



(750-24000 kg axle weight)








# MASTERS IN VEHICLE TESTING



# Catalogue

PTI ideas and solutions

*Lowest total cost of ownership (lowest TCO)*

- M 
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- N 
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- L 

VL Test Solutions, specialist in vehicle PTI equipment and test lanes



artist impression, realisation 2025

# VL Test Solutions

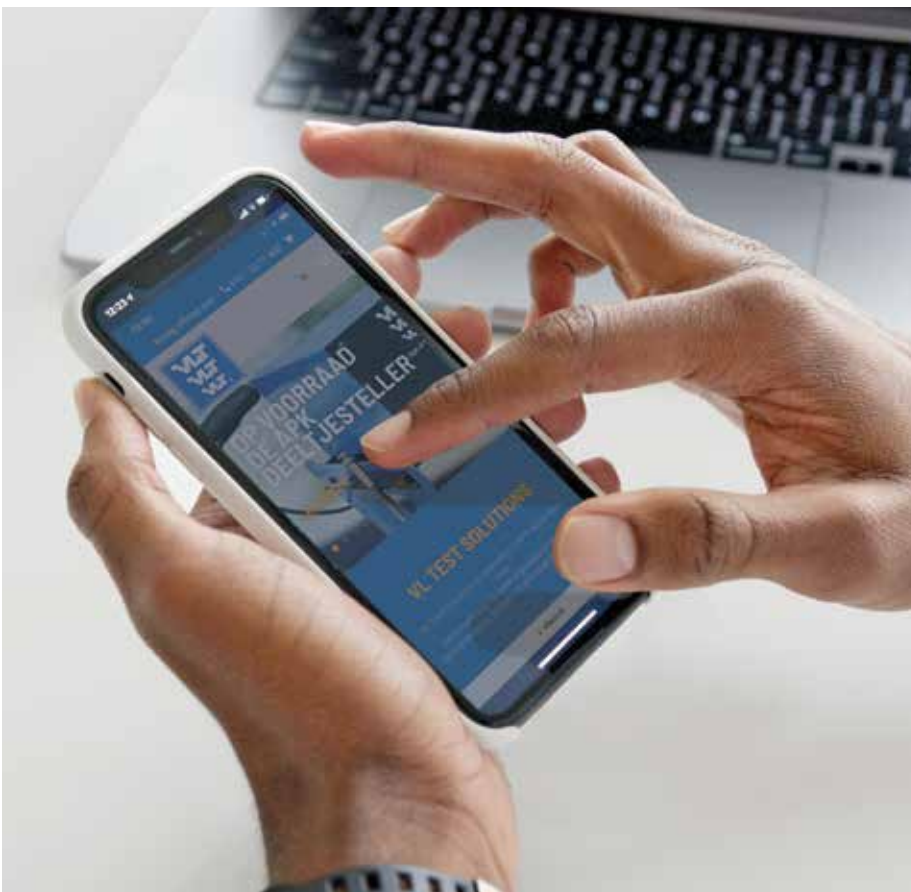
VL Test Solutions bv is the R&D, sales and service organisation of the VL Test Group bv. The history of the VL Test Group bv started back in 1958 in The Netherlands. Since then the 'VLT' brand has become well-known and respected worldwide in the field of vehicle inspection equipment.

Our products range from simple stand-alone machines up to completely automated test lanes and are being used every day by many garages, workshops and (government) inspection centres.

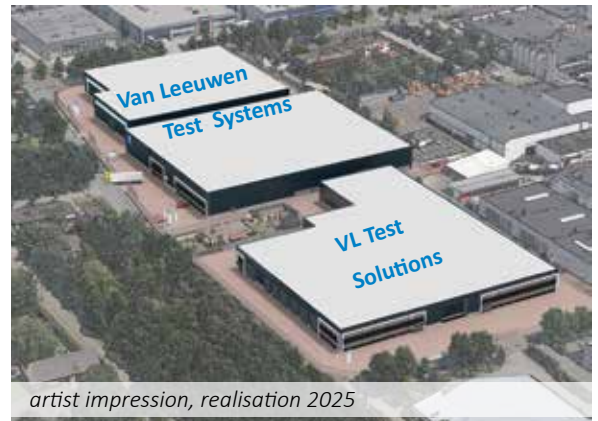
VLT equipment is known for its longevity and low downtime and therefore we can proudly say that we offer a very low total cost of ownership.

## Our key values:

- Our drive is road-safety and a cleaner environment.
- Our actions are customer-driven.
- Quality is our main goal, with a lowest Total Cost of Ownership (TCO).
- Our organisation is flexible and our products are custom-made.
- Our innovations determine the future.



Of course, the companies of the VL Test Group bv are ISO 9001-2015 certified.



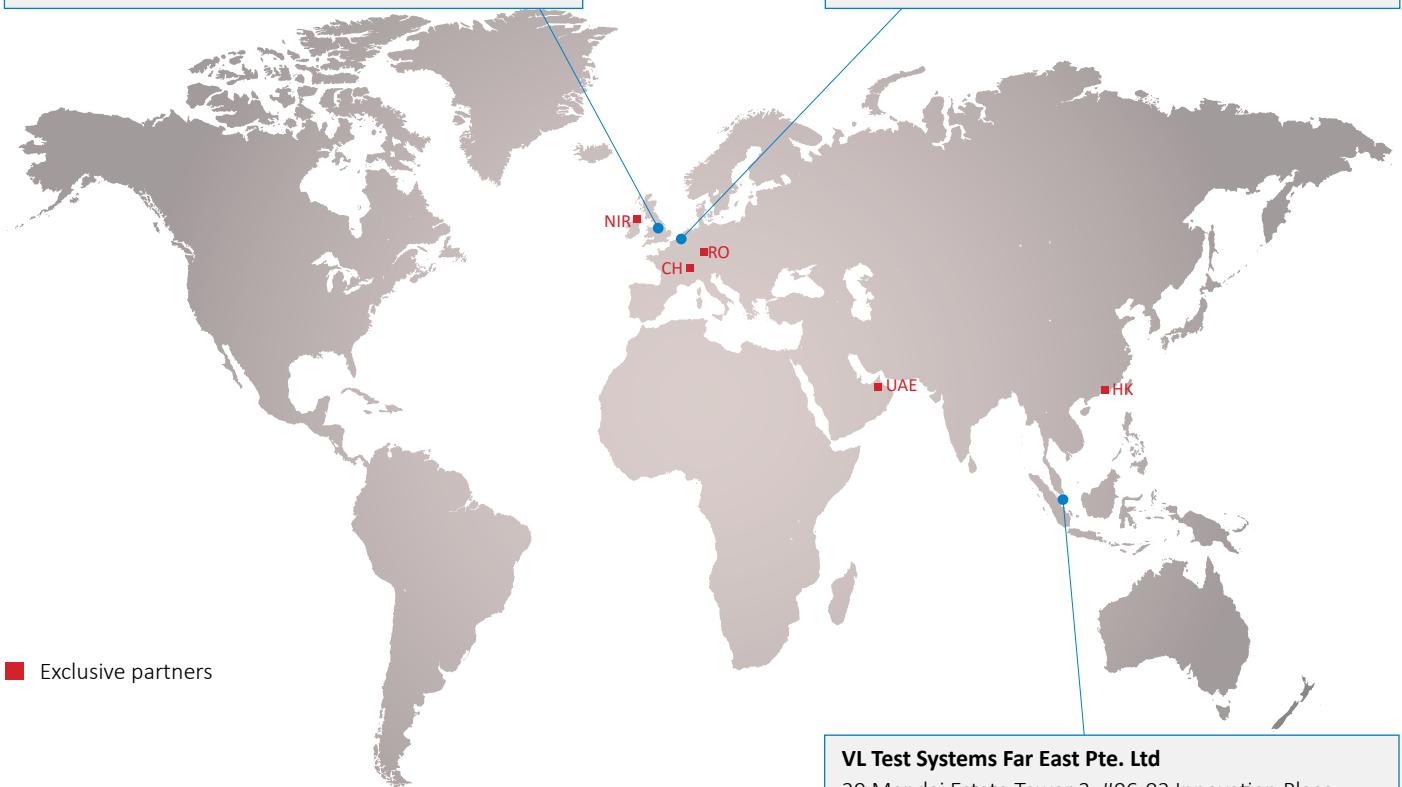
artist impression, realisation 2025

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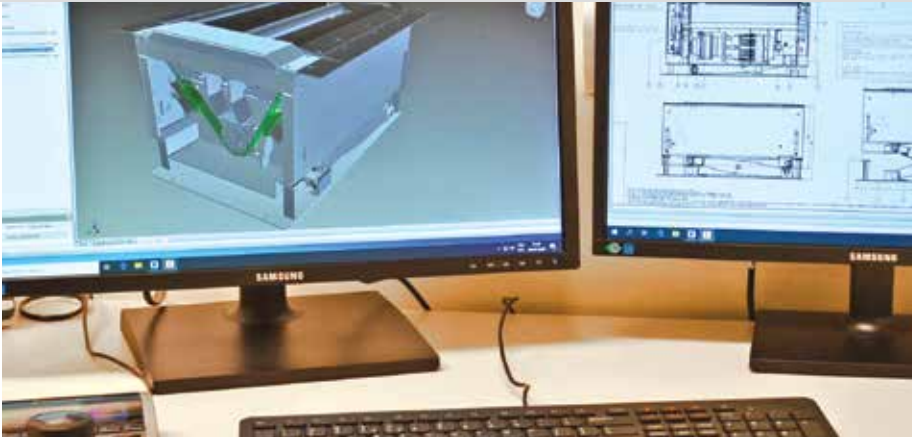
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**VL Test Group bv**

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-  Van Leeuwen Test Systems bv (*manufacturing, NL*)
-  VL Test Systems Ltd (*sales and service, UK*)
-  VL Test Systems (Far East) Pte. Ltd (*sales and service, Singapore/Far East*)

## Mechanical engineering



Designing all mechanical parts, making necessary calculations and all the technical drawings for manufacturing.

## Software development



Designing and coding the software for all embedded and pc based systems that are used to run our equipment.

## Test facility



Purpose-built facility for putting our equipment through its paces, both mechanically and functionally.

## Manufacturing

Sawing, laser cutting, folding, robot welding, CNC machining.



## Assembly

Assembling mechanical and electronic parts.



## Logistics

Warehouse facilities for storing raw materials, parts and subcomponents.

Checking incoming goods and preparing products for shipment.



## Quality Control

Checking the quality of sub-assemblies and combining them into complete machines according to customer wishes, testing all functionality, performing all necessary calibrations.





Periodic Technical Inspection (PTI)  
 MOT  
 Algemeen Periodieke Keuring (APK)  
 Autokeuring  
 Contrôle technique  
 Hauptuntersuchung (HU)

## Welcome

What does PTI mean? For some this is an easy question to answer, for some it may not. The Periodic Technical Inspection, often abbreviated as PTI is meant to reduce the amount of cars that is driving around with technical defects. The intention has always been to reduce the number of accidents caused by technical defects on vehicles. The focus of the inspection is therefore on the safety aspects of the vehicles, such as a proper function of the brakes, tyres, lights, steering etc.

Also, the environmental impact of cars and transportation is getting more and more important. That is why during the PTI the pollution of vehicles is often measured to check if the exhaust gasses are within the limits set by the (local) government.

In this catalogue VL Test Solutions wants to show what they can provide to vehicle testing stations. Depending on the (local) regulation per country or part of the world, some products may or may not be applicable. For example, in some countries motorcycles are tested in the PTI, in other regions they are not.

VLT's key values:

- Our drive is road-safety and a cleaner environment.
- Our actions are customer-driven.
- Quality is our main goal, with a lowest Total Cost of Ownership (TCO).
- Our innovations determine the future of PTI.

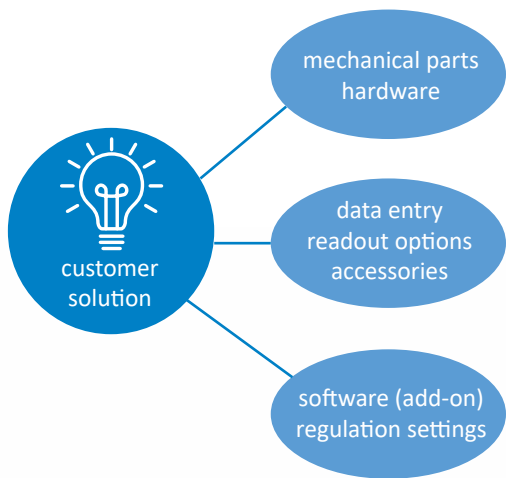
## Introduction - the 6th generation

VL Test Solutions has a perception or vision on the future of PTI, and we would like to help you understand

why we make our machines the way we make them. And why we are offering the solutions as we do today.

First one needs to understand that VLT is providing its equipment to different types of customers/users. First there is a difference in the system of PTI; where does the user of the vehicle go to for checking the vehicle? This could be a workshop/garage or solely a PTI-testing station. Secondly heavy-duty vehicle PTI legislation may differ from the light-duty vehicles. Therefore the equipment built by VLT in the past, was different and often customer specific. Or one bought a so-called 'stand-alone' unit (for example a roller brake tester), or one bought a 'test lane' variant.

Before, when one ordered for example a brake tester or suspension tester, it was not possible to easily expand the machine with more equipment, or integrate it later in a test-lane setup. Nowadays, with the introduction of the 6th generation possibilities are more or less limitless. The core proposition of the 6th generation of VLT equipment is to convert more to a software driven – PTI as a service – way of working.



The hardware made by our sister company VL Test Systems (also based in The Netherlands, on the same location) is now more interchangeable than ever before. All components, whether it is for a 'stand-alone' system or a complete vehicle testing station, with multiple

'test-lanes', are the same. Furthermore one can start with only using one or two pieces of equipment, and later on expand within the same "eco-system" by adding software components. This means that also a testing station can be made in different stages or phases (in time).

**Digital read-outs**

While the hardware components did not changed a lot, the 'visible' items of the equipment did. One has different options to choose from; such as a big 43 inch portrait-screen, a 32 inch landscape screen and/or a tablet.

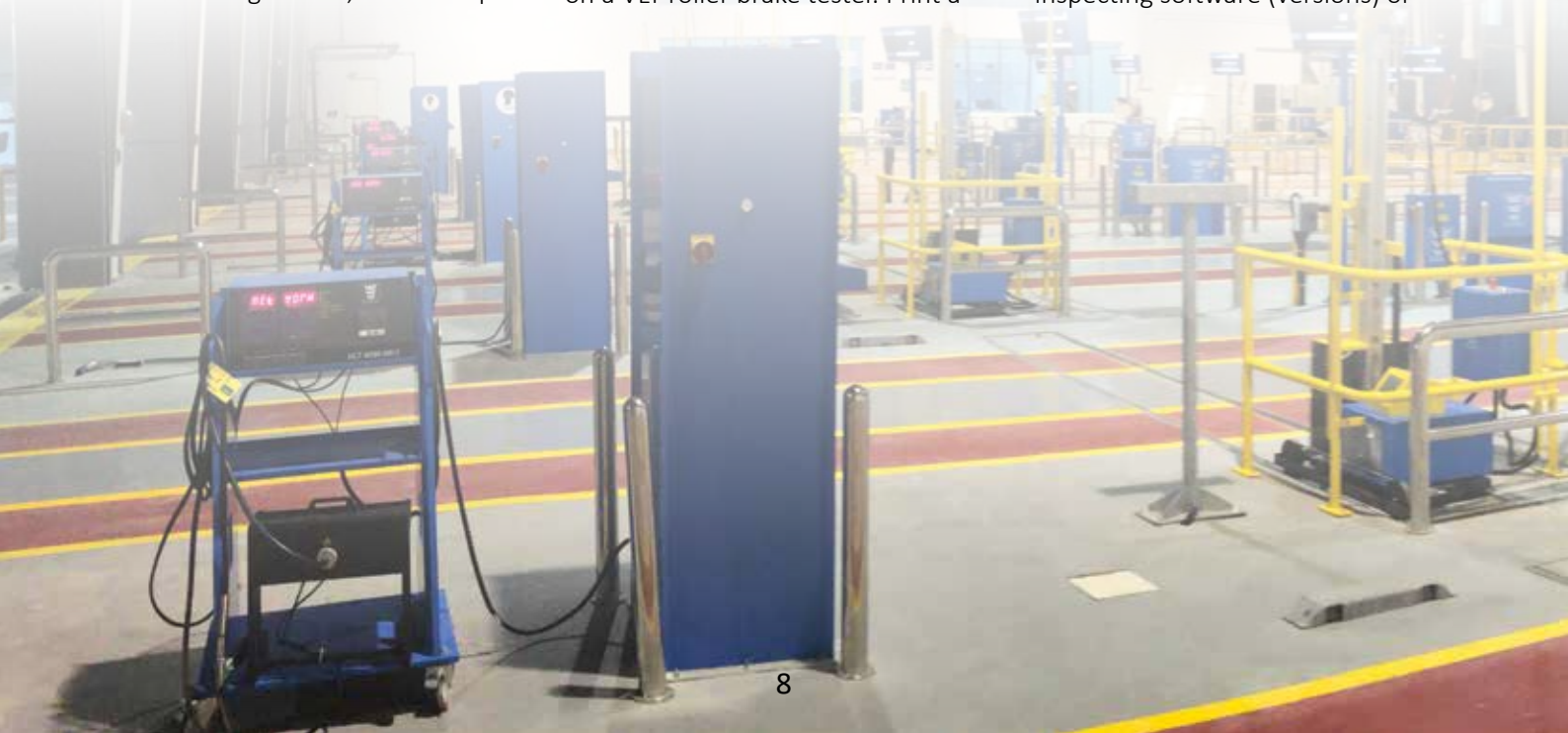
**Expand!**

As mentioned one can start with only one VLT product, but can expand and connect the equipment in the future. Think about adding different kinds of exhaust/emission testers and add them to the VLT 'eco-system' software. Add cameras to scan the license plate and sensors to track a vehicle. Or add a Tyre Inspection System (TIS) for making measurements and diagnostics of the complete tire while testing the brakes on a VLT roller brake tester. Print a

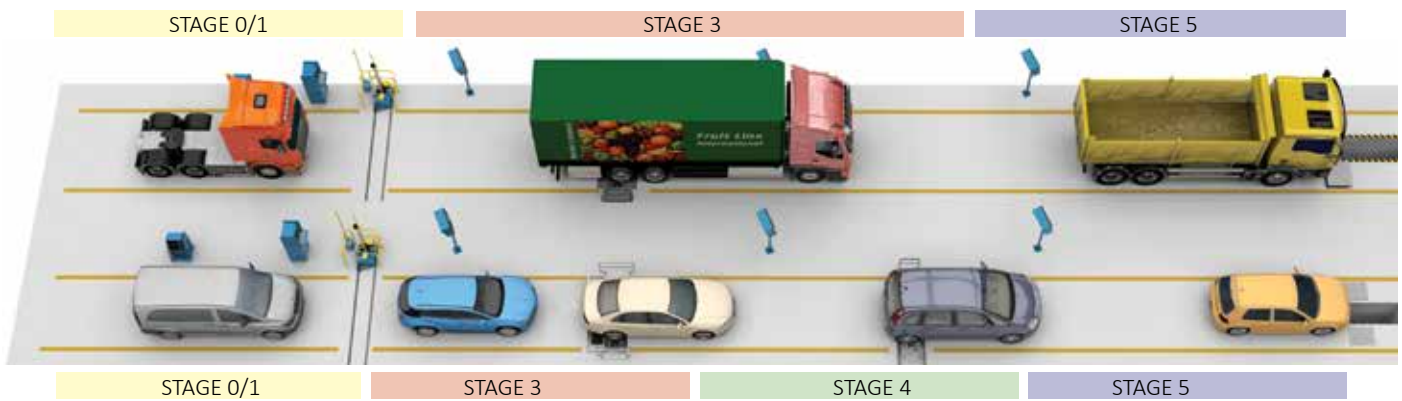
report at the end of the test, or as we all try to put less burden on the environment, send a digital report to the customer or government.

**Future on Vehicle Testing (PTI)**

As mentioned before, VL Test Solutions has a vision or perception on vehicle testing in the future. This is also the reason that we created the so-called 6th generation of equipment. Due to the fact of a global lack of labour force, we assume that in the near future vehicle testing has to become more automated more often. Also vehicles themselves are changing in high pace, compared to the last decades. With more Advanced Driver Assistance Systems (ADAS) in the newer cars, one can imagine that the testing of these systems may also be mandatory to test in the future. Before we enter this phase, a lot of standardization on these systems is important. Especially the possibilities to read the measured values, has to be without limitations. This is a whole other discussion which is way broader discussed in the automotive industry. But, one can imagine that, when inspecting software (versions) or







ADAS systems and vehicle diagnosis in general, it may also be necessary to store this data and connect it with the other parts of the inspection, the ones we already now such as visual inspection, measurements of exhaust pollutions and brake tests etc.

#### Web technology

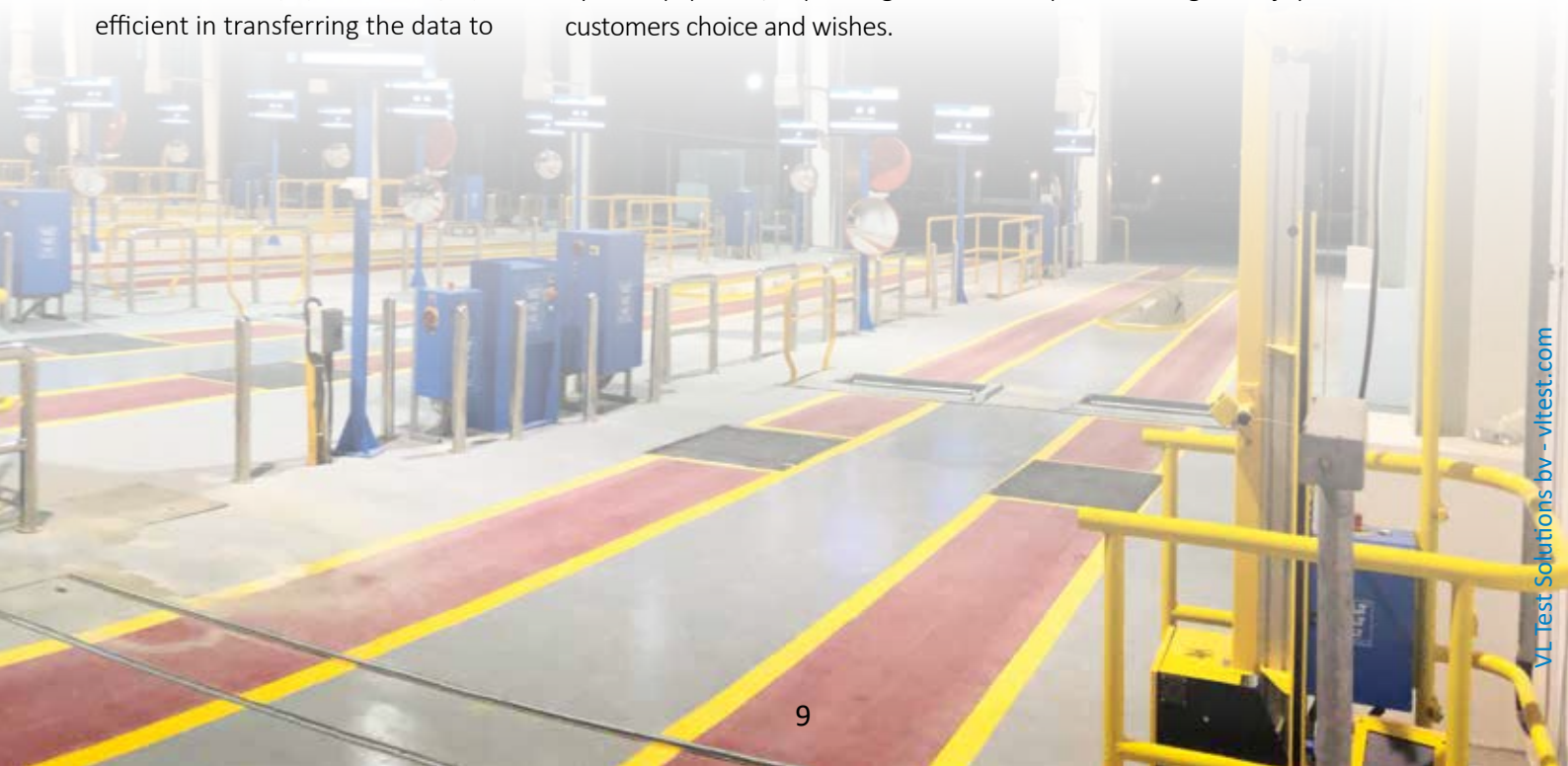
The new 6th gen is based on standard web technology. This makes it possible to connect other kind of equipment in the future. Based on Internet of Things and Web-API, VLT now uses state of the art technology to expand with new (even to be developed in the future) hardware. When the equipment is connected with each other and reporting all the measurements to a centralized software, the equipment is highly efficient in transferring the data to

the PTI provider, or, if needed, to the government. This also takes some of the possibility away of human-made errors or mistakes.

Furthermore, users of VLT equipment are now able to be supported by the internet. Mechanical issues need to be fixed in the field, but non-mechanical issues like problems with pc's, software and screens are often possible to be checked and fixed over the wired connection. Besides that, it is possible to predict some break-downs, for example noticing a sensor drift almost out of calibration. This helps in saving downtime, by responding before the actual event happening. Also change in legislation will be provided via new software, which can pushed or pulled by the equipment, depending on customers choice and wishes.

