HITEC
Testing Technologies

DABS

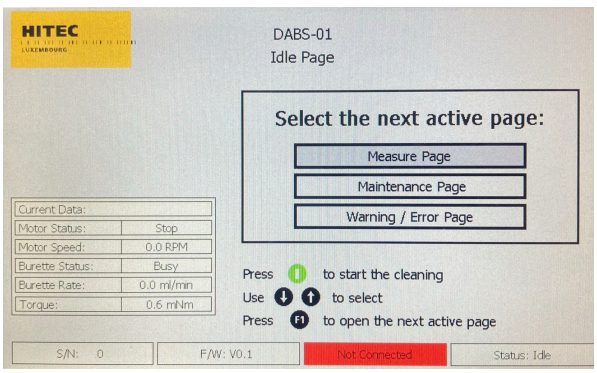
OIL ABSORPTION BASIC SYSTEM

Oil absorption data system compliant to ASTM D2414 OAN and D3493 COAN for carbon black, ASTM D6854 for silica, as well as ISO 4656

DABS is an oil absorption system to characterize the structure of carbon black and silica, as well as oil absorption of other powder material, also known as DPB absorption, DBP number or DOP number.

The data treatment for recording of a full mixing curve was initially developed by HITEC Luxembourg and is since then constantly further extended to satisfy increasing performance requirements.

The actual version, released in 2021, is the result of more than 20 years of experience in testing carbon black structure.



Key features

- State-of-the-art design
- Improved Safety and ergonomics
- Panel mounted 7” LCD screen
- Anodized aluminium frame and fully dust proof stainless steel electronic cabinet
- Compact table model – small footprint
- AC mains supply only – wide range mains 100 to 240 VAC
- New Software application Java based
- Customizable test parameters

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

Visit our online catalog for more information:
shop.hitec.lu/product/dabs/

HITEC Luxembourg S.A.
49, rue du Baerendall | L-8212 Mamer
T +352 49 84 78 -1 | **F** +352 40 13 03
info@hitec.lu | www.hitec.lu

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DABS
CHARACTERISTICS

Measuring capabilities

- Carbon black OAN and COAN
- Silica oil absorption
- Oil absorption of multiple other powder material
- Full recording of mixing torque vs. oil debit
- Applies normalization to raw data, based on reference material and its target values (e.g. carbon black SRBs)
- Torque up to 15 Nm (option for 20 Nm)
- Variable motor speed
- Variable burette rate

Maintenance

- Torque calibration
- Burette debit control
- ASTM procedures (e.g. chamber pre-polish)

Measuring modes

- ASTM D2414: Standard Test Method for Carbon Black Oil Absorption Number (OAN)
- ASTM D3493: Standard Test Method for Carbon Black - Compressed Oil Absorption Number (COAN)

Safety

- Safety door around mixing chamber: Opens 180 degrees - easy filling of samples and comfortable cleaning at end of test
- Certifications: CE marking & SGS-USTC certified

Hardware specifications

- Power supply: 100-240 VAC (+-10%), 50/60 Hz
- Size: 44 x 70 x 95 cm (W x D x H)
- Net weight: 60 kg

Interfaces

- R545 to standard PC serving as operator interface (software included with the instrument)
- Pt-100 temperature sensor input
- Burette control connector

Software

- Menu guided application JAVA based
- Windows®

Features

- Torque smoothing by polynomial fit in significant part of mixing curve
- Calculates oil absorption as per fixed torque level and as per % level of maximum torque (70% being standard)
- Full management of TLS and Normalization as per ASTM D2414:
    - separate data sets for hard and soft grades (tread and carcass)
    - separate data sets for COAN
- Test sequence management allows for remote installation of control PC
- Extensive logging capabilities (all activities in log files)
- Retrieve and visualization of previous data
- Software can be installed for retrieve only on any PC having access to the files
- Output data in several formats

Options

- Mixing Chamber Cooling Block: Maintain chamber at a stabilized temperature
- Temperature Sensor: Monitor mixing bowl temperature
- Extension Funnel: For testing of fluffy material
- Refrigerated circulator: High heating and cooling capacities

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