DIAVITE DH-6

Approaching Lab' Quality!

DIAVITE

Surface roughness meter with «Hall-effect»-technology

High precision for quality assurance in both workshop and inspection room






Special tracers for solving nearly all measuring problems:

- slots and small slots
- thin axis
- spheres and shafts
- concave and convex surfaces
- small bores
- and many more!

More versatile – superior linearity – adaptable for future measuring needs

More than 50 years experience – used worldwide

SWISS MADE

WORKHOLDING – METROLOGY – PRODUCTION OF DIAVITE SURFACE ROUGHNESS METERS

ASMETO AG

Distributeur : SiGaTec - 162 Av. du Bois de Verrières - 92160 ANTONY - FRANCE
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DIAVITE

DIAVITE DH-6

- High precision roughness meter for universal use in workshop and inspection room
- Integral thermo printer for all measuring values, profile and bearing portion
- Automatic print out after each measurement is possible
- Memory for 50 measurements
- Measuring support for many measuring applications – necessary for working with skidless tracers
- Choice of many types of tracers to solve more measuring problems
- User friendly comprehensive multilingual menu guidance
- Tolerance indication for exceeded limits of measuring values

Linearity and measuring accuracy

Since 1995 the analogue Hall-effect-technology with a high linear output signal, employed for the first time by DIAVITE, has proven its superiority against previously incorporated systems. With this technique, **high linearity over the average** is reached. Exact definition of the green phase for optimum position of the diamond point by means of an arrow in the display bar. This **allows now to effect skidless tracer-measurements with DH-6 even more exactly. This is the reason for the creation of our slogan "APPROACHING LAB' QUALITY"!** The DH-6 has moved positively from an ordinary workshop instrument in the direction of a higher-class versatile surface roughness meter.

Technical data

Standard	*ISO/DIN, JIS, CNOMO (optional)*		
Measures in roughness units	*Ra (AA, CLA), Rz (DIN), Rmax, R3z, Rt, Rq (RMS), bearing portion tp (printer)* *Ra (AA, CLA), (JIS), Rz (JIS), Ry (JIS)* *R, AR, Rx (optional)* *supplementary measuring values with PC-software (optional)*		
Measuring range	*Ra, Rq* *all other measuring values*	*0–20.00 µm* *0–200.0 µm*	*0–800 µin* *0–2000 µin*
Resolution	*Ra, Rq* *all other measuring values*	*0.01 µm* *0.1 µm*	
Classification of instrument according to DIN	*1 (5%)*		
Cutoff lc	*0.00 (off), 0.08, 0.25, 0.8, 2.5 mm*		
Traversing length lt	*0.48, 1.50, 4.8, 15.0 mm*		
Traversing length CNOMO	*1, 2, 4, 8, 12, 16 mm*		
Power supply	*charger 90-240 V, 50–60Hz and NiCd rechargeable batteries*		
Printer	*cutoff, measuring length lt, date* *actual measuring value or all measuring values* *profile and bearing portion tp, graphically, list or single value*		
Output	*interface RS 232*		
Air humidity	*max. 80 %, non-condensating*		
Languages	*English, French, German, Italian, Spanish*		
Tracing system	*Analog Hall-Effect technology with high-linear output signal,* *a technical progress against best inductive systems (better linearity)*		
Diamond tip	*radius 5 µm, 90° (standard) or 2 µm, 60° (optional)*		
Radius of the skid	*25 mm (standard tracer)*		
Static measuring force	*tip <0.5 mN*		
Static supporting force	*skid < 0.15 N*		
Tracing speed	*1.0 mm/s*		
Reverse speed	*approx. 2.0 mm/s*		
Traversing units	*VH or VHF (depending on tracer, see page 3)*		
Dimension instrument	*approx. 130 x 78 x 245 mm*		
Dimension traversing units	*approx. 20 x 33 x 136 mm (with supporting shoe)*		

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The **DIAVITE DH-6** assures quality control for present and future work pieces having restricted accessibility or smallest measuring areas. DIAVITE offers more than 15 different tracers – also customized special solutions – to allow measuring in limited zones.