#### Testing 20 vehicles an hour

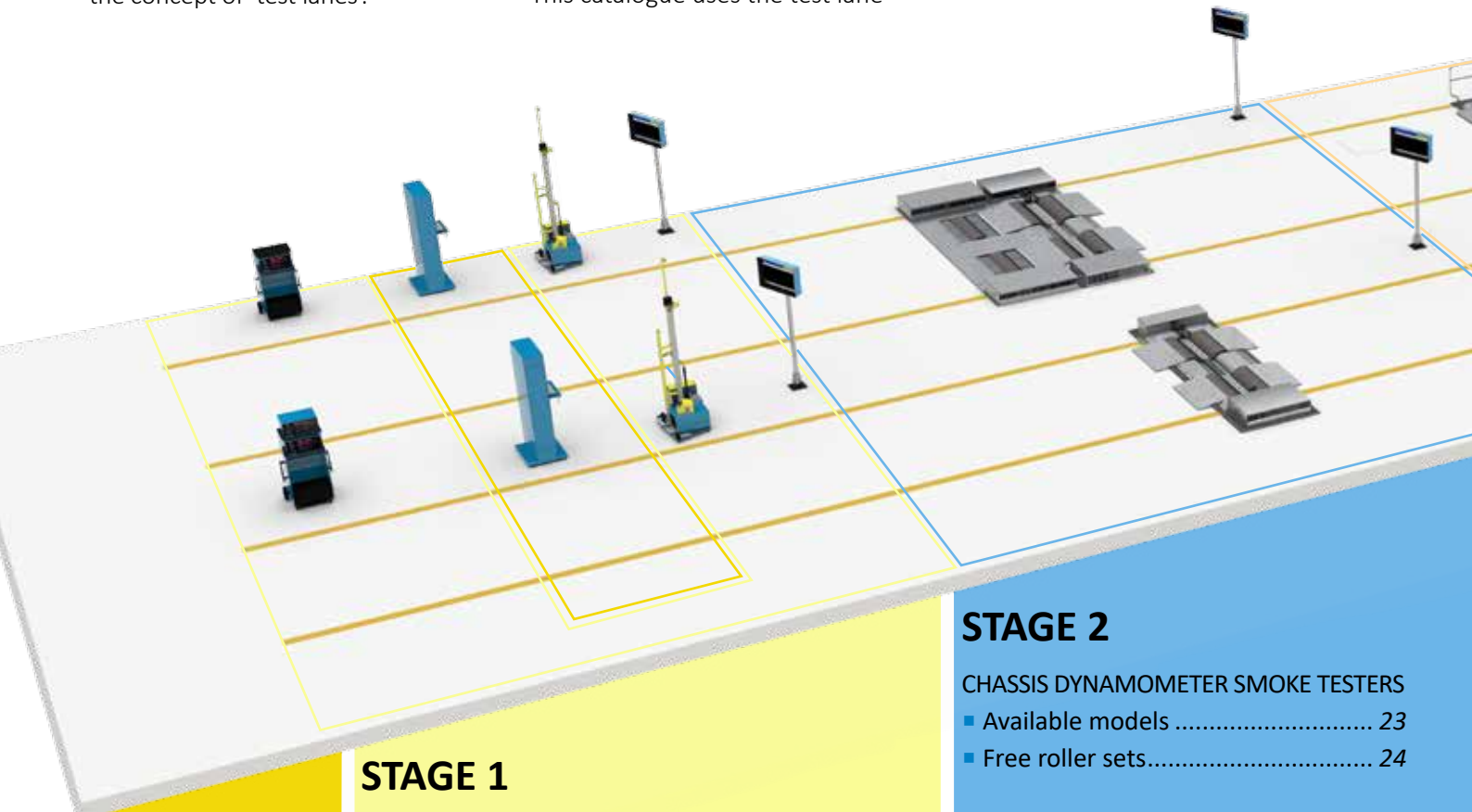
The VLT test lanes are set up in such a way that vehicles do not have to wait for the vehicle which is first in the test lane. When one wants to reach maximum amount of vehicle output, one has to understand that a test lane needs to be long enough. This promotes the speed of throughput. The test lane is divided into stages as shown above. With the ultimate and complete set-up, one is able to test 20 (passenger) cars an hour. For heavy-duty vehicles, the amount of throughput is less, but the PTI itself also is more time consuming. With this ultimate set-up in mind - which one can expand to, even though one has started with a 'stand-alone' piece of equipment- we built up our catalogue. Enjoy it!



The most ideal and efficient way to perform PTI's is by installing the equipment in such a way that vehicles can easily and quickly move from one test to another. That is why VLT prefers the concept of 'test lanes'.

A test lane can be very simple, with one or a few stand-alone machines, but can also consist of multiple sections (test stages) for all kinds of tests and all machines are connected. This catalogue uses the test lane

concept for its layout. You will be able to find specific information about all individual machines quite easily.



## STAGE 0

### VEHICLE ENTRY

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- Licence plate recognition system .....14
- Drive-in sensors ...14
- Database connectivity.....14

## STAGE 1

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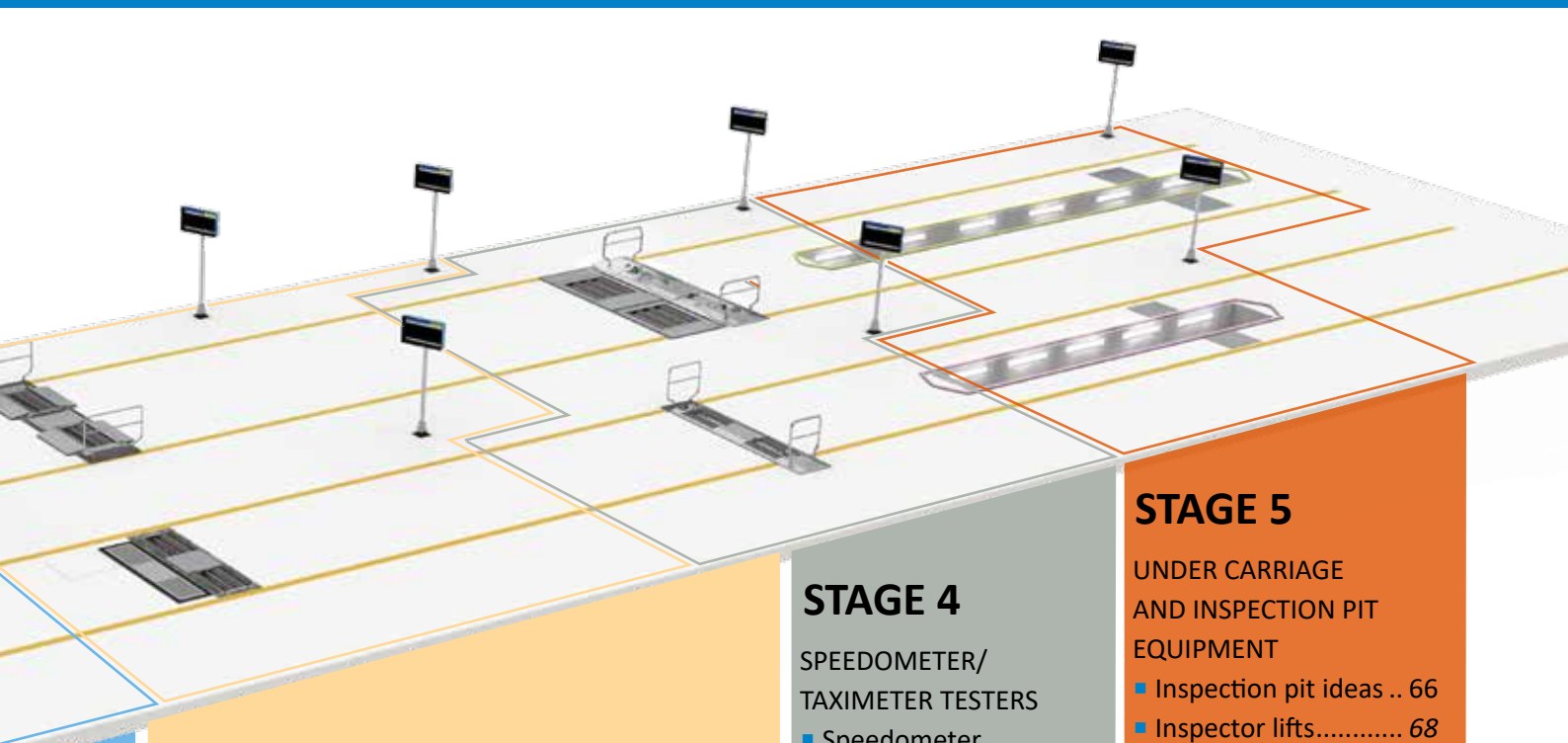
### HEADLIGHT BEAM TESTERS

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### CHASSIS DYNAMOMETER SMOKE TESTERS

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- Free roller sets..... 24



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## STAGE 0

### VEHICLE ENTRY

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- Licence plate recognition system ..... 14
- Drive-in sensors ..... 14
- Database connectivity..... 14

## Data entry



VLTB08307

Data entry: The main interface to the test equipment. Here you can enter vehicle and inspection data, search in the database, view and print test reports, view equipment statistics, and more.

VLTB08307

Steel, powder coated entry console incl. monitor, professional keyboard, mouse

VLTB08307TS

Same as VLTB08307, but with touch screen monitor

VLTB08306

Wall mount incl. monitor, professional keyboard, mouse



VLTB08306

## Licence plate recognition system



VLTLP0873

The licence plate recognition system VLTLP0873 scans the licence plate and passes the number to the software.

No need to manually type in the number.

VLTLP0873P Camera with wall mount

VLTLP0873F Camera with pedestal

VLTLP0874SW Software only, for use with tablet

## Drive-in sensors



VLT-HBTA0909

VLT-HBTA0909 Set with 2 infrared sensor beams for detecting the vehicle. This is most commonly used at the headlight beam tester, because it does not only detect the vehicle, but also makes sure that the distance of the vehicle to the headlight beam tester is optimal.

## Database connectivity



In some countries it is required by law for official inspections to send inspection results to a government system. Also that government system may send vehicle and inspection data to the VLT system. Therefore VLT offers the possibility to connect test equipment to government systems:

VLT Connect.

RDW (Netherlands)

MTS (DVSA, UK)

VIAS (Belgium)

ASA (Germany)

and more...



# STAGE 1

## EMISSION/DIESEL SMOKE TESTERS

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## HEADLIGHT BEAM TESTERS

- Headlight beam testers ..... 20

## Emission analysers



**VLT-E8104**

Modern 4-gas analyser, suitable for petrol, LPG, CNG, LNG vehicles. Can be connected to diesel smoke cell [VLT-E9210](#).

- Measures CO, CO<sub>2</sub>, HC, O<sub>2</sub>
- 6 Large LED displays
- Simple step-by-step test routines
- Integrated thermal printer
- OIML class 1 accuracy
- Optional NOx measurement ([VLT-E8105](#))

## Diesel smoke analysers



**VLT-E9200**

Diesel smoke analyser in a sturdy casing. Can be used as stand-alone unit, or integrated in an automated test lane.

- Measures opacity of exhaust gases
- 6 Large LED displays
- 8 Robust switches on front panel
- Simple step-by-step test routines
- Integrated thermal printer
- Diesel smoke cell [VLT-E9210](#)

## Accessories

**VLT-ET8901**



**VLT-ET8901**

Trolley with 2 plateaus (for emission units, keyboard, mouse) and place for a diesel smoke cell.

With drawer and 2 hose reels.

Optional: [VLT-ETA8901](#) mount for a 22" monitor (excl. monitor).



**VLT-EA92**

Accessory sets available for different countries. These contain all accessories that are required for official inspections in your country, such as oil temperature sensor, rpm meter, country specific software and all necessary cables.

Accessory set for The Netherlands

**VLT-EA92NL**



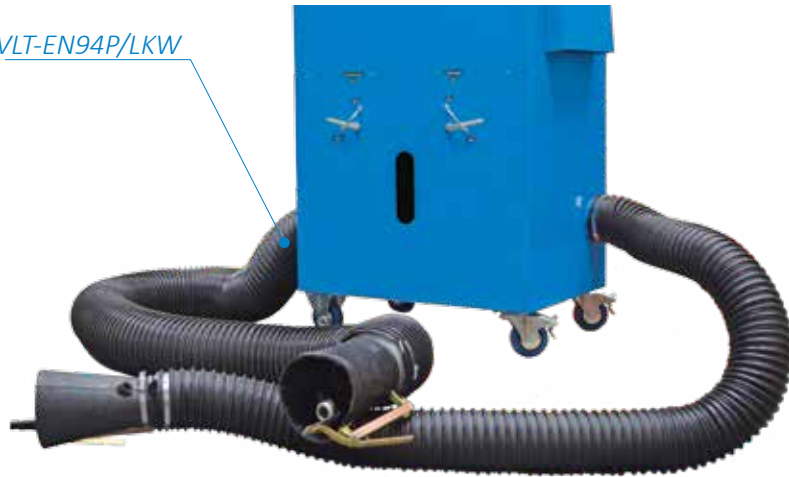




## Zero emission units

Zero emission units for connecting to your exhaust extraction system and the VLT-E9200 diesel smoke tester. The sample probe is integrated in the extraction hose.

VLT-EN94P/LKW



VLT-EN94PKW

Zero emission unit for light vehicles

VLT-EN94LKW

Zero emission unit for heavy vehicles

VLT-EN94P/LKW

Zero emission unit for light and heavy vehicles

VLT-EN94LKW



VLT-E9200

VLT-EN94PKW



## RPM meters

VLT-ERPM492

RPM adapter for 4/5-gas and diesel smoke testers

- Connection possibilities for use with any 4/5-gas or diesel smoke tester
- Suitable for 2-stroke and 4-stroke engines

- Suitable for light vehicles, heavy vehicles, motorcycles
- External magnetic vibration/sound vibration pickup



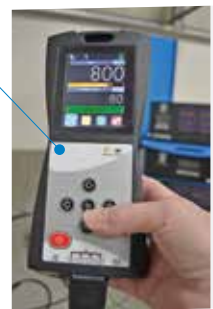
VLT-ERPM492

VLT-ERPM300E

RPM meter for diesel engines, especially developed for use with a diesel smoke tester. Quick and easy to use.

- Rechargeable lithium battery
- Large colour TFT display
- External magnetic vibration pickup
- Battery connection cable for ripple voltage measurement

VLT-ERPM300E



VLT-EOBD2012

Universal scan tool that can be used for service, maintenance and inspections. Connects to the standard 16-pin EOBD connector of the vehicle. It reads:

- Motor rpm
- Motor temperature
- MIL-status
- Permanent error codes
- Readiness code
- Lambda probe signal
- PID information

VLT-EOBD2012





VLT-E9700



- User friendly
- Easy to read display
- Sturdy design
- Vehicles are tested when the engine is idling (no accelerations required)
- In many countries no zero-emission cabinet required when performing a particle measurement
- Suitable for testing EURO 5 and EURO 6 diesel engines
- Measurement takes less than 1 min
- Automatic filter check and zeroing
- Automatic flow control
- Standard with 2.5 m heated sampling probe; at optional cost also 4 m heated probe available

VLT-E9700



VLT-ET8901

The *VLT-E9700* particle counter was developed especially for automotive workshops and inspection stations. This particle counter detects particles when the engine is idling. No additives, such as alcohol, are needed for the measurement.



## Sound level meters

**VLTS0894** Sound level meter (class 1)

**VLTS089301** Tripod for sound level meter

The sound level meter itself can be fitted safely inside a console. The microphone is connected to the sound level meter with a cable and is mounted on a tripod, so that you can quickly place it near the exhaust of the vehicle and remove it immediately after the measurement.



**VLTS0894**



**VLTS089301**

## Above carriage inspection

**VLTTG0877**

Tinted glass meter for measuring the transparency of (tinted) car windows. Consists of 2 sturdy units, to be placed on either side of the glass.



**VLTTG0899**

Tinted glass tester with tablet camera/LED light.

For visual inspections in automated test lanes VLT provides software that lists the items to be inspected for each vehicle type. The items are grouped logically on tabbed pages. The inspector can see immediately which items to inspect and can mark each item as 'failed', if appropriate. The failed items can be printed on the test report.

The software runs on the data entry console or on a tablet. For tablets and accessories, page 48.





VLT-HBT7457L

Manually operated headlight beam testers for quick and simple testing headlight alignment and luminosity. All models are suitable for halogen, xenon and led light sources. All models have a swivel column and a 200 mm clear optical lens.

### Point laser

The VLT-HBT7477 models have a point laser for easy positioning of the optical unit in front of the light source.



### Digital lux meter

The VLT-HBT7457 models have a digital lux meter for reading the measured light intensity.



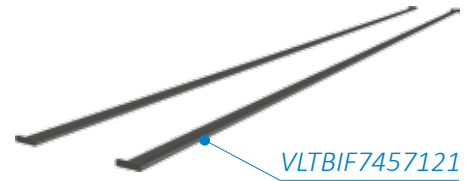
### Touch screen

The VLT-HBT7477U models have a touch screen for accessing all functions of the tester.



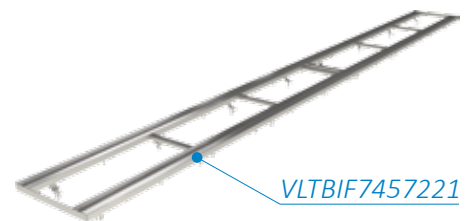
### VLTBIF7457121

Floor mounted V-rail (4.5 metres) for VLT-HBT7457R+R



### VLTBIF7457221

Sub frame for installing headlight beam tester rail for VLT-HBT7457 / VLT-HBT7477 in the concrete floor, instead of on the concrete floor.



### Rail kit

Models with '+R' in the model name come with a rail kit as standard. This consists of a steel base, 4 steel wheels and 4.5 m of metal rails.



	VLT-HBT7457L	VLT-HBT7457L+R	VLT-HBT7457R+R	VLT-HBT7477U	VLT-HBT7477U+R
<b>Alignment method</b>	mirror	mirror	mirror	mirror	mirror
<b>Point laser</b>	no	no	no	yes	yes
<b>Luxmeter</b>	digital	digital	digital	on screen	on screen
<b>Printer</b>	no	no	no	possible via pc	possible via pc
<b>Extra</b>		rail kit	rail kit	touch screen operation, network connection to pc	rail kit, touch screen operation, network connection to pc
<b>For L/R driving traffic</b>	left	left	right (UK)	left or right	left or right



## VLT-HBT0936MK3/TL

- Fully automatic robot type tester for test lane use
- Motor driven horizontal and vertical movement
- Automatic searching for head lights
- Colour TFT screen
- Optical unit with CCD camera
- Horizontal movement over precision guide rails (4.5 m)
- Vertical movement by precision linear drive unit
- Suitable for halogen, xenon and led lamps

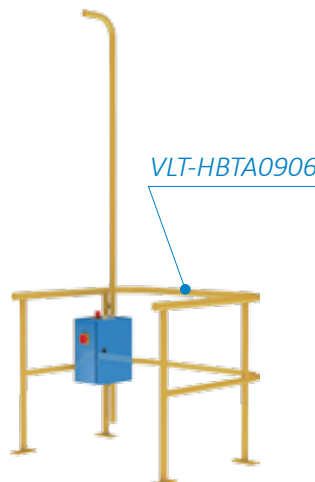
## VLT-HBT7497U(+R)

- Automatic tester with high precision camera
- Automatic light recognition
- Laser viewer
- Suitable for halogen, xenon and led lamps
- Can be used in integrated test lanes, or stand-alone
- Optional rail kit



## VLT-HBTA0906

Optional protection frame for headlight beam tester in parking position. Complete with cable pipe and mounting plate for electric cabinet.

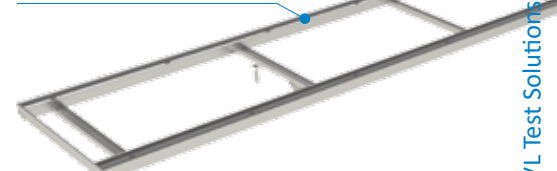


## VLTBIF0905/476 VLTBIF0905/440 VLTBIF0905/275

Precision stainless steel guide rails, one round, one square. Available in 4.5 m or 4.4 m (cars, trucks, buses) and 2.75 m (motorcycles) length. For VLT-HBT0906 series headlight beam testers.

The frame is cast in the concrete floor, so that the top of the rails is flush with the floor. The round and square rails are fully adjustable in height, so they can be aligned perfectly level over the entire length.

## VLTBIF0905/450



	VLT-HBT7497U(+R)	VLT-HBT0936MK3/TL
<b>Alignm.</b>	green laser	fully automatic
<b>Point laser</b>	yes, cross shape pointer	n.a. (fully automatic light search)
<b>Lux</b>	on screen	on screen
<b>Printer</b>	possible via pc	via test lane pc
<b>Extra</b>	touch screen operation, network connection to pc	touch screen / fully automatic operation, network connection to pc
<b>Traffic</b>	left or right	left or right



## STAGE 2

### CHASSIS DYNAMOMETER SMOKE TESTERS

- Available models ..... 23
- Free roller sets..... 24



	VLT038950-G6	VLT068950-G6	VLT148950-G6	VLT248950-G6
Max axle load	3000 kg	6000 kg	14000 kg	24000 kg **
Max speed	150 km/h	150 km/h	100 km/h	90 km/h
Test width	800 / 2200 mm	700 / 2500 mm	800 / 3000 mm	800 / 3000 mm
Roller distance	500 mm	550 mm	630 mm	630 mm
Max brake power	300 kW	300 kW	600 kW	800 kW
Hydraulic pump	1.5 kW	3 kW	3 kW	3 kW

\*\* tandem axle weight



A chassis dynamometer smoke tester (CDST) is used to measure the exhaust gases of diesel powered vehicles when the engine is under load. The driven axle of the vehicle is placed on rollers. The driver is instructed to accelerate to and maintain certain speeds in certain gears, during which the rollers are increasingly being slowed down with eddy current brakes. In this way the vehicle is tested more or less under road conditions, which is much more realistic (and better for the engine).

VL Test Solutions bv has models for 3, 6 and 14 tonnes axle weight, and a model for tandem axle vehicles (24 tonnes tandem axle weight).

For cooling of the engine, a big cooling fan on a trolley is used. This fan can be placed in front of the vehicle.

Every model also comes with a hydraulic pump unit (for the axle lift, side rollers and disc brakes), a relay box, a controller box and an RF remote control unit.



## Available models:

- **VLT038950-G6:** Max axle weight under test: 3000 kg.  
Required sub frame [VLTBIF0389507](#)
- **VLT068950-G6:** Max axle weight under test: 6000 kg.  
Required sub frame [VLTBIF0689507](#)
- **VLT148950-G6:** Max axle weight under test: 14000 kg.  
Required sub frame [VLTBIF148950](#)

- **VLT248950:** Max axle weight under test: 24000 kg (tandem axle model).  
Required sub frame [VLTBIF2489507](#)

The position of the tandem axle rollers can be adjusted according to the axle distance of the vehicle.

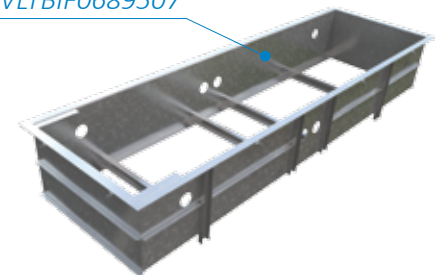
## [VLTFT148960](#)

Large cooling fan on a trolley to place in front of the vehicle. The fan is controlled with the remote control unit of the CDST.

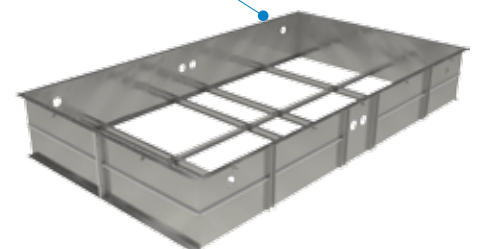
## [VLTFT148960](#)



## [VLTBIF0689507](#)



## [VLTBIF2489507](#)



## VLT Free roller sets

Roller sets with rollers that can rotate freely, used for testing vehicles with multiple driven axles without a third differential on e.g. a roller brake tester, CDST or speedometer tester. The wheels of a driven axle that is on the rollers can rotate freely in any direction.

