

FOR THE 30TH ANNIVERSARY OF FERRY VATT

Ya. O. ZHELONKIN

Ferry Vatt LLC, Kazan, Russian Federation

The company's history starts in 1991 when a group of initiative employees of VAKUUMMASH Research Institute created Kvazar Company, later renamed as MP VATT [VATT small enterprise], and after that as FERRY VATT.

From the first days of operation, the company had orders for manufacturing various protective and decorative coating sputtering systems. Since 1993, the company has opened its coating application floor, which involved several round-the-clock operation systems. To date, our team has finished more than 150 unique projects and accumulated a wealth of experience in the development and manufacture of various vacuum equipment formalized in the form of 6 principal directions:

- Vacuum and plasma thin film and coating deposition technologies (PVD, CVD, PECVD, ALD, etc.);
- Miscellaneous material low-pressure radio-frequency (RF) plasma processing technologies (CCP, ICP);
- Composite material forming, and resin and lacquer impregnation vacuum equipment;
- Climate testing, space simulation and electric propulsion engine (EPE) testing systems;
- Miscellaneous vacuum furnaces;
- Special industrial and laboratory vacuum and plasma equipment (zone melting equipment, including single crystal zone melting equipment, vacuum melting systems).

Over the years, a hand-in-glove consolidated team has been created, ready to solve any tasks, including non-standard tasks. Our employees are graduates of the leading Russian vacuum and plasma technology departments of Kazan National Research Technological University and Bauman Moscow State Technical University. The highest skills of our team are confirmed by numerous scientific articles, diplomas and awards, as well as the choice of our Customers - state corporations, universities, research centers and manufacturing companies. The company is a regular participant and frequent winner of the International Exhibition of Vacuum Equipment VacuumTechExpo. The company is also experienced in dealing with foreign partners and customers – FERRY VATT systems are operated in 12 countries: Japan, China, Switzerland, Spain, Kuwait, Syria, Ukraine, Moldova, Belarus, Uzbekistan and Kazakhstan. The company's turnaround is cyclical, starting from the idea of implementation and design development to in-house manufacturing. FERRY VATT is proud of its past and looks forward to the future with confidence.

REFERENCES

- [1] [1] Zhelonkin Ya O, Biktashev A A, Salikeev S I, Sungatullin I A and Zhelonkin O V 2019 Modern engineering tools for the development of new samples of vacuum process equipment // IOP Conf. Series: Journal of Physics: Conf. Series 1313 01206, doi:10.1088/
- [2] [2] Glinkin V A, Biktashev A A and Murtazin R N 2014 Ustanovka dlya naneseniya prozrachnykh plenok oksida indiya magnetronnym metodom [Magnetron sputtering transparent indium oxide film application system] // Vestnik Kazanskogo tekhnologicheskogo universiteta [Bulletin of Kazan Technological University]. Vol. 17 No. 21. pp. 269-273.
- [3] [3] Glinkin V A, Biktashev A A and Murtazin R N 2014 Vakuumnaya ustanovka dlya naneseniya pokrytiy metodom atomno-posloynogo osazhdeniya [Vacuum atomic layer deposition coating system]//Vestnik Kazanskogo tekhnologicheskogo universiteta [Bulletin of Kazan Technological University]. Vol. 17-No. 19. pp. 276-9.
- [4] [4] Biktashev A A, Glinkin V A and Zhelonkin O V 2012 Promyshlennyye i issledovatel'skiye ustanovki dlya naneseniya nanostrukturnykh i nanorazmernykh pokrytiy [Industrial and research nanostructured and nanoscale coating systems]//Trudy seminarov «Elektrovakuumnaya tekhnika i tekhnologiya» [Proceedings of the seminar "Electrovacuum technique and technology"]. Moscow: Moscow Power Engineering Institute of Bauman Moscow State Technical University, Pp. 157-161.
- [5] [5] Biktashev A A. and Glinkin V A 2009 Novyye rossiyskiye vakuumnyye ustanovki dlya naneseniya tverdykh pokrytiy serii VATT [New Russian VATT-series vacuum hard coating systems] // Materialy IV mezhdunarodnoy nauchno-tekhnicheskoy konferentsii «Vakuumnaya tekhnika, materialy i tekhnologii» [Proceedings of the IV International Science and Technology Conference. "Vacuum technology, materials and technologies"]. Moscow: OMR. PRINT, pp. 50-56.
- [6] [6] Biktashev A A, Zhelonkin O V, Glinkin V A and Lyapin A P 2006 Novoye pokoleniye vakuumnnykh napyitel'nykh ustanovok ZAO "Ferry Vatt" [A new generation of Ferry Vatt vacuum sputtering systems] //Sbornik dokladov 7-y Mezhdunarodnoy konferentsii "Vakuumnnyye nanotekhnologii i oborudovaniye" [Book of abstracts of the 7th International conference "Vacuum nanotechnologies and equipment"] Kharkiv: NSC KIPT, Kontrast Publishing House,
- [7] [7] Biktashev A A, Zhelonkin O V, Burmistrov A V and Glinkin V A 2001 Oborudovaniye dlya naneseniya razlichnykh funktsional'nykh pokrytiy na steklo [Various functional glass coatings equipment] // Sbornik dokladov 4-go Mezhdunarodnogo simpoziuma "Vakuumnnyye tekhnologii i oborudovaniye" [Book of theses of the 4th International Symposium "Vacuum Technologies and Equipment"]. Kharkiv: Kontrast Publishing House, 2001. – Pp. 337-338.