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- [1] R. Mehnert, Review of industrial applications of electron accelerators, Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms. 113 (1996) 81–87. doi:10.1016/0168-583X(95)01344-X.
- [2] M. Cleland, Industrial applications of electron accelerators, CAS 2005 - CERN Accelerator School: Small Accelerators, Proceedings. (2006) 383–416. doi:10.5170/CERN-2006-012.383.
- [3] M.N. Martins, T.F. Silva, Electron accelerators: History, applications, and perspectives, Radiation Physics and Chemistry. 95 (2014) 78–85. doi:10.1016/j.radphyschem.2012.12.008.
- [4] G.A. Mesyats, S.D. Korovin, A. V. Gunin, V.P. Gubanov, A.S. Stepchenko, D.M. Grishin, V.F. Landl, P.I. Alekseenko, Repetitively pulsed high-current accelerators with transformer charging of forming lines, Laser and Particle Beams. 21 (2003) 197–209. doi:10.1017/S0263034603212076.
- [5] G.A. Mesyats, S.D. Korovin, V. V. Rostov, V.G. Shpak, M.I. Yalandin, The RADAN series of compact pulsed power Generators and their applications, Proceedings of the IEEE. 92 (2004) 1166–1179. doi:10.1109/JPROC.2004.829005.
- [6] E.N. Abdullin, G.F. Basov, S. Shershnev, Marx generator on the basis of long lines for electron accelerators with beam extraction into gas, in: Proceedings of SPIE - The International Society for Optical Engineering, 2018. doi:10.1117/12.2303490.
- [7] I. Egorov, Note: Numerical simulation and experimental validation of accelerating voltage formation for a pulsed electron accelerator, Review of Scientific Instruments. 85 (2014) 066112. doi:10.1063/1.4884895.
- [8] I. Egorov, G. Remnev, A. Poloskov, M. Serebrennikov, Effect of emission current delay on the efficiency of electron beam production, Vacuum. 143 (2017) 428–432. doi:10.1016/j.vacuum.2017.03.030.
- [9] D.G. Pellinen, Q. Johnson, A. Mitchell, A picosecond risetime high voltage divider, Review of Scientific Instruments. 45 (1974) 944–946. doi:10.1063/1.1686773.
- [10] A.I. Gerasimov, Aqueous-solution high-voltage resistors: Development, study, and

- application (review), Instruments and Experimental Techniques. 49 (2006) 1–26.
doi:10.1134/S0020441206010015.
- [11] J.L. Liu, B. Ye, T.W. Zhan, J.H. Feng, J. De Zhang, X.X. Wang, Coaxial capacitive dividers for high-voltage pulse measurements in intense electron beam accelerator with water pulse-forming line, IEEE Transactions on Instrumentation and Measurement. 58 (2009) 161–166.
doi:10.1109/TIM.2008.927195.
- [12] J.M. Anderson, Wide Frequency Range Current Transformers, Review of Scientific Instruments. 42 (1971) 915–926. doi:10.1063/1.1685307.
- [13] K.L. Brown, G.W. Tautfest, Faraday-Cup Monitors for High-Energy Electron Beams, Review of Scientific Instruments. 27 (1956) 696–702. doi:10.1063/1.1715674.
- [14] I. Egorov, M. Serebrennikov, Y. Isakova, A. Poloskov, Sectioned calorimeter for quick diagnostic of the electron beam energy distribution, Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment. 875 (2017) 132–136. doi:10.1016/j.nima.2017.09.002.
- [15] V.D. Bochkov, D.V. Bochkov, I.N. Gnedin, P.V. Panov, Pulsed Power Application of TDI-Type Pseudospark Switches, Acta Physica Polonica A. 115 (2009) 1118–1121.
doi:10.12693/APhysPolA.115.1118.
- [16] TDI-series pseudospark switches, PULSED TECHNOLOGIES LTD.,
http://pulsetech.ru/images/tdi_crv.pdf, n.d.
- [17] Elcod, Close Stock Company ELCOD, <http://www.elcod.spb.ru/catalogue.pdf>, n.d.
- [18] B.A. Baginskii, E.Y. Burkin, A power supply for pulsed electron beam sources, Instruments and Experimental Techniques. 41 (1998) 365–367.
- [19] Cryo-torr 8, Brooks Automation, <https://www.brooks.com/support/technical-support/documentation/cryopumps/cryopumps>, n.d.
- [20] Televac CC-10 Wide Range Gauge, Fredericks Company,
<https://www.frederickscompany.com/products/cc-10-wide-range/>, n.d.
- [21] Magnetic core, <https://www.amet.ru/buyers/product/amorf/>, n.d.
- [22] I. Egorov, Principle and simulation of a high voltage bushing for a repetitive electron accelerator, IEEE Transactions on Dielectrics and Electrical Insulation. 23 (2016) 2174–2180. doi:10.1109/TDEI.2016.7556492.
- [23] and I.V.P. S. N. Volkov, A. A. Zherlitsyn, B. M. Koval'chuk, S. V. Loginov, A Vacuum Feedthrough Insulator at a Voltage of ~1 MV, Instruments and Experimental Techniques

Original Russian Text. 46 (2003) 656–659. doi:10.1023/A:1026041705575.

- [24] O.P. Kutenkov, I. V. Pegel, E.M. Totmeninov, Explosive Emission Cathode Based on a Carbon Fiber for Long-Term Pulsed-Periodic Mode of Operation and its Application in a High-Power Microwave Pulse Generator Without External Magnetic Field, *Russian Physics Journal*. 57 (2014) 565–572. doi:10.1007/s11182-014-0277-8.
- [25] И.С. Егоров, М.И. Кайканов, Г.Е. Ремнев, ВЫХОДНОЕ ОКНО СИЛЬНОТОЧНОГО УСКОРИТЕЛЯ ЭЛЕКТРОНОВ « АСТРА », (n.d.) 91–94.
- [26] A. V Poloskov, I.S. Egorov, M.A. Serebrennikov, Design and testing of fluid resistor for repetitive high-voltage pulse generator, *Journal of Physics: Conference Series*. 830 (2017) 012047. doi:10.1088/1742-6596/830/1/012047.