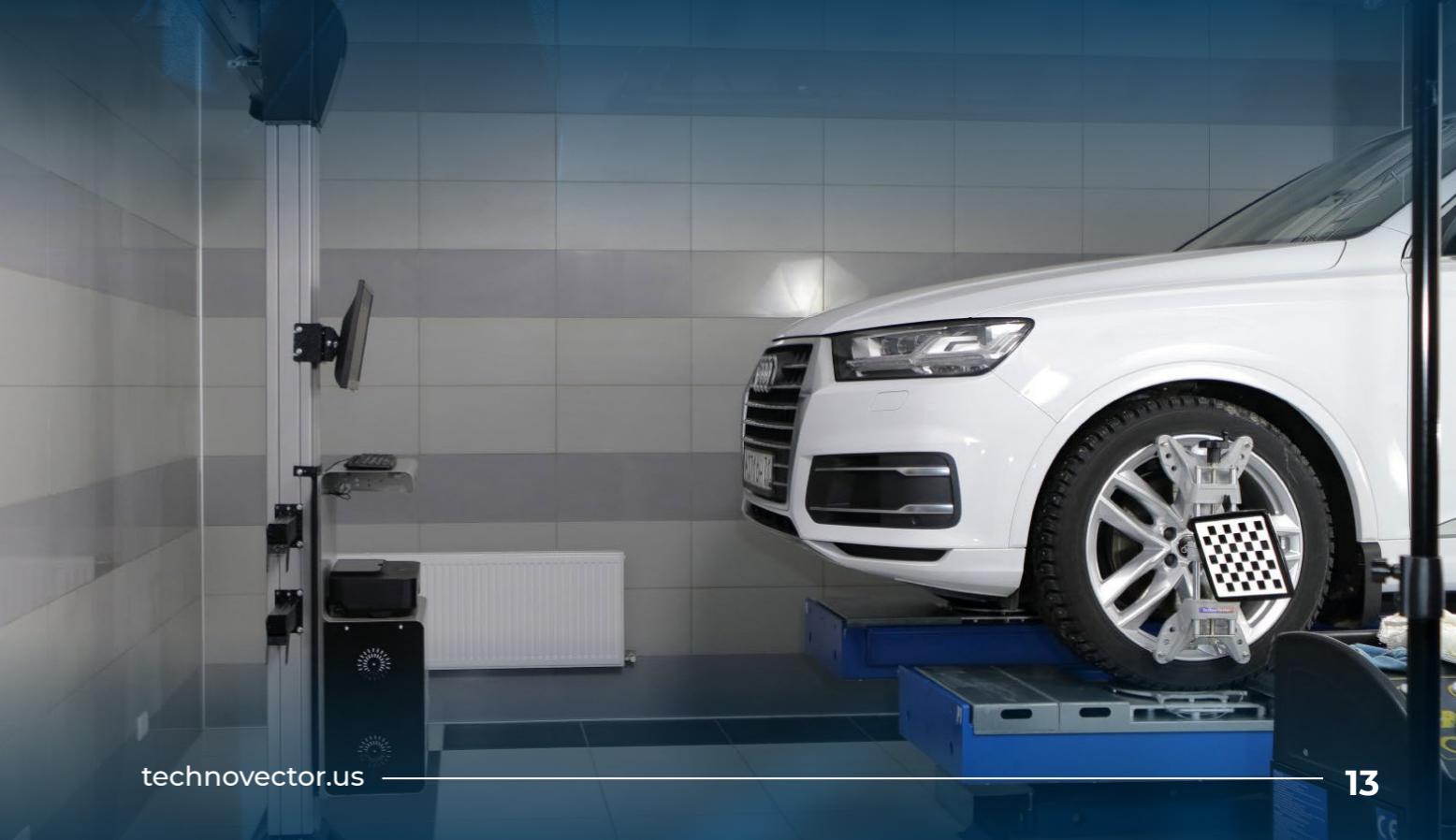


Two-camera wheel alignment system with capabilities of four-camera

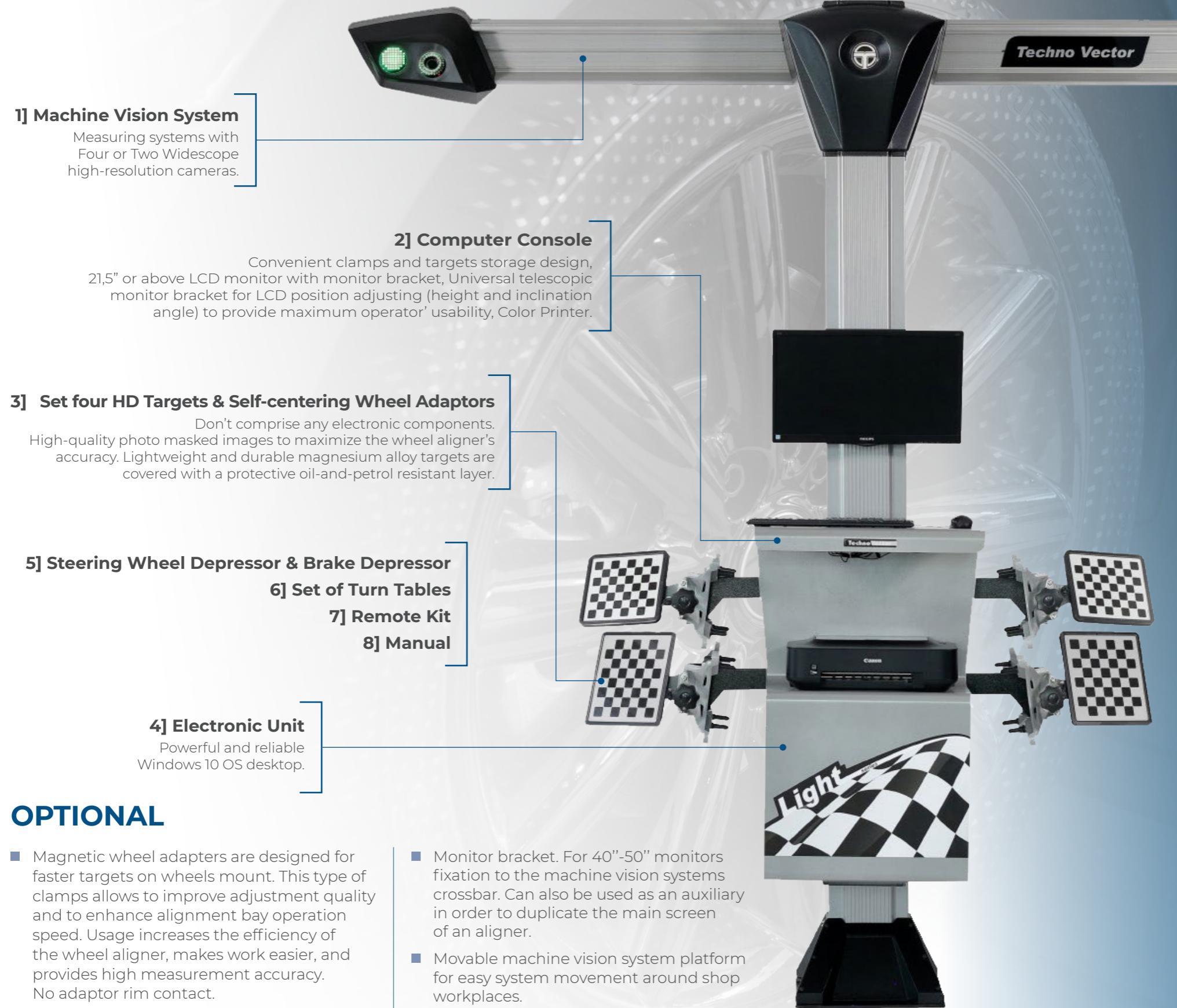
Wheel aligners with two high-resolution Widescope cameras and action indicators make the measurement easier. The cost-saving solution that perfectly fits small shops and allows readings from the comfortable rack heights from 14" to 67" and distance up to 276".



Wall mount bracket to mount the machine vision system horizontal beam to the wall. This type of mounting may be best to save the space if the wall is in front of the work bay and the distance between cameras and front turnplates is between 60" and 100".



WHAT IN THE BOX



OPTIONAL

- Magnetic wheel adapters are designed for faster targets on wheels mount. This type of clamps allows to improve adjustment quality and to enhance alignment bay operation speed. Usage increases the efficiency of the wheel aligner, makes work easier, and provides high measurement accuracy. No adaptor rim contact.
- The 32" monitor is supplied instead of the standard one, could be mounted on a standard bracket.
- Monitor bracket. For 40"-50" monitors fixation to the machine vision systems crossbar. Can also be used as an auxiliary in order to duplicate the main screen of an aligner.
- Movable machine vision system platform for easy system movement around shop workplaces.
- Machine vision system and T-console mobile platform for easy system movement around shop workplaces.

SPECIFICATION

	7404T	7402T
Number of cameras	4 fixed cameras	2 fixed cameras
Cameras type	2x1.3MPix and 2x5MPix machine vision industrial cameras, RAW	2x5MPix machine vision industrial cameras, RAW
Mounting type	Floor-mount. T-shaped pillar	
Cabinet type	T / Y / L / UL	
Applicability	Lift or Pit	
Distance from cameras to the center of the front turn tables	55" – 100", recommended 87"	59" – 118", recommended 100"
Wheel adapter mounting range	12 – 24 in	
Power source	115 VAC single-phase 50/60 Hz	
Weight net/gross	620/860 lbs	
Volume	60 ft ³	

COMPUTER CONSOLES



AVAILABLE COLORS



TechnoVector Group



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