

DH-8 – EXPANDABLE FOR CONTOUR AND OPTIC



SURFACE ROUGHNESS MEASUREMENT

- › High precision surface roughness meter for universal use in workshop and inspection room
- › Automatic calibration
- › Memory for 50 measurements
- › 5 measuring length, all selectable between 0.5 and 15.0 mm
- › Measuring speed selectable
- › Calibration for max. 8 tracers
- › 8 measuring programs
- › Choice of many types of tracers to solve nearly all measuring tasks, also customer specific ones
- › User friendly comprehensive multilingual menu guidance
- › Tolerance indication for measuring values exceeding permissible allowance set
- › Key lock for Lt, Lc and R to prevent any settings being changed by mistake during measuring procedure
- › USB output for data transfer (option: Bluetooth)

SCOPE OF SUPPLY

- › Instrument DH-8
- › Motor unit VH or VHF
- › Standard tracer SH
- › Specimen metal Ra = 3.00
- › Charger
- › Connecting cable
- › USB-connecting cable
- › Screw driver
- › Instruction manual + short manual
- › Certificate of quality
- › Carrying case
- › Software DIASOFT Basic

- › Choice of capable software programmes DIASOFT (optional)
- › Numerous accessories for many applications, needed for working with skidless tracers

OPTIONS FOR DH-8

MEASUREMENT OF CONTOURS

The **DH-8** now offers, as an option, to precisely measure contours. For this purpose, a special contour measuring tracer is needed, in combination with a special software.

CHARACTERISTICS

- › Measuring range X: from 0.5 to 15.0 mm
- › Measuring range Z: max. 4 mm
- › Tracing angle: falling flanks up to 88° rising flanks up to 77°

OPTICAL MEASUREMENT

Measurement of more surfaces: vertical steps, high aspect ratios, bumps and holes, fragile, soft, flexible, sharp, hard or abrasive surfaces, transparent, reflective, opaque, multi-material surfaces

CHARACTERISTICS

- › Measuring head: CLA-400
- › Measuring range Z: 400 µm
- › Working distance: 5 mm
- › Repeatability: 2 nm
- › Vertical resolution: 0.025 nm
- › Spot size: 7 µm
- › Maximum slope: ±30°

Software, tracers and accessories for the **DIAVITE DH-8** see page 6 and more. Please ask for Contour and Optic.

DIASOFT – VISUALISE YOUR MEASURES

PC-SOFTWARE PROGRAM «DIASOFT»

The software as a supplement and extension of **DIAVITE** includes further roughness parameters and can present and memorize profiles. These can be analysed and compared with each other. This software is available in 4 different versions:

Basic (incl. in the scope of supply)

Basic programmes with Ra, Rq, Rv, Rp, Rt, Sm, Rsk, Rku, Rz, RTp, RHTp, RDq, RPC, roughness curve, Abbott curve

Standard

Same as «Basic», additionally with waviness and roughness profile on the same curve, zoom functions, symmetry, comparison of profiles and more.

Automotive

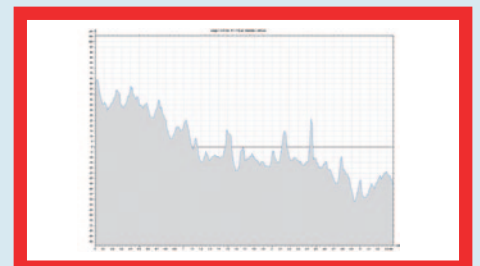
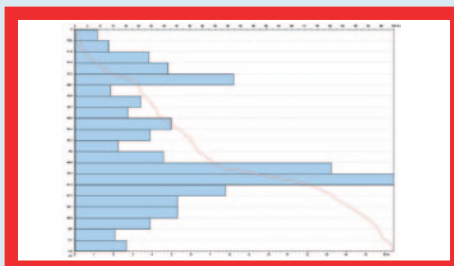
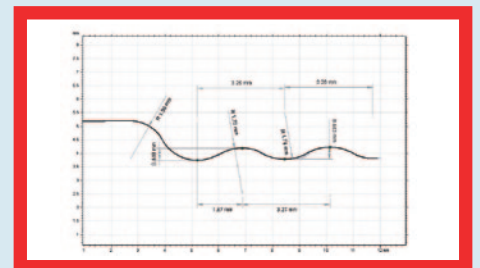
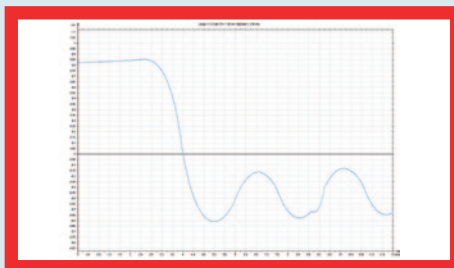
Same as «Standard», additionally with ISO 12085 (CNOMO), ISO 13565, (parameter Rk)

