EzCalipre 3D

PORTABLE MEASURING SYSTEM WITH 3D FUNCTION

Autorobot®

Electronic tram gauge
for vehicle measuring

Technology from FINLAND

MEASURING SYSTEMS

Electronic tram gauge for vehicle measuring

EzCalipre3D is an advanced measuring device for exact verification of vehicle chassis and body condition and for damage documentation, developed by Autorobot Finland Oy. EzCalipre3D is easily portable and movable, it can be used for 2D or 3D measuring in all kinds of surroundings, and therefore it opens up whole new scopes for vehicle estimation.

Applicable everywhere

System calibration and electronic measuring can be done on the body shop yard or on a post lift when estimating the vehicle's repair cost, or during straightening work when the car is mounted in a frame bench of any kind, or when the car has been brought in an inspector's office to be certified for roadworthiness for example.

Modern data transfer

Data on vehicle's present condition, which is provided by EzCalipre's length sensor and inclinometer for height, gets transmitted in the PC measuring software with wireless WLAN connection (Wireless Local Area Network). Immediate, direct data transfer totally eliminates mistakes with typing etc. Measuring results can be viewed immediately both on EzCalipre3D display and on PC screen.

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Damage analysis

Measuring with EzCalipre3D makes vehicle straightening work quicker and ensures the quality of your work. EzCalipre's technique is supported by Autorobot's own, very comprehensive vehicle data files (approximately 60 reference points per vehicle). EzCalipre3D provides a quick report on side damage, showing by how many millimeters the B pillar has bent in (the first picture) for example, and if the crash has shortened the middle section of the body (the second picture). This information helps to produce a realistic cost estimate and repair schedule. In these pictures the measured values are saved in a portable computer.

Areas of use

EzCalipre3D is suitable for measuring passenger vehicles, cross country vehicles and vans, and its' most essential purpose is to serve body shop diagnostics and structural vehicle repair. Wireless and easily portable with the carry case, it is easy to move around. Just like your laptop, EzCalipre3D with Li-Ion battery makes it a mobile solution which adapts to the moving work of insurance company inspectors, for example.

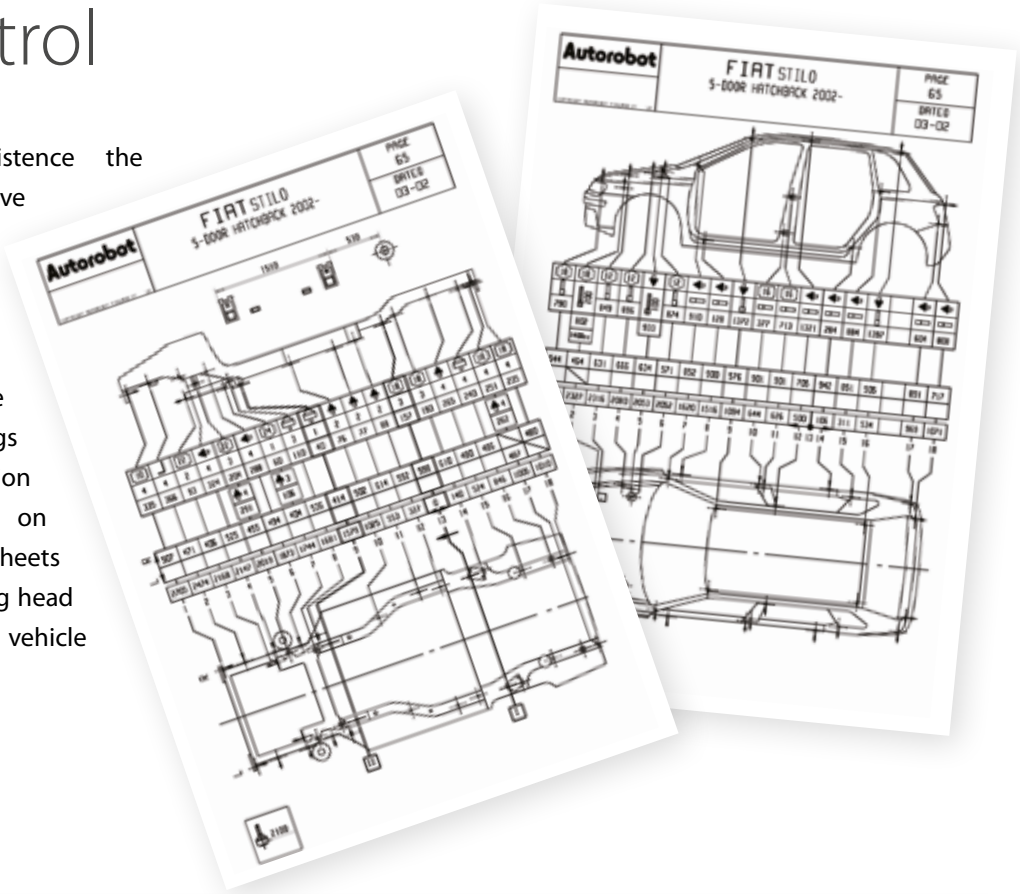
Patented.

