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**PORTABLE SURFACE ROUGHNESS TESTER MODEL TR2000**



**A. Applications:**

Model **VT4222** surface roughness measuring tester is a high accurate yet portable measuring instrument. It is ideal for fast analysis and evaluation of component surfaces e.g. plane, cylinder, bore and curved surface in all engineering environments.

**B. Specifications:**

1. Measuring principle: stylus contact method, differential inductive pick-up
2. Measuring range: stylus displacement:  $\pm 50\mu\text{m}$ ;  $R_t$   $80\mu\text{m}$ ;  $R_a$   $8\mu\text{m}$
3. Indication accuracy:  $\pm 10\%$
4. Smallest resolution:  **$0.005\mu\text{m}$**
5. Cut-off length : 0.25, 0.8, 2.5mm
6. Assessment length:  $N \times$  cut-off,  $N=1, 2, 3, 4, 5$
7. Filter type: Gaussian, RC, PC
8. Measuring stroke:  $\pm 10, \pm 25, \pm 50\mu\text{m}$
9. Measuring parameter:  $R_a, R_c, R_p, R_v, R_z, R_q, R_{sm}, R_t, R_{sk}, R_{ku}, R_{dq}, R_{mr}$  (defined according to GB/T3505-2000)
10. Vertical magnification: auto/500/2000/10000
11. Horizontal magnification: 10/40/100
12. Traversing speed: 0.15, 0.5, 1mm/s
13. Pick-up stylus: diamond-90° angle with spherical tip  $5\mu\text{m}$  radius
14. Operating temperature:  $5^\circ\text{C} - 40^\circ\text{C}$
15. Power supply: rechargeable batteries, plug-in charger

**C. Set of instrument includes :**

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| <ol style="list-style-type: none"><li>1. Standard module:<br/>Electronic unit/printer<br/>Traverse unit<br/>Standard pick-up<br/>Roughness standard<br/>Column<br/>Battery charger</li></ol> | <ol style="list-style-type: none"><li>2. Optional accessories: (at extra cost)<br/>Small-sized instrument stand<br/>Tilttable measuring table<br/>Curved surface pick-up<br/>Pick-up extension 100mm<br/>Pick-up extension 200mm<br/>Vee-block<br/>Parallel vice</li></ol> |
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