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All the services in detail what we offer and more:

Karakol N.V. offers:

On-site & In Laboratories Calibration Services

Karakol N.V. offers on site or in our laboratory's verification and accredited calibration services. With our technician's capabilities and experiences, our services are covering a wide range of multi-brand production, laboratory, medical & biopharmaceutical equipment and instrumentation.

Our accreditations guarantee our calibration results and measurement studies to be traceable to all international systems in all countries that are signatory to the ILAC-MRA (Mutual Recognition Arrangement). All our calibration certificates comply with all ISO requirements.

Our Service cover the minimum of;

Temperature; Humidity; Pressure & vacuum; Pipette; Speed rotation; Time; Volume; Analytical Balance; Balance up to 600 Kg; Electrolytic Conductivity; pH – Measuring Equipment; Sodium (Na) Concentration – Measure; Differential pressure; Barometer; Gas concentration Co2 O2; Turbidity; Sound Level Measurement;

Equipment's List

Incubator; Oven; Climatic chamber; Fridge, Freezer; Autoclave, Sterilizer; Centrifuge & Mixer; Ambient storage area; Negative & Positive storage area; Monitoring system; Fluid bed dryer; Blister line; Water plant; Lyophilizer; Various production & processing equipment; And or just let us know your request

Liquid in glass thermometer; Digital Thermometer; Thermo-Hygrometer; Recorder & Data logger; Micro Pipette, Dispenser; Temperature sensor; Temperature Display; Pressure gauge; Vacuum gauge; Timer; Ph meter; Conductivity meter; And or just let us know your request.

Certification:

Biological Safety Cabinet; Clean Bench; Fume Hood; Ductless Fume; down draft table; Duct Less Fume Hood; PCR-Cabinet; Powder Enclosure; Clean Room;



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On-site Thermal and Climatic Studies

Additionally, Karakol N.V. provide thermal and climatic measurement study for all type of storage areas (positive and negative temperature), stability and sterilization equipment (climatic chamber, oven, incubator, sterilizer, etc..).

Karakol N.V. is able to perform study from very large areas (ex: warehouse) up to laboratory bench equipment by using accurate and reliable data loggers calibrated against international traceable equipment. All loggers can be verified pre-study and post study execution.

For special projects, Karakol N.V. is using The AVS140-6 is a complete system for performing autoclave validations and assisting with 21 CFR Part 11 compliance. Includes ISO17025 accredited calibration certificates that comply with all Pharmaceutical requirements. All our thermal mapping certificates comply with all ISO requirements.

Equipment and Instrument List

- Incubator thermal mapping (temperature);
- Oven thermal mapping (temperature);
- Climatic chamber thermal mapping (temperature & humidity);
- Fridge thermal mapping (temperature);
- Freezer thermal mapping (temperature);
- Autoclave thermal mapping (temperature); According to NEN 285, EN 61010
- Sterilizer thermal mapping (temperature);
- Warehouse thermal mapping, (temperature & humidity);
- Cold room & Freezer room thermal mapping (temperature);
- Cold chain thermal study (temperature);
- Drying oven & tunnel thermal mapping (temperature);
- Lyophilizer thermal mapping (temperature)

Validation & Qualification Services

We are as well able to assist our clients on various levels from consulting on validation up to executing full qualification & validation process for a large range of test, process and production equipment.

Our scope is:

Calibration, Validation, Certification service, Sales & after Sales support for Laboratory, Medical & biopharmaceutical Equipments,www.karakolnv.com Cell: (599)9-560-8841 • (599) 9671-8343 email: <u>bioallanbm@curlink.com</u> <u>biokarakol@curlink.com</u>



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- Qualification of utilities;
- Qualification of equipment (FAT / IQ / OQ & PQ);
- Quality system documentation (SOP's / Logbooks / Checklists).

Technical Inspection Services

As preventive inspection of equipment is part of all the GMP and GLP requirements, besides the calibration & validation services we have implemented a preventive technical program which is applicable for all type of equipment.

On a periodic basis we perform a preventive technical inspection which is fully documented and covering all the critical technical points that will guarantee the integrity of the equipment and can anticipate any potential problem which could occur.

All our technical inspections are fully documented with comprehensive reports.

