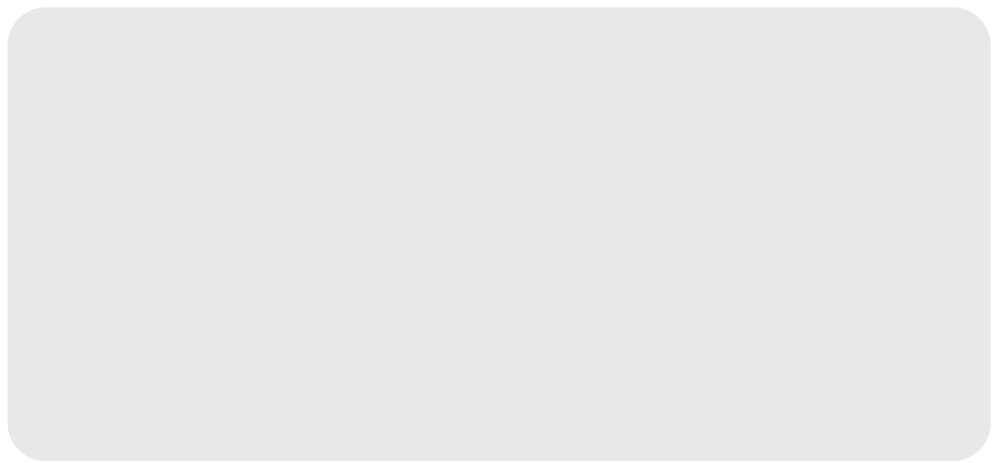




Handling a complex world.



Subject to change.



Handling a complex world.



Success

Service Diagnostic Systems





Customised systems for complex applications.

VDO is a brand of Siemens VDO Trading, one of the world's leading providers of automotive aftermarket equipment. Our customised solutions are used by consumers and business customers all around the world in a wide range of complex and highly demanding applications. At VDO, our extensive product knowledge covers five areas of competence: **•Fleet Solutions**, **•Industrial and Marine Solutions** (Business Customers), **•Car Audio**, **•Car Accessories and Instruments** and **•Marine Instruments** (End Consumers).

Handling a complex world.



Our Fleet Solutions portfolio is divided into five main product groups: **•Tracking, Navigation and Communications, •Driving Times and Rest Periods, •Driver and Vehicle Data Recording, •Instrumentation and Comfort and •Service Diagnostic Systems.** With this comprehensive range of options, VDO has all the functionality you need to create a more flexible and efficient fleet management system, and to implement effective diagnostic services for tachographs.

At a glance.



STC 1601-25/BTC

Stationary Test Computer and Operating Test Computer.

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ATC 1601-26

Rolling Road Test Computer.

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ATC Double Roller Set/Free-Running Roller Set

Roller test stands for the ATC.

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MTC 1602-04/HTC 1602-19/HTC plus

Mobile Test Computer and Hand Test Computer.

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SDS upgrade concept

Diagnostics aids and interface adapters for modular tachographs.

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KIPAS software/Analysis accessories

Software for garages.

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Overview

All the systems and features.

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performance

Multifunctional and user-friendly – the basic system.

For thorough testing and configuration of tachographs and taximeters, VDO offers a multifunction diagnostic system: the Stationary Test Computer (STC). This complete test centre can handle both mechanical and electronic systems. Available in three different versions, with and without Operating Test Computer (BTC), the STC is suitable both for standard (manual) testing and for automatic computer-controlled test runs, offering major benefits in terms of cost-effectiveness and reliability.



Standard STC

The standard version provides all the key test modes: revolutions or pulses can be summed and totalled, and tachograph constants can be determined. Distance counters can also be easily checked with the Standard STC. In addition, the power supply features fixed and variable voltage and current display.



Automatic STC with BTC

In addition to the standard functions, this configuration also supports automatic computer-controlled testing. The user can adjust all constant values and select the fixed speed for the test. The Automatic STC also measures clock deviation on tachographs of type 1314, 1318, 1319 and 1324. Various accessories are available for programming type FTCO 1319 tachographs, e-tachos or modular tachographs of type MTCO 1324.



Automatic STC, supplied without BTC

This version can be used in conjunction with an existing Operating Test Computer, which will then support all the functions of an Automatic STC.



BTC

Our handy BTC is ideal for testing and measurements, and is compatible with various VDO Service Diagnostic Systems. Parameters are input via a robust keypad, and the unit provides a clearly legible display of measured values and results.

Speed and flexibility – the professional system for large workshops.