Wireless data transfer

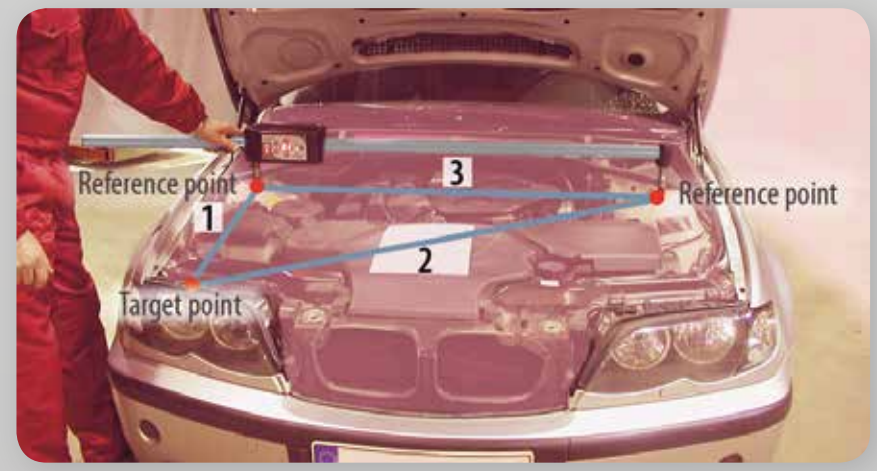
EzCalipre3D central processing unit (CPU) reads the exact locations of the vehicle points with the help of in-built sensors for length and vertical inclination. Measuring points can be selected in the display of the CPU, and saved in the computer database. Chassis and/or body points that were saved during the measuring session can be printed out on separate Before Repair or After Repair reports, or both. Autorobot EzCalipre3D tram gauge uses wireless WLAN technique and therefore it can be used with nearly all kinds of computers.

Consistent quality control

During their long existence the Autorobot datasheets have developed very clear and easily conceivable, containing unique information on chassis and body measures. The data files consist of drawings and numerical information plus actual photographs on measuring points. Datasheets show also which measuring head should be used for the vehicle point in question.



3D measuring with EzCalipre



The 3D function of the EzCalipre3D requires 3 measuring steps to be completed for each target point: 1 Lengthwise measuring, 2 Diagonal measuring and 3 Width measuring (optional). After completing these 3 steps software will show 3D results with height, width and length measurements for the target point and these results can be saved and printed on a 3D measuring report.

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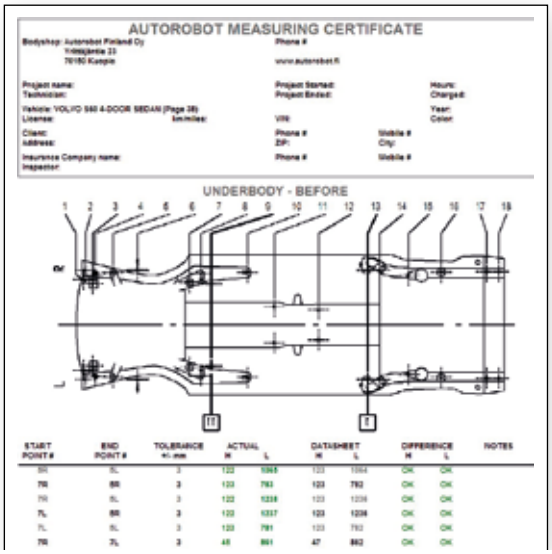
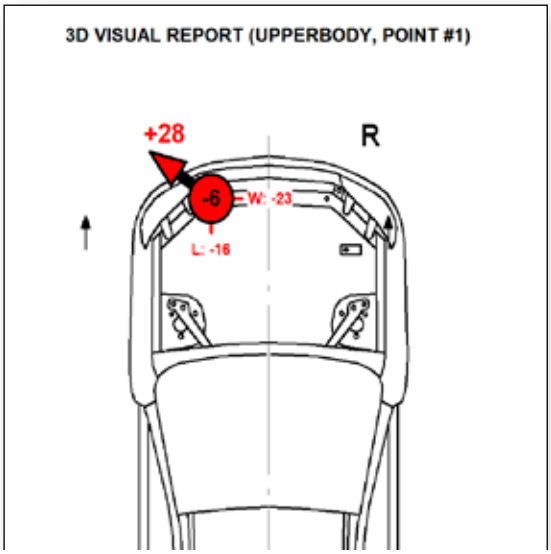
Control the whole vehicle body