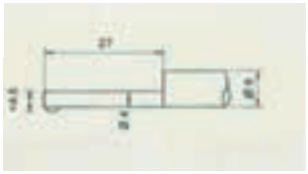
- Bores from ∅ 1 mm
- Slots from 1 mm longitudinally, from 1.5 mm transversally
- Concave-/convex surfaces
- Laterally lowered slots left and right
- Tooth flanks from module 0.5
- Axis and wires below ∅ 1 mm

Besides simple measurements, the solution of many measuring problems believed to be "impossible" can now be realized!

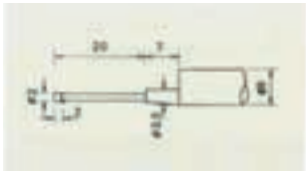
Tracers with skid

Traversing unit: VH or VHF

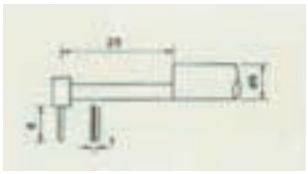
Reference surface tracers are probes having a skid, producing its own surface reference level (reference area) for determination of the surface roughness value.



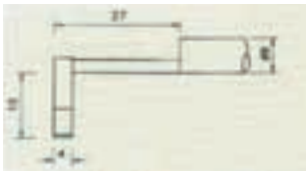
Standard tracer SH



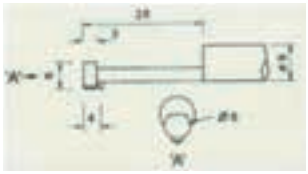
*Bore tracer BH**



*Concave-convex-tracer KKH**

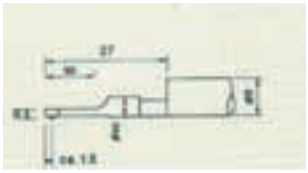


*Slot tracer NH**

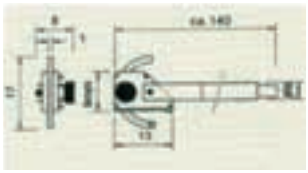


*Axis and knifes tracer AH**

*Transversal tracer QH**



*Gear tooth flanks tracer ZH**

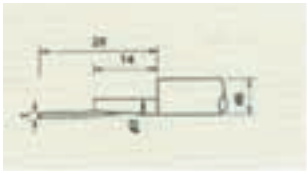


*Circumference and ball tracer UH**

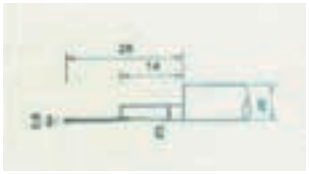
Tracers without skid

Traversing unit: only VHF

Tracers without skid (free tracers) need a reference level which is incorporated in the traversing unit VHF

