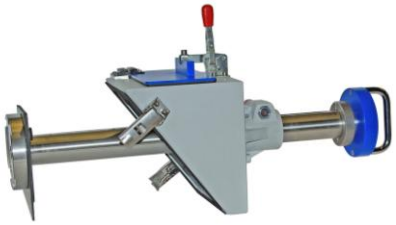
RIMpact I – Impact cabinet (for Mod. 508 SAE or VDA)

RIMpact II-VDA Impact cabinet (for Mod. 508 VDA)

MULTI GRIT TESTER 508 VDA 508 SAE

Attachment for tests in accordance with PSA D24 1312 (for Mod. 508 VDA)



Attachment for tests in accordance with Daimler DBL 5416 (for Mod. 508 VDA)

testing equipment for quality management

ERICHSEN
since 1910

Technical Description

508 VDA
DIN EN ISO 20567-1
FORD FLTM BI 157-06
RENAULT D24 1702
PSA D24 1312
DAIMLER DBL 5416

508 SAE
SAE J 400
ASTM D 3170

Multi-Blow Test Instruments for reproducible Test Results

VDA Stone Hammer Blow Test Instrument, MULTI GRIT TESTER 508 VDA

Purpose and Application

The **MULTI GRIT TESTER 508 VDA** is a stone hammer blow testing instrument that at first was developed in co-operation with the "Verband der Automobilindustrie (VDA)" (Association of the Automotive Industry) but now also meets the specifications of national and international standards. The **MULTI GRIT TESTER 508 VDA** is used to assess the ability of single and multiple layers of paints and similar coating materials to stand up to the impacts caused by small bodies of low mass hitting the specimen at high speed as experienced on road and rail vehicles and other equipment used in the transport field.

Principle of the Test

A defined number of impact bodies of specified shape, material and surface quality is made to impinge for a given period of time and with a defined energy at a determinate angle (54° in accordance with DIN/ISO) of impact onto the specimen.

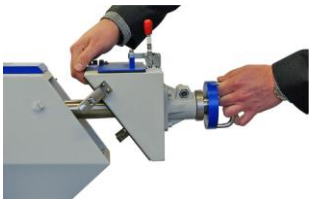
Design and Mode of Operation

The **MULTI GRIT TESTER 508 VDA** is a multi-blow test instrument of high precision, and its special feature is the good repeatability and comparability of the test results obtained. The specimen is subjected to impacts by sharp-edged steel shot accelerated by compressed air. An air accumulator in the system eliminates effects of momentary pressure variations in the external compressed air supply. The shot is entered automatically using an adjustable vibratory feed. On a multifunctional display the working pressure, the duration of the test, the setting of the vibratory feed and the number of tests conducted (total / temporary) can be read off alternatively.
To facilitate working with the **MULTI GRIT TESTER 508 VDA** the instrument is available - upon request - with a pneumatic specimen applying device.

Accessories (option)

Attachment for tests in accordance with PSA D24 1312, for vertical impact angle at 90°.

Attachment for tests in accordance with Daimler DBL 5416, for vertical impact angle at 90°, with infinitely adjustable shoot distance.



Impact cabinet **RIMpact II VDA**

For stone impact simulation testing at rims/wheels up to 26“ dia. x 335 mm width (**under consideration of 54° impact angle prescibed by VDA, in conection with the correct shoot distance**). The variable holding device allows an upright positioning as well as to tilt the sample’s position.

SAE Stone Hammer Blow Test Instrument, MULTI GRIT TESTER 508 SAE

Purpose and Application

The new **MULTI GRIT TESTER 508 SAE** is a stone hammer blow testing instrument equipped with an adjustable impact angle, contrary to the execution of VDA.

Principle of the Test

A defined number of impact bodies of specified properties is made to impinge for a given period of time and with a defined energy at a determinate angle of impact onto the specimen.

Design and Mode of Operation

The **MULTI GRIT TESTER 508 SAE** features, like the VDA version, a good repeatability and reproducibility of the test results. The bombardment of the test panels is carried out with determinate grit (according to ASTM D 3170) which is accelerated by compressed air. Dependent of the specifications of further standards (mostly of car manufacturers) other shot materials can be used, too.
The shot is entered automatically using an adjustable vibratory feed.
On a multifunctional display the working pressure, the duration of the test, the setting of the vibratory feed and the number of tests conducted (total / temporary) can be read off alternatively.
An air accumulator in the system eliminates effects of momentary pressure variations in the external compressed air supply.