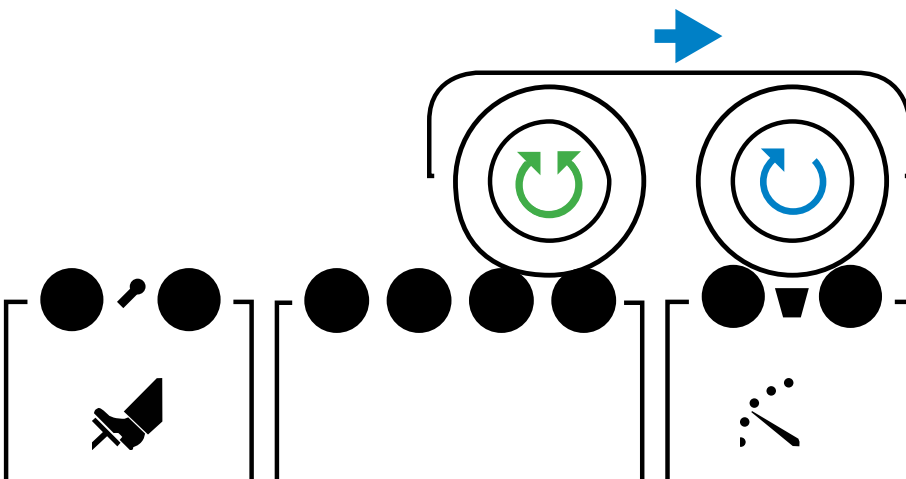
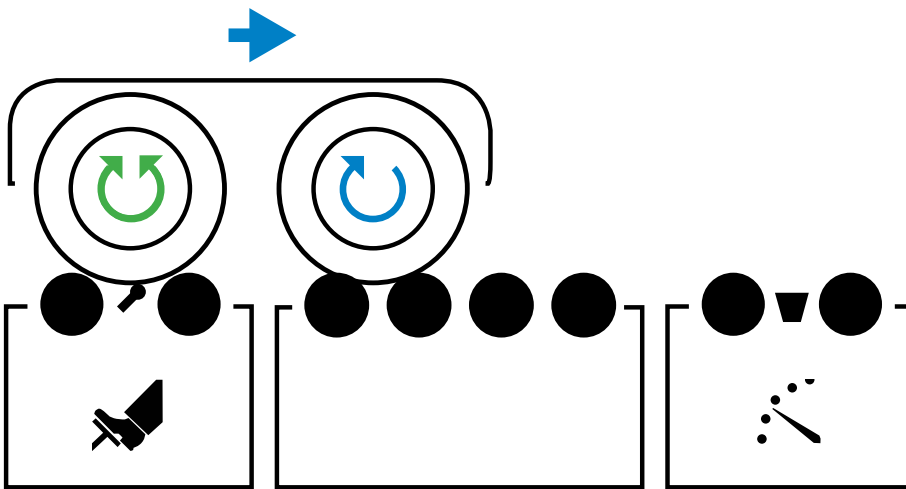
- Hydraulic axle lift for easy drive-in/out
- Rollers locked when axle lift is up
- [VLT8103](#) with 3 rollers, L = 950 mm  
8000 kg axle weight
- [VLT16104](#) with 4 rollers, L = 1100 mm  
16000 kg axle weight



[VLT16104](#)

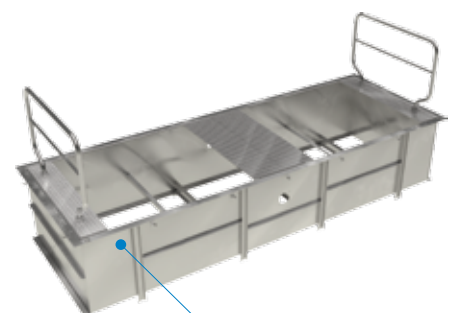


[VLT16104](#)



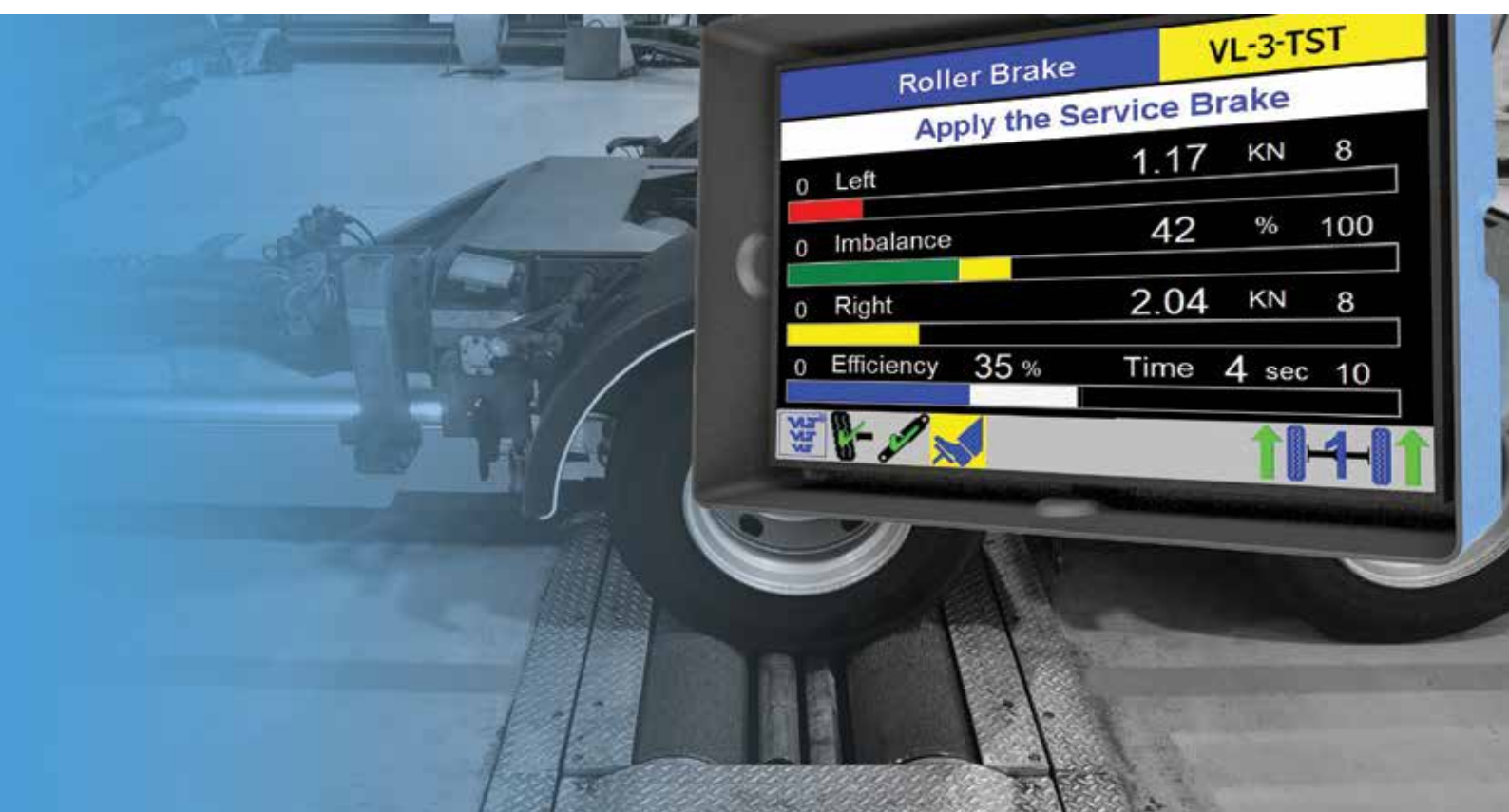
### Sub frames:

- |                                  |                             |
|----------------------------------|-----------------------------|
| 3 rollers,<br>no safety guards   | <a href="#">VLTBIF8154</a>  |
| 4 rollers,<br>no safety guards   | <a href="#">VLTBIF16154</a> |
| 3 rollers,<br>with safety guards | <a href="#">VLTBIF8155</a>  |
| 4 rollers,<br>with safety guards | <a href="#">VLTBIF16155</a> |



[VLTBIF16155](#)





## STAGE 3

### TYRES, SUSPENSION AND BRAKES

- Tyre inspection system ..... 26
- Suspension testers ..... 28
- Suspension /roller brake tester combinations..... 29
- Roller brake testers
  - Roller brake testers for light vehicles..... 30
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  - Readout options ..... 48
  - Axle load simulators ..... 50
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- **Stage 3 specials**
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## VLT3972, VLT3982

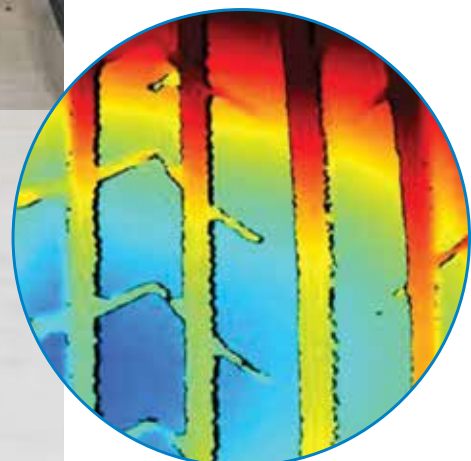
Tyre inspection system *VLT3972* for light vehicles\*, *VLT3982* for heavy vehicles, for checking profile depth. Optionally the system can check if the tyre pressure has been too high or too low on average by looking at the wear of the tyres.

In the near future the option will become available to measure toe-in and toe-out. This eliminates the need for a separate side slip tester. This option can simply be installed via an online connection.

More functionality will be added in the future.

The VLT tyre inspection system is installed just after the roller brake tester. The measurement is done while the wheels are rotating and so the entire circumference is checked. This takes only a few seconds. The test results are printed (per axle) on the brake tester test report. The system uses stereo imaging to check the tyres. There are 2 digital stereo cameras per wheel. Clever software takes care of the rest.

\* The model for light vehicles requires a sub frame for in-ground installation to make driving over the units easier.



- Profile depth measurement (*VLTSW621701*)
- Tyre over/under pressure indication (*VLTSW621702*)
- Nail in tyre detection (*VLTSW621703*)
- Side wall damage detection (*VLTSW621704*)
- Alignment, toe (*VLTSW621710*)
- Alignment, camber (*VLTSW621711*)
- Tyre side wall damage (*VLTSW621704*)
- And more.....



V.1.4.0-07|1.6.0-alpha.690 **VLT TEST EQUIPMENT** 09-Jun-2022 14:52

0907-002386-000

**VEHICLE INFORMATION**

Type : Car  
 Manufacturer : Mileage :  
 Model : Government standards : NL  
 Plate number : 5VPT02 Inspector : Administrator  
 VIN :

**BRAKES** (✓=Passed, X=Failed, (B)=Wheel locked, (K)=Side by side )

AXLE 1	Left	Right	Total	Efficiency	Reference	Result
Static axle weight	449 kg	451 kg	900 kg	--	--	--
Brake force	3770 N	3720 N	7490 N	85 %	--	--
Imbalance	3770 N	3720 N	1 %	--	30 %	✓
Bind	180 N	170 N	350 N	4 %	--	--
Tread depth	3.2 mm	4.3 mm	--	--	1.6 mm	✓

AXLE 2	Left (B)	Right	Total	Efficiency	Reference	Result
Static axle weight	293 kg	302 kg	595 kg	--	--	--
Brake force	2530 N	2520 N	5050 N	87 %	--	--
Imbalance	2530 N	2520 N	0 %	--	30 %	✓
Bind	170 N	120 N	290 N	5 %	--	--
Tread depth	3.4 mm	3.9 mm	--	--	1.6 mm	✓

PARKING BRAKE 2	Left	Right	Total	Efficiency	Reference	Result
Static axle weight	293 kg	302 kg	595 kg	--	--	--
Brake force	1610 N	1340 N	2950 N	51 %	--	--
Imbalance	1610 N	1340 N	17 %	--	--	--

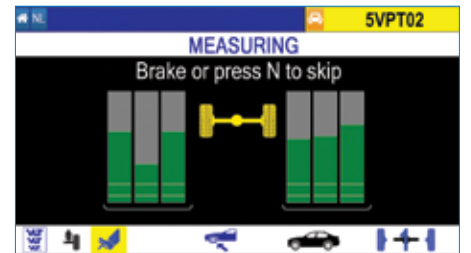
TOTAL	Left	Right	Total	Efficiency	Reference	Result
Static vehicle weight	742 kg	753 kg	1495 kg	--	--	--
Service brake	6300 N	6240 N	12540 N	86 %	50 %	✓
Parking brake	1610 N	1340 N	2950 N	20 %	16 %	✓
					<b>Total</b>	✓

**SUSPENSION TEST** (✓=Passed, X=Failed, !=Controleer bandenspanning)

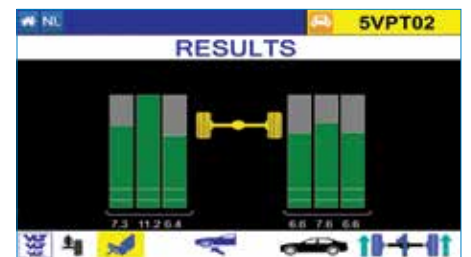
Axle 1	Left	Frequency	Right	Frequency	Total	Reference	Result
Wheel-road contact	64 %E	15 Hz	61 %E	15 Hz	--	--	--
Relative imbalance	64 %E	15 Hz	61 %E	15 Hz	5 %	50 %	✓
Min. dynamic weight	287 kg	15 Hz	275 kg	15 Hz	562 kg	--	--
Phase shift	88 °	13 Hz	86 °	13 Hz	--	35 °	✓
Imbalance	88 °	13 Hz	86 °	13 Hz	2 %	50 %	✓
Tyre rigidity	374 N/mm	25 Hz	379 N/mm	25 Hz	--	--	--
Static axle weight	449 kg	0 Hz	451 kg	0 Hz	900 kg	--	--
					<b>Suspension condition</b>		✓



starting measurement prior to brake test



measuring profile depth



profile depth measurement results





## VLT3673-G6 SERIES

The *VLT3673-G6* road contact tester uses an extended Eusama measuring principle. It measures and calculates the following values:

- Road contact value
- Road contact value imbalance left/right
- Resonance frequency
- Wheel weight at minimum road contact value
- Tyre rigidity
- Wheel weight
- Axle weight
- Phase shift

Why measure phase shift?

Measuring the phase shift is especially useful when testing very light vehicles and vehicles with low profile or run-flat tyres. These vehicles often don't pass a standard Eusama test.

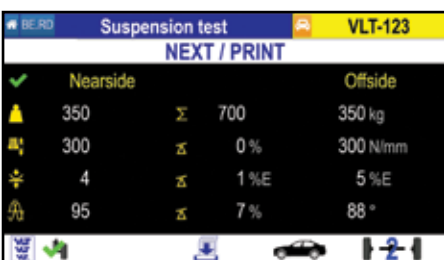
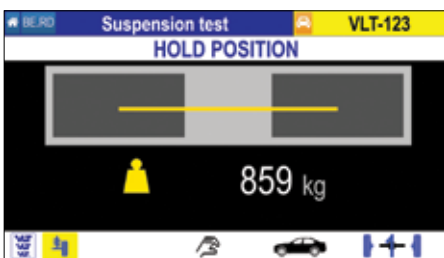
The *VLT3673F-G6* road contact tester has machined aluminium measuring plates (instead of folded steel ones) that allow for a very accurate measurement. This model also has a frequency converter. This can be used for the optional resonance test.

### Options and accessories

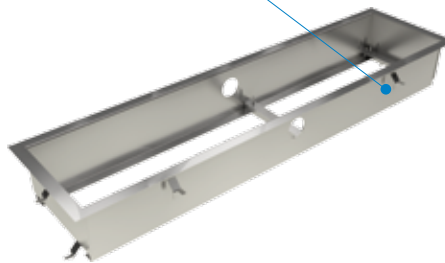
- *VLTBIF3605*  
Sub frame for installing the tester in the shop floor
- *VLTBIF3610MR2*  
Sub frame with sliding cover plates (electrically driven, for driving over with heavy vehicles)
- *VLTBID3607*  
Dummy cover for installing in a combination sub frame for a brake tester and a suspension tester, when the suspension tester will be installed at a later date



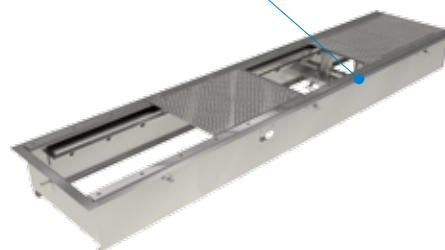
*VLT3673F-G6*



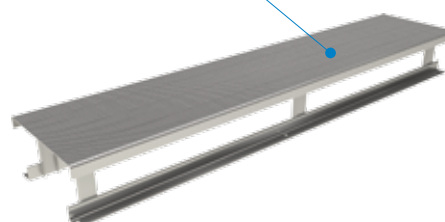
*VLTBIF3605*



*VLTBIF3610MR2*



*VLTBID3607*





## VLT3673F/42xx-G6

VLT road contact testers can be combined with VLT roller brake testers for light and medium weight vehicles, such as the VLT4200 series. The two machines are placed in a single sub frame and use the same controller, vehicle entry, monitor and remote control unit. The test report shows the results of both machines. This is a more compact and cheaper solution than two fully separate machines.

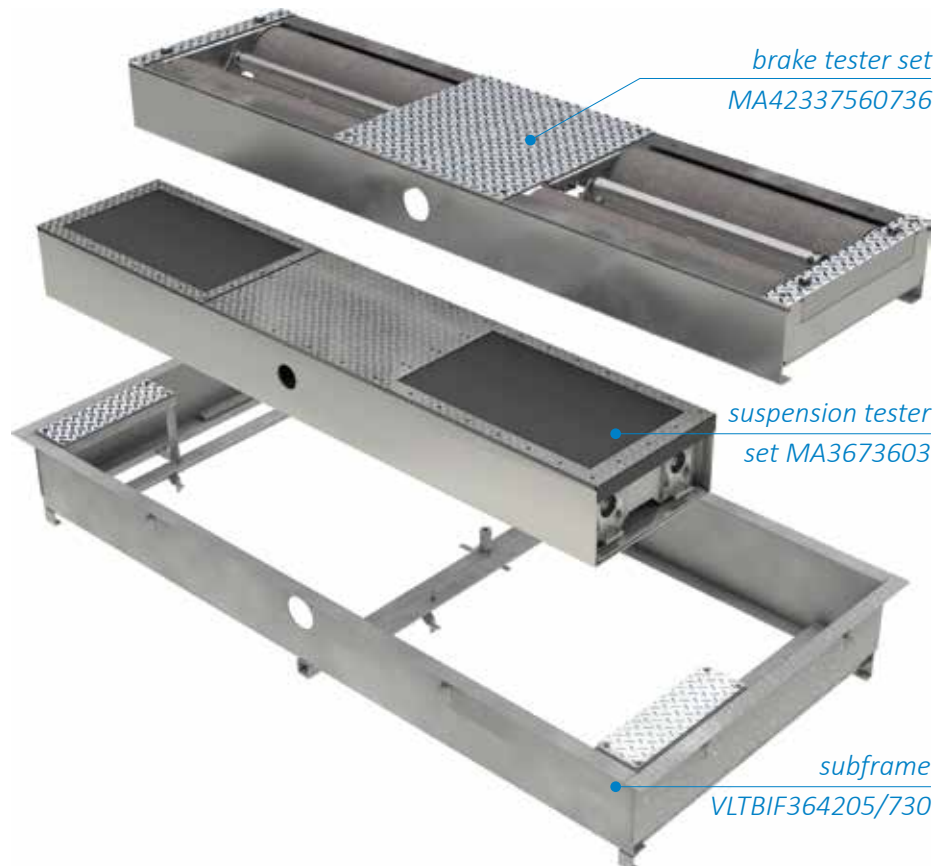


VLT3673F/4222-G6

**VLT3673F/4222-G6:** The road contact tester measures the axle weights. The roller brake tester uses these weights for the brake efficiency calculations.

**VLT3673F/4233-G6:** The road contact tester measures the axle weight, but the brake tester also has an axle weighing system. So, if you do not need/want to do a suspension test, you do not have to stop when the wheels are on the road contact tater in order to weigh the axle.

The user is guided through the entire testing process step by step. All information for the user/driver will appear on the monitor at the appropriate time.



brake tester set  
MA42337560736

suspension tester set  
MA3673603

subframe  
VLTBIF364205/730

Suspension tester **VLT3673F-G6**, with

- Eusama measurement, plus
- Phase shift measurement
- Frequency converter
- Axle weighing

Brake tester **VLT4222-G6/730/2450**, with

- Roller locking
- Counter-rotating rollers (4x4 testing)
- Soft starters
- Applied parking brake test
- Optional axle weighing (**VLT4233-G6/730/2450**)
- Open sub frame **VLTBIF364205/730**, or
- Closed sub frame **VLTBIC364209/730**

Brake test +  
suspension test =

**2 machines**  
**1 readout**  
**1 remote control**  
**1 vehicle entry point**  
**1 test report**



## VLT24/2500-G6

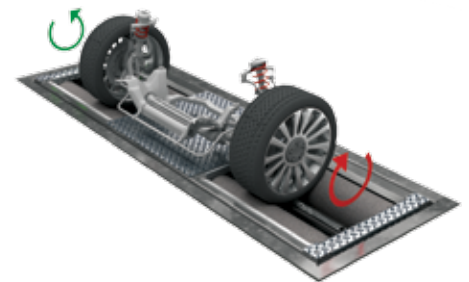


VLT2533-G6

Model	VLT2422-G6 VLT2433-G6 VLT2522-G6 VLT2533-G6
	0- 6.2 kN
	2500 kg
	4000 kg
	800 x 2200 mm
	2 x 3.8 kW

Standard features:

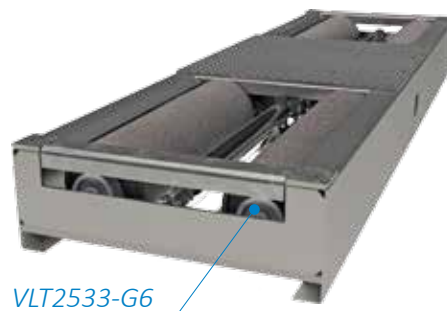
- RF remote control unit
- Roller locking
- Counter-rotating rollers (4x4 testing)
- Axle weighing system (VLT2x33-G6)



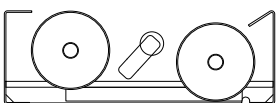
Counter-rotating rollers possibility for testing 4x4 vehicles is standard on these brake testers.



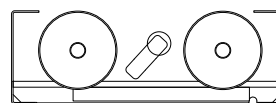
VLT2433-G6



VLT2533-G6



VLT2422-G6  
VLT2433-G6  
Front rollers at floor level  
Rear rollers-30 mm



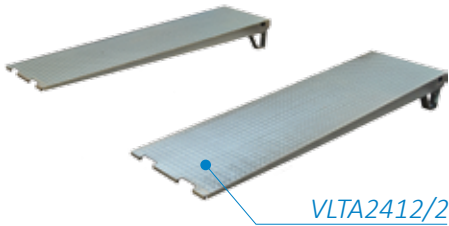
VLT2522-G6  
VLT2533-G6  
All rollers at floor level



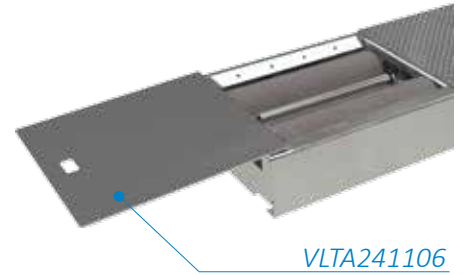
RT2996001  
RF remote control



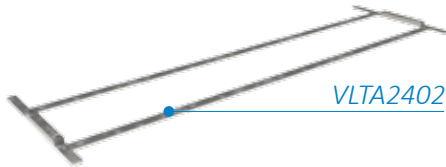
## Options and accessories for VLT24/2500 series



- **VLT241106**  
Drive-over cover plates with hinges on the outside



- **VLT2412/2**  
Set of 2 ramps for on-floor installation (e.g. in front of a car lift)



- **VLT2402**  
Ground frame for installation without sub frame VLTBIF2405 or VLTBIC2409



- **VLTBIC2409**  
Closed sub frame for single installation in concrete floor



- **VLTPT1032**  
Pedal force transducer with integrated amplifier and 12 meter cable (54)



VLM100929/32/W +  
VLMC08302 +  
VLTB08303/EXT

Rollerbrake test		CAR-02
BRAKE TO MAXIMUM		
0 Brake force nearside	0.96 kN	6.2
0 Incline	5 %	100
0 Brake force offside	1.01 kN	6.2
0 Efficiency	40 %	10
	Time	3 s



## VLT42/5200-G6

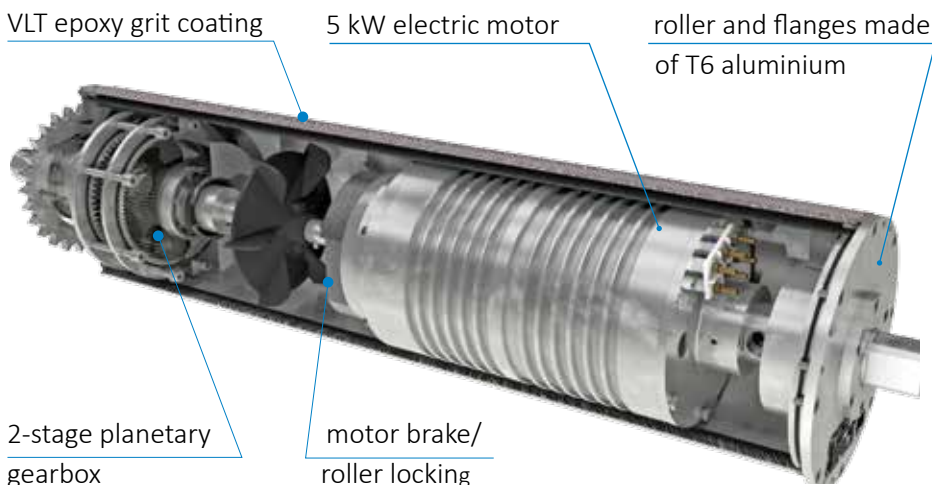


Model	VLT4233-G6 /VLT5233-G6	
	0 - 10 kN	0 - 12.5 kN
	4000 kg	5000 kg
	5000 kg	6000 kg
	730 x 2450 mm or 880 x 2600 mm	
	2 x 5 kW	



Standard features:

- Axle weighing system
- Applied brake test
- Roller locking device
- Counter-rotating rollers (4x4 testing)
- RF remote control



RT2996001  
RF remote control



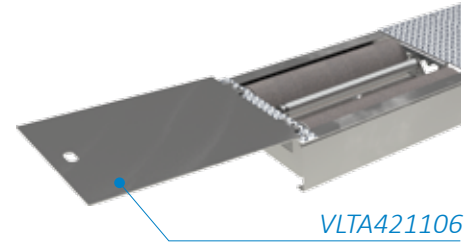




## Options and accessories for VLT42/5200 series



■ **VLTA421106**  
Drive-over cover plates



■ **VLTA421108MC**  
Drive over plate for motorcycle testing



■ **VLPT1032**  
Pedal force transducer with integrated amplifier and 12 meter cable (54)



■ **VLTA4002**  
Ground frame for installation without sub frame VLTBIC4209

■ **VLTBIC4209/730, VLTBIC4209/880**  
Closed sub frames for single installation in concrete floor

Applied parking brake test.  
Brake test on static wheels (for electronic parking brakes).

**1** Put the axle on the rollers.



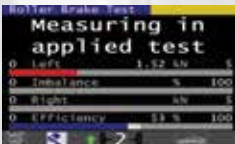
**2** Apply the parking brake.



**3** Press the start button.



**4** Read the brake force values.





## COMPACT series

### VLT140/160233-G6

Model	VLT140233 / VLT160233-G6	
	0 - 35 kN	0 - 40 kN
	14000 kg	16000 kg
	18000 kg	20000 kg
	800 x 2800 mm*	
	2 x 11 kW	

\* Approx., depends on sub frame

Rollerset dimensions: L x W x H  
1300 x 785 x 585 mm

Also available with integrated axle lift. See page 40.



