Spirometer CE 1011
LUNGTEST Handy

MES

Lungtest Handy is a small portable diagnostic spirometer to be directly connected with a PC via USB. The examination safety is based exclusively on the accessories provided in the set without any need to use anti-bacterial filters.

Lungtest Handy spirometer is easy to use and to maintain. High measurement accuracy and technologically advanced software allow to perform with Lungtest Handy the slow spirometry, flow-capacity curve and the maximal minute ventilation. The full system of control over the correctness and quality of the performed examination compliant with the ERS/ATS guidelines and the possibility to interpret and report the results of the performed examinations put the Lungtest Handy spirometer on a par with the specialised diagnostic spirometric systems.

Basic advantages and possibilities of the Lungtest Handy spirometer:

- replaceable measurement heads - with no anti-bacterial filters - completely protect the examined patient from the infection of the respiratory tract
- possibility o easy installation to any computer with the Windows operational system
- automatic control over the correctness of the examination performance according to the ERS and ATS standards
- automatic assessment of the quality of the correctly performed examination in the A-F scale
- automatic assessment of the diastolic test according to ERS with text commentary
- possibility to present the slow spirometry and the flow-volume curve
- real-time examination presentation in three axes: flow, volume, time
- possibility to calculate standard deviations and percentile of the due values
- possibility to control the spirometer calibration by the user with the use of a syringe
- possibility to edit own reports from the examination
- possibility to preview and print up to 55 spirometric values
- GLI and many others predicted values available,
- possibility to turn on the automatic diagnosis system
- ergonomic casing of the spirometer with patent handle of the replaceable measurement head
- possibility to select the manner of result presentation
- direct power supply from the computer
- motivational system for children
- user-friendly software
- database without any limitations with quick searching for patients and examinations
- latest versions of software included in the price of the spirometer
- small weight.

Spirometer Lungtest Handy

Spirometer **LUNGTEST** Handy

PATIENT'S DATA
The spirometer allows to introduce the following patientís data:
first name, last name, patientís code, date of birth, height, weight, gender.

PREDICTED VALUES
Usually the due values are calculated according to ERS but the Lungtest Handy software contains actually 31 authors including GLI, NHANES III, Kuster, Hankinson, Falaschetti etc.

STANDARD TESTS PERFORMED BY LUNGTEST HANDY
Spirometry - the determined parameters: VC, IC, ERV, TV, IRV, MV, BF.

Flow/volume loop - the determined parameters: FEV0.5, FEV0.75, FEV1, FEV2, FEV3, FEV6, FVC EX, PEF, MEF75, MEF50, MEF25, MEF@FRC, FEF75/85, FEF25/75, FEF 0.2-1.2, VPEF, TPEF, FET, TPEF%FET, MEF50% FVC EX, FEV1% FVC EX, FEV1% VC, FEV1/PEF, VCmax, FEV1% VCmax, FEV1% FEV3, FEV1% FEV6, BEV, BEV%FVCex, TC25/50, MTT, AEX, FVC IN, FIV1, PIF, MIF50, FIT, TPIF, VPIF, TPIF%FIT, FEV1% FVC IN, MEF50/MIF50, PEF/PIF, FEV1/FIV1, FET%FIT, TTOT.

