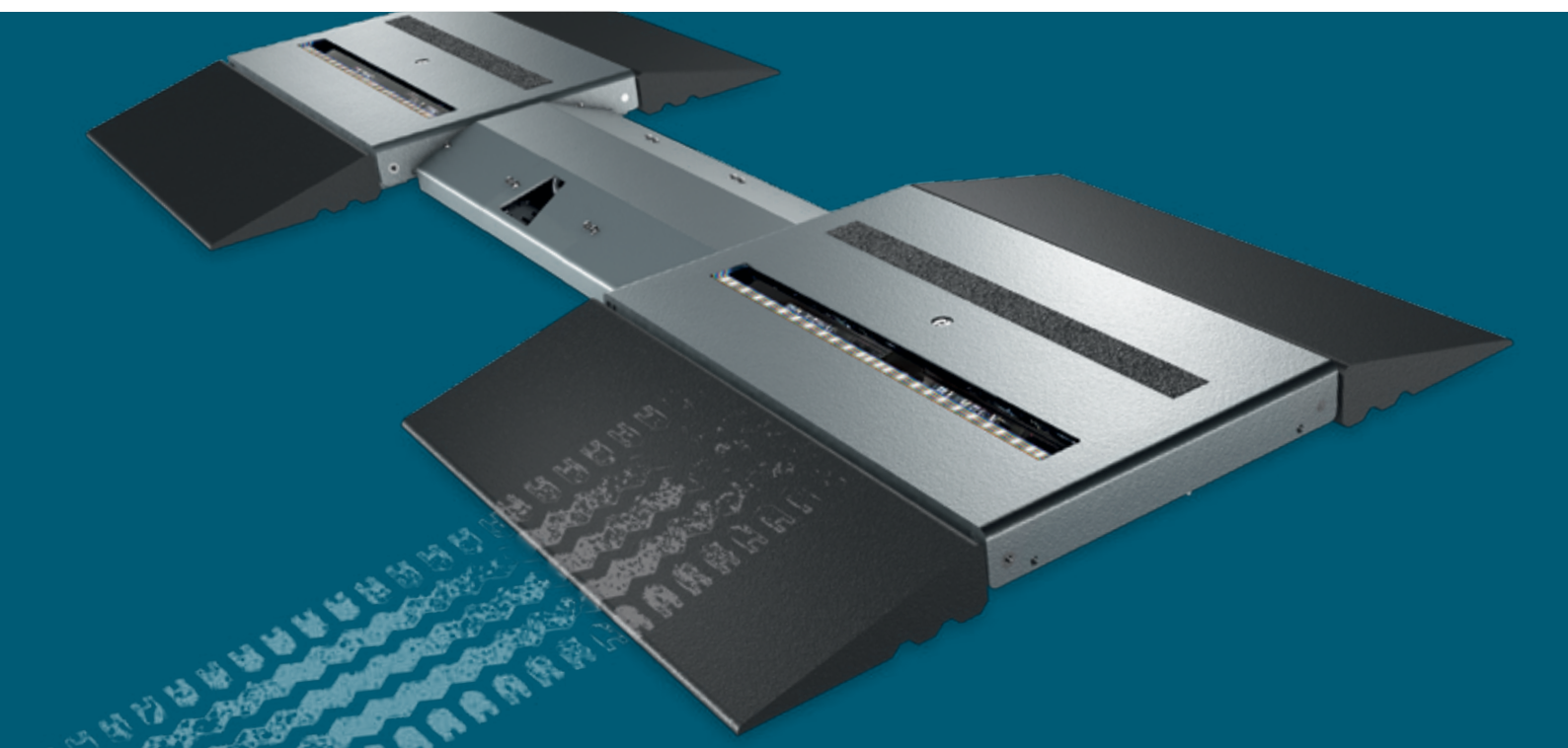


VOLKSWAGEN

AKTIENGESELLSCHAFT



VAS 741 083

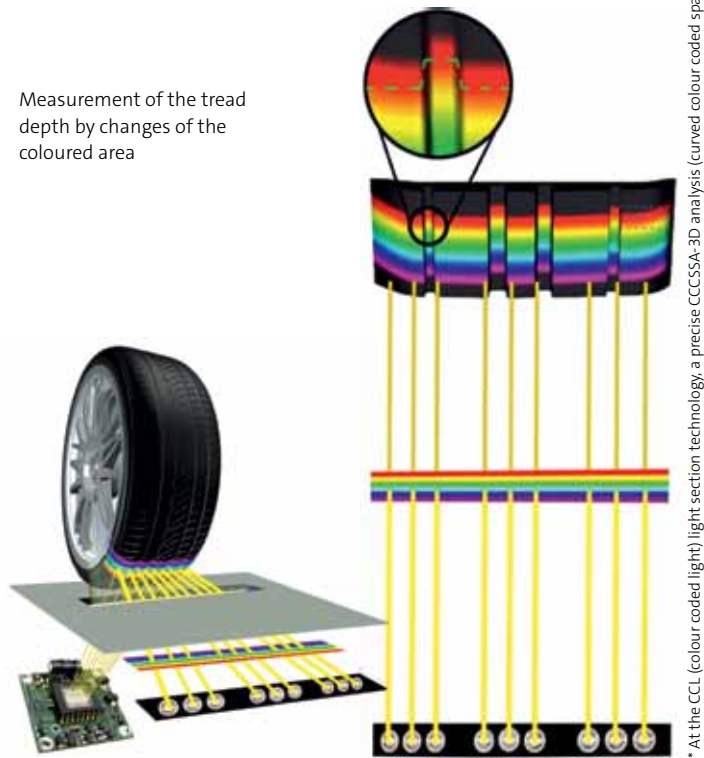
Tyre diagnosis system TDS

VAS 741 083 optical diagnostic system: high-precision tyre tread measurement via CCL technology*

High-precision light section method

The light section method provides accurate results

The LED projection through a special transmission foil with coloured stripes (see below) onto the tyre is captured by cameras and turned into a 3D cloud. Based on this cloud, changes concerning the position of the colours are translated into information concerning the tread depth.



Advantages of CCL measurements*

- Top precision: 18 measurement lines with a width of 1.8 mm each allow a surface-based measurement at the maximum tyre contact area. In comparison: Laser projections use a measurement line with a width of 1 mm.
- High resolution: Measurements with up to 2500 pixels. Other measurement methods often only use half the resolution.
- 100 frames per second
- Flicker-free: Unlike measurements with lasers, LED projection prevents any flickering – thus no gaps at the tread measurement
- In comparison with laser systems, CCL measurement* practically doesn't use any delicate or moving parts. TDS is thus highly resistant to dust, vibrations, moisture or changing temperatures

Advantages for the vehicle reception:

