

FP92 5G2 & SC6

ASTM D 92
ISO 2592, EN 22592, IP 36
DIN/EN 22592, JIS K-2265
NF EN 22592

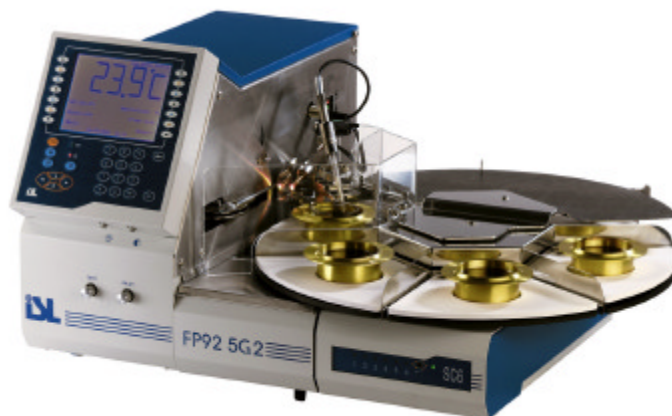
FLEXIBILITY
PRECISION
QUALITY
SAFETY



Automated Cleveland Flash & Fire Tester

The Cleveland Flash Point FP92 5G2 automatically determines flash and fire points of volatile materials in accordance to ASTM D 92 or equivalent methods. Its automated operation, backed by leading latest technology, greatly increases laboratory productivity while also improving repeatability and reproducibility. The system automatically corrects results for barometric pressure before storing the data to permanent memory. Through its sophisticated, quality control features including traceable automatic calibrations with lock-out control, products quality following-up by data comparison to pre-programmed specifications and many others the FP92 5G2 fulfills strict ISO9000 quality system requirements.

To further upgrade operation, you may add ISL's SC6 automatic six-position sample changer at any time. It allows six different samples to be tested completely unattended, drastically reducing operator time.



Operation

After filling the test cup with test specimen and placing the cup on the instrument's heating plate, the operator define all test conditions by simple selection the sample name in pre-programmed samples list. If required, fire point determination can also be set at this time. With one press of the test key, the test begins. The instrument controls heat at a specified rate and passes the igniter across the cup according to the test method conditions. The detected flash point value displays immediately then stores to permanent, non-volatile memory. If fire point measurement has also been requested, the test continues until detection occurs. The test head then automatically moves, allowing a stainless steel cover to extinguish the sample. A unique low voltage heating element with low mass provides very fast cooling enabling the next test to begin immediately. If test results fall outside defined specifications, a system message automatically warns the operator. Results may be transferred to a LIMS via an RS 232C port or printed to the user's printer. PC software under Windows is also available for multi-instrument results collection and advanced LIMS communication by user-defined protocol.

When utilizing an optional SC6 sample changer, the operator selects the first sample cup to test and initiates operation. Remaining samples can then be programmed as the first test is running. A special menu provides all information including cup number, sample name, flash point and fire point. Following each test, the carousel rotates to extinguish the completed sample under a cover then moving the next cup to the test position. Because each place is equipped with its own heating plate, the next test begins immediately with a cold plate.

Flexibility

- Preset and programmable test methods; search, fast and pass/fail methods possible
- Easy test initiation; simply select the sample name from a pre-programmed list
- Programmable heating enables a variety of heating rate combinations
- Sample pre-heating capability with adjustable duration
- Optional device for skin removal in bitumen applications
- Upgrades at any time with addition of a 6-place automatic sample changer, which can be installed by user
- Stand-alone operation or multi-instrument network by ALAN® management software under Windows

Precision

- Heater, heating plate and insulating plate in strict accordance with method
- Automatic barometric pressure correction according to method
- Warning message when the result falls outside of specification
- Statistical analysis of AVE, MIN, MAX, and SD

Quality

- Probe with engraved serial number delivered with certificate
- 21-point probe offset correction table capabilities
- Automatic, time recorded calibrations
- Calibration frequency lock-out control

Safety

- Automatic suppression of gas source at end of test
- Automatic lighting of the test flame, detection of its presence during the run and re-lighting in case of extinction
- With sample changer, special extinguisher covering two cups prevents fire risk after the test
- Fire protection with thermofuse
- External fire alarm connection
- Over-heating detection with automatic heating system shut-off
- Conforms to CE requirements

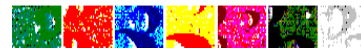
Technical information:

Standard test methods	20 different methods including ASTM D 92 ISO 2592, EN 22592, IP 36, DIN/EN 22592, JIS K-2265, NF EN 22592
Customized methods	User, Fast, Pass/Fail and Search methods
Sample temperature measurement	Pt 100 glass probe as standard Or optional Pt 100 stainless steel probe Delivered with calibration certificate
Temperature range	1 to 400°C in 0.1°C (38 to 760°F)
Sample heating	Low voltage and low mass heater
Heating rate	Two different heating rates and pre-heat mode
Draft protection	Polymethacrylat shield in standard
Ignition system	Gas
Flash/fire detection	Ionization detection
Sample changer	Optional automatic 6 place carousel
Barometric correction	Automatic correction with built-in gauge
Display	LCD, ¼ VGA monochrome with screen saver
Keypad	Alphanumeric keypad with dedicated function keys
Calibration	Automatic calibration, programmable frequency, calibration ticket print out
Password security	Multi-level password protection
Data memory	550 tests, 20 sample specifications, 20 operator names and 20 test methods
Statistical analysis	Computation of AVE, MIN, MAX, and STD
Data input/output	Connection to PC or RS232 (delivered as standard)
Printer	Centronics® link (delivered as standard)
Diagnostics	Automatic diagnostic routines on functions of the analyzer
Safety	Fire protection with thermal fuse and external alarm connection
Operation conditions	15 to 35°C (60 to 95°F)
Dimensions W x D x H	FP92 5G2: 36 x 48 x 33 cm (13 x 20 x 13 in) With SC6: 69 x 48 x 33 cm (27 x 20 x 13 in)
Weight	FP92 5G2: 32 Kg (61 lbs) With SC6: 42 Kg (92 lbs)
Electrical	100–240V auto switching; 800W; 50/60 Hz In conformance with CE requirements

We reserve the right to alter specifications without notification



For more information, please contact:



INSTRUMENTATION SCIENTIFIQUE DE LABORATOIRE

BP 70285 - VERNON – 14653 CARPIQUET - FRANCE
Phone: (33) 2 31 26 43 00 - Fax: (33) 2 31 26 62 93
<http://www.ISL-France.com>
E-Mail : sales@isl-france.com