



Techno Vector 7 Truck

computer-based **3D** wheel aligners for trucks

Techno Vector 7
is the first in the world
3D wheel aligner
of conventional assembling
for heavy-duty vehicles



*Precision
in Motion*



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Techno Vector 7

Computer-based

3D wheel aligners

4 digital HD video cameras

- one camera for each wheel
- determine positions of measurement targets in space

Innovation in Wheel Alignment

Measurement
of truck frame position

It allows taking measurements
on heavy-duty vehicles
with the wheelbase
up to 16 meters

Special probe target

allows quick and accurate measurements
of truck frame position in order to
determine the vehicle centerline

Machine vision
system includes
4 video cameras

Self-centering wheel
adapters allow operating
a wide range of wheel
disks – from 12" to 24"

Special probe target
allows quick and accurate
measurements of truck
frame position

Clamps with targets
are mounted onto
wheels one after
another on measurable
axles of a vehicle



Machine vision system



Machine vision system housings are vertical posts equipped with high-precision network cameras with high-quality matrices

Data are transferred from cameras to PC via TCP/IP

Machine vision system automatically recognizes the targets installed on the wheels and the position of the probe target and calculates their geometrical position in space to high precision

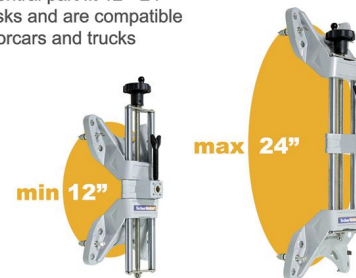
Video Cameras



Such arrangement of the machine vision system allows taking into account individual peculiarities of a certain workplace and provides drive-through

Clamps

Self-centering clamps with the mobile central part fit 12" -24" wheel disks and are compatible with motorcars and trucks



Operation



Clamps can be adjusted easily to various disk diameters with a special handle

Quick and reliable target mounting in wheel adapters with a shaft lock

Switching from minimum disk size to maximum disk size is carried out by inserting "claws" into outer holes

Clamp



Double "claws" allow operating steel and light-alloy disks

Targets

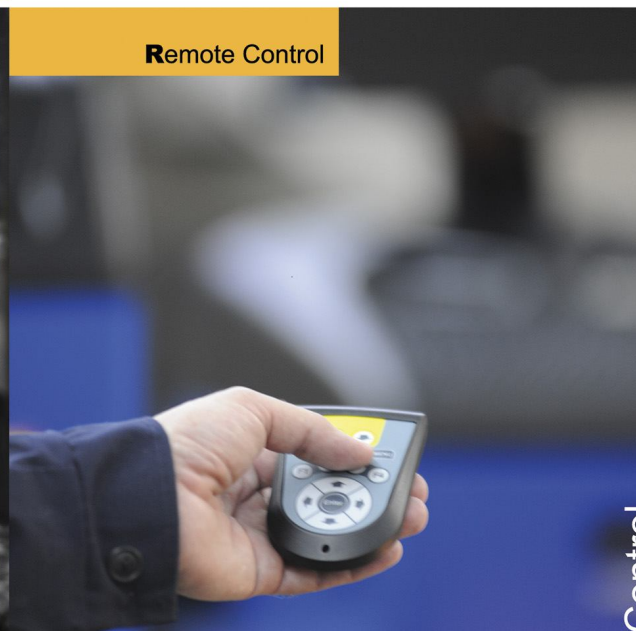
- Compact and easy targets
- One target for each wheel
- Easy to handle
- The front panel is protected with a rubberized border
- No electronic components
- No need to calibrate targets



Targets



Remote Control



Control



- allows you to control your PC from the distance up to 10 meters
- duplicates the functional keys on the main control panel



Computer Cabinets

V series



T series



Y series



L series



S series



Computer cabinet includes:

- electronic unit based on PC with Intel Core I3 processor and up-to-date video card that supports Direct X11
- 22" and above widescreen LCD monitor
- special bracket
- printer
- wireless remote control
- brackets for integrated storage of clamps and targets

Available colours

RAL 7040



RAL 5010



RAL 3002



Allows adjusting the LCD monitor position (height and inclination angle) to provide maximum visibility and operability

Universal telescopic monitor bracket



Specifications

Parameter	Techno Vector 7 Truck		
	Measurement Range	Maximum Error in Measurement	Average Error in Measurement
Front Wheel Alignment			
Camber	$\pm 8^\circ$	$\pm 3'$	$\pm 2'$
Front Total Toe	$\pm 5^\circ$	$\pm 3'$	$\pm 2'$
Caster	$\pm 19^\circ$	$\pm 8'$	$\pm 5'$
SAI / KPI	$\pm 19^\circ$	$\pm 8'$	$\pm 5'$
Lock Angle	$\pm 45^\circ$	$\pm 10'$	$\pm 5'$
Rear Wheel Alignment			
Camber	$\pm 8^\circ$	$\pm 3'$	$\pm 2'$
Rear Total Toe	$\pm 5^\circ$	$\pm 3'$	$\pm 2'$
Symmetry Angles			
Front Set Back (controllable)	$\pm 2,5^\circ$	$\pm 3'$	$\pm 2'$
Rear Set Back (uncontrollable)	$\pm 2,5^\circ$	$\pm 3'$	$\pm 2'$
Thrust Angle	$\pm 2,5^\circ$	$\pm 3'$	$\pm 2'$
Geometrical Driving Axis	$\pm 2,5^\circ$	$\pm 3'$	$\pm 2'$