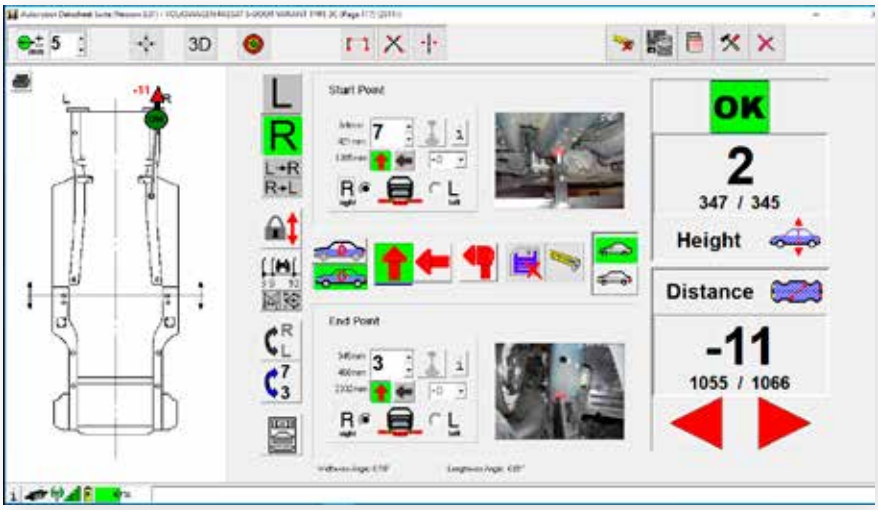
EzCalipre3D Tram Gauge comes with vehicle specifications on both vehicle upper body and chassis. Therefore it allows checking the quality of the body form all around the vehicle. What makes EzCalipre3D very a unique device is its' capability to register height differences in vehicle measures (patented feature).



Versatile measuring reports serve as certificates on professionally accomplished repairs. This is very important for the customer, insurance companies and vehicle inspection offices.



In addition to traditional measuring reports it is possible to create a visual report, which shows the exact pulling angle and the amount of pulling required. Correct pulling angle can be determined with the 3D function of the software.



Measuring software uses large numbers, so the measuring process can easily be followed even from longer distance. Measuring window indicates both reference value and actual value plus the existing difference. Results outside the accepted tolerance appear with clear a red arrow.

Detailed photographs on measuring points (since 2006) help the user to identify the datasheet points in practice. Details can be enlargened and printed out for review. Abundant data updates on new vehicles are available via internet and on DVD-ROMS.

