HITEC

Testing technologies







IPHT

INDIVIDUAL PELLET HARDNESS TESTER

Automatic equipment to determine carbon black crush strength, compliant to ASTM D5230 and ISO 8942

The Individual Pellet Hardness Tester (IPHT) is an automated tester to determine individual crush strength of carbon black pellets. The Individual Pellet Hardness Tester has been initially developed in 1993 and is in use with many international carbon black manufactures and producers of rubber products. The IPHT has been designed to provide reliable measurements of individual pellet hardness according to ASTM International and ISO standards.

This IPHT has been further optimized to facilitate cleaning and be less sensitive to vibrations. The extensive control software runs on standard Windows® based PCs and is constantly kept up to date to stay compatible with latest PC technology and to reflect possible changes to the respective standards.

Key features

- Fully compliant to relevant international standards
- Exceed applicable standards
- Integrated Random Access Sample Buffer (RASB) and damping table
- Easy to clean
- Connects to standard PC via serial port

Customer satisfaction promise

We offer worldwide installation and training services by our experienced engineers and technicians.

Contact our sales & service team for more information: sales@hitec.lu



IPHTCHARACTERISTICS

Measuring capabilities

Pellet hardness
Pellet diameter
Pellet stiffness

Calculate statistics about pellet characteristics

Force measuring specifics

Range Up to 250 cN

Absolute accuracy $\pm 2 \text{ cN}$ Relative accuracy $\pm 1 \text{ cN}$

(between two measurements)

Pellet size measuring specifics

Range 0.8 to 3.5 mm

(interchangeable sample tip for different pellet size

range)

Absolute accuracy $\pm 0.1 \text{ mm}$ Relative accuracy $\pm 0.02 \text{ mm}$

Calibration

Automatically executed before each series of n pellets (n = typically 20 or 50)

Force transducer

Zero-thickness point (ZEROING)

Equipment deflection under load

Compression modes

ASTM D5230 Constant support speed in mm/sec ASTM D3313 Constant force rate in cN/sec

Sampling

Sampling rate 55.6 Hz

Sample buffer Carroussel type for 14 samples for

random access

Safety

Certifications CE marking

SGS-USTC certified

Hardware specifications

Compressed air Min. 4 bar

Max. 6 bar

Power supply 100-240 VAC +- 10%, 50/60 Hz

Table model $461 \times 435 \times 857 \text{ mm} (W \times D \times H)$

Weight 55 kg

Software

Menu guided application

Microsoft Windows® 32/64 bit W10

Features

Automatic verification of "good" condition of the tester

Integrated electronic manual

Extended data treatment

Extended maintenance support

Extensive logging capabilities (all activities in log files)

Up to four testers per PC (IPHT and/or DADS/DABS)

Retrieve and visualization of previous data

All product, product specifications and data are subject to change without notice to improve reliability, function or design.