The tyres are a vehicle's only point of contact with the road. It is the quality of this connection that decides upon a vehicle's acceleration and braking behaviour. Therefore, the measurement of the tread depth is part of legal safety checks.

But unevenly worn tyre treads can also be an important indicator for workshops to adjust the toe correctly performing a wheel alignment.

Using the VAS 741 083 tyre diagnosis system, the procedures at the workshop are standardised and thus eased significantly. All four tyres are analysed right at the vehicle reception. With these measured values at hand, it is much easier to consult the customer.

Even after a professional test, positive results will also contribute to increased customer loyalty.

VAS 741 083: quick measurement



Tyre diagnosis at the vehicle reception: VAS 741 083 tread measurement with automatic number plate identification

All 4 tyres are measured as they roll across

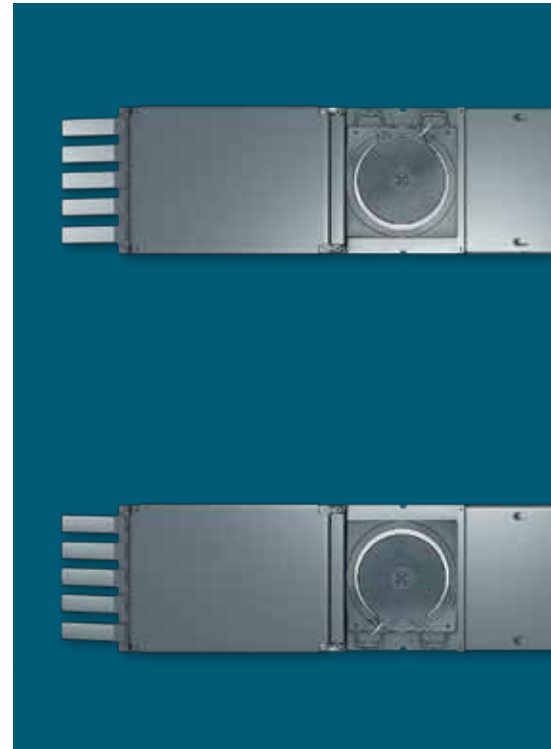
- Roll-over speed: 8 km/h (maximum speed)
- Measurement at a single roll-over without stopping
- Latest camera technology (measurement accuracy : +/-0.25 mm)
- Distinctive coloured CCL light section method thanks to several times larger wheel contact area
- Measurement of the tread depth on all of the 4 wheels within seconds
- Additional evaluation of wear patterns