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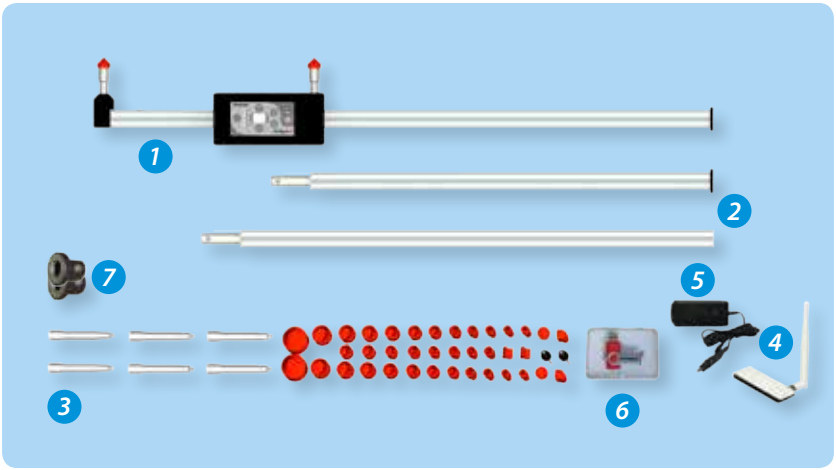
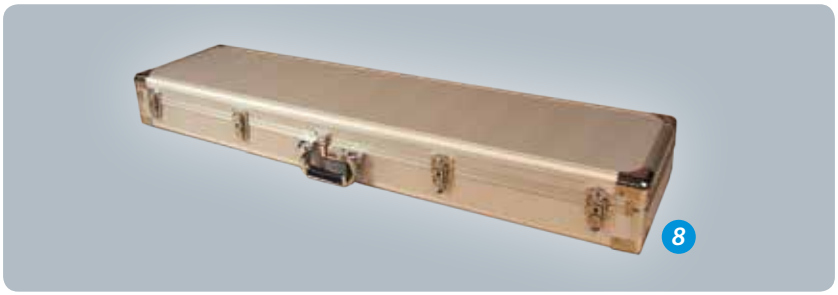
EzCalipre3D technical information
Measures length and height (2D mode)
3D measuring mode (requires 3 steps)
Height measuring based on reading vertical angle
Works together with a computer (not without a PC)
WLAN connection between tram gauge and computer
Datasheet and software updates are available via internet
Length 1140 mm, extension bars 760 mm and 900 mm, max. total length 2.8 m
Weight approx. 2 kg (without extensions bars)
Rechargeable batteries (Li-Ion)
10 hours operating time

EzCalipre3D functions
Measures distance between start point and end point (length) and height difference. Autorobot datasheet points are used as reference values.
Display can show length difference (vs. reference point), height difference (vs. reference point), start point number and end point number.
Point number display indicates also the selected vehicle side (L/R).
Necessary functions can be carried out from the tram gauge display unit itself: start point and end point selection, saving measuring results in the computer, and selecting display mode for example.
Ability to print the measurement results and save them in a local database
Warns for low battery. Battery status can also be shown on the display as a numerical value (0-99). Auto power off after 10 minutes (if idle).

EzCalipre3D 300EL+1A is delivered in a convient carry case, which holds measuring instruments in perfect order.

Autorobot EzCalipre 3D





300EL+1A

1. 760EL+ Tram gauge (CPU)
2. Extension bars 760 + 900 mm
3. Set of measuring instruments
4. WLAN USB adapter
5. Battery charger
6. USB stick with software
7. Magnetic holder
8. Carry case

300EL+3

1. 760EL+ Tram gauge (CPU)
2. Extension bars 760 + 900 mm
3. Set of measuring instruments
4. WLAN USB adapter
5. Battery charger
6. USB stick with software
7. Magnetic holder
9. PC cabin

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Accessories

8. Carry case
9. PC cabin 300EL+1E
10. Magnetic holder 300EL+M

Autorobot® Tracker

300EL+4

Inclination tracking device

Autorobot Tracker 300EL+4 (optional accessory) is designed to be used with EzCalipre for tracking the inclination changes of the vehicle during the measuring process. The device makes the measuring during the repair quick.

Autorobot Tracker uses also wireless WLAN technique to communicate with measuring computer and it reports all the changes in vehicle inclination after EzCalipre has been calibrated to the vehicle. If inclination of the vehicle is changed, measuring software will change the calibration of the EzCalipre accordingly. When Autorobot Tracker device is used with EzCalipre, vehicle can be raised or lowered on a lift or on a bench during the damage estimation or body repair work. With Autorobot Tracker unit it is possible to measure the whole vehicle including body, chassis and side tructures using one and the same calibration of the EzCalipre tram gauge.

Tracker technical information
Function panel indicates status of calibration, signal strength and battery level
Rechargeable Li-Ion battery is charged with EzCalipre charger or with additional charger (sold separately 203316)
10 hour operating time
Weight approx. 1,4 kg

Tracker stand is used to mount Tracker on the vehicle (for example on the roof). The stand is equipped with 2 magnets to keep the device stationary.

300EL+5 Stand for Autorobot Tracker

Accessories

300EL-7 Additional Li-ion charger for Tracker

Manufacturer:

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