Expert

Same as «Automotive», additionally analysis of series of profiles and a lot more features to analyse the measurements. The most complete offer for the specialist, now and in future.

OPTIONS FOR STANDARD, AUTOMOTIVE AND EXPERT

- › Module advanced contour
- › Module simple contour
- › Module statistics



TRACERS – FOR USE WITH ALL DIAVITE INSTRUMENTS

TRACER WITH SKID

(Enumeration not complete)

Standard tracer

SH



Smallest bore: Ø 8 mm
Max. measuring depth: 27 mm
Included in the delivery

Bore tracer

BH



Smallest bore: Ø 2.5 mm
Max. measuring depth: 20 mm

Slot tracer

NH



Max. depth of slot: 15 mm and 20 mm
Min. width of slot: 3 mm

Axis and knives tracer

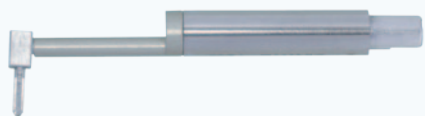
AH



For measuring small axis, knives, edges and wires

Concave-convex tracer

KKH



For measuring concave and convex work pieces having a minimum radius of 5 mm. Also irregular curves can be measured.

Gear tooth flanks tracer

ZH

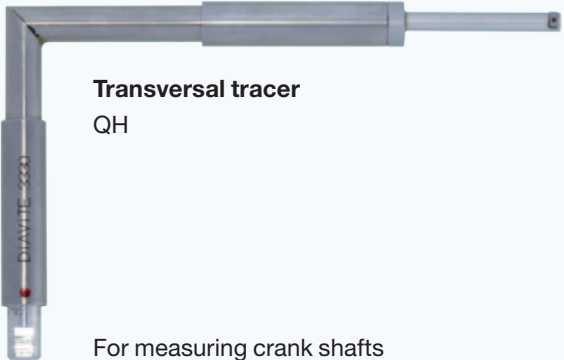


Tracer with skid for tooth flanks up to module 2



TRACER CONTINUATION

TRACER WITH SKID CONTINUATION

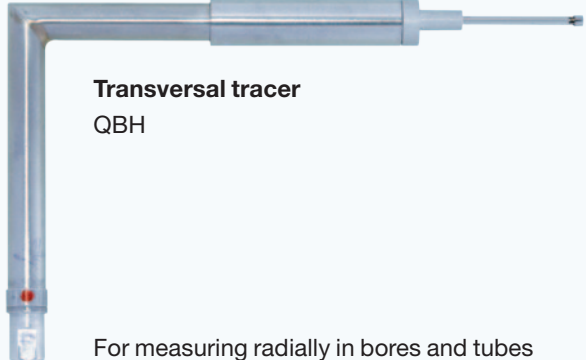
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Transversal tracer
QH



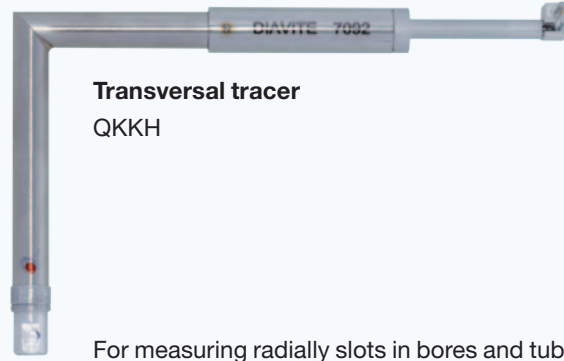
For measuring crank shafts





Transversal tracer
QBH



For measuring radially in bores and tubes



Transversal tracer
QKKH




For measuring radially slots in bores and tubes

Basis tracer
TH




For measuring of deep level flats till 140 mm

Circumference- and ball tracer
UH



Minimum possible diameter \varnothing 8 mm



SKID LESS TRACER

(Enumeration not complete)