Standard features:

- Counter-rotating rollers (4x4 testing)
- Roller locking device
- Axle weighing system
- Gritted rollers, solid one-piece shaft
- Rollers perfectly cylindrical (precision tube and machined over entire length)
- Class GGG40 bearing housings for roller bearings
- Middle rollers pivoting in self-aligning ball bearings
- OIML R60 C3 brake force strain gauges, fully sealed, stainless steel
- Proximity sensors with stainless steel housing
- For installation in existing or new floor/pit, or in a new sub frame
- VLT160733-G6 version for UK (4000 kgf, 16000 kg, 5.5/11 kW)



## Options and accessories for VLT140/160233 series

- **VLTA160233/202**  
Drive-over cover plates
- **VLTBIF13003/C550**  
Sub frame for installation over inspection pit, with provisions for axle load cylinders
- **VLTBIF13007/C550**  
Sub frame for installation over inspection pit. No provisions for axle load simulator
- **VLTBIF13037/C550**  
Sub frame for non-pit installation
- **VLTP1032**  
Pedal force transducer with integrated amplifier and 12 meter cable (54)
- **VLTP1063**  
Air pressure transducers with cable (54)
- **VLTP1734/20**  
Wireless (RF) Air pressure transducers (54)





## FULL SIZE series

### VLT14/16033-G6 VLT14/16233-G6

Model	VLT140233 / VLT160233-G6	
	0 - 35 kN	0 - 40 kN
	14000 kg	16000 kg
	18000 kg	20000 kg
	800 x 3000 mm (VLTBIF14027/NO SG) 1000 x 3200 mm (VLTBIF14003)	
	2 x 11 kW	

Rollerset dimensions: L x W x H  
1450 x 890 x 640 mm



VLTxx033-G6  
rear rollers raised



VLTxx233-G6  
all rollers at same level

Standard features:

- Counter-rotating rollers (4x4 testing)
- Roller locking device
- Axle weighing system
- Gritted rollers, solid one-piece shaft
- Rollers perfectly cylindrical (precision tube and machined over entire length)
- Class GGG40 bearing housings for roller bearings
- Middle rollers pivoting in self-aligning ball bearings
- OIML R60 C3 brake force strain gauges, fully sealed, stainless steel
- Proximity sensors with stainless steel housing
- For installation in existing or new floor/pit, or in a new sub frame

Also available with integrated axle lift. See page 42.





## Options and accessories for VLT14/16/20x33 series

- **VLTPT1734/20**  
RF Air pressure transducers (54)
- **VLTIO16132**  
Two measuring directions, with or without second readout cabinet (not for raised rear rollers)
- **VLTBIF14003**  
Sub frame for installation over inspection pit, with mountings for axle load cylinders
- **VLTBIF14027/NO SG**  
Sub frame for non-pit installation
- **VLTBIF14037 and VLTBIF14037/100**  
Sub frames for non-pit installation

- **VLTPT1032**  
Pedal force transducer with integrated amplifier and 12 meter cable (54)
- **VLTPT1063**  
Air pressure transducers with cable (54)

**VLTM100929/43/W**  
**VLTCM08301**





VLT16733-G6

**FULL SIZE UK series**

**VLT16733-G6**

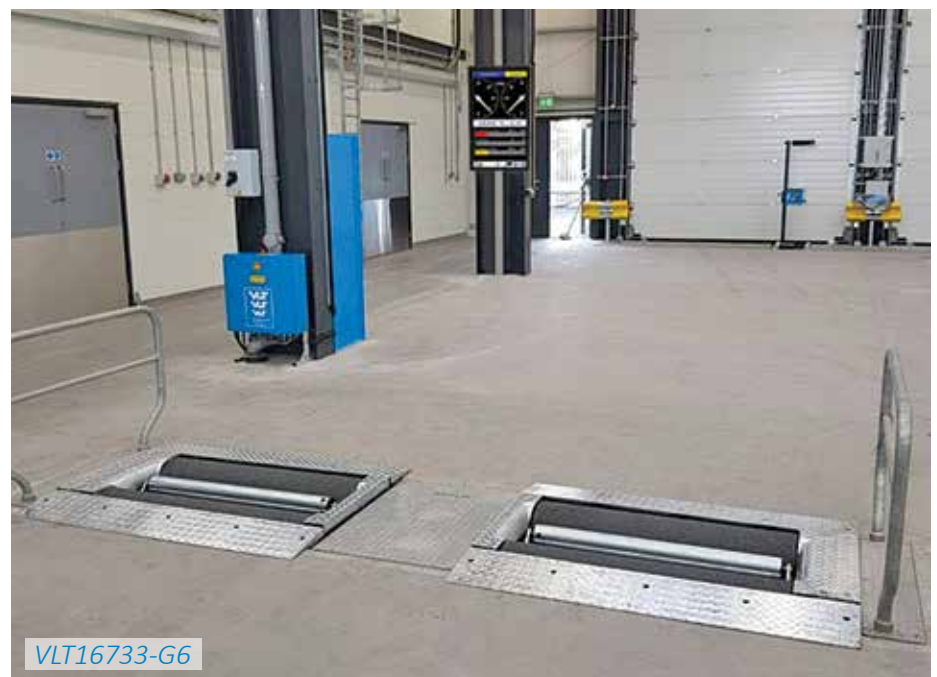
**VLT20733-G6**

Model	VLT16733 / VLT20733-G6	
	4000 kgf	5000 kgf
	16000 kg	20000 kg
	20000 kg	24000 kg
	870 x 3070 mm (VLTBIF14027), 800 x 3000 mm (VLTBIF14127), roller length 1100 mm	400 x 3200 mm (VLTBIF14027/1400), 400 x 3200 mm (VLTBIF14127/1400), roller length 1400 mm
	5.5 / 11 kW	5.5 / 11 kW

**VLT16733-G6**

Roller brake tester for testing heavy and light vehicles. Includes a computer with the complete DVSA database (17000 DTp numbers) and testing software. Brake testers of the VLT16733 series have been in use at most official UK MOT inspection

stations since 1988 and many more are installed every year at private companies, such as fleet owners and HGV work shops. Also the British Ministry of Defence uses VLT brake testers exclusively; 20 tonnes models in a special MOD configuration.



VLT16733-G6



Options and accessories for VLT16/20733 series

■ *VLT18631/5M/UK*

Axle load simulator with hydraulic pulling cylinders. Including hydraulic pump unit. Pulling force 1000- 10000 kg (50).



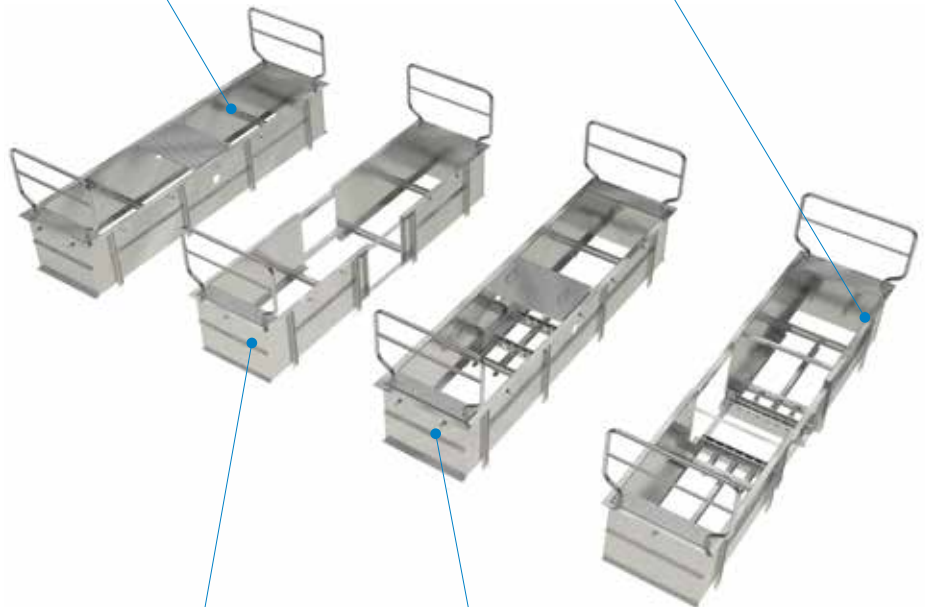
*VLT18631/5M/UK*

Non-pit installation, no lift  
No load simulation cylinder attachments  
With side guards

*VLTBIF14027*

Over pit installation, no lift  
With load simulation cylinder attachments  
With side guards

*VLTBIF14003UK*



*VLTBIF14007UK*

Over pit installation, no lift  
No load simulation cylinder attachments  
With side guards

*VLTBIF14127*

Non-pit installation, no lift  
With load simulation cylinder attachments  
With side guards



*VLT20733-G6 (MOD SPEC)*

VL Test Solutions bv - vltest.com



**COMPACT series with lift**

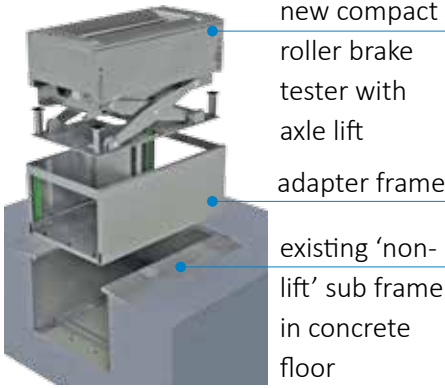
## VLT160233LIFT-G6

Model	VLT160233LIFT-G6
	0 - 40 kN
	16000 kg
	18000 kg
	Depends on sub frame
	2 x 11 kW



- Standard features:
- Main features same as models without lift
  - Lifting height 180 mm
  - Roller length 1000 or 1100 mm

Rollerset dimensions incl. adapterframe with guidings: L x W x H  
 1350 x 890 x 640 mm, or  
 1450 x 890 x 640 mm



Compact roller brake testers with integrated axle lift. Because of the compact construction they can be installed in an existing VLT sub frame for a full size brake tester without axle lift, or they can replace brake testers of several other brands without the need for extensive civil work.



**VLTBZ16278P2**  
 Optional tie-down frame set for using the lifting system as a load simulator.





TIP

COMPACT UK series with lift

# VLT160733LIFT-G6

Model	VLT160733LIFT-G6
	0 - 4000 kgf
	16000 kg
	18000 kg
	800 x 3000 mm
	2 x 5.5/11 kW

Compact roller brake tester with integrated axle lift for replacing your existing VLT brake tester without the need for extensive ground work. By using adapter frame [VLTBIF16278](#) the roller beds are placed in your existing sub frame.

[VLTBIF16278](#)

Standard features:

- Lifting height 180 mm
- Counter-rotating rollers (4x4 testing)
- Roller locking device
- Axle weighing system
- Applied test function
- 2 testing speeds
- RF remote control unit
- Complete DVSA database

Rollerset dimensions incl. adapterframe with guidings: L x W x H  
1450 x 890 x 640 mm

Replace your old VLT roller brake tester *without axle lift* with a new VLT roller brake tester *with axle lift within 2 working days.*  
No need for extensive ground work or a new subframe.



1. Old roller beds disconnected and lifted out of the sub frame.
2. Adapter frames lowered in and secured to the existing sub frame.
3. New roller beds with lift installed.





**FULL SIZE series with lift**

## VLT14033LIFT-G6 VLT16233LIFT-G6

Model	14033LIFT-G6	16233LIFT-G6
	0 - 35 kN	0 - 40 kN
	14000 kg	16000 kg
	16000 kg	18000 kg
	845 x 3045 mm (also 800/3100, 900/3100, 1000/3200 mm possible)	
	2 x 11 kW	

VLT14033LIFT-G6

Standard features:

- Main features same as models without lift
- Lifting height 180 mm
- VLT14033: Rear rollers raised 60 mm
- VLT16233: All rollers at +40 mm

Rollerset dimensions: L x W x H  
1450 x 890 x 750 mm



VLT16233LIFT-G6



## Options and accessories for VLT14/16x33 series

- **VLTIO16132**

Two measuring directions, with or without second readout cabinet (not for raised rear rollers)



VLTIO16132

- **VLTP1032**

Pedal force transducer with integrated amplifier and 12 meter cable (54)



VLTP1032

- **VLTP1063**

Air pressure transducers with cable (54)



VLTP1764/20

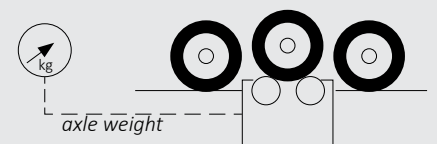
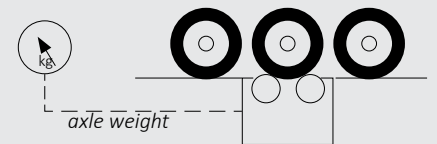
- **VLTP1734/20**

RF Air pressure transducers (54)



## Why lift the axle?

- **Fast**  
Brake test is controlled completely from the cabin of the vehicle, including raising and lowering the lift.
- **Easy**  
Simply increase the axle weight with the lift.
- **Shorter testing time**  
Legally required pressure factor can be reached sooner.





**FULL SIZE series with lift for pendle axles**

## VLT16233LIFT/PA-G6

Model	VLT16233LIFT/PA-G6
	0 - 40 kN
	16000 kg
	20000 kg
	Depends on sub frame
	2 x 11 kW

Standard features:

- Counter-rotating rollers (4x4 testing)
- Roller locking device
- Axle weighing system. Integrated axle lift
- 2 Testing speeds
- 2 Middle rollers per side, slip detection for each wheel separately
- Lifting height 180 mm
- Rollers 260 x 1100 mm

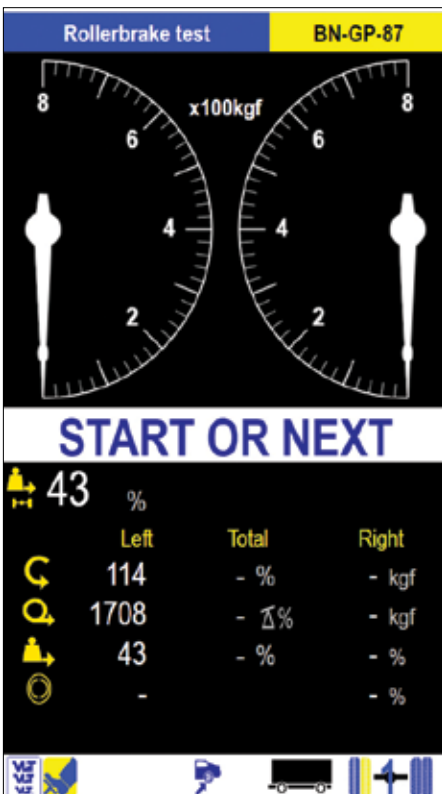




FULL SIZE UK series with lift for pendle axles

### VLT20733LIFT/PA-G6

Model	VLT20733LIFT/PA-G6
	0 - 5000 kgf
	20000 kg
	24000 kg
	845 x 3045 mm (rollers 1400 mm)
	2 x 5.5 / 11 kW



inner left wheel locked during brake test

Pendle axle trailers are mostly used for extremely heavy loads. So, it speaks for itself that the brakes of those trailers must be in optimum condition.

The VLT brake testers with split middle rollers were made especially for that purpose. Each wheel of a pendle axle pair has its own independent brake. The split middle rollers can detect the locking of a single wheel and will stop the rollers immediately to prevent tyre wear.

**FULL SIZE UK series with lift**

## VLT16733LIFT/G6

Model	VLT16733LIFT-G6
	0 - 4000 kgf
	16000 kg
	20000 kg
	845 x 3045 mm
	2 x 5.5 / 11 kW

All the same features of the standard VLT16733-G6 model, as used by the DVSA and many other MOT testing facilities, but with the added benefits of the lifting system (increase axle load quickly from the cabin of the vehicle)

- Lifting height 180 mm
- Lifting capacity 20000 kg
- Use as full load simulator by tying down the axle/chassis

Rollerset dimensions: L x W x H  
1450 x 890 x 750 mm



Extra heavy duty model:

- 24 Tonnes axle weight
- Axle lifting system
- Test width 400 x 4000 mm (Rollers 260 x 1800 mm)



## Miscellaneous accessories



**VLTB14035**  
Floor stand for hydraulic pump unit

**VLTB14035**



**VLTB14036**  
Floor stand for relay/controller box

**VLTB14036**

## Sub frames for full size roller brake testers with lift

### ■ VLTBIF16276

Sub frame for non-pit installation  
With attachment brackets for load simulator cylinders

**VLTBIF16276**: 845 x 3045 mm

**VLTBIF16276/R1400/30**: 300 x 3100 mm (1400 mm rollers)

**VLTBIF16276/R1400/40**: 400 x 3200 mm (1400 mm rollers)

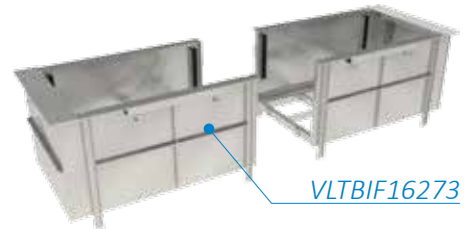


**VLTBIF16276**

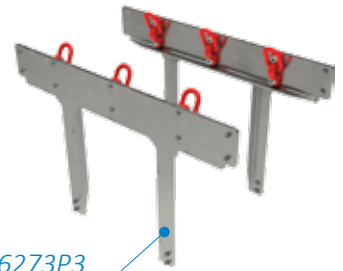
### ■ VLTBIF16273

Sub frame for installation over inspection pit.

Available for different test widths



**VLTBIF16273**



### ■ VLTBZ16273P3

Tie down frame for load simulation, for VLTBIF16273 sub frames

VLTBZ16273P3FR = frame only

VLTBZ16273P3ACC = accessories only



**VLTKB16603**  
Professional grade usb pc keyboard, dustproof, waterproof (IP65).



**VLTKB16604**  
Professional grade usb pc mouse, dustproof, waterproof (IP66).



[VLTM100929/32/W](#)



[VLTM100929/43/W](#)

### Widescreen monitors

[VLTM100929/32/W](#)

(display area 698 x 393 mm)

[VLTM100929/43/W](#)

(display area 941 x 529 mm)

All models are professional grade led monitors, designed for 24/7 use. High luminance, non-glare panels. Full HD resolution 4K.

[VLTM100929/22/W](#)



[RTB08306](#)

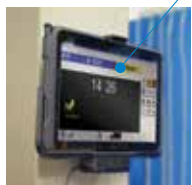
[VLTKB16603](#)

[VLTKB16604](#)

[VLTB08306](#) (complete set)

Wall mount, including 22" monitor, professional keyboard and mouse and 15 m cable set. Adjustable height, rotation and tilt.

[VLTTB0928/01](#)



[VLTTB0928/02](#)



[VLTTB0928](#)

Professional grade tablet 10.1" with stylus pen, 1920 x 1200 resolution

[VLTTB0928/01](#)

Tablet holder/charger station

[VLTTB0928/02](#)

Docking station with keyboard

[VLTB08307](#)



[VLTB08307](#)

Steel, powder coated entry console with fold-away lockable keyboard shelf, lockable door, 2 shelves inside, 4 adjustable feet.

Dimensions 1770 x 750 x 330 mm. Including 22" monitor, professional keyboard and mouse, 15 m cables.

### Monitor covers and mountings

[VLTM08301](#)

(for VLTM10029/43/W)

[VLTM08302](#)

(for VLTM10029/32/W)

VLTM08302 can be used in portrait and landscape orientation. Both covers can be used with all mounts.

[VLTM08303](#)

(for VLTM10029/43/W)

Fully closed metal casing with transparent window, for outside use

[VLTB08304 / VLTB08305](#)

Galvanised steel pedestal for monitor, 2 metres/3 metres high. Monitor can be fitted at any height on the pedestal.

[VLTB08303/EXT](#)

Galvanised steel wall mount for 32" or 43" monitor.

Monitor can be rotated up to 180° (max angle depends on monitor size and orientation).

[VLTB08309](#)

Angled mounting plate for mounting to truss beam.

[VLTM08302](#)



[VLTM08303](#)

[VLTM08301](#)

[VLTB08309](#)



[VLTB08303/EXT](#)

[VLTB08304 / VLTB08305](#)



## VLT-R/O-C1

VLTM100929/43/W monitor 43"  
 VLTM08301 monitor cover  
 VLTB08303 wall mount, or  
 VLTB08304 pedestal 2 mtr, or  
 VLTB08305 pedestal 3 mtr

## VLT-R/O-C1+TB

VLTM100929/43/W monitor 43"  
 VLTM08301 monitor cover  
 VLTB08303 wall mount, or  
 VLTB08304 pedestal 2 mtr, or  
 VLTB08305 pedestal 3 mtr  
 VLTB0928 toughpad  
 VLTB0928/01 toughpad holder  
 VLTB0928/02 docking station

## VLT-R/O-C3

VLTM100929/32/W monitor 32"  
 VLTM08302 monitor cover  
 VLTB08303 wall mount  
 VLTB08307 entry console

## VLT-R/O-C4

VLTM100929/43/W monitor 43"  
 VLTM08301 monitor cover  
 VLTB08303 wall mount, or  
 VLTB08304 pedestal 2 mtr, or  
 VLTB08305 pedestal 3 mtr  
 VLTB08307 entry console

## VLT-R/O-C4+TB

VLTM100929/43/W monitor 43"  
 VLTM08301 monitor cover  
 VLTB08303 wall mount, or  
 VLTB08304 pedestal 2 mtr, or  
 VLTB08305 pedestal 3 mtr  
 VLTB08307 entry console  
 VLTB0928 toughpad  
 VLTB0928/01 toughpad holder  
 VLTB0928/02 docking station

## VLT-R/O-C6

VLTM100929/32/W monitor 32"  
 VLTM08302 monitor cover  
 VLTB08303 wall mount or  
 VLTB08304 pedestal 2 mtr  
 VLTB08307 entry console  
 VLTB0928 toughpad  
 VLTB0928/01 toughpad holder  
 VLTB0928/02 docking station





**VLT18631/5M**

Standard load simulator

**VLT18631/5M/UK**

UK spec load simulator

**VLT18631/CON/UK**

UK MOD spec load simulator

**VLT18531/5M**

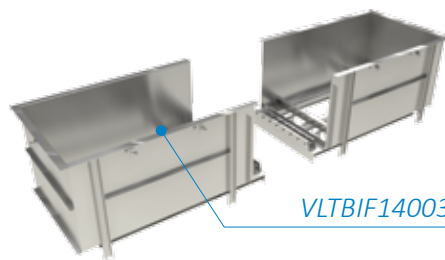
Load simulator for use in combination with VLT9054 series play detector (shared pump unit).

The desired axle weight is controlled with the remote control of the brake tester, coupled to the RBT axle weighing system.

- Cylinder stroke 250 mm
- Pulling force: 1000- 10000 kg
- Includes 2 double-acting hydraulic cylinders, electronic pressure control, chains/belts, hydraulic pump unit

**VLT18631/5M**

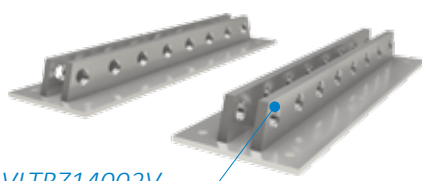
Pulling cylinders can be used with sub frames VLTBIF14003 and VLTBIF13003/C550 (for compact series brake testers).



VLTBIF14003

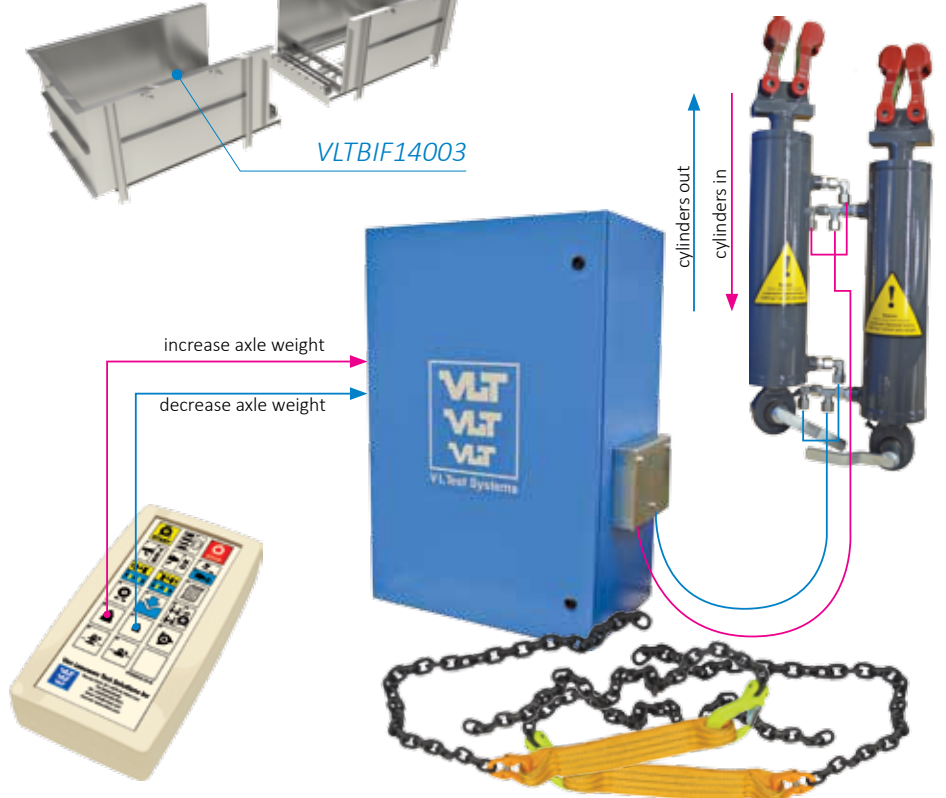


VLTBZ14002W



VLTBZ14002V

If you do not have a sub frame with cylinder attachment brackets, you can use **VLTBZ14002W** brackets that must be bolted to the pit wall, or **RTA14002V** for bolting to the pit floor.





Agricultural and similar vehicles

## VLT16833/AGRI-G6

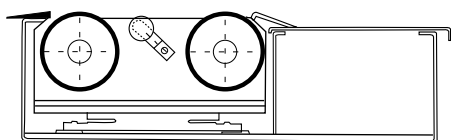
Model	VLT16833/AGRI-G6
	0 - 40 kN
	16000 kg
	20000 kg
	700 x 3500 mm
	2 x 11 kW



Special roller brake tester for vehicles with large wheels, such as agricultural vehicles, or road working equipment like wheel loaders and scrapers.

Roller distance increased to allow for the bigger wheels.

