



Signatory to the EA Multilateral Agreement in this field

ORDER

Nº A 180

Sofia, 15.05.2024

Pursuant to Art. 10, para. 1, item 4, Art. 28, para. 1 of the Law on National Accreditation of Conformity Assessment Bodies and item 6 of the BAS QR 2 Accreditation Procedure, in connection with an application of re-accreditation reg. Nº 09-81/2/P/11.09.2023 and an open procedure reg. Nº 10/10 Π K/ Π A/27.09.2023, assessment report reg. Nº 10/10 Π K/ Π B/07.02.2024 and statement of the Accreditation Commission reg. Nº 10/10 Π K/ Π A/4/B/08.05.2024, I hereby

RE-ACCREDIT

Kalabsi Ltd Kalabsi Calibration laboratory

Management address: 1505 Sofia, 7 Neofit Bozveli Str. Laboratory address: 1505 Sofia, 7 Neofit Bozveli Str.

To perform testing of:

| Nº 1 | Measuring instrument | Measured value, unit of measure 3 | Measurement Range | Measuremen t uncertainty 5 | |
|-------------------------|----------------------|--------------------------------------|-------------------------|----------------------------------|--------------|
| | | | | | |
| from 1 kN to 1000 kN | 0,5 % | | | | |
| from 1000 kN to 2000 kN | | | | | |
| | 0,6 % | | | | |
| 2. | Dynamometers | Force, tension/ compression, N | from 0,5 N to 1000 N | 0,2 % | PΠΚ 702 C 02 |
| | | | from 1 kN to 1000 kN | 0,3 % | |
| | | | from 1000 kN to 2000 kN | 0,4 % | |

| Nō | Measuring instrument | Measured value, unit of measure | Measurement Range | Measuremen t uncertainty | Calibration method |
|-----|---|--|--|-----------------------------|-----------------------|
| L | 2 | 3 | 4 | 5 | 6 |
| 3. | Pendulum-type impact testing machines (Charpy hammer) | Energy, J | from 0,1 J to 450 J | from 1,3 % to 0,5 % | PΠK 702 E 01 |
| 4. | Torque wrenches | Torque, Nm | from 0,4 Nm to 1100 Nm | 1,0 % | РПК 702 М 01 |
| 5. | Reference hardness blocks using the method of Brinell | Hardness /the method of Brinell/ HBW | from 90 HBW to 400 HBW | 2,0 % | РПК 702 T 01 |
| | Reference hardness blocks using the method | Hardness /the method of Rockwell/ HRA HRB HRC | from 60 HRA to 88 HRA | 0,8 HRA | РПК 702 Т 01 |
| 6. | | | from 60 HRB to 100 HRB | 0,8 HRB | |
| | of Rockwell, scales A, B and C | | from 20 HRC to 70 HRC | 0,8 HRC | |
| 7. | Reference hardness blocks using the method of Vickers - second level | Hardness /the method of Vickers/ HV | from 200 HV to 800 HV (from HV 1 to HV 30) | 2,0 % | РПК 702 ⊤ 01 |
| 8. | Hardness testers using the method of Brinell (stationary and portable) | Hardness /the method of Brinell/ HBW | from 90 HBW to 400 HBW | 2,0 % | РПК 702 Т 02 |
| 9. | Hardness testers using the method of Rockwell, scales A, B and C (stationary and portable) | method of | from 60 HRA to 88 HRA | 1,0 HRA | -РПК 702 Т 02 |
| | | | from 60 HRB to 100 HRB | 1,0 HRB | |
| | | | from 20 HRC to 70 HRC | 1,0 HRC | |
| 10. | Hardness testers using the method of Vickers (stationary and portable) | Hardness /the method of Vickers/ HV | from 200 HV to 800 HV (from HV 1 to HV 30) | 2,0 % | РПК 702 Т 02 |
| 11. | Dial gauge for length measurement | Length, m | up to 1,0 mm | 1,5 µm | РПК 702 Д 01:2023 |
| | | | up to 25 mm | 3,0 µm | |
| 12. | Line scales and measuring tapes. | Length, m | for tapes and tape measures to 5000 mm for lines to 1500 mm | 0,6 mm | РПК 702 Д 02:2023 |
| 13. | Calipers | Length, m | up to 250 mm | 0,03 mm | РПК 702 Д 03:2023 |