Valuable data for tyre specialists

- Browser-based measurement results on smart TV, PC or tablet
- Clear display of tyre tread depth and wear information
- Integrated database for statistic evaluations
- Storage of results on Windows systems
- Interface for workshop connectivity (optional)

Easy to install

- No internet or compressed-air connection required
- Low installation height: just 85 mm from ground level (or optionally on ground level, see page 9)
- Robust structure for vehicles featuring up to 4 t (max. axial load)



(Optional) second monitor
for a second application



VAS 741 083 at the vehicle reception

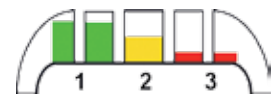
The shown example is combined with VAS 6767 wheel alignment, digital headlight tester and DAS adjustment

Expanded tyre analysis

Precise recognition of tyre damages



Workshop information



Quick and neatly arranged:
Tread depth (mm) measured
at 3 different zones:

- Left – centre – right.
- Only the decisive, smallest value is displayed (here: 2.0 mm)

Key / typical wear patterns:



Normal



Air pressure too low
Air pressure too high



Incorrect camber

Record

ANPR camera: Vehicle number plates can be identified automatically

Beissbarth GmbH
Hanauer Straße 101
80993 München
www.beissbarth.com

BEISSBARTH

VW Passat 15.5.2019, 07:47:27

Tire condition

2.0 Front left tire (Warning icon)

5.2 Front right tire (OK icon)

5.9 Rear left tire (OK icon)

5.0 Rear right tire (OK icon)

MBB1007

Measured value in mm | Replace < 2.0 mm | Marginal < 3.0 mm

Recommended measures

Check wheel alignment (Warning icon)

Tire data

	Manufacturer	Size	DOT
Front left tire	Continental	205/55 R16	3018
Front right tire	Continental	205/55 R16	3018
Rear left tire	Continental	205/55 R16	3018
Rear right tire	Continental	205/55 R16	3018

Faulty tire wear

Axle adjustment
Camber
Toe

Tire inflation pressure

Result of measurement: Ok (Green), Marginal (Yellow), Bad (Red)

MBB2019

Observe the manufacturer's specifications for types of tires, wheel/tire combinations and recommended tire makes (Wheel, tire advisor).

Date and time of the test

Green: tyres are OK

Recommended action:

- Adjust tyre pressure?
- Replace tyres?
- Sell tyres?
- Wheel alignment?

Tyre manufacturers, tyre size and DOT

can easily and quickly be entered manually at VAS 741 083. Once entered, these data will also be shown on the printed record.

Vehicle status picture:

Overall evaluation of the vehicle safety

Option: Automatic number plate identification at the roll-over

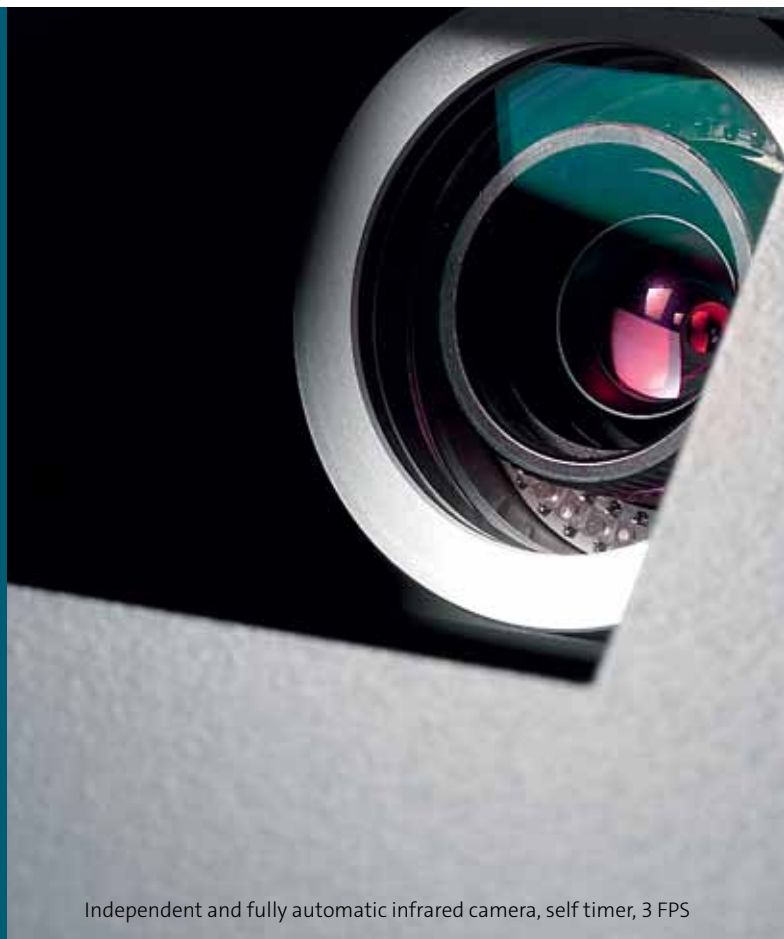
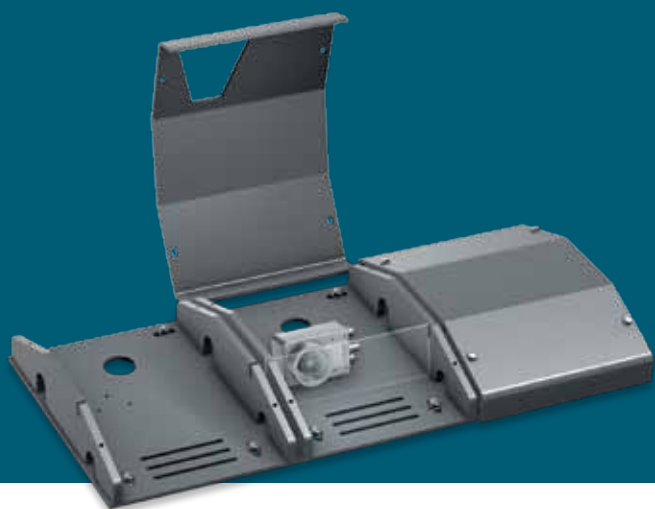


OCR software generates numerical values

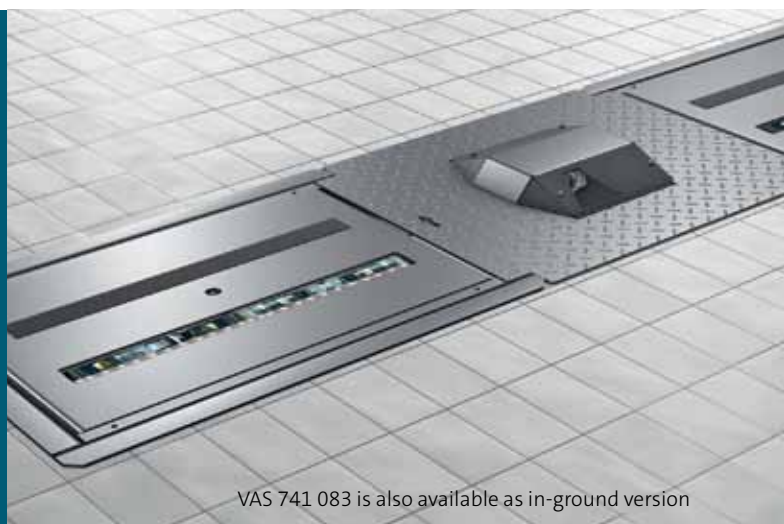
Connection to TDS via big or small cable tunnel

ANPR camera (camera for automatic number plate identification)

- Universal set-up for front and rear number plate identification
- Country and state identification
- Roll-over speed of up to 8 km/h
- Data transfer to VAS 741 083 via LAN
- Simple installation and calibration
- Robust steel housing as roll-over protection (up to 4 t)
- CDC varnish protects against corrosion
- IP65 housing tightness (dust / moisture)



Independent and fully automatic infrared camera, self timer, 3 FPS



VAS 741 083 is also available as in-ground version

User interface: intuitive and easily understood



Integrated database function with analysis for the creation of tyre statistics. The software solution protects customer data in accordance with GDPR.