Busy workshops in particular need a diagnostic system that gets through the work, is simple to use and reliable. VDO's Rolling Road Test Computer (ATC) provides leading-edge technology in a compact form factor, and is significantly faster than traditional measurement techniques. All necessary tests can be carried out – in any weather – by a single person, and the measured data can immediately be printed out or transferred to KIPAS (see page 16). The modular design of the ATC allows it to be easily connected to roller test stands from various manufacturers, such as Bosch and MAHA.



ATC Basic System for VDO Double Roller Sets or Performance Test Stands

This unit provides all the key test functions: measurement of total vehicle distance pulses or revolutions, determining and adjusting tachograph constants, measurement of effective wheel circumference and tests on distance counters. When used with the BTC (see page 7), all these functions can also be remotely controlled from the driver's cab.

ATC for Brake Test Stand with Wheel Sensor

In addition to all the functions of the ATC Basic System, this version records wheel movement via a wheel sensor with integrated pulse generator.



ATC for Bosch Brake Test Stand

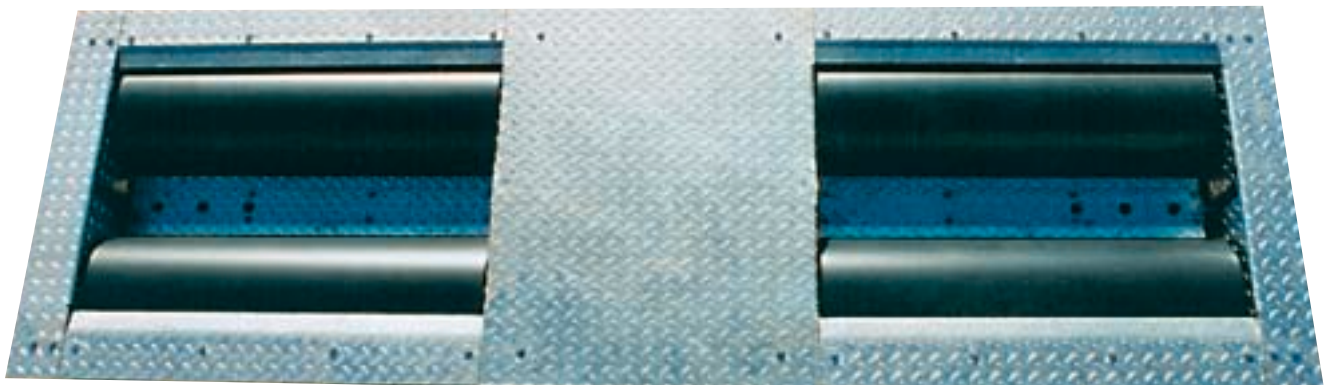
In addition to all the basic features, special adapter functionality allows easy connection to Bosch brake test stands.

ATC for MAHA Test Stand

This ATC version supports MAHA's range of stands for brake, performance and speedometer testing.

Robust roller test stands that can really take the strain.

To complement the Rolling Road Test Computer (ATC), VDO provides a robust, durable roller system suitable for trouble-free testing of large commercial vehicles. With a proven track record, this system features precision-aligned, zero-maintenance rollers that guarantee reliable measurement results every time.



