Lintel® ATH-20

Automatic Fraass Breaking Point Tester

Standards

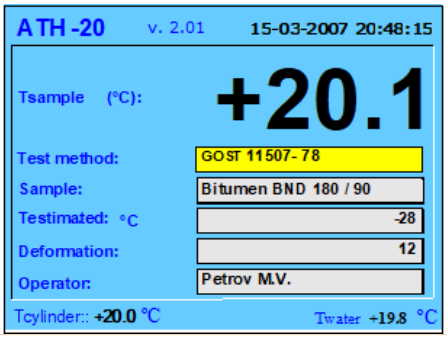
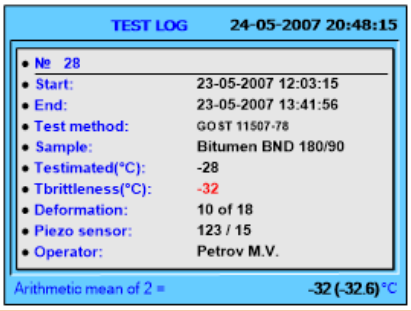
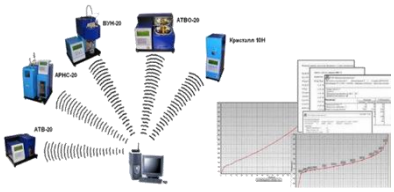
EN 12593
IP 80

FEATURES OF THE LINTEL ATH-20

- LinteL ATH-20 provides full automation of the test process. Tester works in several modes: "standard", "accelerated", "express". When the mode is selected, all necessary parameters and test conditions are set and maintained automatically.
- Tester supports automatic lowering of the sample temperature using the built-in cooler on the Peltier elements at a specified speed, fixing and storing the breaking point temperature in the non-volatile memory.
- Test logging provides storage of up to 100 test results, and allows you to filter results by method, date, and product.
- Calculation of the average breaking point temperature.
- The ability to check the readings of the sample temperature sensor with an exemplary thermometer
- Full self-diagnosis system with indication of the causes of malfunctions on the display.
- Stop the test process at the end of the analysis with an audible alarm.
- The high-contrast color TFT display provides an intuitive user interface with all the necessary information for testing and viewing the results.
- Test by “Express” method for products with unknown brittleness temperature.
- Integration with LinteL Link Data Collection System allows the collection and transfer of laboratory test results from the tester to a personal computer via wireless communication. Integration with the laboratory information system LinteL LIMS provides a complex automation of laboratory activities.

Automatic tester LinteL ATH-20 uses up-to-date technologies and components to ensure high quality of the tester and convenience of its operation to reduce test timing and improve work efficiency.

Tester LinteL ATH-20 provides a number of advantages to our customers:

The tester has four operating modes: standard, accelerated, and express	
The integrated cooling system based on Peltier elements ensures automatic maintenance of the test conditions in accordance with the selected method and a minimum temperature of - 45 °C in the cooling module. The tester does not require an external cryostat, does not use additional supplies and toxic refrigerants.	
The color contrast TFT display provides detailed information about the current parameters and set test conditions	
Test results obtained and stored in the tester memory can be compared due to the test log	
Rapid transfer of test results through a Data Collection System (Zbee). LinteL Link Data Collection System allows to transfer test results from the tester to a computer using wireless data transmission.	

SPECIFICATIONS	
Measurement range of breaking point temperature	–45 to + 20°C
Cooling system type	based on Peltier modules; Peltier modules are cooled by water

ACCURACY PARAMETERS	
Maximum distance between the grooves clips	39,9 to 40,1 mm
Minimum distance between the grooves clips	36,4 to 36,6 mm
Sizes of a working plate from a steel tape	Length 41,0±0,05 mm Width 20,0±0,2 mm Thickness 0,15±0,02 mm
Tester evenly bends and straightens the working plate: -bending process time - the process of bending and straightening	 10 to 12 sec 20 to 24 sec
Temperature drop rate -with a deviation no more than	1,0 °C/minute 0,1 °C/minute

PERFORMANCE DATA	
Power supply	450 W, max
Dimensions, (W*H*D)	1) 400x555x275 mm in the sample loading state; 2) 400x395x275 mm in working condition
Weight	12,5 kg max
Ambient temperature	10 to 35 °C
Relative humidity at a temperature of +25°C	80 % max
Voltage	187 to 242 V
Frequency	49 to 51 Hz
Service life	6 year (15,000 hours max)
Warranty period	1 year (2,500 hours max)

