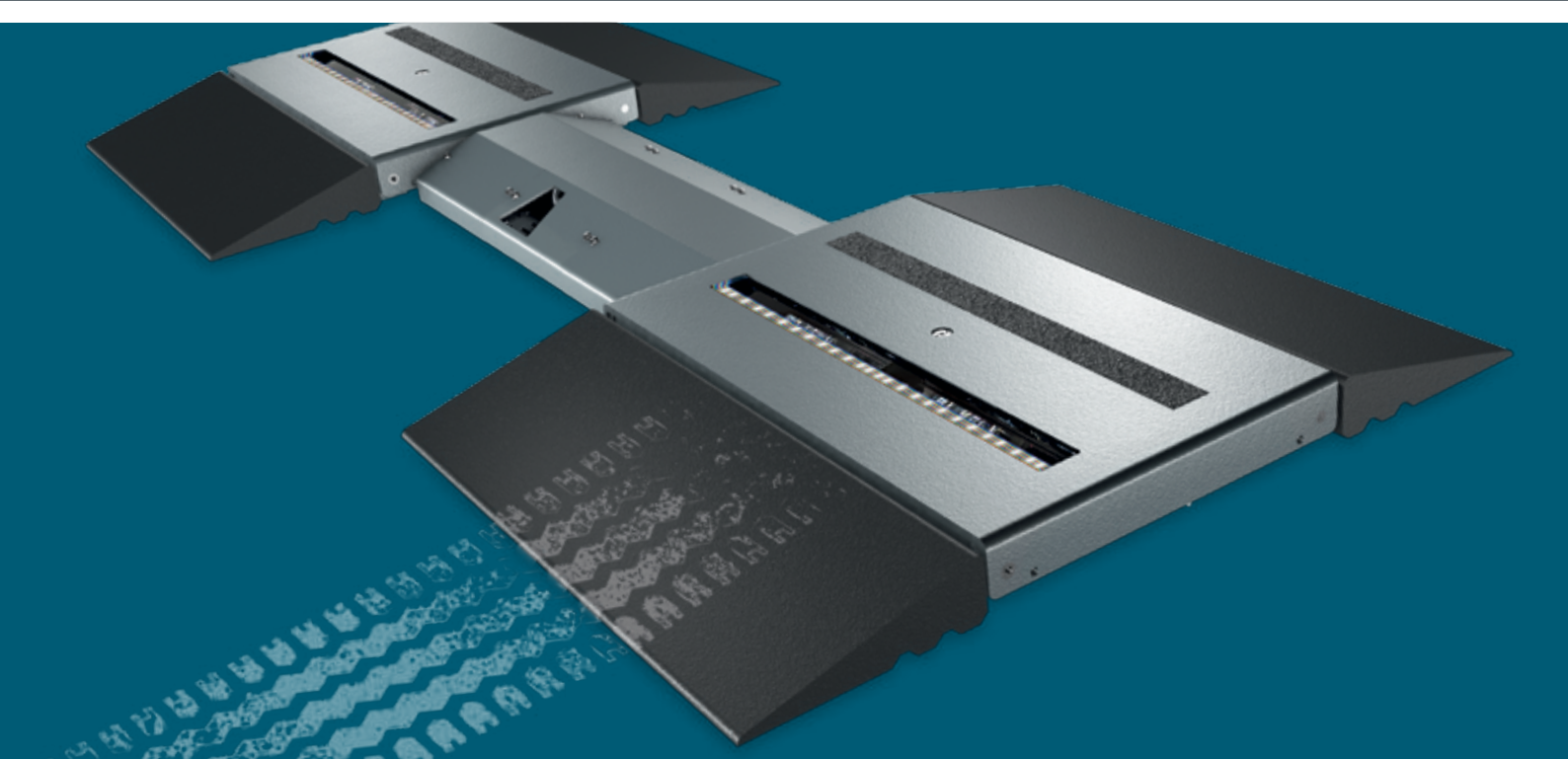


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VAS 741 083

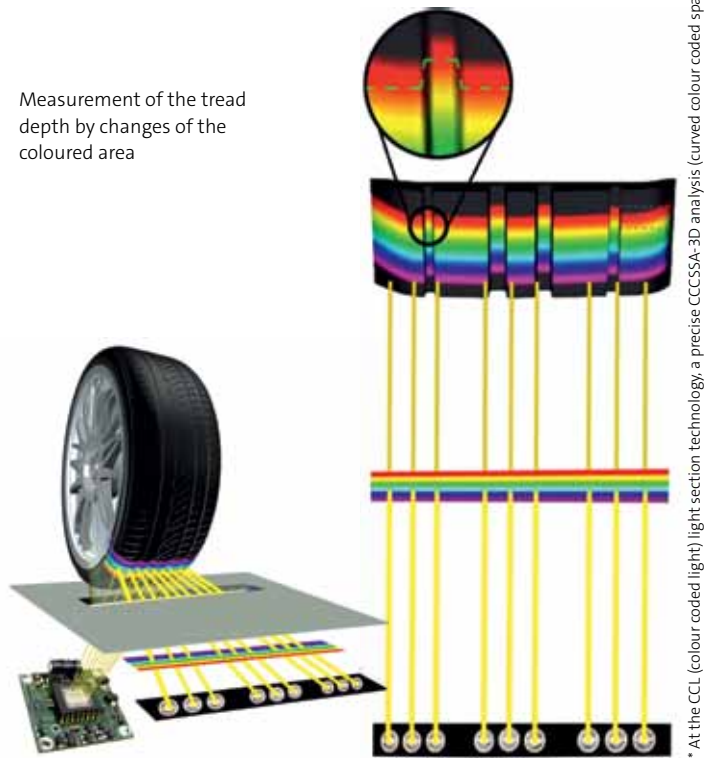
Tyre diagnosis system TDS

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 in the spectrum of 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 in the tyre measurement
- In comparison with laser systems, CCL measurement* 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 by performing a wheel alignment.

Using the VAS 741 083 tyre diagnosis system, the procedures in the workshop are standardised and therefore simplified. 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 test results will 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