- Min./max wheel diameter  
ø800 / ø2500 mm
- In-ground installation with sub frame, or above ground installation (ramps required)





## Brake and suspension tester for light vehicles, on tow trailer



Note: All mobile testing equipment is tailor made. No standard product.

## Brake tester for heavy vehicles, for use in mobile systems



← Two different loading/unloading approaches by our customers →



Model	VLT16233/ABGR-G6
	0 - 40 kN
	16000 kg
	20000 kg
	800 x 3000 mm
	2 x 11 kW

Optional axle lift, 150 mm lifting height



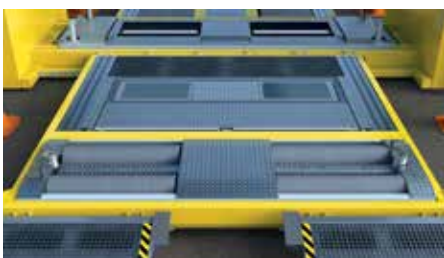
Mobile vehicle inspection station on a 2-axle semi-trailer.

The following equipment can be integrated:

- Roller brake tester 16 ton, with lift
- Suspension tester
- Side slip tester
- Speedometer/taximeter tester
- Wheel play detector
- Emission/diesel smoke analyser
- Particle counter
- Headlight beam tester
- Visual inspection tablet

Comes complete with:

- Power generator
- Office space
- Steered axles with remote control



## Complete mobile inspection station





VLTPT1032

### VLTPT1032

Pedal force transducer

- Connects to the VLT roller brake tester directly, or via junction box (in combination with air pressure transducers VLTPT1063)
- Measuring range 0- 1000 N
- Cable length 12 m
- Amplifier converts signal to amps to minimise signal level drop in long cables



VLTPT1029B

### VLTPT1029B

Pedal force transducer

- Stand-alone (does not connect to the roller brake tester)
- Measuring range 0- 1000 N



VLTPT1063

### VLTPT1063

Air pressure transducer

- Connects to the roller brake tester via junction box
- Connect up to 10 transducers
- Measuring range 0- 20 bar
- Cable length 12 m
- Amplifier converts signal to amps to minimise signal level drop in long cables



Junction box

Complete sets available:

[VLTPT1032-63](#) Junction box +

VLTPT1032 + VLTPT1063

[VLTPT1032-63-63](#) Junction box +

VLTPT1032 + 2x VLTPT1063

[VLTPT1032-63-63-63](#) Junction box +

VLTPT1032 + 3x VLTPT1063

[VLTPT1063-63](#) Junction box + 2x

VLTPT1063

[VLTPT1063-63-63](#) Junction box + 3x

VLTPT1063





Wireless (RF) pedal force and air pressure transducer sets  
0- 1000 N / 0- 20 bar

### VLTP1772/20

- Charger station
- RF receiver
- 2x Air pressure transducer
- Cable set

### VLTP1773/20

- Charger station
- RF receiver
- 3x Air pressure transducer
- Cable set

### VLTP1774/20

- Charger station
- RF receiver
- 4x Air pressure transducer
- Cable set

### VLTP1775/20

- Charger station
- RF receiver
- 5x Air pressure transducer
- Cable set

### VLTP1783/20

- Charger station
- RF receiver
- 2x Air pressure transducer
- 1x Pedal force transducer
- Cable set

### VLTP1784/20

- Charger station
- RF receiver
- 3x Air pressure transducer
- 1x Pedal force transducer
- Cable set

### VLTP1785/20

- Charger station
- RF receiver
- 4x Air pressure transducer
- 1x Pedal force transducer
- Cable set



VLTP1784/20



VLT1764/20

VLTP1734/100





## Roller brake tester for motorcycles

### VLT0573-G6

Model	VLT0573-G6
	0 - 4 kN
	750 kg
	1000 kg
	3.8 kW

- Axle weighing
- RF remote control
- Optional hydraulic wheel clamping devices available; fixed clamp (VLTAM0554) and a model with alignment measurement capability (VLTAM0553)



VLTBIC0576

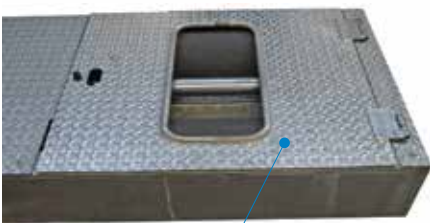
Sub frame for roller brake tester only

VLTBIF0556

Sub frame for roller brake tester with 2 clamps

VLTBIF0557

Sub frame for roller brake tester with 2 rigid clamps and 1 moving clamp for measuring alignment



VLTA501108MC

Cover plates set for performing motorcycle brake tests on a VLT42/5200 series roller brake tester for cars

Roller brake tester with 2 clamps







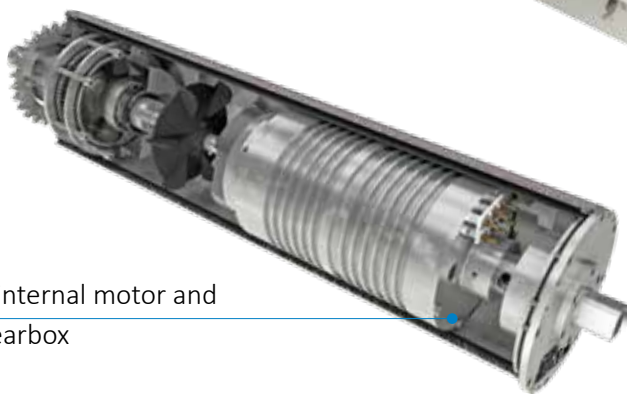
Roller brake testers for 2/3/4 wheeled vehicles

## VLT4266-G6

Model	VLT4266-G6
	0 - 10 kN
	390 x 2300 mm
	2000 kg (1000 kg/wheel)
	3000 kg
	5 kW



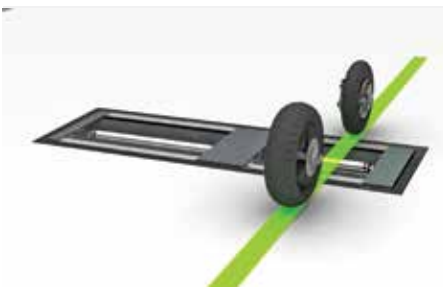
The solution with one short and one long roller pair on this brake tester makes that you can test motorcycles (also with side cars), scooters, trikes, tuk-tuks, quads, cars, taxi's, etc.  
Rollers 220 x 860 mm + 220 x 1050 mm



rollers with internal motor and planetary gearbox



VLTBIC4209/730



2 wheeled vehicles



3 wheeled vehicles



4 wheeled vehicles



## [VLT CAR2106](#)

Overrun brake simulator

The overrun brake simulator is used to test the overrun brake of a caravan or trailer. The simulator also keeps the caravan/trailer in place on the brake tester rollers. The overrun force is applied manually and is indicated on the brake tester readout. The simulator is locked in place on a rail that is cast in the concrete floor.

### Options

#### [VLT322146](#)

Auto-reverse brake test

#### [VLT322106](#)

Weigh bridge function

#### [VLTBIC2109-...](#) (required)

Rail for sawing in existing concrete floor

Available in 4, 5, 6 or 8 metres

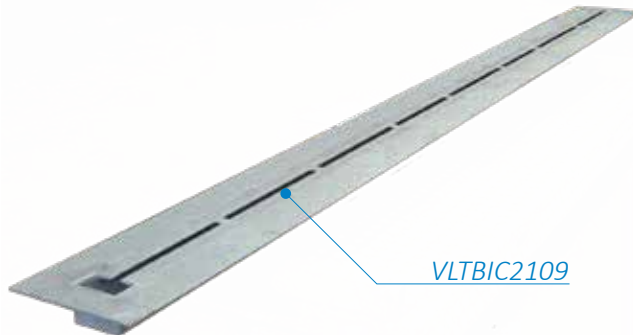
#### [VLTBIC2109-400](#)

#### [VLTBIC2109-500](#)

#### [VLTBIC2109-600](#)

#### [VLTBIC2109-800](#)

[VLT CAR2106](#)



[VLTBIC2109](#)

[VLT CAR2810](#)



## [VLT CAR2810](#)

Mobile overrun brake simulator

Ideal for testing large numbers of caravans/trailers up to 3500 kg. Collect the trailer on the parking lot and drive it to the brake tester. After the test, drive it back to the parking lot and collect the next one.

No locking rails needed. Works with any VLT brake tester that has the overrun brake testing option.

Coupling: NATO or ball  $\varnothing$ 50mm (interchangeable).

Coupling height: 480 ~ 985 mm.



## VLT4233CAR-G6

Model	VLT04133CAR-G6
	0 - 10 kN
	4000 kg
	5000 kg
	5 kW

Consists of

- VLT4233-G6 Brake tester
- VLTA421106 Drive-over plates
- VLTCAR2106 Overrun brake simulator
- VLTBIC2109-400 Locking rail
- VLT-R/O-C32 32" Monitor set
- VLTKB16504/USB/2X Keyboard
- VLT16595D Laser printer
- VLTBIC4209/880 Closed sub frame



VLT4233CAR-G6



VLT4233LIFT/CAR-G6

### VLT4233LIFT/CAR-G6

Same as VLT4233-G6CAR, but with lifting system under the brake tester

- Lifting capacity 4500 kg
- Lifting height 100 mm

### VLTBIC4210LIFT/880

Special sub frame with lifting system for VLT4233-G6/880/2600 brake tester. Especially useful for testing tandem axle trailers and caravans.

- VLTBIC4210LIFT/880 sub frame
- VLTA4210LIFTING/880 lifting system

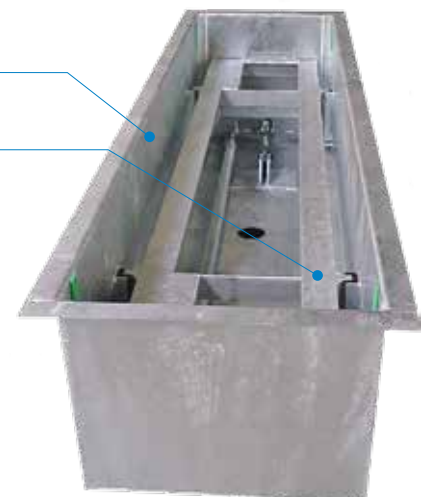
### VLTA4210LIFTING/880

Lifting system for subframe VLTBIC4210LIFT/880.

- Lifting capacity 4500 kg
- Lifting height 100 mm



VLTBIC4209/880



## Van Leeuwen Test Group - Synonymous for quality, durability and ease of use

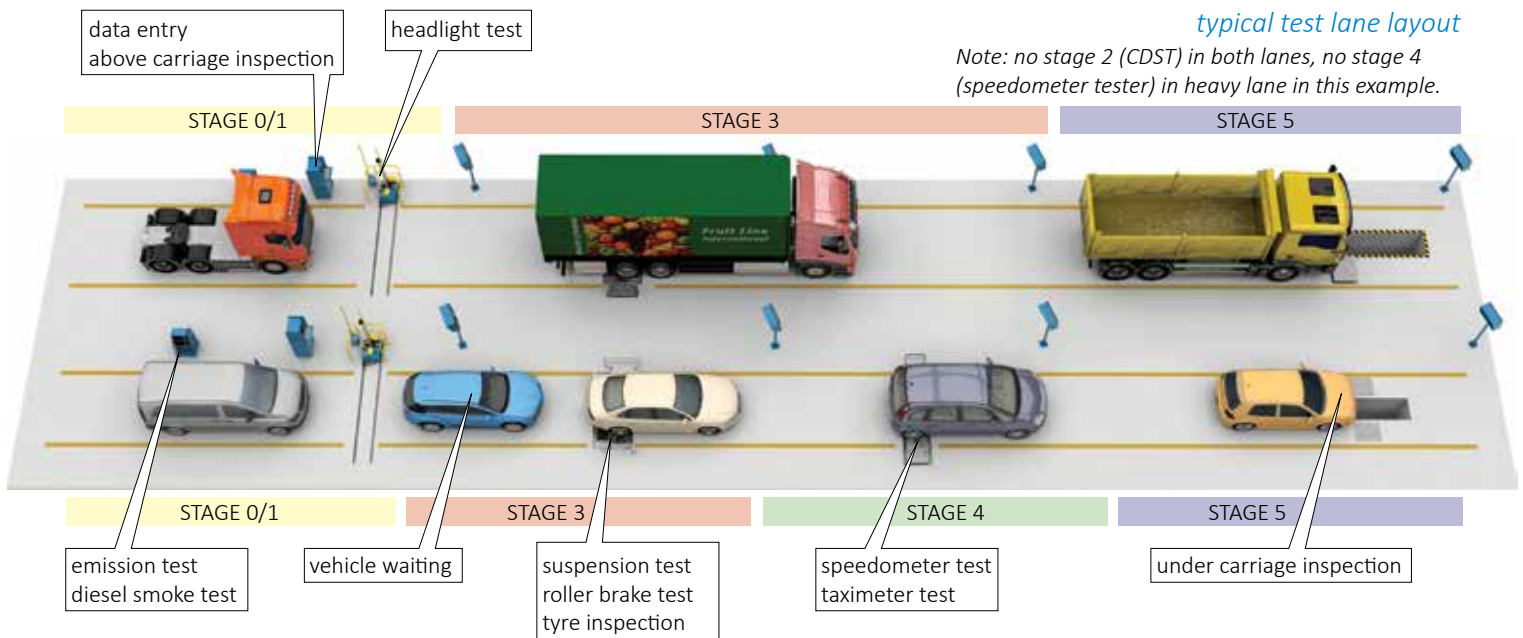
The history of the Van Leeuwen Test Group starts in 1958 in The Netherlands. Since then the VLT brand has become well-known and respected worldwide in the field of vehicle inspection equipment. Product development is quality driven first, price driven second. This may mean that VLT equipment is not the cheapest, but the total cost of ownership is very low.

### INTEGRATED TEST LANES

Besides making stand-alone equipment, VL Test Solutions also integrates equipment in automated test lanes. These lanes are computer controlled and can handle many

vehicles per hour. The high throughput is realised by automating as much as possible and by dividing the test lane into multiple test stages. At any given time there can be a

vehicle in each test stage. This means that each test lane can handle 3 or 4 vehicles simultaneously. All necessary data about a vehicle and its inspection is entered at the



data entry console, or retrieved from a (government) database. By using that information, the vehicle tracking system guides the vehicles through the test lane efficiently. In the case of a re-test the vehicle is directed straight to the location in the test lane where the re-test is to be performed. Most tests are fully automated. Only the visual inspections require decisions from the inspector. The rest is all handled by the VLT inspection software. This ensures consistent and fair test results.

### VLT GRIT EPOXY ROLLER COATING

The grit epoxy coating was developed by VL Test Solutions. It has some unique characteristics.

- It is extremely durable
- A lifespan of more than 20 years at normal use (garages)
- Over 10 years for very intensive use (inspection stations with up to 200 vehicles per brake tester per day)
- High quality & performance
- The concept and production process guarantee minimal tolerances of the outer roller diameter
- High brake forces are obtained, even in wet conditions
- Minimal tyre wear

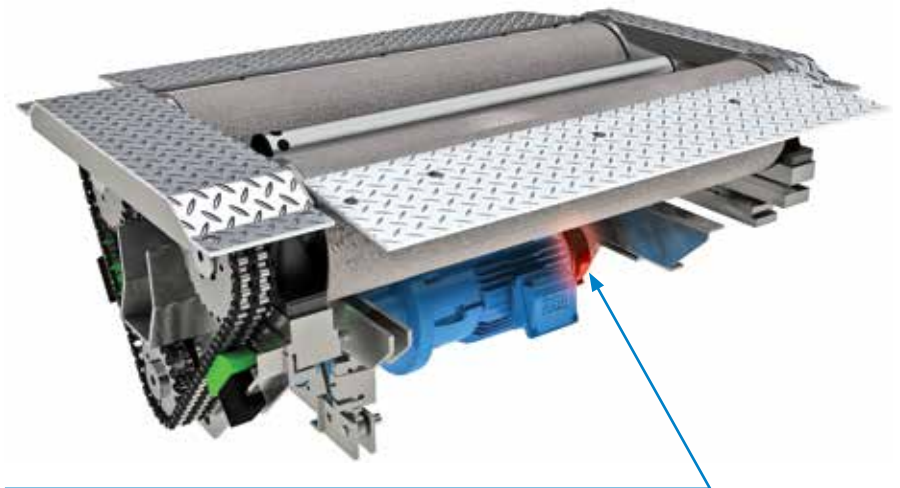


### MECHANICAL ROLLER LOCKING

The mechanical roller locking system (motor brake) makes sure that the rollers are always locked, unless a brake test is in progress.

#### Advantages

- Driving onto and off the rollers very easily (essential for vehicles with automatic transmission and rear wheel drive)
- Does not require elaborate electronic provisions e.g. to prevent peak voltages
- Makes passing over the rollers very quick and easy, without the need for a (slow) axle lift



### INDUSTRIAL PROCESSORS

VL Test Solutions uses industrial processors for the core functionality of all machines. These processors are very well suited for work shop environments, where temperature changes, dust, etcetera are normal. Also, their technology has a much longer lifespan than pc's. VL Test Solutions processors have proven to last more than 20 years.



## BRAKE TESTER ROLLERS WITH INTEGRATED DRIVE UNIT

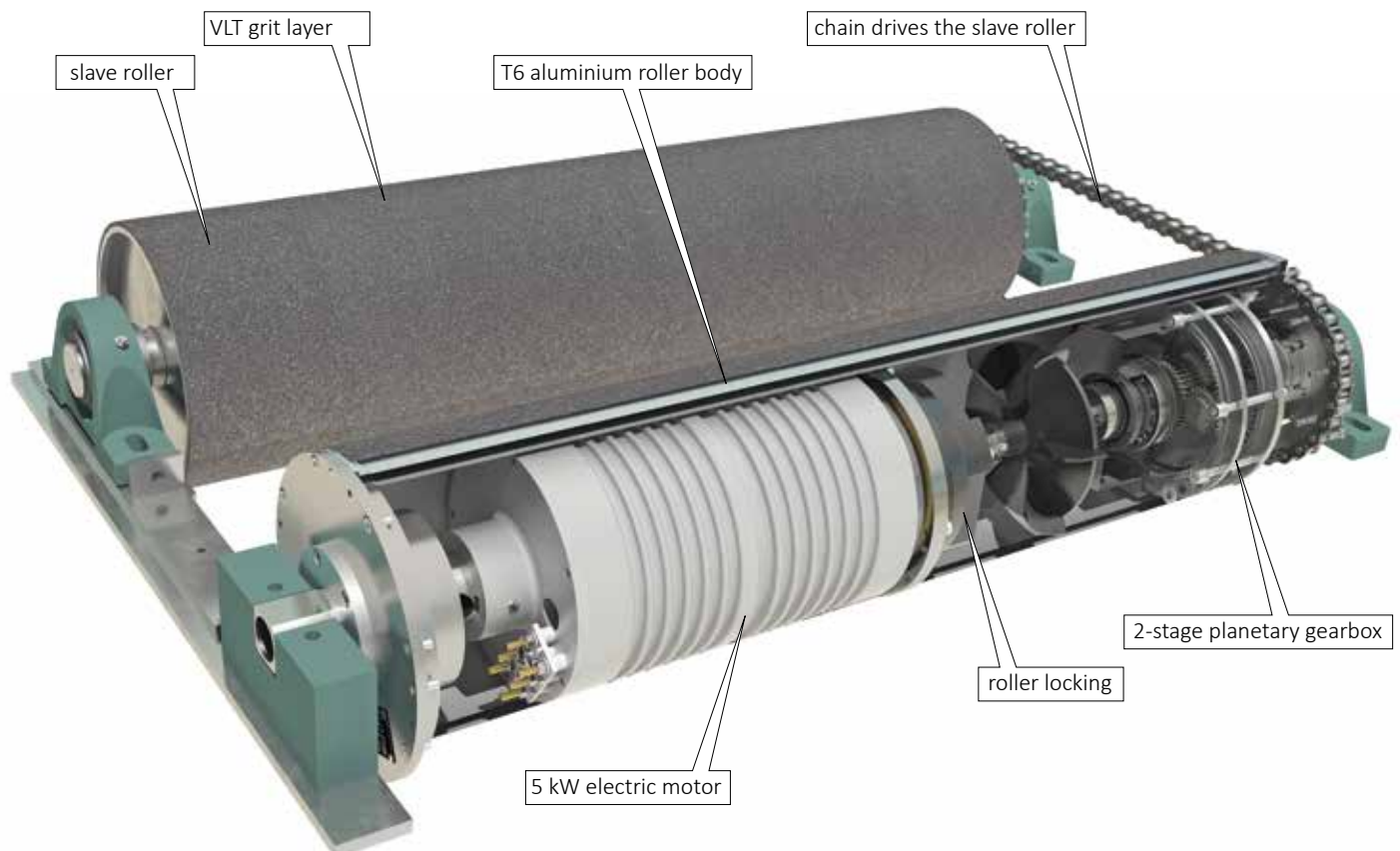
Another VL Test innovation is the brake tester roller with internal drive unit. These rollers are available for brake testers for axle weights up to 5 tonnes.

### Advantages

- No loss of measured brake force due to misalignment of components
- Very accurate measurement
- Rollers coated with the well-known VLT grit layer to ensure correct brake forces, even with wet tyres/rollers
- Internal wear of the internal drive system (motor, gearbox) is compensated
- Suitable for testing electro-mechanical brake systems (applied test)
- High IP65 protection class
- Roller locking device option
- Very compact construction
- Low maintenance
- Roller body made of high grade T6 aluminium (no corrosion that can damage the grit layer; a damaged grit layer does not cause corrosion to the roller body)

### How do we know it is strong enough?

We put a Scania truck (5500 kg axle weight) on the rollers of a 4 tonnes brake tester and let it perform a brake test once every minute for 72 hours straight. That amounts to 4320 brake tests in 3 days. Result? No problems whatsoever.





### STAGE 4

SPEEDOMETER/TAXIMETER TESTERS

- Speedometer testers ..... 64
- Taximeter testers ..... 64



## Speedometer Testers (VLx885-G6)

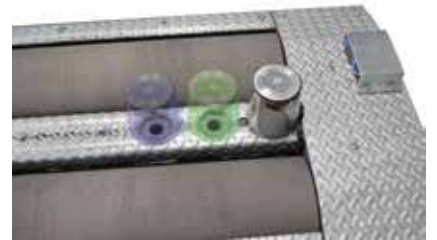
- All rollers flame sprayed with 17% chrome
- Hydraulic axle lift for easy drive-in/out
- Rollers locked when axle lift is up
- Side rollers to prevent vehicle from accidentally moving too far to the side
- RF remote control
- Models for 3000, 12000, 14000 kg axle weight and for motorcycles



VLT3885T-G6

## Extensions (for VLT3885-G6)

- VLT3885T-G6, incl. taximeter testing software for your national legal requirements and electric motor
- VLT3885TF-G6, incl. taximeter testing software for your national legal requirements and electric motor + frequency control



Side protection rollers can be placed in different positions to adjust for the width of the vehicle.





