1. I.A. Dibrov. Contribution of the Russian Association of Foundry Workers to the development foundry production in Russia

Annotation. In April 2022, the 30th anniversary of the formation of the Russian Association of Foundry Workers (RAL), which is the legal successor, was celebrated All-Union Association of Foundry Workers. Currently, there are 46 regional (Regional, regional, Republican) branches, 12 scientific and technical committees in the structure of the RAL.

The Association has its own print and information bodies — the magazine "Foundry of Russia" and a website www.ruscastings.ru, who turned 20 years old this year.

2. B.A. Sivak. Directions and prospects for the development of cooperation between the metallurgical and foundry industries

Annotation. The features of metallurgical and foundry production are considered. The mentioned industries differ in their output and production scale. Taking into account the many coincidences of scientific, technical and organizational problems. Domestic metallurgy and foundry production, it is advisable to jointly hold eventsfor the exchange of experience.

Keywords: metallurgy, foundry, melting furnaces, cooperation.

3. V.V. Semenov, Yu.Yu. Zaplatkin. Innovative alloys for the development of metallurgical and heavy engineering.

Annotation. A complex of structural materials for the manufacture of machine parts and equipment for metallurgical and heavy engineering is proposed.

Keywords: metallurgy, quality, reliability, economy, strength and operational properties.

4. A.A. Lisovoy, I.S. Tkachenko. Innovative equipment for foundries

Annotation. The development and manufacture of equipment for the production of castings according to the technology of casting according to gasified models is given.

Keywords: gasified model, molding machines, lines

5. A.F. Davletbaev, V.A. Serikov, O.V. Volynsky. Innovative approaches to the development of the electrometallurgical industry in Russia

Annotation. The organization of the company Globotherm LLC, which has engineering, production and service centers in Russia and Kazakhstan, cooperates with state universities and design institutes. Globalterm company is mainly focused on the design and manufacture of electrometallurgical equipment.

Keywords: arc furnaces, ore-thermal furnaces, vacuum furnaces.

6. Yu.N. Muravyev, M.A. Druzhevsky. The company Rodonit is on the market of molding equipment in the light of the import substitution program.

Annotation. The equipment of domestic production 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 Economic Union was noted.

Keywords: pneumatic transport, floor filters, mixers, mechanical regeneration

7. Yu.N. Kornev. Extreme import substitution.

Annotation. Positive and negative results in the performance of the course are considered «Import substitution» in the domestic foundry. Litmashpribor LLC produces modern and reliable molding equipment and devices of land laboratories for foundries in Russia.

Keywords: molding equipment, molding and core mixtures, devices.

8. V.I. Zolotukhin, E.I. Gordeev, S.G. Murat, A.I. Zagibalova. Modern equipment for fi nishing and casting of steel for foundry production.

Annotation. The products manufactured by NPP Vulkan-TM are considered as an alternative to supplies from abroad.

<u>Keywords:</u> import substitution, tri-apparatuses, purge plugs, ladle, refractory concrete, packing masses, slide gate, molded and unformed refractories.

9. V.N. Timofeev. RELTEK is a national manufacturer of induction equipment.

Annotation. The enterprise LLC NPP RELTEK is a developer and manufacturer of induction melting and heating equipment, ultrasonic processing equipment for fine cleaning of machine-building parts before painting, equipment for heat treatment and hardening.

<u>Keywords:</u> induction furnaces, heat treatment, vacuum furnaces.

10. E.I. Marukovich, M.A. Sadokha. Technologies and equipment for foundry production.

Annotation. The equipment for foundry production in the Republic of Belarus is considered. The equipment for continuous horizontal casting, for electroslag casting, freezing casting is presented. Equipment for the manufacture of molds and rods, coking machines, lowpressure casting plants, etc.

Keywords: foundry equipment, molds, rods, coquille, injection molding, automatic line, device.

11. V.A. Izotov, A.A. Shatulsky, Yu.S. Fedulova. Production of castings from light alloys in conditions of small-scale production.

Annotation. The technology of obtaining castings from light alloys at various parameters of the gate system is considered.

Keywords: mold cavity, gate system, riser, feeder.

12. RESULTS of the All-Russian Student Olympiad on Foundry Production 2022 (NUST MISIS, Moscow, April 19, 2022)