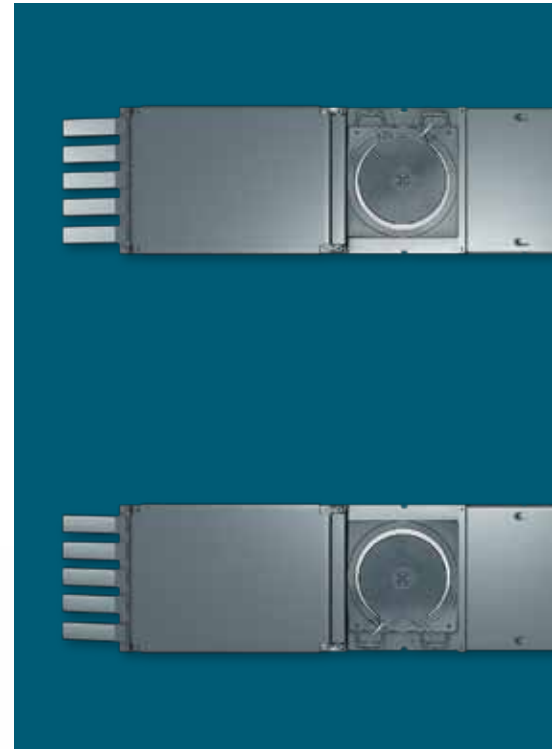
- Drive-over speed: 8 km/h (maximum speed)
- Measurement in a single drive-over without stopping
- Latest camera technology (measurement accuracy : +/-0.25 mm)
- Distinctive coloured CCL light section method thanks to large wheel contact area
- Measurement of the tread depth on all of the 4 wheels within 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. axle load)



(Optional) second monitor
for a second application





VAS 741 083 at the vehicle reception

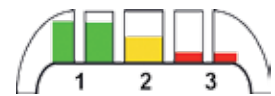
The shown example is combined with VAS 6767 wheel alignment, digital headlight tester and DAS adjustment