SAFETY	
Audio signals	Beeping at the end of the test and failure detection
Diagnostic and setting	Built-in algorithms for self-diagnostics and settings, user notification about causes of malfunctions

Dealer in Kazakhstan

«ELEMENTUM» LLP
86 Gogol str., office 214, Almaty, 050000
Phone: +7 (727) 250-89-76,
+7 (727) 329-68-75
Fax: +7 (727) 250-89-73
info@elementum.kz
elementum.kz@mail.ru

KAZAKHSTAN-TASYMAL LTD LLP
9 Abay ave., office 105, Ust-Kamenogorsk, 070002
Phone: +7 (7172) 69-59-31,
+7 (727) 312-34-28,
+7 (7232) 48-90-39;
WhatsApp: +7 (702) 694-93-11
gk-tasymal@mail.ru

Dealer in Belarus

«FIVE OCEANS» CJSC
12 Moskovskaya str., Minsk, 220007
Phone / Fax: + 375 17-374-42-56,
+ 375 17-397-57-44,
+ 375 33-357-42-56
w@5ok.by, info@5ok.by

«AVANTA & Co» CJSC
2 Spassateley str., room 32, Pukhovichy district, Maryina Gorka, Minsk, 222827
Phone: + 375 17-270-70-00,
+375 44-512-52-80
Fax: + 375 17-394-01-59
info@avanta.by, girs@avanta.by

Dealer in Uzbekistan

«INVEST KOMPLEKT» LLC
55 Chilanzarskaya str., Tashkent, 100115
Phone: +998 97-156-53-43,
+ 998 97-724-63-43
invest.komplekt@bk.ru

«FORTEK» private enterprise
13A 6th passage Sairam str., Tashkent 100170
Phone: + 998 71-268-5750,
+ 998 71-268-5720
Fax: + 998 71-267-7190
office@fortek.uz, sales.a@fortek.uz

Himlabpribor LLC
15 Almazar str., Shaikhontohur district, Tashkent, 100011
Phone: + 998 90-997-64-56,
+ 998 90-355-62-35
uzhimlabpribor@mail.ru

COMPLETE SET

LinteL ATH-20	1 pcs.
Plate 36,5 mm	1 pcs.
Plate 40 mm	1 pcs.
Clamp screw 8…12	2 pcs.
Silicone tube 10x2 1,5m	2 pcs.
Working plate	10 pcs.
Operating manual	1 pcs.
Passport	1 pcs.
Certification program and methodology	1 pcs.

OPTIONS

LinteL Link Data Collection System	Software and hardware intended for collection and transmission of test results from devices LinteL to a personal computer by wireless communication
Laboratory information system LinteL LIMS	Software and hardware designed for complex automation of laboratory activities
LinteL UPP-10	Sample preparation device Used with LinteL ATH-20. Temperature range from + 80 to +250°C. Heating temperature of each 1 °C
LinteL TKS-20	Liquid thermocriostat Intended for temperature control of samples of petroleum products and work in conjunction with the tester: ATH-20 Temperature range from -20 to +100°C; Accuracy of maintaining t ±0.1°C
Electronic thermometer (versions #1)	Temperature meter (TTSM 9410 M2) with sensor TTTS 01-180

CERTIFICATION MEANS

Measuring devices used during certification shall be approved by State authorities and have a valid Verification Certificate (reports, stamps).
Measuring devices recommended* for use during tester certification are given in table

Title of equipment	Measuring range	Accuracy class, measurement error	Purpose during tester certification
Stopwatch	0...30 min	2	Measuring the rate of temperature change
Calliper	0…150 mm	0,01mm	Measuring the size of the working, control and adjustment plates
Temperature meter	-50…0°C	0,1°C	Measuring the rate of temperature change
Protractor	0…180°	1°	Measuring the angle of the piezo sensor

* Given devices can be replaced with analogous means providing measurement of corresponding parameters with required accuracy.

Contact information:
Phone: +7 (347) 284-28-32
General and Technical Support Requests: lintellab@gmail.com
Website: www.bashnxa.com