Parameter	Value
Voltage, W	$220 \pm 10\%$
Frequency, Hz	50/60
Wheel Adapter (Clamping Arm) Mounting Range, in.	$12 \div 24$
Operating Temperature, C	$+10 \div +35$
Power Consumption	350
Climatic Category of the Device according to GOST (All-Union State Standard)	GOST 15150-69



Delivery Set

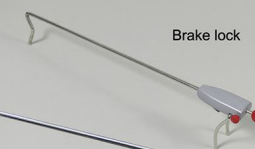


Set of turn tables



Probe target

Techno Vector 7 Truck (Standard accessories)		Quantity, pcs.
1. Machine Vision System		1
2. Computer Cabinet		1
3. Electronic Unit		1
4. Set of targets		4
5. Set of self-centering clamps		4
6. Probe target		1
7. Steering Wheel Holder		1
8. Brake Lock		1
9. Set of turn tables		2
10. Remote Control Receiver		1
11. Remote Control		1
12. Manual		1
13. Inkjet color printer		1



Brake lock



Steering wheel holder



Set of targets & clamps



Remote control



Techno Vector Software

The Techno Vector 7 software is a powerful and modern means for checking and controlling wheel alignment



The Techno Vector 7 software based on PC works with **Windows 10**



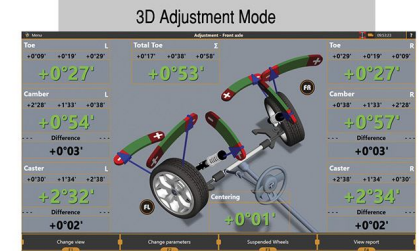
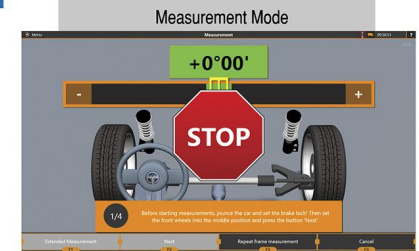
Continuous data processing and measurement displaying

Easy operating away from the monitor with color indicators

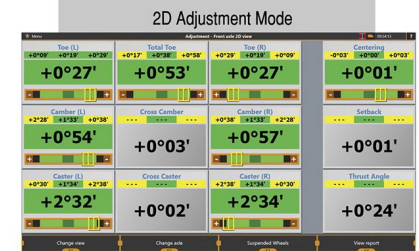


Measurements are automatically compared with standard specifications

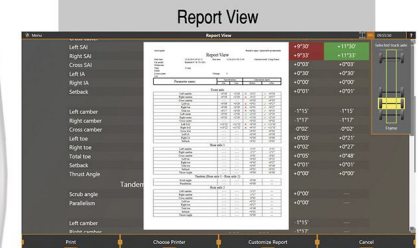
Quick access to other program modes



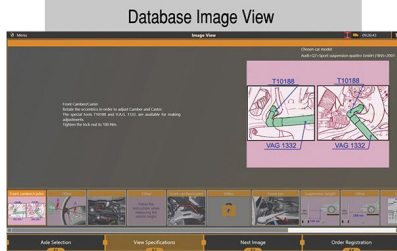
3D visualization, 7 modes



2D visualization, 2 modes



Report View



Database Image View



Axle Selection



Measurement Mode Selection

Database

The database that contains thorough information on wheel alignment and is integrated in the software

You can create a user's database

Help System

The electronic Help system contains thorough information on working with the wheel alignment machine and software

- video for working with the equipment
- video lectures on working with the software
- information on adjustments – diagrams, images, video, 3D animation



asanetwork

The wheel aligner software supports **ASA Network** (communication standard for service centers and dealer centers). It allows taking orders centrally and sending measurements to vehicle receiving centers.



Free annual software updates

3D Animation





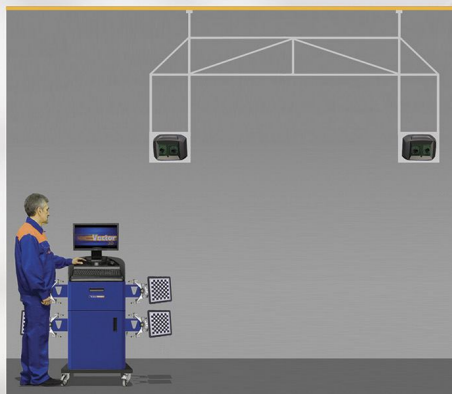
Configuration

Machine vision system housings are two vertical posts with video cameras installed on them



Floor-mount installation of the wheel aligner
Measurements and adjustments are performed on the pit.
Drive-through is possible.