Expanded tyre analysis

Precise recognition of tyre wear



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

5.9 Rear left tire

5.2 Front right tire

5.0 Rear right tire

MBB1007

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

Recommended measures

Check wheel alignment

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 Marginal Bad

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 drive-over

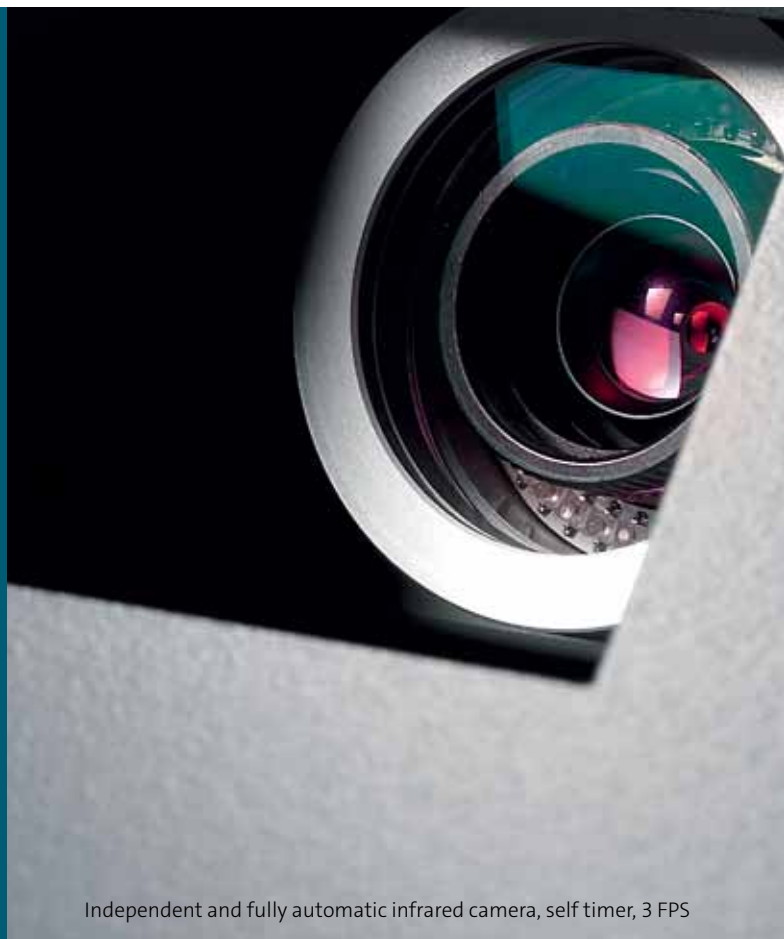


OCR software generates numerical values

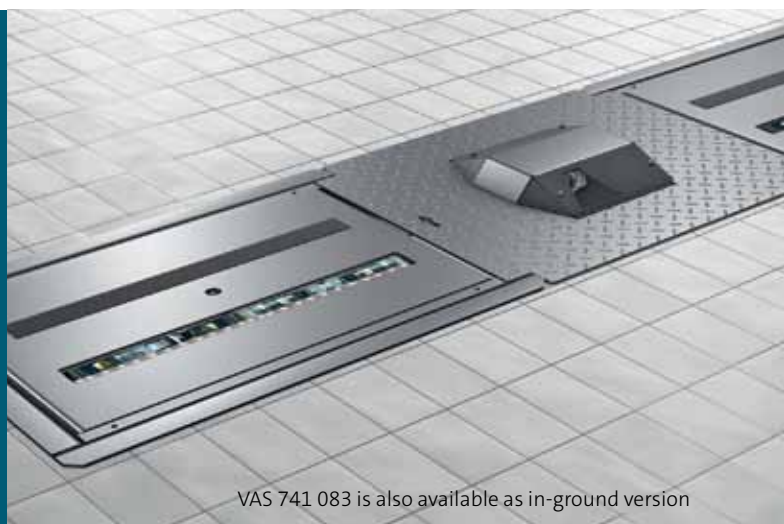
Connection to TDS via big or small cable tunnel

ANPR camera (camera for automatic number plate identification)

- Universal set-up for front or 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 drive-over protection (up to 4 t)
- CDC varnish protects against corrosion
- IP65 rated housing 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 traffic light colours (red, yellow and green).

Technical data

Size in mm (H x W x D)	85 x 2 245 x 1 040
Max. tyre width	450 mm
track width	1 080 – 1 820 mm
Max. speed	8 km/h
Max. axial load	4 t
Voltage supply	100 to 230 VAC, 50 – 60 Hz, 1 phase
Operating temperature / range of functionality	0 – 40 °C
Protection class of the measurement modules	IP65
Software languages	18

Tyre diagnosis system

Accessories

Colour printer	1 693 770 415
Desiccant (2 pieces)	1 691 201 005

Order number

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



Customers own smart TV
mounted onto the wall or a column



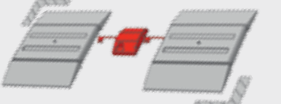
Transparent measurement results on the tablet
This allows the workshop to recommend new tyres or diagnose if a wheel alignment is required using the captured data.

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 set into concrete incl. filler 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

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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: 8th November 2019