The specimen fixing device of the **MULTI GRIT TESTER 508 SAE** is provided with an adjustable impact angle.

The adjusting unit for the impact angle allows to adjust the orientation of the test panel relative to the direction of impact in the range from 30° to 90° in steps of 15°.

Contrary to the VDA version, the test panel in the **MULTI GRIT TESTER 508 SAE** is located completely within the testing room during the whole bombardment procedure.

Due to numerous technical differences between both versions (conditional on the standards), a test in accordance with VDA using the SAE version, is not intended and thus technically excluded.

Accessories (option)

Impact Cabinet **RIMpact I (for models 508/SAE and VDA)**

Enables the user to test complete rims respectively in principle also several other specimen, which up to now – due to their big sizes – would have to be previously segmented by cutting them.

The wheel rim to be tested is turnably fixed, so **each single spoke** can be tested differently by choice with varying combinations of shot gravel, shoot cycles, shot gravel quantities, shoot periods and shoot pressures (under an impact angle of 90°).
So, the user is free to use it in accordance to the current standards' stipulations he has to follow as well as for individually tailored tests.

Technical Data (Mod. 508 VDA)

Dimensions (W x D x H):	1750 x 500 x 1220 mm
Weight (net):	approx. 100 kg
Compressed air connection:	min. 6 bar / max. 10 bar, requires connecting hose with ID 13 mm
Filling pressure control:	approx. 5 bar, factory set
Working pressure:	(0 - 3) bar / quality class I
Time for feeding shot:	(5 - 30) s / adjustable
Display:	8 digits, lighted LCD, height of digits 11.5 mm
Power supply:	85-264 VAC / 47-63 Hz (control circuit volt. 24 V)
Shot (Steel shot acc. to VDA):	GH Diamant 06302, sharp-edged (3.55 - 5 mm)

Note: By now many users also apply further types of shot material, e. g. in accordance with the specifications of different international vehicle manufacturers or internal specifications based on experience in their own company.

Order Informations	
Ord.-No.	**Product-Description**
00630131	**VDA Stone Hammer Blow Instrument, MULTI GRIT TESTER 508 VDA,** with **manual** specimen applying device
00630231	**VDA Stone Hammer Blow Instrument, MULTI GRIT TESTER 508 VDA,** with **pneumatic** specimen applying device
Supplied with: ♦ 1 kg Shot (Steel shot) ♦ Operating Instructions	

Accessories	
Ord.-No.	**Product-Description**
07060132	Attachment for tests in accordance with PSA D24 1312
17060132	Attachment for tests in accordance with Daimler DBL 5416
24080132	Impact cabinet RIMpact II VDA

For further details please see our price list no. 508.

Technical Data (Mod. 508 SAE)

Dimensions (W x D x H):	1600 x 500 x 1250 mm
Weight (net):	approx. 100 kg
Compressed air connection:	min. 8 bar / max. 10 bar, requires connecting hose with ID 19 mm
Volume flow:	min. 3 m^3/min
Filling pressure control:	7.8 bar overpressure, set by factory
Pressure sensor:	0 - 6 bar, accuracy 0.5% by end of value
Time for feeding shot:	(4 - 30) s
Display:	8 digits, lighted LCD, height of digits 11.5 mm
Power supply:	85-264 VAC / 47-63 Hz (control circuit volt. 24 V)
Shot:	grit (in accordance with ASTM D 3170)

Order Informations	
Ord.-No.	**Product-Description**
02790131	**SAE Stone Hammer Blow Instrument, MULTI GRIT TESTER 508 SAE,** with adjusting unit for the impact angle
Supplied with: ♦ 1 kg Shot (Grit) ♦ Operating Instructions	

Accessories	
Ord.-No.	**Product-Description**
22710132	Impact cabinet RIMpact I - SAE
22710232	Impact cabinet RIMpact I - VDA

For further details please see our price list no. 508.

Note:
For capture and analysis at impact images we recommend our new analysis system GRITSCAN. Please ask for our detailed leaflet and price list.

Subject to technical modifications.
Group 13 – TBE 508- X/2017

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