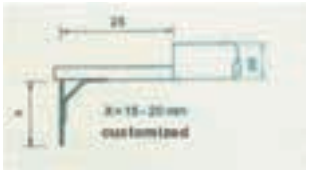


*Small bore tracer BZFH**

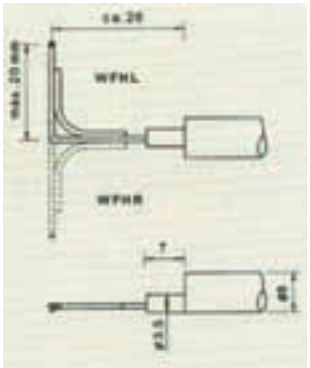


*Small bore tracer BZFH-06**

Slot tracer NFH-x and NFH-06-x**



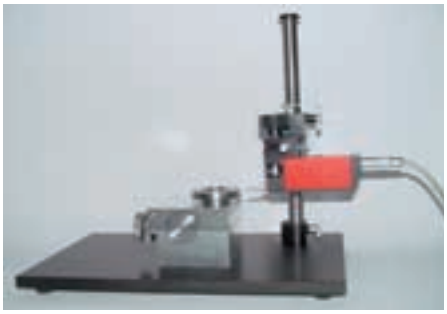
*Slot tracer NFH-x**



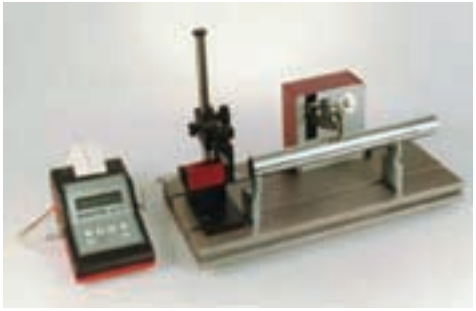
Angle free tracer left and right WFH-L and WFH-R**

Not shown:

- **Further customized tracers constructed specially according to measuring task**
- **Extension for tracers with skid (max. 300 mm)**



Measuring-support DIAVITE MSHN allows smooth lowering of the tracer onto the workpiece – protects tracers



*Measuring of roughness radially **at the inner and outer circumference of cylindrical parts** with the optional complementary accessory **DIAVITE Tubemaster.***

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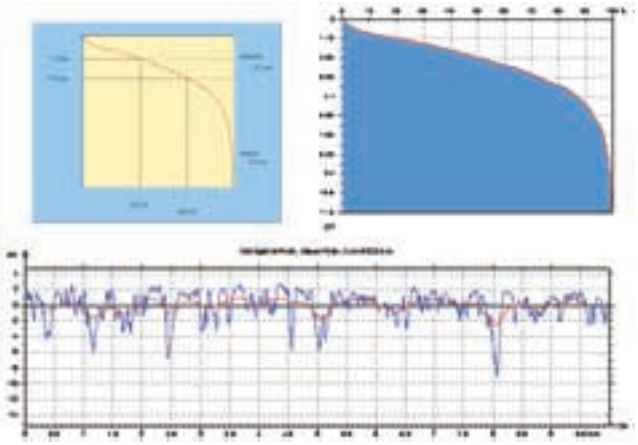
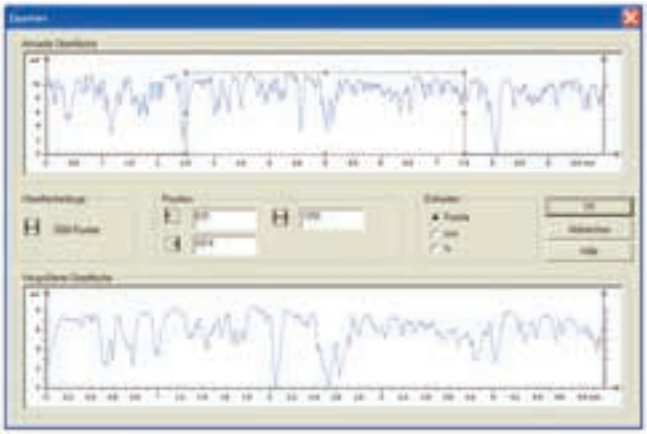
PC program 'DIASOFT'

Option

”DIASOFT” is a multilingual software offering complementary features for DIAVITE DH-6. This program calculates numerous further roughness parameters, presents and memorizes profiles for analysis, comparison and is available in the following three versions:

Basic	Basic program including Ra, Rq, Rv, Rp, Rt, Sm, Rsk, Rku, Rz, RTp, RHTp, RDq, RPc, profile curve, Abbott-curve and more.
Standard	Comprises additionally RLq, Rlo, RzJIS, R3z, waviness and roughness profile on the same curve, zoom functions, symmetry, comparison of profiles and more.
Expert	The most complete offer of measuring and analysis possibilities for now and the future. It is a professional tool for the measuring specialist.





Examples of industrial applications:

Multisensor measuring robot in a car engine factory of a famous motor car manufacturer, using the DIAVITE roughness meter

General application in the workshop

Further optional accessories

– Shoulder strap for DH-6
– Positioning cross table 70 x 70 mm, displacement x-y 25 mm
– Vice length 65 mm, width 35 mm, height 30 mm
– SPC-Box

Subject to technical modification without notice.

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