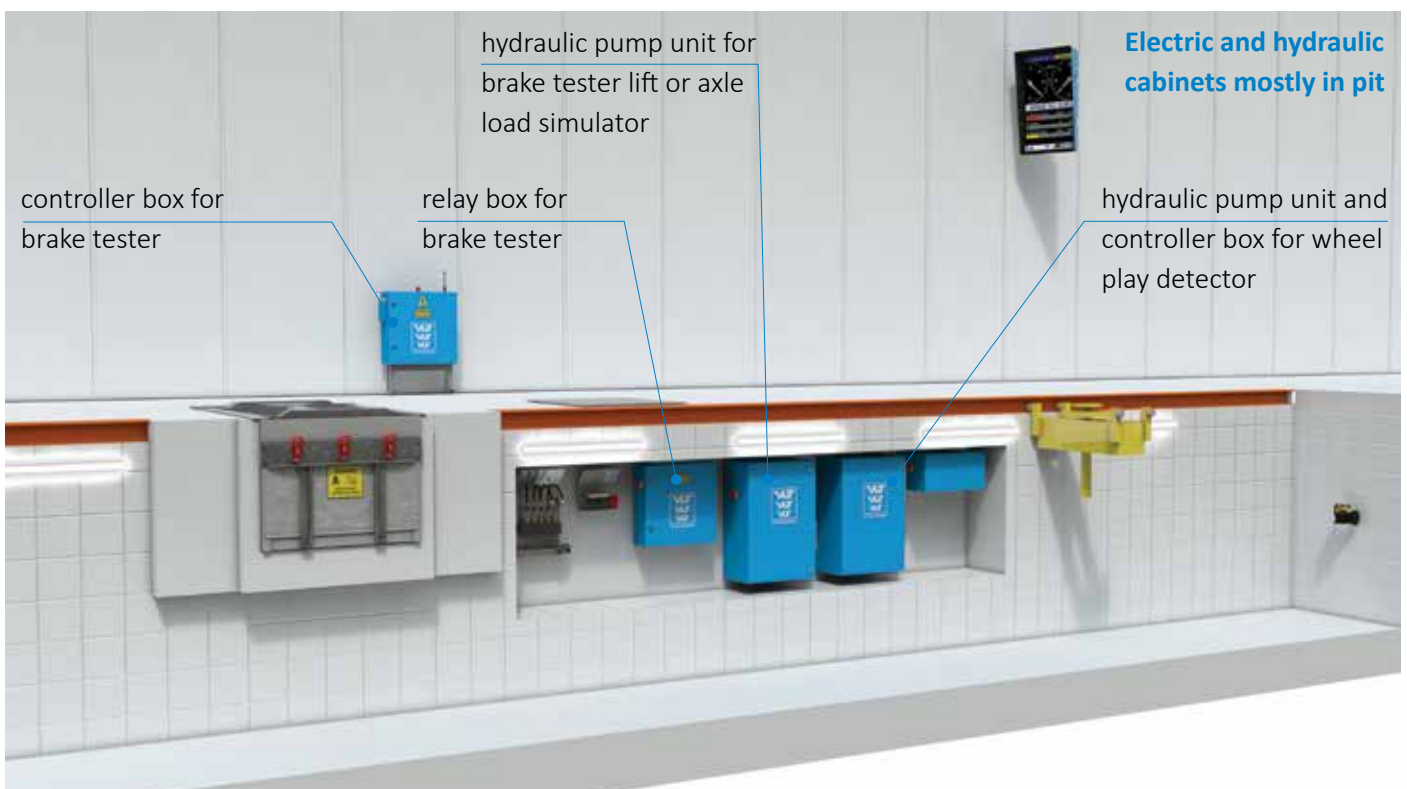
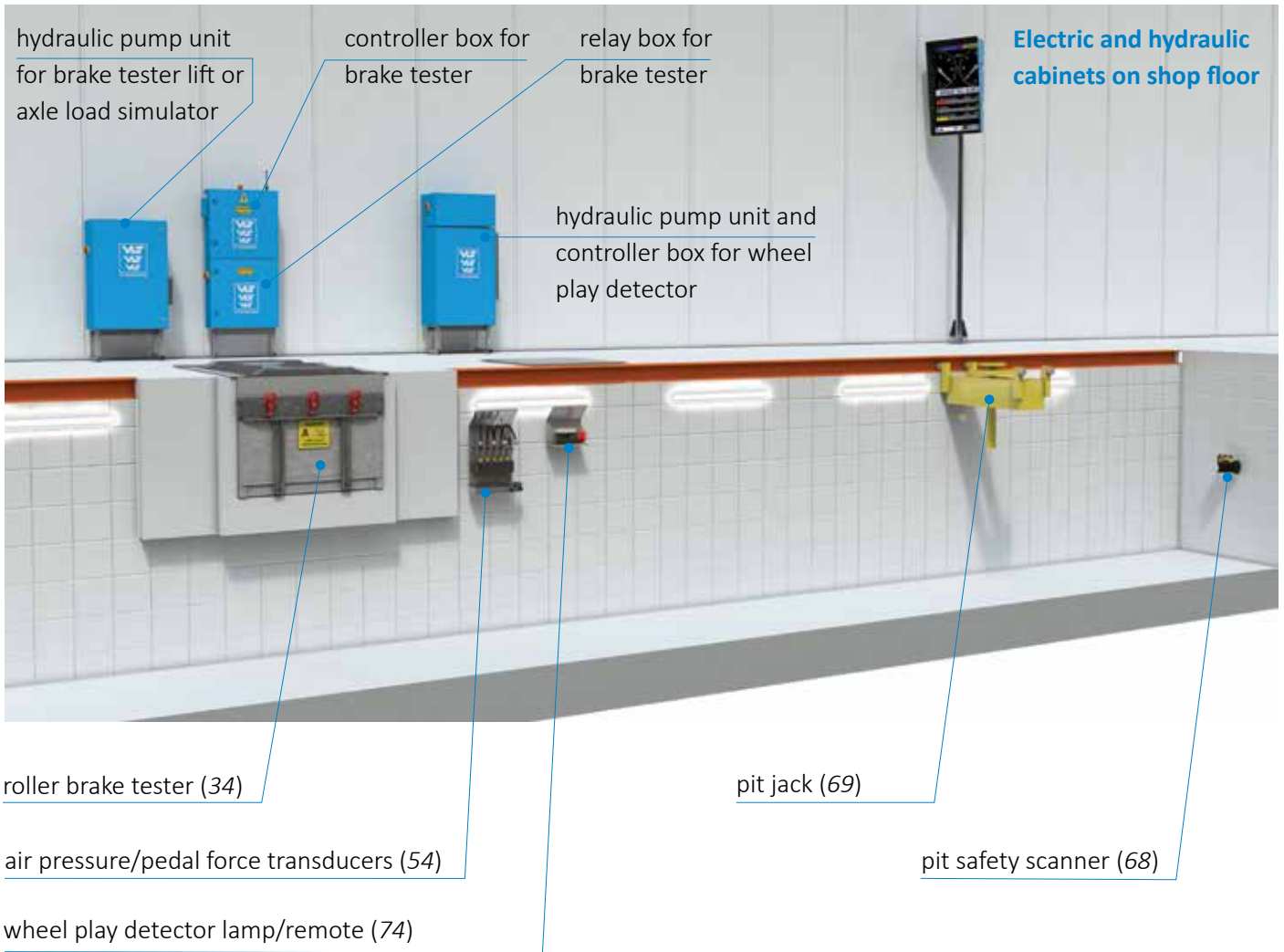


## STAGE 5

### UNDER CARRIAGE AND INSPECTION PIT EQUIPMENT

- Inspection pit ideas ..... 66
- Inspector lifts..... 68
- Pit safety scanner ..... 68
- Pit jacks ..... 69
- Wheel play detectors ..... 73
- Report printers ..... 75







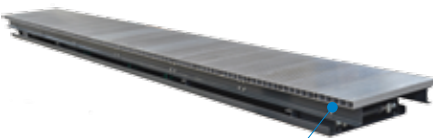


## VL Test Inspector lifts

To make it easier for inspectors to work in inspection pits, VL Test offers hydraulic pit lifts. An inspector can raise the lift to the height that is best for him to work at.

When the pit is not in use the lift can be raised to floor level for safety reasons.

- Hydraulic lift
- Spring-activated safety locking mechanism
- Foot or hand operated switches
- 500 kg load capacity
- Different sizes available
- With or without steps
- 8 or 10 m Length, 2 m height, 0.75 m width



[VLTPIL10880/75/2000](#)



[VLTPIL8880/75/2000](#)



## VLTPSS2019

Pit safety system

Laser scanner for detecting objects and persons in an inspection pit.

- Safety range 8.4 m. The brake tester will stop if a person enters the safety range.
- Warning range 26 m
- Scanning angle >180°
- All ranges can be adjusted (size and shape)

[VLTPSS2019](#)

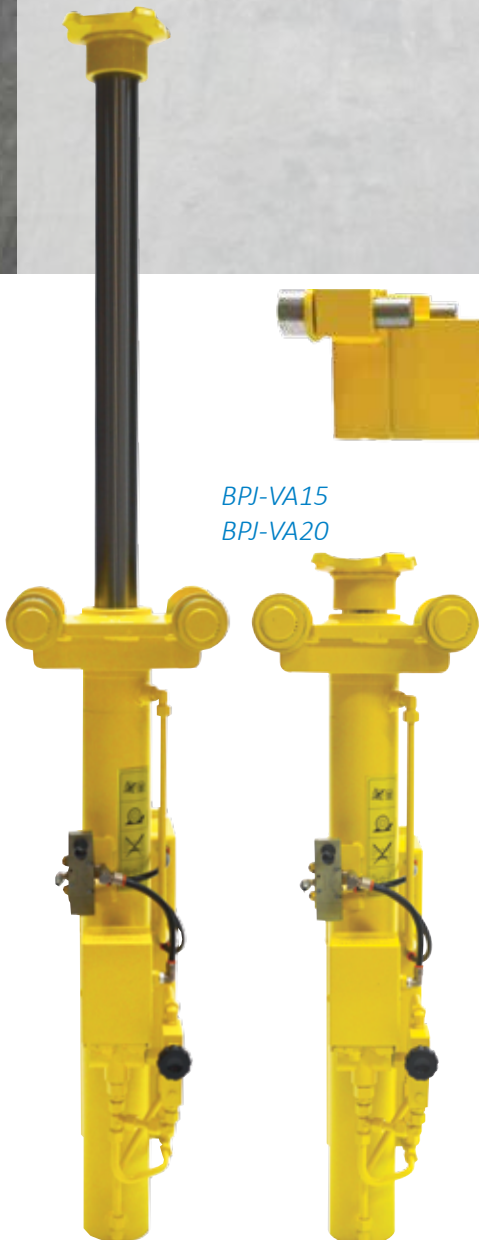


## BPJ-VA15

- Lifting capacity 15000 kg
- Stroke 770 mm
- Pneumatic-hydraulic operation
- Working pressure 10 bar
- Tilt prevention system
- Pressure relief valve

## BPJ-VA20

- Lifting capacity 20000 kg
- Stroke 770 mm
- Pneumatic-hydraulic operation
- Working pressure 10 bar
- Tilt prevention system
- Pressure relief valve



BPJ-VA15  
BPJ-VA20

BPJA-VAW15  
BPJA-VAW20



## BPJA-VAW15

- Carriage for BPJ-VA15
- Custom made to pit size
- Rollers  $\varnothing 65$  mm with double needle bearings, or wheels  $\varnothing 105$  mm with double ball bearings

## BPJA-VAW20

- Carriage for BPJ-VA20
- Custom made to pit size
- Rollers  $\varnothing 65$  mm with double needle bearings, or wheels  $\varnothing 105$  mm with double ball bearings





*BPJP-VA20*

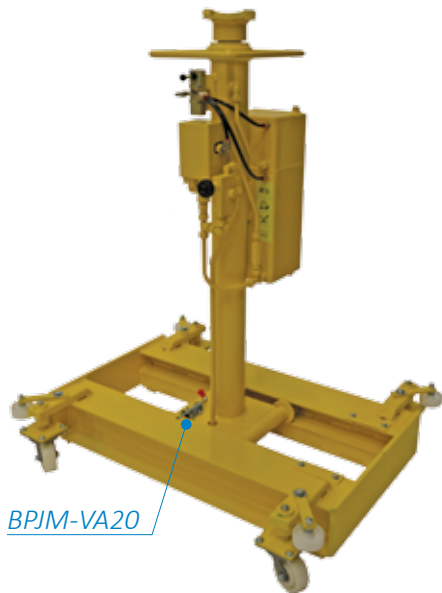
- Lifting capacity 20000 kg
- Stroke 750 mm
- High lifting/lowering speed
- Mechanical position lock
- Required pit depth min. 1400 mm
- Working pressure 10 bar
- Pressure relief valve
- Does not block you from moving through the pit
- Including accessories





## BPJM-VA20

- Lifting capacity 20000 kg
- Lifting stroke 770 mm
- Working pressure 10 bar
- Minimal height based on pit depth
- Wheels for moving over pit floor
- Also available as extra fast model *BPJ-VA20SS* (6 sec until full load and 15 sec until wheel-free)



BPJM-VA20



## BPJM-VA20SP

- Lifting capacity 20000 kg
- Single cylinder, double acting
- High speed lifting and lowering function
- Maximum stroke always available because frame height is custom made according to pit depth
- Movable over pit floor
- 4 Wheels for moving when not under load, 4 support legs when under load
- Standard dimensions of carriage 750 x 750 mm; other width possible
- Standard colour RAL1023 (yellow)



## BPJM-VA20AP/80SS

- Lifting capacity 20000 kg
- Lifting height based on pit depth
- Wheels for moving over pit floor
- Super speed

## BPJM-VA30

- Lifting capacity 15000 / 30000 kg
- Min/max height 900 / 2200 mm
- Pneumatic (10 bar)/hydraulic operation
- Wheels for moving over pit floor
- Telescopic gearbox charge



**BPJA-KBPx**  
Tiltable gearbox plate  
ø 60 or 70 mm



**BPJA-KP**  
Differential adapter BPJA-KP



**BPJA-VLSxxx**  
Extension piece  
200, 300, 500,  
600 or 700 mm



**BPJA-VLGM**  
Mechanical safety lock bars  
per 75 mm



- BVK-TL2,5VOETKBP**
- Lifting capacity 2500 kg
  - Min/max height 800 - 2100 mm
  - Pneumatic-hydraulic operation
  - Foot pedal for exact height setting
  - Tilting gearbox support plate
  - Including BPJA-KBx



**BPJA-AFZB15**  
Supporting bridge





## VLTWPD9032

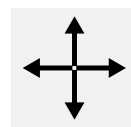
- Max axle weight: 5000 kg
- Hor. force: 18000 N per plate
- Stroke: 70 mm
- Plate dimensions: 590 x 720 mm
- Movements: longitudinal

## VLTWPD9036

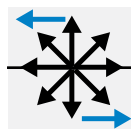
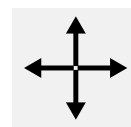
- Max axle weight: 5000 kg
- Hor. force: 18000 N per plate
- Stroke: 70 mm
- Plate dimensions: 590 x 720 mm
- Movements: longitudinal + diagonal + steering
- Automated program cycles

## VLTWPD903629

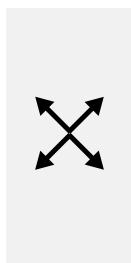
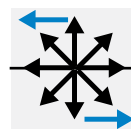
- Max axle weight: 5000 kg
- Hor. force: 18000 N per plate
- Stroke: 70 mm
- Plate dimensions: 590 x 720 mm
- Movements: longitudinal + diagonal + steering
- Automated program cycles
- Rear plate set with diagonal movements



VLTWPD9032



VLTWPD9036



VLTWPD903629



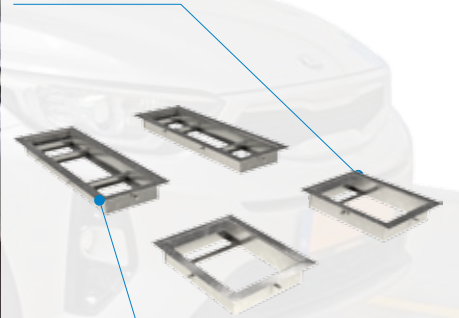
radio frequency



rear plate set

Sub frame for VLTWPD9032:

[VLTBIF9003](#): set of 2 sub frames



[VLTBIF9008](#): set of 2 sub frames for rear plates (for VLTWPD903629)



### VLTWPD9143

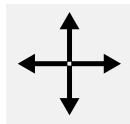
- Max axle weight: 20000 kg
- Hor. force: 30000 N per plate
- Stroke: 100 mm
- Plate dimensions: 850 x 1000 mm
- Movements: longitudinal

### Extra on VLTWPD9152

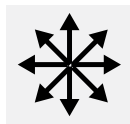
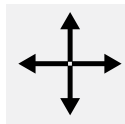
- Max axle weight: 20000 kg
- Hor. force: 30000 N per plate
- Stroke: 100 mm
- Plate dimensions: 850 x 1000 mm
- Movements: longitudinal + diagonal
- Automated program cycles

### VLTWPD9752

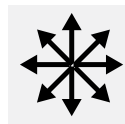
- Same as VLTWPD9152, but extra compact hydraulic pump unit for installation in inspection pit.



VLTWPD9143  
VLTWPD9743



VLTWPD9152  
VLTWPD9752



radio frequency

hydraulic pump unit in pit (VLTWPD9752)



VLTBIF9005

Sub frames for all models:

VLTBIF9005: set of 2 sub frames with concrete anchors on 3 sides

VLTBIF9006: set of 2 sub frames with concrete anchors on 4 sides





- Wheel play detector plate units:
- Heavy gauge steel, all galvanised
  - Werkstoff S guidings



## Report Printers



### VLTP16525

- Dot matrix printer
- 24 Pins
- 80 Columns
- Suitable for continuous paper (A4)



### VLTP16655D

- Laser printer
- A4
- Double sided
- Monochrome



*VLT-SW-NL-APK2/2,5t*  
*VLT-SW-NL-APK2/5t*

Software for brake testers up to 2500 or 5000 kg axle weight, consisting of

- Basic software light vehicles
- Measurement according to Dutch regulations (RDW)
- Dutch language
- 4x4 option
- Pedal force measurement option

*VLT-SW-NL-APK2/5t-CAR-Lift*

Software for brake testers up to 5000 kg axle weight, consisting of

- Basic software light vehicles
- Measurement according to Dutch regulations (RDW)
- Dutch language
- 4x4 Ooption
- Pedal force measurement option
- Trailer/caravan testing with lift/axle load simulator

*VLT-SW-NL-APK1/14t*  
*VLT-SW-NL-APK1/16t*

Software for brake testers up to 14000 or 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Dutch regulations (RDW)
- Dutch language
- 4x4 Option
- Pedal force measurement option
- Air pressure measurement option

*VLT-SW-NL-APK1/14t-Lift*  
*VLT-SW-NL-APK1/16t-Lift*

Software for brake testers up to 14000 or 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Dutch regulations (RDW)
- Dutch language
- 4x4 Ooption
- Pedal force measurement option
- Air pressure measurement option
- Axle lift/axle load simulation option



*VLT-SW-BE-PTI/2,5t*  
*VLT-SW-BE-PTI/5t*

Software for brake testers up to 2500 or 5000 kg axle weight, consisting of

- Basic software light vehicles
- Measurement according to Belgian regulations (BIVV, GOCA)
- Dutch and French language
- 4x4 Option
- Pedal force measurement option

*VLT-SW-BE-PTI/14t*  
*VLT-SW-BE-PTI/16t*

Software for brake testers up to 14000 or 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Belgian regulations (BIVV, GOCA)
- Dutch and French language
- 4x4 Option
- Air pressure measurement option

*VLT-SW-BE-PTI1/14t-Lift*  
*VLT-SW-BE-PTI/16t-Lift*

Software for brake testers up to 14000 or 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Belgian regulations (BIVV, GOCA)
- Dutch and French language
- 4x4 Option
- Air pressure measurement option
- Axle lift/axle load simulation option



## *VLT-SW-UK-MOT/5t*

Software for brake testers up to 5000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to UK regulations (DVSA)
- English language
- 4x4 Option
- Applied test option
- VLT Connect (MTS connection)

## *VLT-SW-UK-MOT/16t*

### *VLT-SW-UK-MOT/20t*

### *VLT-SW-UK-MOT/24t*

Software for brake testers up to 16000, 20000, 24000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to UK regulations (DVSA)
- English language
- 4x4 Option
- Applied test option
- 2 Measuring directions option
- VLT Connect (MTS connection)

## *VLT-SW-UK-MOT/16t-Lift*

Software for brake testers up to 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to UK regulations (DVSA)
- English language
- 4x4 Option
- Applied test option
- 2 Measuring directions option
- Axle lift/axle load simulation option
- VLT Connect (MTS connection)

## *VLT-SW-NIR-PTI/14t*

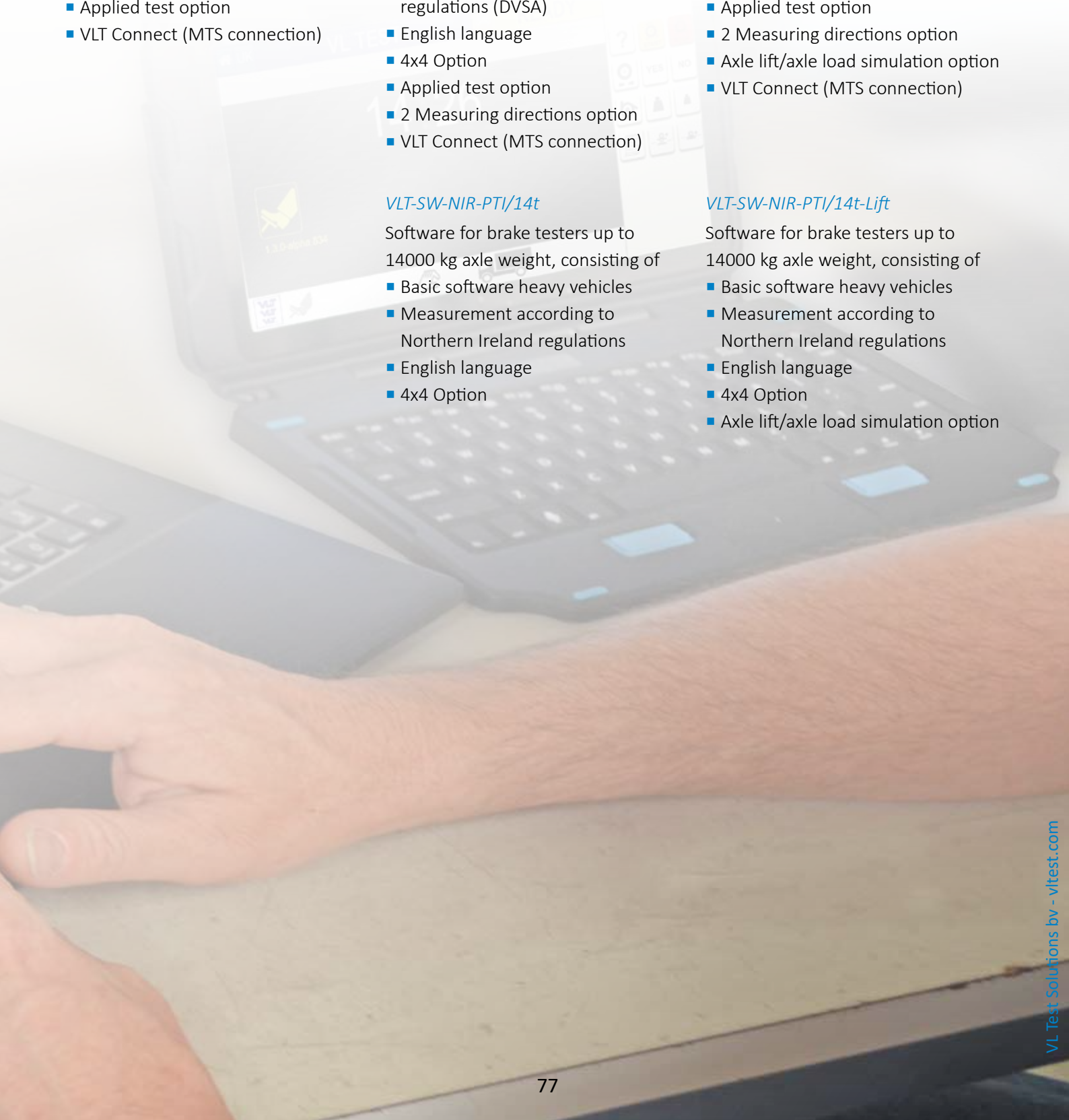
Software for brake testers up to 14000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Northern Ireland regulations
- English language
- 4x4 Option

## *VLT-SW-NIR-PTI/14t-Lift*

Software for brake testers up to 14000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Northern Ireland regulations
- English language
- 4x4 Option
- Axle lift/axle load simulation option





## Universal software versions

*VLT-SW-RO-PTI/2,5t*  
*VLT-SW-RO-PTI/5t*

Same as non-country specific version, but with Romanian language

*VLT-SW-RO-PTI/14t*  
*VLT-SW-RO-PTI/16t*

Same as non-country specific version, but with Romanian language and air pressure measurement option

*VLT-SW-RO-PTI/14t-Lift*  
*VLT-SW-RO-PTI/16t-Lift*

Same as non-country specific version, but with Romanian language and air pressure measurement option

*VLT-SW-CH-PTI/16t*

Software for brake testers up to 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Swiss regulations
- German and French language
- 4x4 Option
- Air pressure measurement option
- Hydraulic pressure measurement option

*VLT-SW-CH-PTI/16t-Lift*

Software for brake testers up to 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to Swiss regulations
- German and French language
- 4x4 Option
- Air pressure measurement option
- Hydraulic pressure measurement option
- Axle lift/axle load simulator option

*VLT-SW-IM-PTI/2,5t*  
*VLT-SW-IM-PTI/5t*

Software for brake testers up to 2500 or 5000 kg axle weight, consisting of

- Basic software light vehicles
- Measurement according to VLT standard regulations
- English language
- 4x4 Option

*VLT-SW-IM-PTI/14t*  
*VLT-SW-IM-PTI/16t*

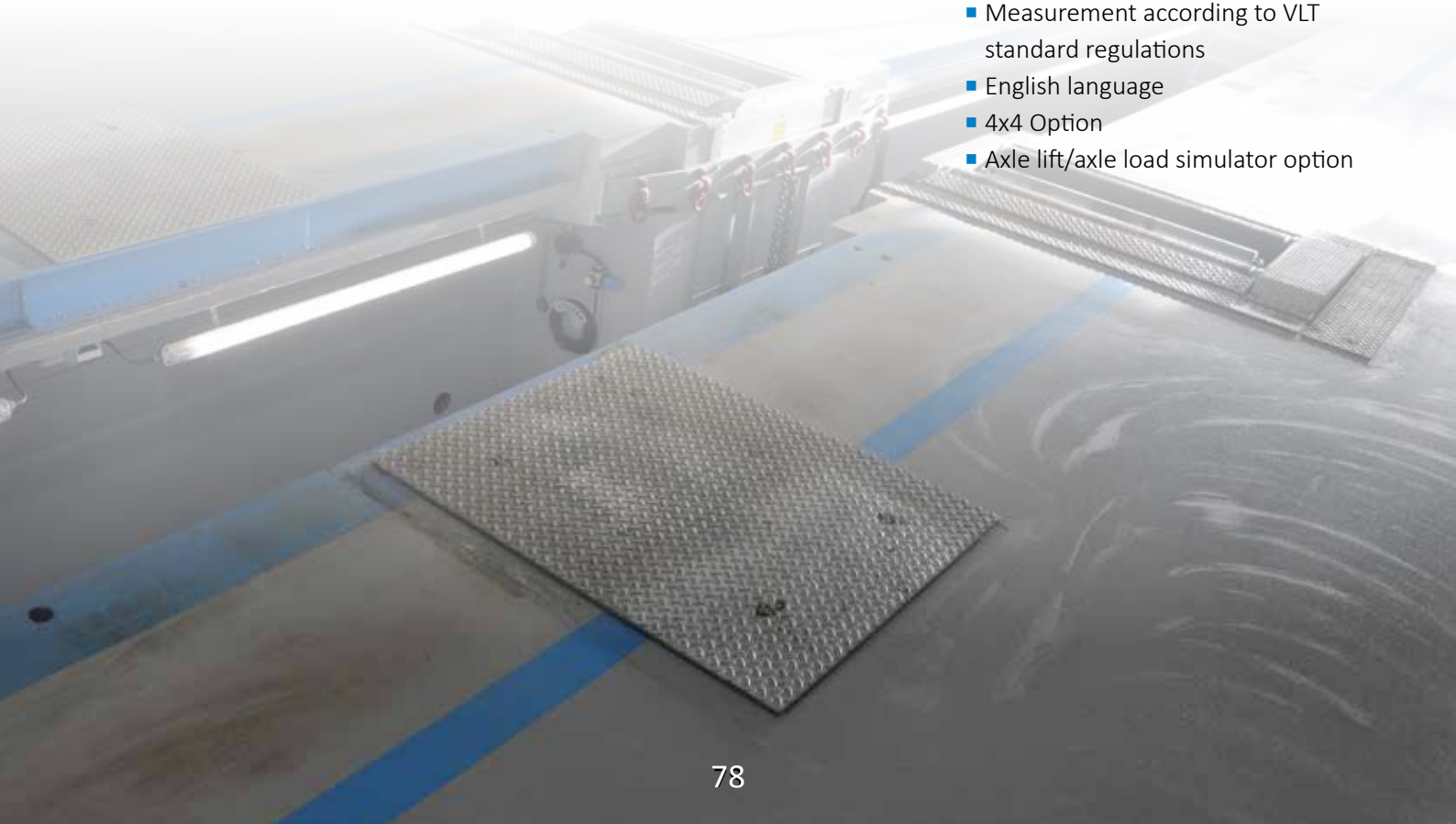
Software for brake testers up to 14000 or 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to VLT standard regulations
- English language
- 4x4 Option