HGV Double Roller Set with Pulse Generator and Light Beam

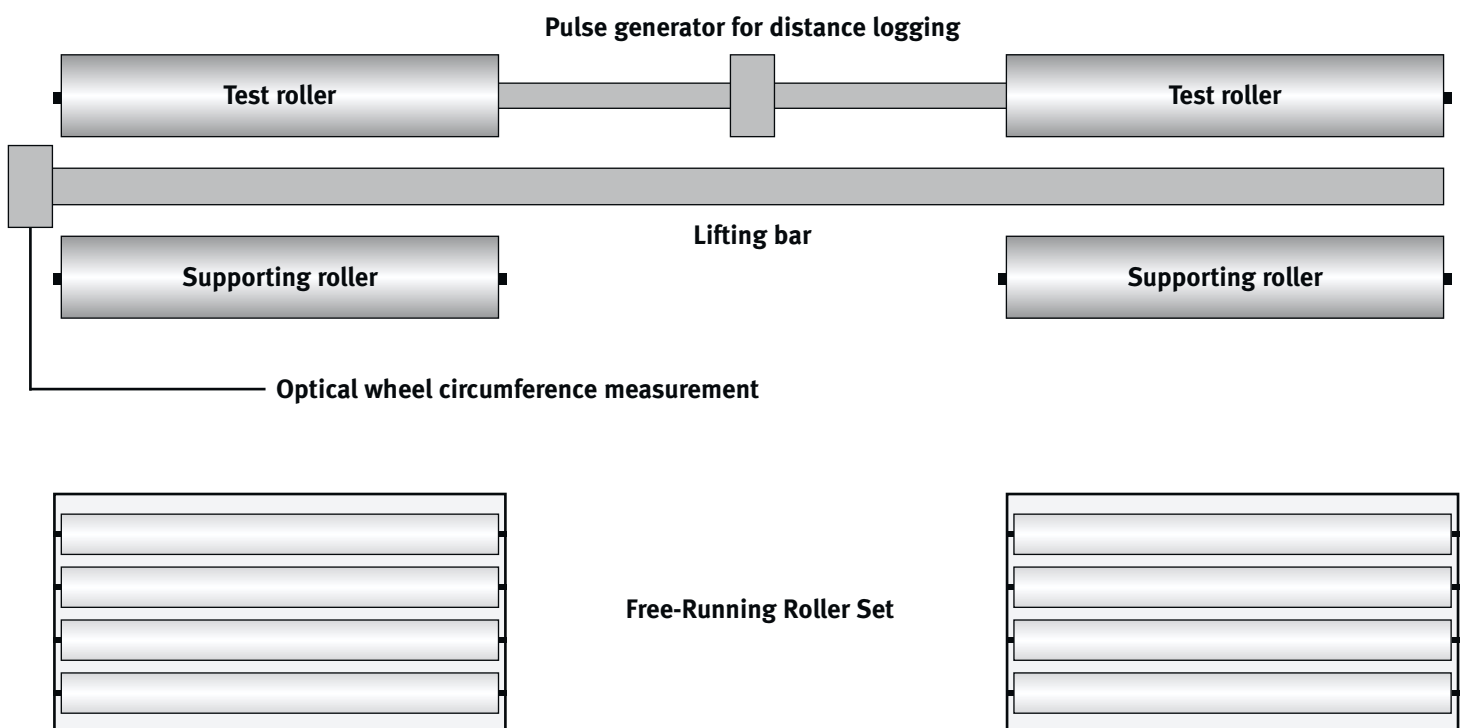
This compact galvanised steel unit can support a vehicle axle-load of up to 13 tonnes. The test rollers and supporting rollers are seated in maintenance-free housings, with a flexible coupling to ensure synchronised running. Rev-counting and distance measurement is carried out by means of a sensor wheel and Hall-effect pulse detector. A pneumatic lifting bar of sectional steel tube is provided to assist entry and exit of vehicles. The unit is also equipped with a light beam to allow measurement of the wheel circumference.

HGV Free-Running Roller Set

Comprising two free-running roller-set halves embedded in the foundations, this galvanised steel equipment is designed for an axle-load of up to 13 tonnes.



Double Roller Set (13t axle-load)



advantage

Combining versatility and convenience – the mobile Service Diagnostic System.

Workshops with their own test track need a flexible multi-purpose diagnostic system. VDO has the answer: the Mobile Test Computer (MTC) is housed in a transportable, robust case and can be operated either automatically via light beams or manually via a keypad.

The Hand Test Computer (HTC) allows the user to carry out all essential tests in the vehicle, avoiding the need to remove the equipment to be tested.



MTC

This modular system reads distance pulse count and tachograph constants, and also engine revolutions – the MTC can even be used to check correct functioning of the pulse generator. As an option it is possible to use this unit to program type FTCO 1319 and MTCO 1324 tachographs, and to automatically generate a test diagram. The Mobile Test Computer is available with or without a BTC.



SET "Automatic Test Track"

This low-cost kit is an ideal complement to the MTC, and significantly simplifies the measurement of distance pulse counts. It consists of two lightweight, compact reflector stands and an infrared light beam for mounting on the vehicle.



HTC

The Hand Test Computer can be used to check not only tachograph systems, but also the Automatic Speed Limiter (ASL). It reads the distance pulse count from the vehicle (W-value) and the tachograph constant (K-value). The current supply for the unit is obtained via a plug which inserts into the cigarette lighter.



HTC plus

The integrated fast-charge battery makes this unit independent of the vehicle power supply. It is suitable for mobile testing of tachographs and Automatic Speed Limiters (ASL).

Cost-effective and adaptable – upgrade solutions from VDO.

Increasing numbers of commercial vehicles are fitted with type MTCO 1324 modular tachographs from VDO. Existing VDO Service Diagnostic Systems can be easily upgraded to allow programming and testing of these units. VDO provides a range of accessories for this purpose.



SDS kit for MTCO 1324

This kit consists of the interface adapter for radio-slot units for adapting tachograph signals to the MTC and ATC testing systems, plus the diagnostic cable for the MTCO 1324, which acts as the test cable for connecting the MTCO to the MTC and ATC.

The individual components are also available separately.



Diagnostic cable for TVI series 2400

This test cable allows the TVI 2400 to be connected to the MTC or ATC for in-situ testing.