Bore tracer
BZFH



Smallest bore: Ø 1.5 mm
Max. measuring depth: 15 mm
Gear tooth flanks: from module 0.75

Small bore tracer
BZFH-06



Smallest bore: Ø 0.8 mm
Max. measuring depth: 15 mm
Gear tooth flanks: from module 0.5

Slot tracer
NFH



Max. depth of slot: 25 mm
Min. width of slot: 1.5 mm

Slot tracer
NFH-06



Max. depth of slot: 10 mm
Min. width of slot: 1.0 mm

Axis and knives tracer
AFH



For measuring small axis, knives, edges and wires

Transversal tracer
WFH

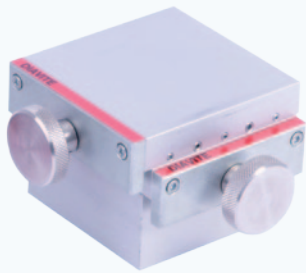


For measuring slot inside flanks

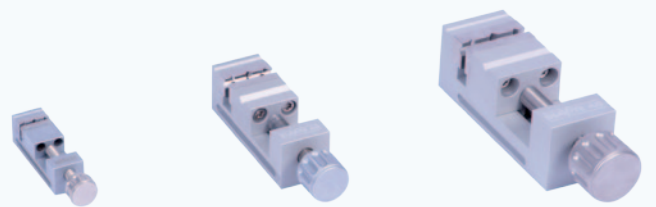
ACCESSORIES – SIMPLY FITTED TO ALL INSTRUMENTS

ACCESSORIES DIAVITE DH-8 AND COMPACT II





Cross table 70x70 mm for the vices



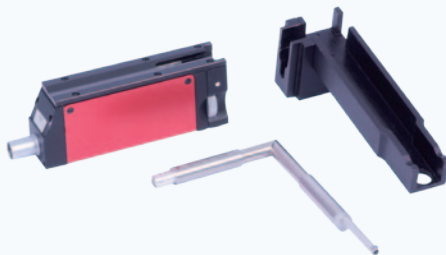
Vices with jaws width 15 mm, 25 mm and 35 mm



Various small supports



Various metal or glass specimen



Device for the manual measurement of crank shafts (without tracer and motor unit)



To extend the tracers for deep bores (up to 700 mm)

TECHNICAL DATA	DIAVITE COMPACT II AND DH-8	
Parameters	<ul style="list-style-type: none"> ➤ ISO/DIN: Ra, Rz (DIN), Rmax, R3z, Rt, Rq (RMS), Rk, Rp, Rv, Rpk, Rvk, MR1, MR2, Rpc, C1, C2, percentage contact area, C0, Cz ➤ JIS: Ra (JIS), Rz (JIS) ➤ ISO 12085: R, AR, Rx ➤ additional parameters possible with optional PC software 	
Measuring range	<ul style="list-style-type: none"> ➤ Ra, Rq: 0–20.00 µm 0–800 µin ➤ All other measuring values: 0–350.0 µm 0–1400 µin 	
Resolution	<ul style="list-style-type: none"> ➤ Ra, Rq: 0.001 µm ➤ All other measuring values: 0.01 µm 	
Output	USB interface	DH-8: option Bluetooth
Humidity	max. 80 %, not condensing	
Languages	German, English, French, Italian, Spanish, Polish	
Tracing system	Analog hall effect technology with high linearity output signal	
Diamond tip	Radius: 5 µm, 90° (standard) or 2 µm, 60° (option)	
Tracing skid	25 mm (standard tracer)	
Static measuring force	Stylus < 0.5 mN	
Static tracking force	Skid < 0.15 N	
Tracing speed	COMPACT II: 0.5 mm/s	DH-8: 0.25, 0.5 und 1.0 mm/s
Reverse speed	1.0 mm/s	
Motor unit	VH (tracer with skid) or VHF (all tracers with and without skid)	
Dimensions instrument	COMPACT II: 140 x 75 x 60 mm	DH-8: 245 x 130 x 78 mm
Dimensions motor unit	ca. 20 x 33 x 136 mm (with supporting shoe)	

Made in Switzerland

Specifications subject to change without prior notice!



DIAVITE AG