*VLT-SW-IM-PTI/14t-Lift*  
*VLT-SW-IM-PTI/16t-Lift*

Software for brake testers up to 14000 or 16000 kg axle weight, consisting of

- Basic software heavy vehicles
- Measurement according to VLT standard regulations
- English language
- 4x4 Option
- Axle lift/axle load simulator option



## Software modules for brake testers (basic software)

Product number	EU Vehicle Categories	For countries	Description, max axle weight
VLTSW60401	L1e, L3e		Motorcycles
VLTSW60402	L2e, L4e, L5e, L6e, L7e		Trikes, quads
VLTSW60403/025	M1, M2, N1, O2	all, excl. UK	Cars, max 2.5 t
VLTSW60403/050	M1, M2, N1, O2	all, excl. UK	Cars, max 5 t
VLTSW60404/050	M1, M2, N1, O2	all, excl. UK	Cars, caravans, tow trailers, max 5 t
VLTSW60404L/050	M1, M2, N1, O2	all, excl. UK	Cars, caravans, tow trailers, max 5 t, brake tester with lift or load sim.
VLTSW60405/140	M1, M2, M3, N1, N2, N3, O2, O3, O4	all, excl. UK	Heavy vehicles, max 14 t
VLTSW60405/160	M1, M2, M3, N1, N2, N3, O2, O3, O4	all, excl. UK	Heavy vehicles, max 16 t
VLTSW60405/200	M1, M2, M3, N1, N2, N3, O2, O3, O4	all, excl. UK	Heavy vehicles, max 20 t
VLTSW60405L/140	M1, M2, M3, N1, N2, N3, O2, O3, O4	all, excl. UK	Heavy vehicles, max 14 t, brake tester with lift or load sim.
VLTSW60405L/160	M1, M2, M3, N1, N2, N3, O2, O3, O4	all, excl. UK	Heavy vehicles, max 16 t, brake tester with lift or load sim.
VLTSW60405L/200	M1, M2, M3, N1, N2, N3, O2, O3, O4	all, excl. UK	Heavy vehicles, max 20 t, brake tester with lift or load sim.
VLTSW60408/160	M1, M2, M3, N1, N2, N3, O2, O3, O4	UK	Heavy vehicles, max 16 t
VLTSW60408/200	M1, M2, M3, N1, N2, N3, O2, O3, O4	UK	Heavy vehicles, max 20 t
VLTSW60408/240	M1, M2, M3, N1, N2, N3, O2, O3, O4	UK	Heavy vehicles, max 24 t
VLTSW60408L/160	M1, M2, M3, N1, N2, N3, O2, O3, O4	UK	Heavy vehicles, max 16 t, brake tester with lift or load sim.
VLTSW60408L/200	M1, M2, M3, N1, N2, N3, O2, O3, O4	UK	Heavy vehicles, max 20 t, brake tester with lift or load sim.
VLTSW60408L/240	M1, M2, M3, N1, N2, N3, O2, O3, O4	UK	Heavy vehicles, max 24 t, brake tester with lift or load sim.
VLTSW60410	T1, T2, T3, T4, T5, R1, R2, R3, R3, S1, S2		Brake tester for agricultural and similar vehicles, max 16 t
VLTSW60410L	T1, T2, T3, T4, T5, R1, R2, R3, R3, S1, S2		Brake tester with lift or load sim for agricultural and similar vehicles, max 16 t

All kinds of other software solutions on request, such as:

- Optional software modules for brake testers (e.g. 4x4 testing. 2 measuring directions, pendle axle test)
- Multiple legal standards
- Extra language packs
- Software modules for connecting to government database
- Extra functionality for tyre inspection system
- Resonance test for suspension testers

Set nr. 80



VLT-E8104

VLT-EA81N



**Complete emission test kit for Dutch APK2 (PTI):**

- VLT-E8104  
4-Gas analyser (16)
- VLT-EA81NL  
Accessory kit (16)  
rpm sensor  
oil temperature sensor
- First calibration, with calibration certificate

Set nr. 80b



VLT-E9210 +  
VLT-EN94pkw

VLT-EA92NL



VLT-E8104

VLT-EA81NL



**Complete emission/diesel smoke test kit for Dutch APK2 (PTI):**

- VLT-E8104  
4-Gas analyser (16)
- VLT-EA81NL  
Accessory kit (16)
- VLT-E9210  
Diesel smoke cell (16)
- VLT-EA92NL  
Accessory kit (16)
- VLT-EN94pkw  
Zero emission cabinet (17)
- First calibration, with calibration certificates

Set nr. 80c



VLT-E9210 +  
VLT-EN94pkw

VLT-EA81NL



**Diesel smoke test extension kit for VLT-E8104 Dutch APK (PTI):**

- VLT-E9210  
Diesel smoke cell (16)
- VLT-EA92NL  
Accessory kit (16)
- VLT-EC92NL  
First calibration, with certificate (diesel)
- VLT-EN94pkw  
Zero emission cabinet (17)
- First calibration, with calibration certificate



## Complete diesel smoke test kit for Dutch APK (PTI):

Set nr. 80L

- VLT-E9200  
Diesel smoke analyser
- VLT-E9210  
Diesel smoke cell (16)
- VLT-EA92NL  
Accessory kit (16)
- VLT-ENp/lkw  
Zero emission cabinet (17)
- First calibration, with calibration certificate



## Most complete test kit for Dutch APK (PTI):

Set nr. 80NL

- VLT-E8104  
Emission analyser (16)
- VLT-E9210  
Diesel smoke cell (16)
- VLT-E9700  
Particle counter (18)
- VLT-E8901  
Trolley (16)
- VLT-EN94pkw  
Zero emission cabinet (17)



### Particle counter test kit for Dutch APK:

- VLT-E9700  
Particle counter (18)
- First calibration, with calibration certificate

Set nr. 80PN

## Complete emission/diesel smoke test kit for Belgium:

Set nr. 80BE

- VLT-E8104  
4-Gas analyser (16)
- VLT-E9210  
Diesel smoke cell (16)
- VLT-ENp/lkw  
Zero emission cabinet (17)
- VLT-ET8901  
Trolley (16)
- VLT-EA81BE  
Accessory set, incl. pc, monitor, special software for Belgium
- First calibration, with calibration certificate

### BELGIUM/UK CONFIGURATION



## Complete emission/diesel smoke test kit for UK:

Set nr. 80UK

- VLT-E8104  
4-Gas analyser (16)
- VLT-E9210  
Diesel smoke cell (16)
- VLT-ENp/lkw  
Zero emission cabinet (17)
- VLT-ET8901  
Trolley
- VLT-EA81BE  
Accessory set, incl. pc, monitor, special software for UK
- First calibration, with calibration certificate

## Inspection starter set with plate brake tester



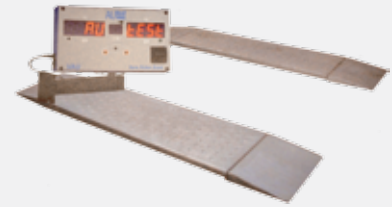
Set nr. 80b emission/diesel smoke set (80)



VAU2014 plate brake tester

incl. pedal force gauge (54)

incl. IR remote control



## Inspection starter set with roller brake tester



Set nr. 80b emission/diesel smoke set (80)



VLT2422-G6 roller brake tester (30)

incl. pedal force transducer, subframe,

RF remote control, TFT monitor



Equipment set 'Three Stars APK2', for max 3000 kg axle weight, up to 8 inspections per day. For use with your existing car lift.



32" TFT monitor for roller brake tester



Set nr. 80NL emission/diesel smoke/particle measurement set (81)  
VLT-EOBD2012 universal scan tool (17)



4 ~ 4.5 x 12 m

VLT-HBT7457L headlight beam tester (20)



VLT2433-G6

roller brake tester (30)  
incl. axle weighing system  
incl. roller locking device  
incl. counter rotating rollers (4x4 test)  
VLTPT1032 pedal force transducer (50)  
VLTBIC2409 subframe



Equipment set 'Four Stars APK2', for max 4000 kg axle weight,  
up to 16 inspections per day.  
For use with your existing car lift.



32" TFT monitor for roller brake tester



Set nr. 80NL emission/diesel smoke/  
particle measurement set (81)

VLT-EOBD2012 universal scan tool (17)

VLT-ERPM300E rpm tester (17)



4 ~ 4.5 x 13 m

VLT-HBT7457L

headlight beam tester (20)



VLT3972

tyre inspection system (26)



VLT4233-G6/880/2600

roller brake tester (32)

incl. axle weighing system

incl. roller locking device

incl. counter rotating rollers (4x4 testing)

VLTPT1032 pedal force transducer (54)

VLTBIC5009/880 subframe



Equipment set 'Five Stars APK2', for max 4000 kg axle weight,  
up to 32 inspections per day.  
For use with your existing car lift.



VLT-HBT7457L

headlight beam tester (20)



VLT3972

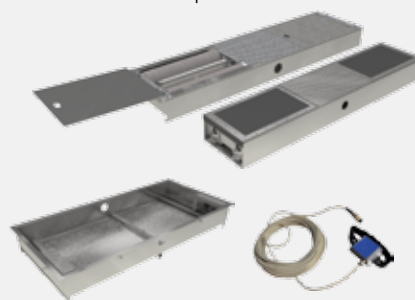
tyre inspection system (26)



VLT3673F/4222-G6

suspension tester + roller brake tester (29)

- incl. axle weighing system
- incl. roller locking device
- incl. counter rotating rollers (4x4 testing)
- VLTPT1032 pedal force transducer (54)
- VLTBIC365009 subframe
- VLTA501106 cover plates



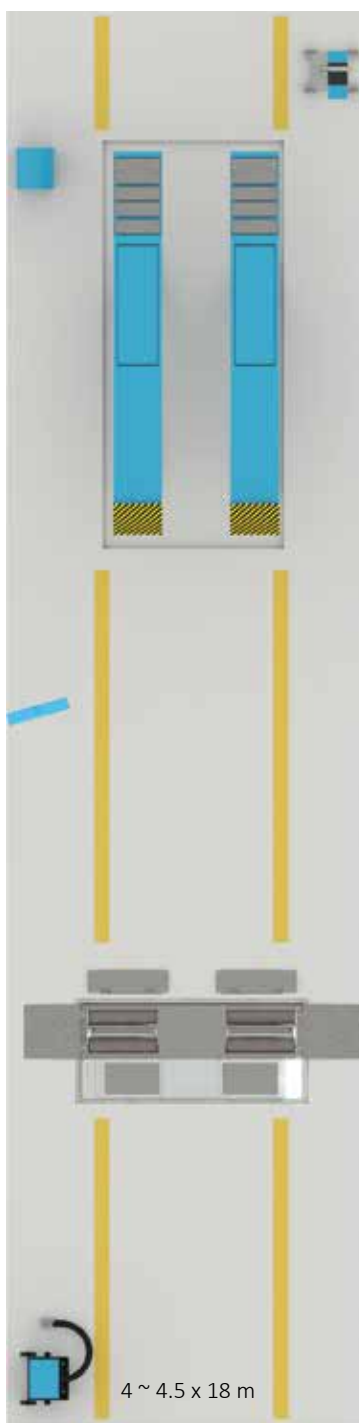
32" TFT monitor for roller brake tester



Set nr. 80NL emission/diesel smoke/  
particle measurement set (81)

VLT-EOBD2012 universal scan tool (17)

VLT-ERPM300E rpm tester (17)



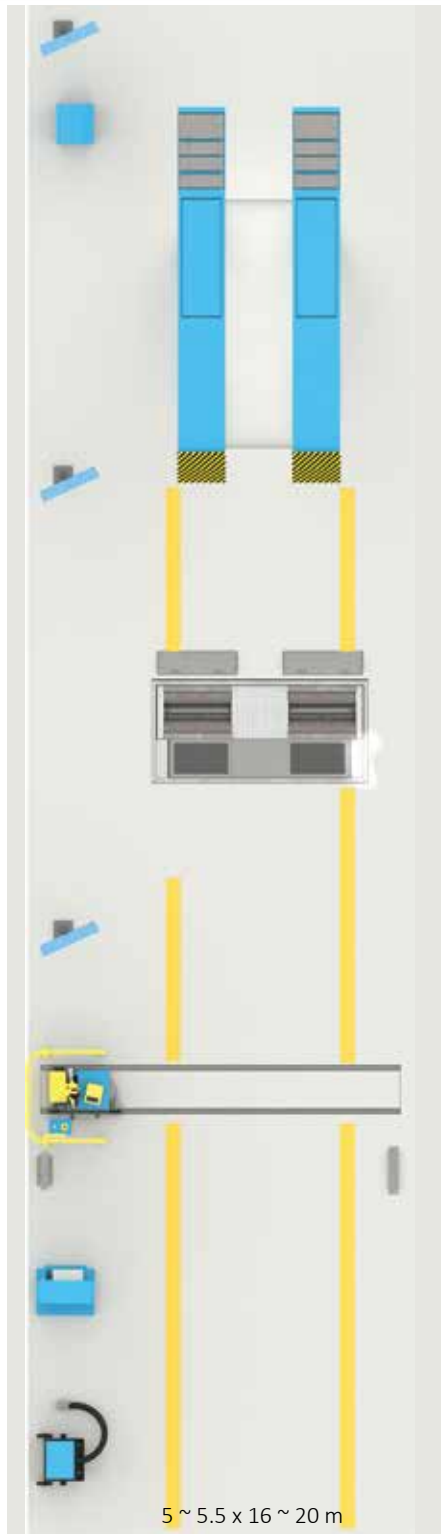
4 ~ 4.5 x 18 m

Integrated test lane 'Six Stars APK2', for max 4000 kg axle weight, up to 48 inspections per day (1 inspector). For use with your existing car lift.



monitor 32" (3x)

- Set nr. 80NL* emission/diesel smoke/particle measurement set (81)
- VLT-EOBD2012* universal scan tool (90)
- VLT-ERPM300E* rpm tester (90)



5 ~ 5.5 x 16 ~ 20 m

*VLT3972*  
tyre inspection system (26)



*VLT3673F/4222-G6*  
suspension tester + roller brake tester (29)  
with options



*VLT-HBT0936MK3/TL* autom. headlight beam tester (21), incl. 4.5 m rail and protective frame

- VLT-HBTA0909* drive-in sensor set (14)
- data entry console (14)
- above carriage inspection tablet (14)
- licence plate recognition system (14)



Integrated test lane 'Seven Stars APK2', for max 4000 kg axle weight, up to 160 inspections per day (3 inspectors and inspection pit)



monitor 32" (3x)

Set nr. 80NL emission/diesel smoke/particle measurement set (81)

VLT-EOBD2012 universal scan tool (17)

VLT-ERPM300E rpm tester (17)



6 x 30 ~ 35 m

VLTWPD9143 wheel play detector (73)



VLT3972 tyre inspection system (26)



VLT3673F/4222-G6

suspension tester + roller brake tester (29) with options



VLT-HBT0936MK3/TL autom. headlight beam tester (21), incl. 4.5 mtr rail and protective frame

VLT-HBTA0909 drive-in sensor set (14)  
data entry console (14)  
above carriage inspection tablet (14)  
licence plate recognition system (14)



Equipment set 'Three Stars APK1', for max 14000 kg axle weight, up to 8 inspections per day



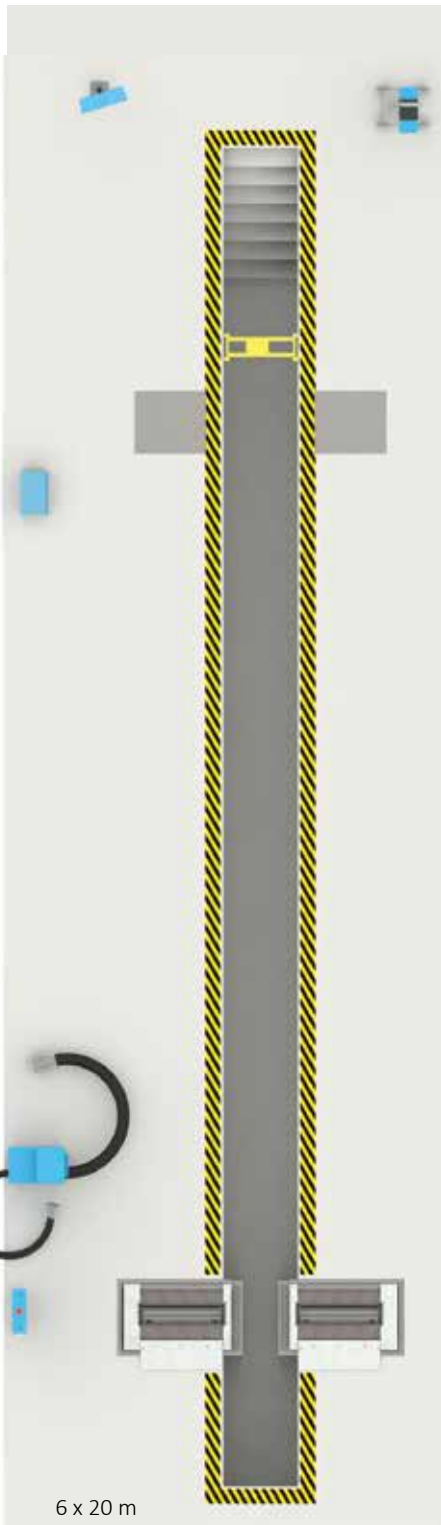
*BPI-VA15APK* pit jack  
15000 kg lifting capacity  
770 mm stroke (69)



*VLT9143* play detector  
manual operation, 8 movements (74)  
incl. subframes VLT9005T2  
incl. lamp/remote control



*VLT-E9200* diesel smoke tester (16)  
*VLT-EA92NL* accessory kit (16)  
*VLT-EN94p/kw* zero emission unit (17)  
*VLT-ERPM300E* rpm meter (17)



*VLT-HBT7457L*  
headlight beam tester (20)



*VLT14033-G6* roller brake tester (36)  
incl. readout 43"  
incl. 4x4 testing  
incl. roller locking device  
incl. pc keyboard and printer  
*VLPT1063* air pr. transducers (2x) (54)  
*VLTBIF14003* subframe (suitable for axle load simulator cylinders) (37)





Equipment set 'Four Stars APK1', for max 16000 kg axle weight, up to 12 inspections per day



VLT-HBT7457L

headlight beam tester (20)



BPI-VA15APK pit jack

15000 kg lifting capacity

770 mm stroke (69)

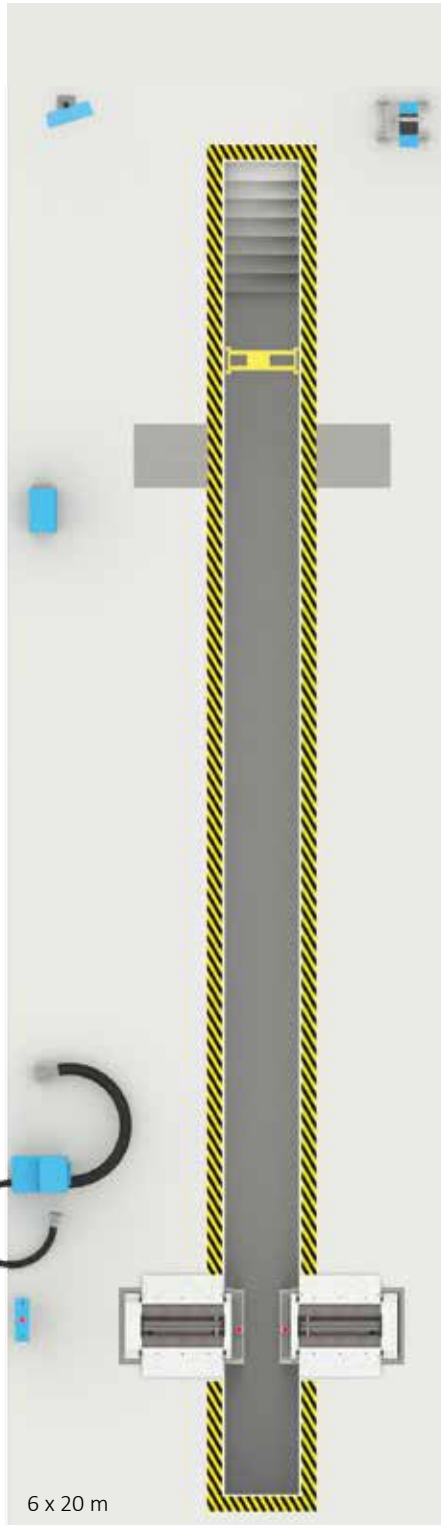


VLT-E9200 diesel smoke tester (16)

VLT-EA92NL accessory kit (16)

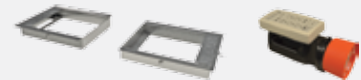
VLT-EN94p/kw zero emission unit (17)

VLT-ERPM300E rpm meter (17)



6 x 20 m

VLT9154PRCRF/5M play detector programmable, 16 movements (74) incl. subframes VLT9005T2 incl. lamp/remote control



VLT16233-G6 roller brake tester (36)

incl. readout 43"

incl. 4x4 testing

incl. roller locking device

3 air pressure gauges VLTPT1063 (54)

incl. VLTBIF14003 subframe (37)

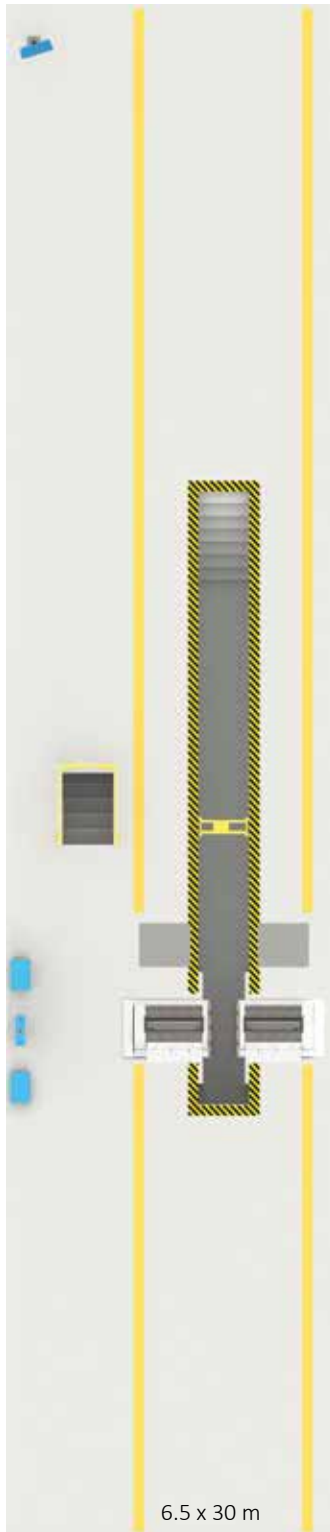
incl. VLT18531/5M axle load simulator (50)



Equipment set 'Five Stars APK1', for max 14000 kg axle weight, up to 16 inspections per day

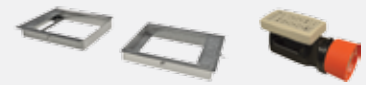


*BPI-VA15APK* pit jack  
15000 kg lifting capacity  
770 mm stroke (69)



6.5 x 30 m

*VLT9152PRRF* play detector  
programmable, 16 movements (74)  
incl. subframes *VLT9005T2*  
incl. lamp/remote control



*VLT14033L-G6B* roller brake tester  
with integrated axle lift (42)  
incl. readout 43"  
incl. 4x4 testing  
incl. roller locking device  
3 air pressure gauges *VLTPT1063* (54)  
incl. pc keyboard  
incl. *VLTBIF16273* subframe (47)  
with tie-down facilities



Equipment set 'Six Stars APK1', for max 16000 kg axle weight,  
up to 16 inspections per day



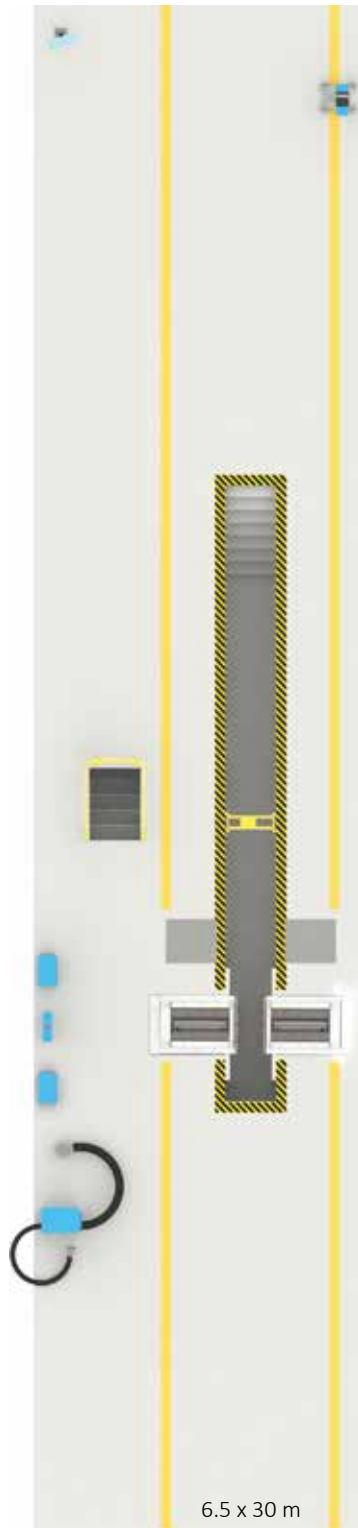
*BPI-VA15APK* pit jack  
15000 kg lifting capacity  
770 mm stroke (69)