Upgrade kit for e-tacho

Required for setting up and testing the type 1323 electronic speedometer.



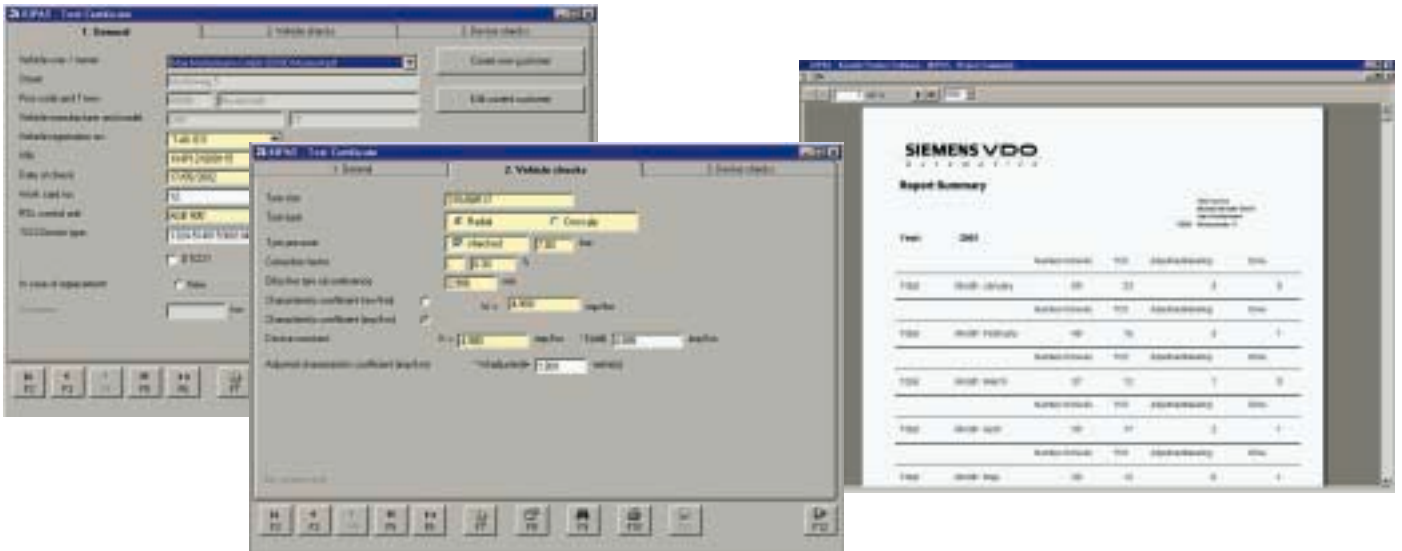
Upgrade kit for KITAS

Allows functional testing of the KITAS sensor.

efficiency

Smart solutions for reduced admin costs.

Current legislation requires that every tachograph test result must be documented and an installation and constants label produced. Up to now, it has been necessary to record test results and customer/vehicle data by hand. With KIPAS companion software for workshops, these tasks can now be carried out quickly and professionally on a PC. A customer database and other practical features help save time and money. VDO provides a range of useful aids for checking that tachograph data has been recorded correctly on the charts. Further information can be found in the VDO "Driving Times and Rest Periods" catalogue.



KIPAS software (Version 1.10)

This practical program makes light work of managing and processing data relating to tests, customers and vehicles. Test certificates, installation and constants labels can be created on a computer and easily printed out. At the end of the year, a record/date calendar can be created with just a few clicks of the mouse. Browse through customer/vehicle data, periodic tests and statistics about previous tests in the databases. A reminder function ensures that no dates are missed. ATC data can easily be exported into a test report. A technical product handbook (which also deals with MTCO) is included, and the user can choose between English and German. A complete overview of VDO's product portfolio is included to round off the package, together with full sales and service information.



Chart evaluation disc

Allows 24-hour charts to be checked easily and quickly by hand for correct recording of key values (speed, 0km/h-value, journey and working times).



Chart analyser

Detailed checking of recorded data is much easier and more convenient with this desktop unit, which comes complete with built-in magnifier and light.

Overview of systems and functionality.



	Standard STC	Automatic STC	ATC	MTC	HTC/HTC plus
Distance pulse total			●	●	●
Tachograph constants	●	●	●	●	●
Distance logger test	●	●	●	●	●
Functional transmitter test				●	
Automated testing		●	●	●	
Total revolutions/pulses	●	●			
Clock divergence 1314, 1318, 1319, 1324		●	●	●	
KTCO switch position			●	●	
Effective wheel circumference			●		
Revolutions			●	●	
Speed speedometer/tachograph			●		
Programming MTCO 1324, FCO 1319		●	●	●	
Speed limit from ASL			●	●	●

