

Bochkarev Oleg Ivanovich (60th birthday)



Russian Foundry Association and the Editorial Board of the Russian Foundry Magazine congratulate Oleg Ivanovich Bochkarev on the anniversary date, wish you good health, prosperity and further success in the creative and production activities for the benefit of the development of the Russian defense industry.

1. **A.K. Masalov (PJSC «SIBLITMASH»).** Equipment for foundry production and casting for various industries



Novosibirsk plant of foundry machines and automatic lines "Siblitmash" - a company with a rich history 67 years old, widely known both in Russia and in the world. Currently, Siblitmash PJSC produces a wide range of technological equipment for foundry:

- Machines and complexes of injection molding;
 - Pneumatic shaking molding machines with shock absorption;
 - Impulse forming machines low pressure with pre-pressing;
- Equipment based on vacuum-film (VPF) technology;
 - Sand throwers;
 - Automatic molding lines;

Keywords: foundry equipment, molding lines, ductile iron, tubing, injection molding machines

2. **Yu.N. Muravyev, M.A. Druzhevsky (LLC «RHODONIT»).** The company Rodonit in the market of molding equipment.

The equipment for the manufacture of molds, designed and manufactured by LLC RHODONIT, is considered. The wide cooperation of the company with foundries located on the territory of the Eurasian Union was noted.

Keywords: mixers, vibrating tables, regeneration, nonstick coatings.

3. **E.V. Bekhtgold («Uralchimplast - Hüttenes Albertus»).** Modern solutions for the production of molds and rods from HA Group in Russia

Uralchimplast - Hüttenes Albertus is a joint venture, the leading supplier of bonding materials for casting in the CIS. Hüttenes-Albertus is a leading chemical company for the foundry industry worldwide. The group of companies was founded in 1905, is represented in more than 30 countries of the world on all continents, 2000 competent employees.

Keywords: Cold-Box systems, No-Bake systems, inorganic systems, thermosetting systems, release coatings, lubricants, auxiliary materials

4. **V.D. Belov («NUST MISIS LTIH»).** Interaction of Russian universities with industrial enterprises of the foundry industry

The role of universities in the development of foundry production in Russia is considered, related to the training of foundry specialists and conducting research and implementation work, allowing foundry enterprises to successfully compete and win leading positions in the international arena. Cooperation with a number of Russian enterprises on the technology of production of castings from non-ferrous alloys is shown on the example of the NUST MISIS LTIH.

Keywords: university, additive technologies, foundry mold, casting.

5. **V.I. Luzgin, A.S. Koptyakov, V.E. Frizen, A.Yu. Petrov, S.M. Fatkullin.** Innovative technologies of induction melting of metals in foundries

The results of the study of innovative systems of induction melting of metals associated with simultaneous power supply of the crucible furnace with high and low frequency currents are presented. The high-frequency cascade is the master during the operation of the inverter, and the low-frequency cascade is the slave. The use of such a furnace power supply scheme makes it possible to increase the efficiency of induction medium-frequency melting of metals and expand the technological capabilities of the furnace by controlling the movement of metal under the action of low-frequency currents.

Keywords: induction furnace, inductor, cascade, current frequency.

6. **V.I. Zolotukhin, S.G. Murat, E.A. Protopopov, S.S. Dobrykh, P.I. Malenko, A.A. Protopopov** Production of iron-carbon alloys for castings using «LOW-CARBON METALLURGY (LCM)» technology

A complex chemical and metallurgical technology for the production of high-quality low-carbon steel by reducing melting in electric arc furnaces is considered. The proposed technology makes it possible to reduce the cost of coal for iron recovery and reduce CO₂ emissions into the atmosphere.

Keywords: electric arc furnace, coal, greenhouse gases, hydrogen

7. **V.V. Klepikov, E.S. Ivanov.** High-quality Balashe molding sands for the foundry industry

A brief description of JSC «Balasheimky Sands» in terms of the production of quartz sands is given. Grades of enriched quartz sand and their properties are proposed.

Keywords: quartz sands, binder, catalyst, granulometric composition.

8. **D.V. Peplov** Production capabilities and innovative technologies for the manufacture of large steel castings of UZTM-KARTEX LLC

A brief description of the enterprise, the range of products, technological parameters of the production of massive steel castings are given. Original equipment is used for the manufacture of molds and rods without the use of model tooling. The volume of production of steel castings by year with a weight of more than 30 tons is shown.

Keywords: steel castings, nomenclature, original equipment, high-speed milling.

9. **V.A. Anderson, A.V. Kotovich.** Automated casting shop for gasified models, put into operation at the Kharkiv Tractor Plant

Annotation. The article presents the composition and characteristics of a complex of automated equipment for the production of castings from cast iron and steel using gasified casting technology.

Keywords: gasified models, molding, flask, casting.

Viktor Aleksandrovich Kurganov
28.04.1936—18.10.2021



Passed away on October 18, 2021 Viktor Aleksandrovich Kurganov, Doctor of Technical sciences, professor.

The Russian Association of Foundry Workers, colleagues and friends express their deep condolences to the family and friends of Viktor Aleksandrovich in connection with the grave loss of a wonderful man, a talented scientist