| Type of the scope: Flexible for part of the scope | | | | | | | |
|---|----------------------------------|--|-------------------------------------|----------------------------------|-----------------------|-----|--|
| Nº 1 | Measuring instrument | Measured value, unit of measure 3 | Measurement Range | Measuremen t uncertainty 5 | Calibration method | | |
| | | | | | | 14. | Micrometers, for 2-point external and internal dimensions |
| 15. | Pressure measuring devices | Pressure, bar | from -0,95 bar to 0 bar with air | 0,3% FS | РПК 702 H 01 :2023 | | |
| | | | up to 2,5 bar with air | 0,1% FS | | | |
| | | | up to 600 bar with oil | | | | |

Flexible Scope: Implementing a new version of standards/documents or standards / documents replacing them is allowed. An updated list of standards/documents and their dated versions is provided by laboratory.

Note:

The calibration of measuring devices to point 3 is performed at the customer's site.

The calibration of measuring devices to point 1, 2, 4, 8, 9, 10, 11, 12, 13, 14 and 15 is performed at the customer's site and at the laboratory.

The calibration of measuring devices to point 5, 6, 7 is performed at the laboratory.

References:

- 1. PTIK 702 C 01 Calibration of systems for measuring the force of machines for testing materials and products of tension/compression (based on BDS EN ISO 7500-1);
- 2. PTIK 702 C 02 Calibration of dynamometers (based on BDS EN ISO 376);
- 3. PΠK 702 E 01 Calibration of energy measurement system for hammer bending test machines (Charpy hammer) (based on BDS EN ISO 148-2);
- 4. PΠK 702 M 01 Calibration of torque wrenches (based on BDS EN ISO 6789);
- 5. PΠK 702 T 01 Calibration of reference hardness blocks second level by the methods of Brinell, Rockwell and Vickers (based on BDS EN ISO 6506-3, BDS EN ISO 6507-3, and BDS EN ISO 6508-3);
- PΠΚ 702 T 02 Calibration of hardness testers by the methods of Brinell, Rockwell and Vickers (based on BDS EN ISO 6506-2, BDS EN ISO 6507-2 and BDS EN ISO 6508-2);
- 7. PΠK 702 Д 01:2023 Calibration of dial gauges for length measurement;
- 8. РПК 702 Д 02:2023 Calibration of line scales and measuring tapes;
- 9. РПК 702 Д 03:2023 Calibration of caliper devices;
- 10. РПК 702 Д 04:2023 Calibration of micrometer devices;
- 11. P Π K 702 H 01:2023 Calibration of pressure measuring devices (based on EURAMET cg-17).

I ORDER

To issue the certificate of accreditation reg. \mathbb{N}^0 10 JK/15.05.2024, valid until 15.05.2028 and this order as an integral part of it.

The certificate of accreditation with the enclosure to be received by the Manager/representative of Kalabsi Ltd, Sofia, the head of Kalabsi Calibration laboratory, at Kalabsi Ltd, Sofia, or other authorized person in the office of EA BAS.

Upon receipt of the certificate and the enclosure issued, the the accredited person is obliged to return to EA BAS the originals of accreditation certificate N° 10 JK /24.03.2022, valid until 15.05.2024 and its enclosure - EA BAS order reg. N° A 217/24.03.2022.

This order shall be notified to Kalabsi Ltd, Sofia within 3 (three) days from its issuance.

Eng. Irena Borislavova

Executive Director of EA BAS PERVENNIA