Easily understood classification of the tyre condition based on the colours of a traffic light (red, yellow and green).

Technical data

Size in mm (H x W x D)

Max. tyre width

track width

Max. speed

Max. axial load

Voltage supply

Operating temperature / range of functionality

Protection class of the measurement modules

Software languages

Tyre diagnosis system

85 x 2 245 x 1 040

450 mm

1 080 – 1 820 mm

8 km/h

4 t

100 to 230 VAC, 50 – 60 Hz, 1 phase

0 – 40 °C

IP65

18

Accessories

Colour printer

Desiccant (2 pieces)

Order number

1 693 770 415

1 691 201 005

Display solutions for VAS 741 083 with browser-based display

Workshop computer with trolley (standard)

Direct access to customer data, measured values and for statistics and evaluation







Customer-specific smart TV
mounted onto the wall or a column




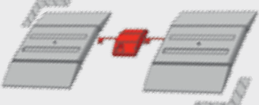
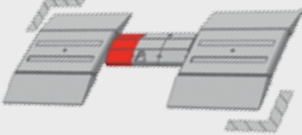



Transparent measurement results on the tablet
This allows the workshop to recommend new tyres or a wheel alignment in case of doubt as an additional diagnosis.

TDS: Configuration with and without ANPR camera

Tyre diagnosis system

Illustration	Tyre diagnosis system (above ground)	Order number
	TDS modules incl. drive-on ramps for above-ground installation (scope of delivery: measurement modules, drive-on ramps, trolley with PC, mouse, keyboard, monitor LAN cable, main switch box, glass squeegee)	1 691 200 017
	TDS modules incl. drive-on ramps for above-ground installation (scope of delivery: measurement modules, drive-on ramps, trolley with PC, mouse, keyboard, monitor LAN cable, main switch box, glass squeegee)	1 691 200 017
	Foundation frame Foundation frame to be cemented in with filling pieces	1 691 200 010
	Centre cover TDS cover panel for in-ground version without ANPR camera	1 691 202 069

Tyre diagnosis system with ANPR camera

Illustration	Tyre diagnosis system with ANPR camera (above ground)	Order number
	TDS modules incl. drive-on ramps for above-ground installation (scope of delivery: measurement modules, drive-on ramps, trolley with PC, mouse, keyboard, monitor LAN cable, main switch box, glass squeegee)	1 691 200 017
	ANPR camera ANPR camera with housing for above-ground installation (scope of delivery: ANPR camera, housing, LAN cable)	1 691 200 008
Illustration	Optional accessories	Order number
	Cable tunnel to be used as cable bridge for the gaps between the ANPR camera housing and the TDS modules (left and right) and as roll-over protection for lateral cable outlets (scope of delivery comprises 1 piece. Cable tunnel can be ordered in the desired quantity)	1 691 201 023
Illustration	Tyre diagnosis system with ANPR camera (in ground)	Order number
	TDS modules incl. drive-on ramps for above-ground installation (scope of delivery: measurement modules, drive-on ramps, trolley with PC, mouse, keyboard, monitor LAN cable, main switch box, glass squeegee)	1 691 200 017
	Foundation frame Foundation frame to be cemented in with filling pieces and ANPR camera socket	1 691 200 010
	In-ground ANPR camera ANPR camera with housing (in ground) and centre cover	1 691 200 009

© VOLKSWAGEN AG
K-AVO-RW Group Sales After Sales
Workshop equipment
P.O. box 011 / 4915
38436 Wolfsburg, Germany

Online
www.erwin.volkswagen.de/workshop-equipment-VAS-Software
Workshop equipment and special tools catalogue

For internal use only.
Technical modifications are subject of change.
Version: 05th June 2019
