

INNOVATIONS IN THE FIELD OF NOISE AND VIBRATIONS FROM SPECTRI LTD

B. B. Mihaylov

Abstract: In the present paper a comparative information for the realized innovations in the field of noise and vibrations by SPECTRI Ltd. is presented.

Key words: noise, vibrations, SPECTRI.

1. About us:

SPECTRI was founded in 1998 by the manager Eng. Boris Mihaylov. The specialists in the company are leading experts in the field of noise and vibration with a wide practical experience of successfully implemented projects.

The SPECTRI's activity is covered and focused on the following thematic sites, which are a property of SPECTRI:

www.ШУМ.eu - examines the services offered by SPECTRI in the field of noise.

www.ШУМОВИКАРТИ.eu - development of **strategic noise maps**.

www.ВИБРАЦИИ.eu - examines the **services** offered by SPECTRI in the field of vibrations.

www.ШУМОМЕР.eu - examines the **products** offered by SPECTRI in the field of noise.

www.ВИБРОМЕР.eu - examines the **products** offered by SPECTRI in the field of vibrations.

Since its founding, an exclusive agency contract (technical, engineering, service, commercial) has been in force of the company - leader in the field of noise and vibrations, Bruel & Kjaer – Denmark.

SPECTRI is partnering with many others world leading manufacturers of measurement equipment. SPECTRI carries out service activities, deliveries of spare parts and equipment for measurements, monitoring and analysis of vibrations, noise, pressure, power, offset and others., also and engineering and installation on the territory of the Republic of Bulgaria.

SPECTRI organizes different events (courses, symposium, seminars) for training and acquaintance with the latest developments in the field of noise and vibration.

2. Mission and vision:

Mission

Our mission is to help our clients and partners to improve their working conditions, safety, competi-

tiveness and efficiency. In this way, we strive to influence the environment, the quality and the joy of life.

Vision

Our vision is to be the preferred partner and provider for leading companies and institutions, which are thinking and carrying about their business and human comfort, development and prosperity as well as to be the national centre for competence and knowledge in the field of noise and vibrations.

3. Certificates:

SPECTRI with certification ISO 9001:2015



Fig. 1: Certificate on ISO 9001:2015

Section VI: ACOUSTICS MEASUREMENTS, VIBRATION MEASUREMENTS AND DIAGNOSTICS

SPECTRI successfully implemented the system for quality management with compliance with the requirements of international standard ISO 9001:2015, including:

- Designing, manufacturing, engineering, maintenance, service, trading and delivery of solution, expertise, measurement equipment and software for noise and vibrations, process-parameters.

- Installations and settings, training and consultations.

- Measurements, diagnostic analysis, control and assessment of the condition.

- Test of noise-vibration parameters, calibration of noise and vibrations measuring equipment. The certificate is valid until 25th Nov. 2019.

SPECTRI with certification on BDS EN ISO / IEC 17020:2012 – OKC „SPECTRI – MEASUREMENTS”

Type C authority for control at “SPECTRI” Ltd., Sofia, is accredited according to BDS EN ISO / IEC 17020:2012 from EA “BAS” with unique certificate number № 122 OKS. The certificate is valid until 30.11.2020.



Fig. 2: Certificate on
BDS EN ISO / IEC 17020:2012

4. Partners:

Brüel & Kjaer Sound & Vibration A/S

Internet: www.bksv.com

The company Bruel & Kjaer – Denmark was founded in 1942 by Per Bruel and Viggo Kjaer. In 1994 the company becomes a part of Spectris Group – United Kingdom (See <http://www.spectris.com>). The turnover for the past years is more than €150 million a year.

The company is a world leader in the field of noise and vibrations, with over 65% of the world market share. The main ISO and EN standards in the field of noise and vibration have been created by and in collaboration with Bruel & Kjaer specialists.

PCH Engineering A/S

Internet: www.pch-engineering.dk

PCH Engineering is a company, specialized in production of vibrations monitoring modules, sensors and software for continuous monitoring of vibrations and the condition of machines and equipment.

Instantel

Internet: www.instantel.com

Founded in 1982, InstanTEL specializes in the production of vibration and explosive modules. The company is part of Stanley Black & Decker, Inc.

InstanTEL's equipment for "regulated" vibrations and overpressure control over the years has earned its reputation as the most equipment of its type (used in over 110 countries around the world) – for various applications in the mining, construction and geotechnical research.

Eesiflo

Internet: www.eesiflo.com

EESIFLO manufactures the most up-to-date equipment for contactless ultrasonic measurement and flow control as well as water-in-oil detection equipment, hydrocarbon water-accurate measuring equipment, BS & W analyzers.

Odeon

Internet: www.odeon.dk

The ODEON project was initiated as a joint cooperation between the Technical University of Denmark (Acoustics Unit), Brüel & Kjaer and other leading companies in the field of acoustic modeling. The ODEON development efforts over the years have made it a reliable and easy-to-use software product that is used in numerous projects in building acoustics

and acoustics of premises.

Bulgarian Association for Public Control and Management of (BAOKUSH)

Internet: www.nonoise-bg.com

BAOKUSH is a non-agricultural public organization that has formed itself as an expert national centre of competence in noise and vibration and whose main objective is to promote and defend the expertise in the preparation of opinions, consultations, national and international strategy papers in the field of acoustics.

5. Projects:

In 2017-2018, successful updates of Strategic Noise Maps and action plans of:

- Agglomeration Sofia
- Agglomeration Plovdiv
- Agglomeration Burgas
- Agglomeration Varna
- Agglomeration Ruse
- Agglomeration Pleven
- API

Realization of acoustic audits

Realization of acoustic audits of large industrial sites as well as of large infrastructure projects:

- Monitoring and noise
- Research
- Noise maps

System for noise monitoring. Sofia Airport.

Annual maintenance contract, acoustic expertise, diagnostics and calibration.

6. News

Conference “Acoustic 2018”

Annual Conference “Acoustic 2018”, Sofia
30.11. – 01.12.2018.

New (old) location - the refurbished luxury conference room – MECHANICS INSTITUTE – BAN, floor 5

Conference “Days of Indestructible control 2018”

Annual conference “Days of Indestructible control 2018”: 04 – 08 June 2018 SOZOPOL.

SPECTRI participation: Bulgarian – Russian seminar “Diagnostic of power systems”.

Scientific leaders: Assoc. Dr. Hr. Draganchev, Prof. A. N. Nazuirchev.

New upgraded own products - by SPECTRI LTD

Expanding the capabilities of hardware Spectri Data Logger and integration software at <http://webnoise.eu>.

Information about the Author:

Boris Mihaylov. Sound and vibration qualified expert (2001), Eng. (1994), Electronics, Technical University of Sofia, Brüel & Kjær University (2001). Co-Chair, Bulgarian Association for Public Control and Management of Sound, Manager SPECTRI LTD.

Web address: www.spectri.bg

e-mail address: spectri@spectri.net