*VLT9152PRRF* play detector  
programmable, 16 movements (74)  
incl. subframes *VLTBIF9005T2*  
incl. lamp/remote control



*VLT-E9200* diesel smoke tester (16)  
*VLT-EA92NL* accessory kit (16)  
*VLT-EN94p/kw* zero emission unit (17)  
*VLT-ERPM300E* rpm meter (17)



6.5 x 30 m



*VLT-HBT7457L* headlight beam tester (20)

*VLT16233L-G6* roller brake tester  
with integrated axle lift (42)  
incl. readout 43"  
incl. 4x4 testing  
incl. roller locking device  
3 air pressure gauges *VLTP106 3* (54)  
incl. *VLTBIF16273* subframe (47)  
with tie-down facilities



## UK authorised test facility for heavy vehicles

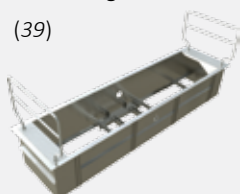


*VLT-HBT74574R* headlight beam tester  
 ■ incl. 5 m rail (20)

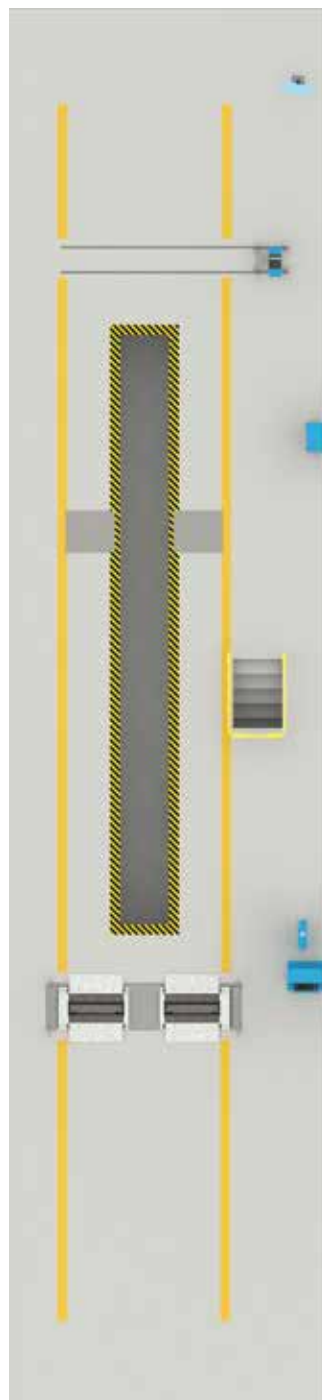
All mentioned  
 equipment  
 DVSA approved



*VLTBIF14027/T3*  
 subframe  
 with side guards  
 (39)



*VLT16733-G6*  
 roller brake tester  
 800 / 4000 kgf  
 16000 kg  
 applied test  
 5.5 / 11 kW  
 1.3 / 2.6 km/h  
 (38)



readout cabinet  
 43" led display  
 high luminance panel

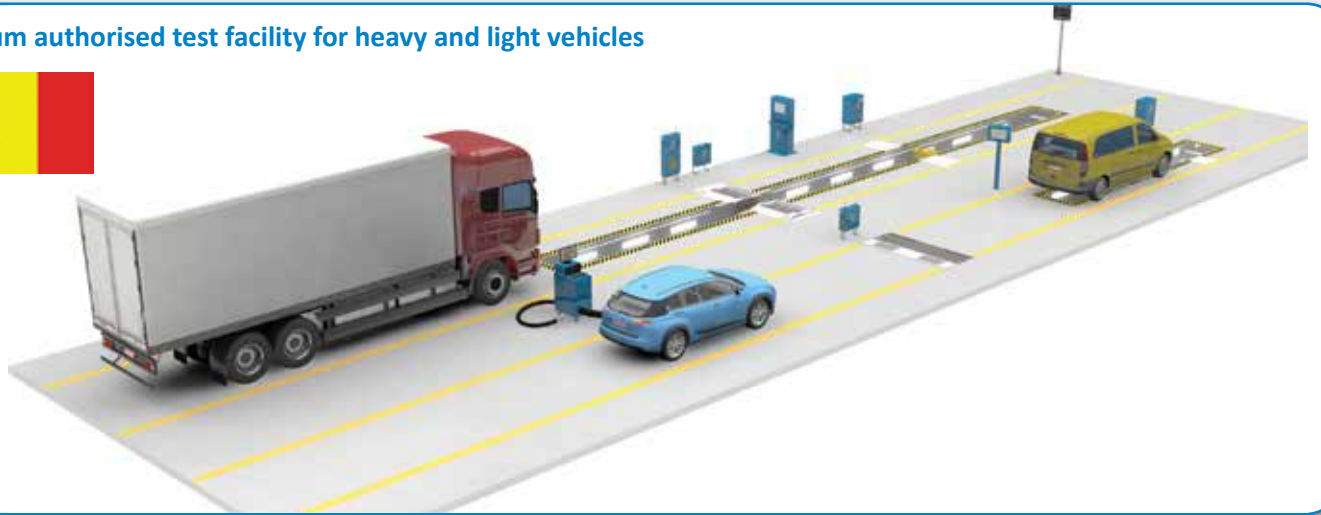


*VLTPWD9143* wheel play detector (74)  
 max axle weight 20000 kg  
 stroke 100 mm  
 remote control with lamp



entry console (14)  
 TFT monitor  
 keyboard and mouse  
 pc with software  
 and complete DVSA  
 database  
 printer compartment

## Belgium authorised test facility for heavy and light vehicles



**VLTWPD9152**  
wheel play detector (74)  
programmable,  
16 movements  
incl. lamp/remote  
control



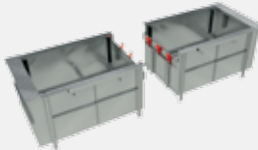
pit safety  
scanner (68)



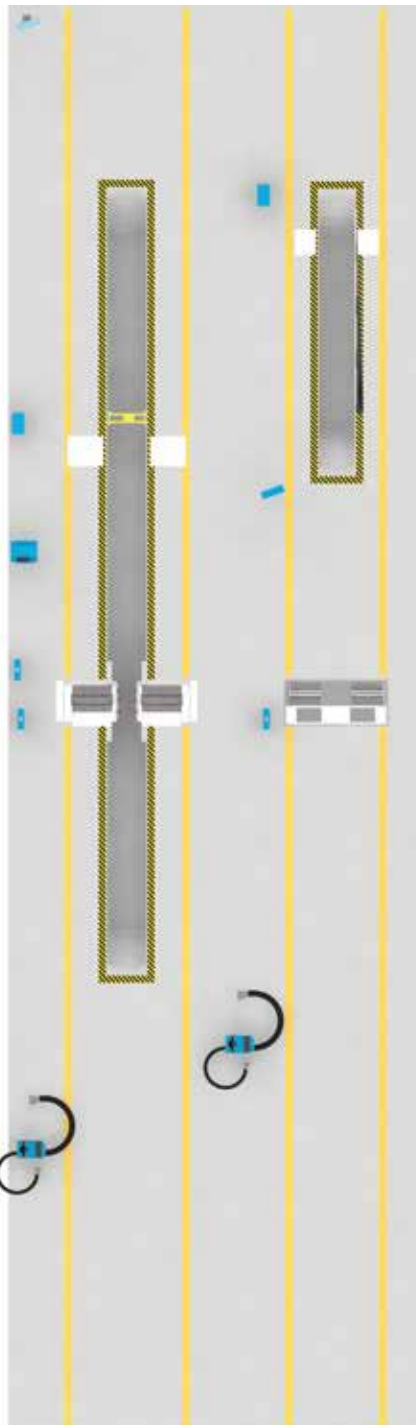
pit jack (69)



**VLT14033L-G6** roller brake tester (42)  
with integrated axle lift, full GOCA-  
configuration  
incl. readout 43"  
incl. 3 air pressure gauges **VLTP1063** (54)  
incl. VLTBIF16273 subframe (42)  
with tie-down facilities

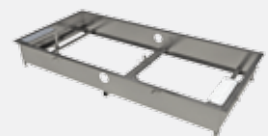
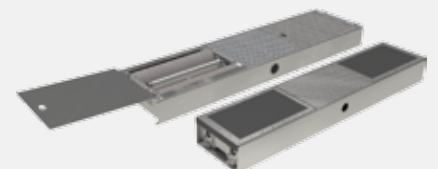


**VLT-E8104** 4-gas analyser (16)  
incl. diesel smoke cell (16)  
incl. zero emission cab. (17)  
incl. monitor, keyboard  
Incl. BE software



**VLTWPD9033** wheel play detector (73)  
programmable, 16 movements  
incl. subframes VLTBIF9003T2  
incl. lamp/remote control

**VLT3673F/4233-G6**  
suspension tester + roller brake tester (29)  
incl. phase shift measurement  
incl. axle weighing system  
incl. roller locking device  
incl. counter rotating rollers (4x4 testing)  
incl. pedal force transducer (54)  
incl. subframe **VLTBIF364205/730**  
incl. cover plates



## 2 Test lanes for light and medium weight vehicles

Capacity light/medium weight vehicles per lane based on:

- 250 Days/year
- 8 Hours/day
- Min. lane dimensions 5.5 x 25 m
- 3- 4 Test stages, 3 vehicles under test simultaneously (12 vehicles/hour)

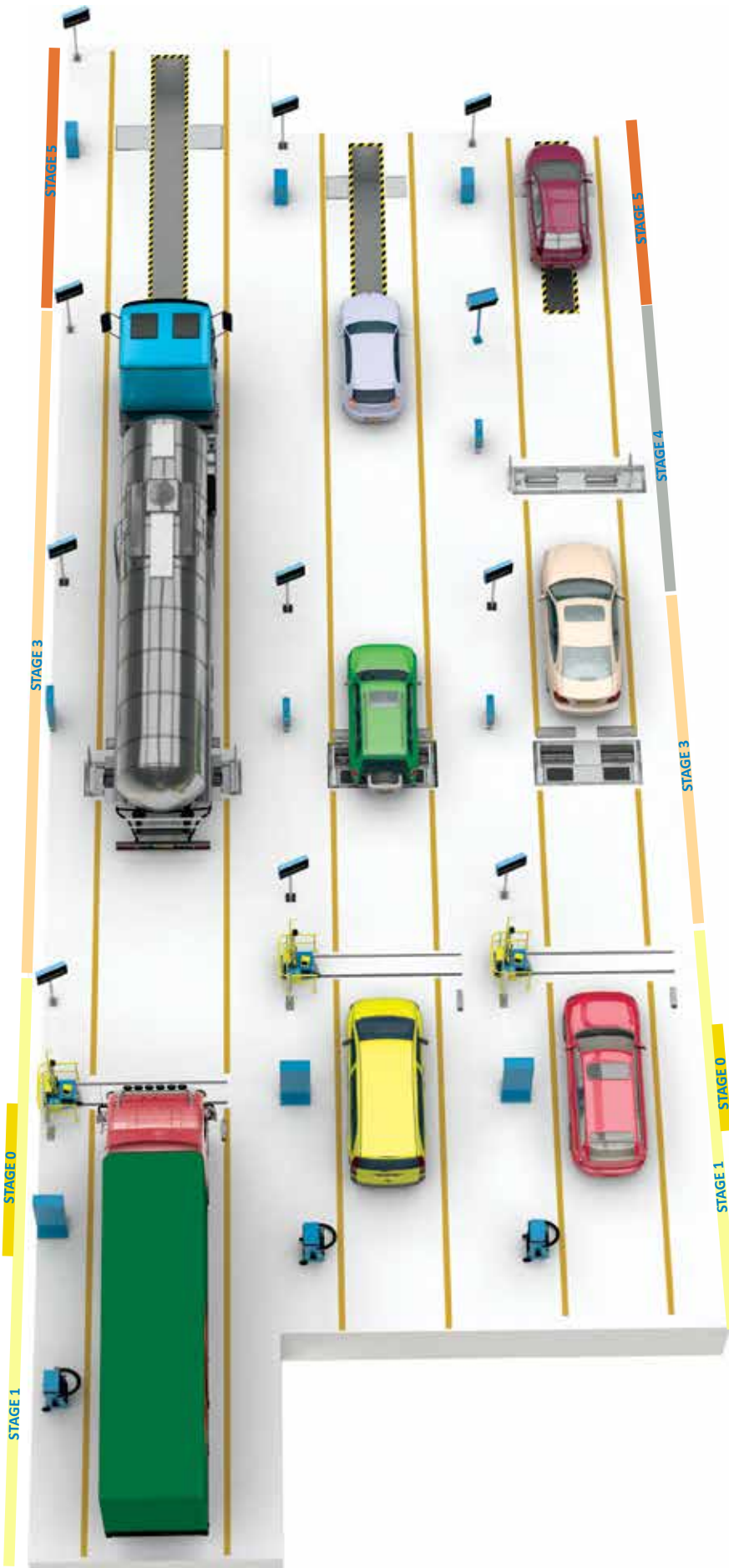
24,000 vehicles/year/lane

Setup shown here:

**48,000** vehicles per year



## 2 Test lanes for light and medium weight vehicles, 1 test lane for heavy vehicles



Capacity light/medium weight vehicles per lane based on:

- 250 Days/year
- 8 Hours/day
- Min. lane dimensions 5.5 x 25 m
- 3- 4 Test stages, 3 vehicles under test simultaneously (12 vehicles/hour)

24000 vehicles /year/lane

Capacity heavy vehicles per lane based on:

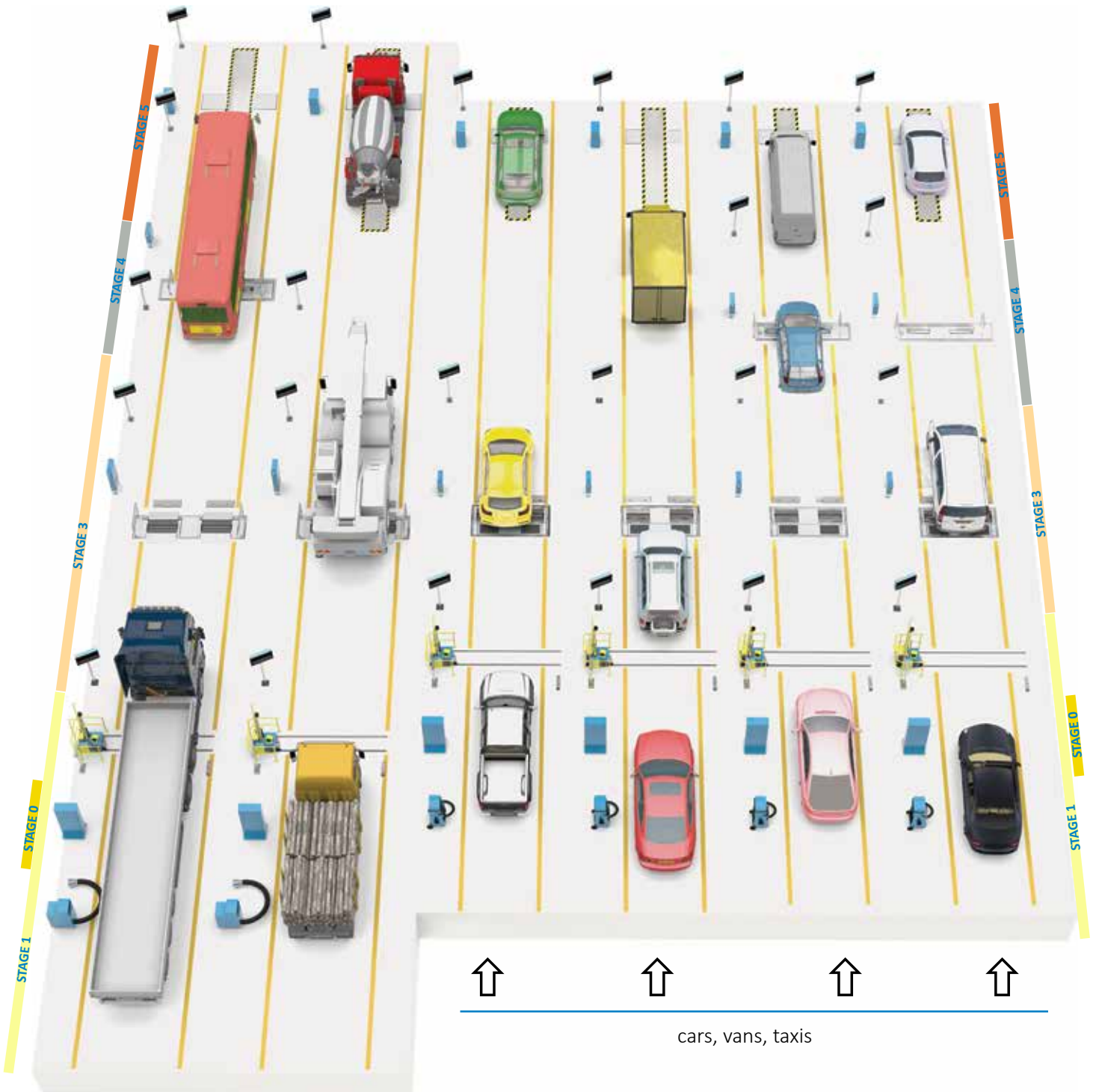
- 250 Days/year
- 8 Hours/day
- Min. lane dimensions 6 x 35 m
- 3 Test stages, 2 vehicles under test simultaneously (6 vehicles/hour)

12,000 vehicles/year/lane

Setup shown here:

**60,000** vehicles per year

## 4 Test lanes for light and medium weight vehicles, 2 test lane for heavy vehicles



trucks, lorries, trailers, buses



Capacity heavy vehicles per lane based on:

- 250 Days/year
- 8 Hours/day
- Min. lane dimensions 6 x 35 m
- 3 Test stages, 2 vehicles under test simultaneously (6 vehicles/hour)

Setup shown here:

**120,000** vehicles per year

12,000 vehicles/year/lane



cars, vans, taxis

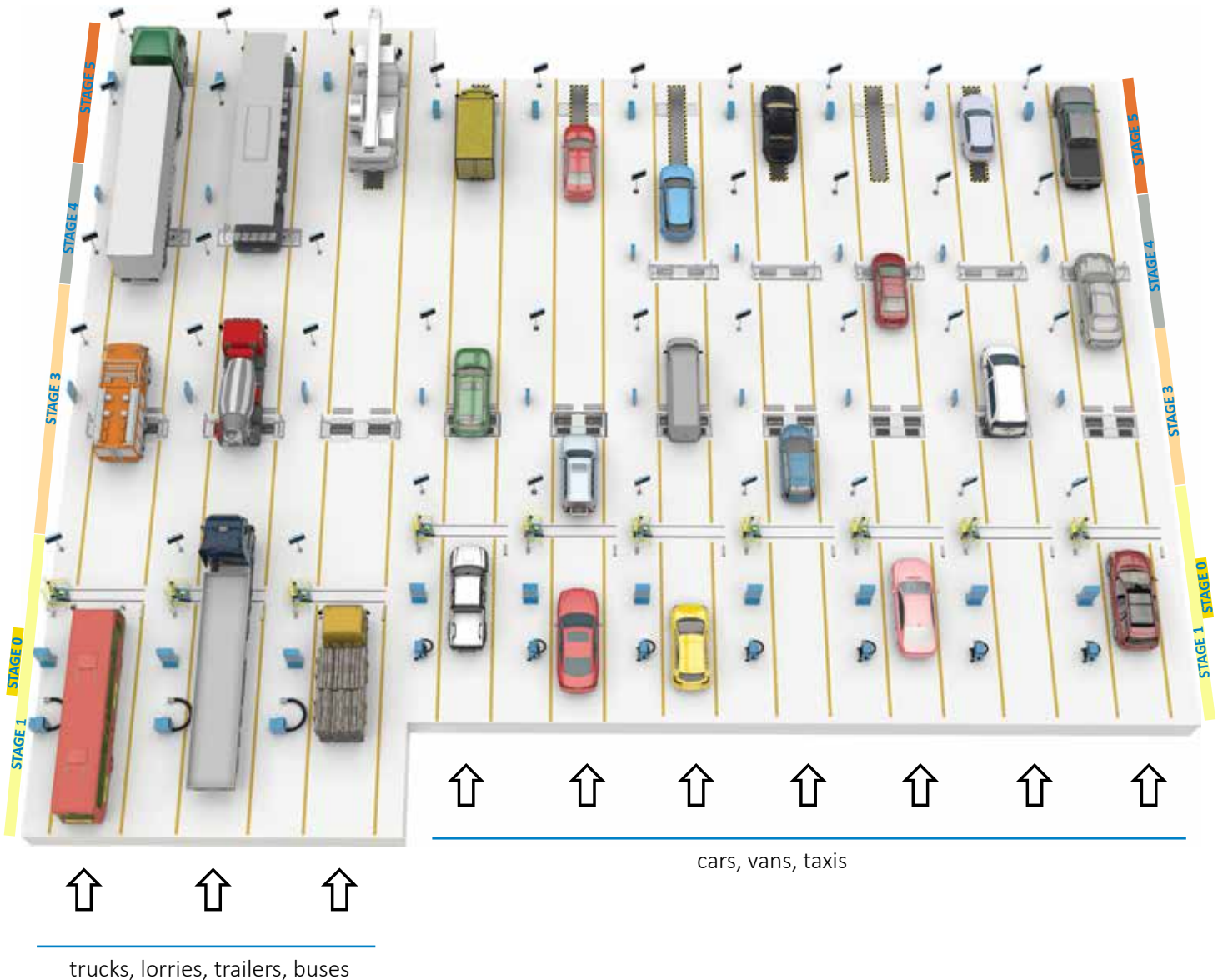
Capacity light/medium weight vehicles per lane based on:

- 250 Days/year
- 8 Hours/day
- Min. lane dimensions 5.5 x 25 m
- 3- 4 Test stages, 3 vehicles under test simultaneously (12 vehicles/hour)

24,000 vehicles/year/lane



## 7 Test lanes for light and medium weight vehicles, 3 test lane for heavy vehicles



Capacity heavy vehicles per lane based on:

- 250 Days/year
- 8 Hours/day
- Min. lane dimensions 6 x 35 m
- 3 Test stages, 2 vehicles under test simultaneously (6 vehicles/hour)

Capacity light/medium weight vehicles per lane based on:

- 250 Days/year
- 8 Hours/day
- Min. lane dimensions 5.5 x 25 m
- 3- 4 Test stages, 3 vehicles under test simultaneously (12 vehicles/hour)

Setup shown here:

**204,000** vehicles per year

12,000 vehicles/year/lane

24,000 vehicles/year/lane



A VLT integrated test lane does not have one single test lane computer, but most machines have their own dedicated computer. These computers make it possible for the equipment to have all the necessary functionality that they need to operate in stand-alone mode. This also makes it easy to integrate your stand-alone equipment later on, or to add extra equipment later. It

also has the advantage that, in case one computer fails, the rest of the equipment can continue to function normally.

In order for all the machines to work together in a test lane, they are connected to a network.

Some inspections are software only, such as the visual inspections. They do not require their own computer, but run directly on the server.



## Integrated Test Lanes, Station Server

The test station server (TSS) is what makes a VLT integrated test lane really integrated.

An integrated test lane is essentially a collection of (stand-alone) machines that are all connected to and controlled by a server.

Multiple test lanes in a test station can be connected to that server, hence the name 'station server'.

The station server also holds the databases with test results, vehicle data, etc.

### Tasks handled by the TSS:

- Taking care of the waiting list (list of vehicles arriving at the test station).
- Sending jobs to the equipment of the appropriate test lanes (heavy, light, etc.).
- Collecting the results from all the connected test lane equipment and storing them in a database.
- Running optional test station management software (TMPS, for making statistical reports on performance of equipment and staff, maintenance planning, etc.).
- Optional communication with company or government database.
- Generating and printing the test reports.

### Options:

- Uninterrupted power supply
- Failover server
- Connection to government system
- TMPS (management software)

The VLT Testlane Management Productivity System (TMPS) is a software package for use with VLT inspection Lanes/stations.

### Key features:

- It allows the station management to monitor performance of equipment and personnel.
- It allows inspectors to view the complete inspection history of vehicles.
- It allows technicians to view and plan maintenance and calibration.
- Permissions set by user access level.
- Access via web browser.
- View data of all test lanes in a station, data of multiple stations.
- Filter data on lane, equipment, date, inspector, vehicle, etc.
- Set warnings for calibration due dates.
- Generate all kinds of statistical reports, such as end-of-day summaries.



Installation date	Service type	Interval	Last service date	Next service date	Remarks
11-Oct-2016	Calibration	3 Months	20-Oct-2021	20-Jan-2022	Maintenance, inspection and calibration to manufacturer specification
11-Oct-2016	Calibration	3 Months	20-Oct-2021	20-Jan-2022	Maintenance, inspection and calibration to manufacturer specification
11-Oct-2016	Calibration	3 Months	20-Oct-2021	20-Jan-2022	Maintenance, inspection and calibration to manufacturer specification
11-Oct-2016	Maintenance	3 Months	20-Oct-2021	20-Jan-2022	Small interval for inspection and in some cases maintenance
11-Oct-2016	Calibration	6 Months	20-Oct-2021	20-Apr-2022	large interval for calibration
11-Oct-2016	Maintenance	3 Months	20-Oct-2021	20-Jan-2022	Small interval for inspection and in some cases maintenance
11-Oct-2016	Calibration	6 Months	20-Oct-2021	20-Apr-2022	large interval for calibration

Mileage: **383956**

Inspection date: **02-Jan-2021**

Inspection started: **11:29:29**

Inspection ended: **11:38:58**

Component	Result	Started	Completed	Test duration	Performed by
ACD	Pass	11:29:29	11:29:31	00:00:02	Inspector
SST	Pass	11:31:34	11:31:37	00:00:03	Inspector
SUT	Fail	11:31:44	11:34:35	00:02:51	Inspector
RBT	Fail	11:33:00	11:35:45	00:02:45	Inspector
TMT	Pass	11:34:07	11:38:19	00:04:12	Inspector
SMT	Pass	11:35:59	11:36:19	00:00:20	Inspector
UCI	Pass				



# VL Test Solutions

division of VL Test Group

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