The initial installation of the equipment is performed by the manufacturer's service technicians.
The device works with a 4 post wheel alignment lift or a repair pit, compliance with the horizontality requirements is strongly recommended.



Wall-mount (or ceiling-mount) installation of the wheel aligner*
Measurements and adjustments are performed on the pit.
Drive-through is possible.

* design is calculated individually



Integrated storage for targets and clamps on the computer cabinet



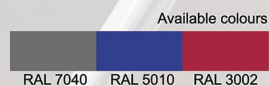
Moving clamp along with target easily at the same time



Mounting clamp and target easily at the same time



Measuring truck frame position



Marking

V 7 2 0 4 H T

1 2 3 4 5 6 7

- 1 Letter symbol of a computer cabinet series: T, V
- 2 Numeric symbol of a device series according to the type of measuring:
7-measuring by video cameras and high-precision image targets (3D)
- 3 Numeric symbol of axis number measured simultaneously
- 4 Numeric symbol of a video camera type:
0 - stationary
- 5 Numeric symbol of the total number of video camera units in the modification: 4
- 6 Letter symbol of a video camera housing type: H
- 8 Letter symbol of video camera housing: Truck

7204 HT MC

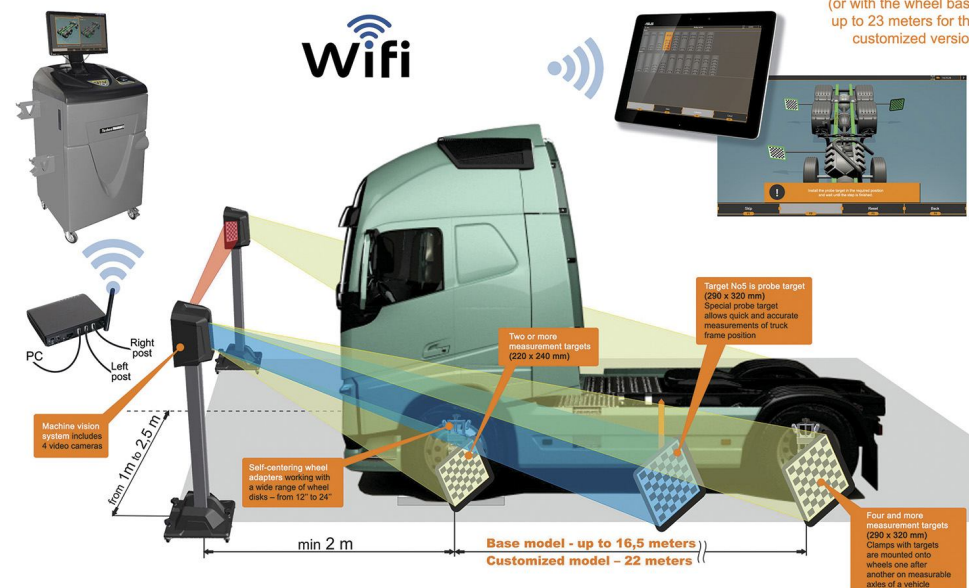


Techno Vector 7 3D wheel aligners for trucks designed to take measurements and make adjustments on trucks became the Runner-Up International A' Design Award & Competition in the Engineering and Technical Design Category 2016-2017

- 5 movable cameras
- 3 video cameras 1.3MPix and 2 video cameras 5MPix
- Floor-mount. Two low pillars



Operating principle



Techno Vector 7 7204 HT MC allows measuring trucks with the wheelbase up to 16 meters (or with the wheel base up to 23 meters for the customized version)



Techno Vector 7 Truck

Certificates



Pattern Approval
Certificate of Measuring Instruments
RU.C.28.001.A № 51081



Pattern Approval
Certificate of Measuring Instruments
RU.C.27.001.A № 38858



Certificate of Conformance
№ 6651



Certificate of Conformance
№ C-RU.AГ83.B.09992



Certificate of Conformance
№ C-RU.AГ83.B.09993



Certificate of Achievement
product designer in 2016-2017



Certificate of Conformance
ISO 9001-2015

The awarding ceremony of the contest
100 Best Commodities of Russia
2016 took place in 2016 as a part
of activities devoted to European Quality
Week and World Quality Day



As a result of the contest
the Techno Vector 7 Truck
wheel alignment gauge got
the **Gold Award** and the
Novelty of 2016 Certificate



The **Gold Award** is given to
the winner of the contest for
manufacturing high-quality
Russian products



The **Golden Key Award** 2017 is the
international, independent professional
award in the market of supplies and
brands of auto service equipment in
the Russian Federation