PRE/ POST BRONCHIODILATATION
When a test is repeated after intake of the medicine, results of the second test are related to the results of the test preceding the medicine intake. Each initial test is marked as PRE and the test following the medicine intake is marked as POST to facilitate interpretation of the recorded results. The software allows automatic evaluation of a diastolic test consistent with ERS/ATS standards.
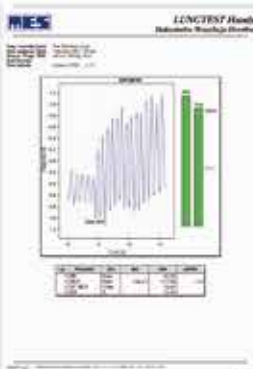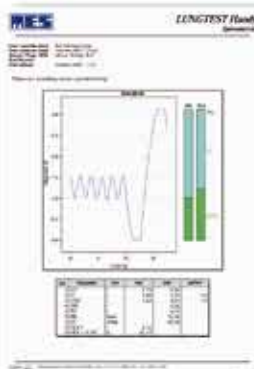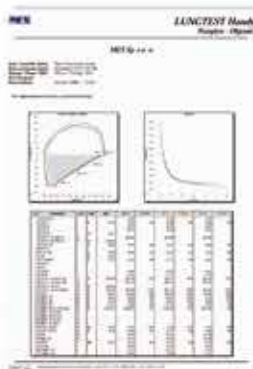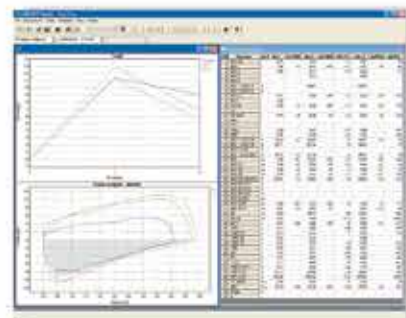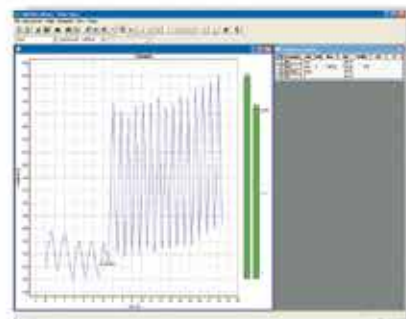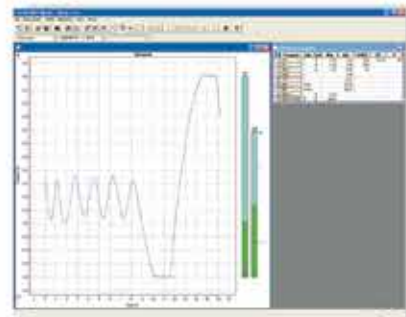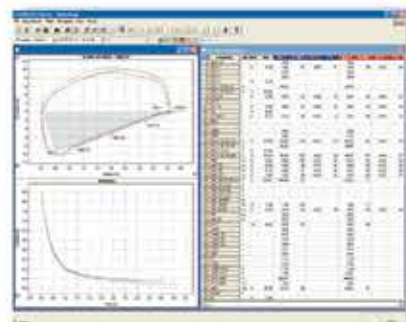
STANDARD EQUIPMENT
spirometer, USB cable, CD with software, 10 measurement heads, 10 mouthpieces for children, 10 mouthpieces for adults, clip on the nose, box.

TECHNICAL PARAMETERS:

- measuring headpiece MES DV40 (or DV40e)
- deadspace 38ml (or 20ml)
- flow range ± 20 l/s
- flow resolution 1 ml/sec
- usable flow resolution 10 ml/s
- volume measurement range 0 ± 10 l (0-20 l)
- accuracy < 2%
- headpiece resistance < 0,9 cmH$_2$O/l/s
  (at 14 l/s flow rate)

General data:
- Dimensions 145/40/90 mm
  (length/width/height)
- Weight 120g
- Power supply USB
- Ambient conditions: 0 – 100% humidity
  0 – + 50°C
  500 – 1200 hPa

Advantages of our headpiece:

- **parameters do not change in the course of a test**
- **pre-test calibration is not required**
- **high accuracy and resolution**
- **sterile for each patient**
- **easily sterilizable**
- **no moving elements**
- **small dead space**
- **low flow resistance**
- **no heating system**

Distributor:

PATENT NR: 173767

Manufacturer:

MES ®

MES Ltd.
32-050 Skawina, Krakowska Street 87, Poland
tel./fax ++48 12 269 02 09, 263 77 67, 262 01 66, 262 01 71
e-mail: mes@mes.com.pl, www.mes.com.pl