

1. **Dibrov I.** Press conference dedicated to the International machine-tool building exhibition EMO MILANO 2015.
2. **Mysik R.K., Brusnitsyn S.V., Sulitsin A.V., Sinitsyna M.A., Bashmakov V.V., Ivkin M.O.** Investigation of complex alloyed cast brass structure and properties.

In this paper the results of complex alloyed cast brass CuZn23Al6Fe3Mn2 centrifugal castings structure and mechanical properties investigation are presented. It is shown that the structure of alloy consists of β -phase and evenly distributed particles of γ Fe-phase. This structure warrants of mechanical properties homogeneity in the casting cross section and considerable reserve of strength and plastic properties level of alloy.

Key words: complex alloyed brass, centrifugal casting, structure, phase, mechanical properties.

3. **Belov V., Fadeev A., Pavlinich C., Kachalov A., Gamazina M., Alikin P.** The influence of casting mold material on the quality of castings made of titan alloys.

Some aspects of influence of material of casting form are considered on quality of the cast details. The results of work on manufacturing of the titan casting in graphite forms in the field of centrifugal force are presented.

Key words: casting, shape, material, titanium, graphite, parts, quality.

4. **Mamin V., Esenbekov V.** Modular designing of the foundry equipment. A presented constructive schemes of foundry machines and units of automatic transfer lines.

The most widespread are the units carrying out rectilinear movement. The drive in such designs is carried out from pneumatic or hydrocylinders. The following on applicability machines which working bodies carry out circular movements. A drive in such units, basically, electromechanical. Most machines with a horizontal axis of rotation. Are presented various schemes such machines of rotation.

Key words: drive, horizontal axis of rotation, pneumatic cylinder, hydrocylinder.

5. **Vachenko A., Jokhin A.** Mathematic simulation as the tool of the technologist-founder on some examples.

In article problems of mathematical simulation, on well known examples and examples of various foundry technologies are considered. Recommendations of how to reduce these problems are given and how to raise efficiency of simulation.

Key words: mathematical simulation, result of interpretation, MAGMASOFT, accuracy of calculation, CAE, CAD.

6. **Monastyrskiy V., Ershov M.** Simulation model of piping and macro porosity formation.

A finite-element model of the piping and shrinkage macro porosity formation taking into account the capillarity and dendrites skeleton influence on feeding of the mushy zone were designed. A software module for PolygonSoft CAE system has been developed. The software module is available in test mode in PolygonSoft CAE system 13.4 and above.

Key words: porosity, shrinkage, casting cavity, capillary effect, casting defects.

7. **Kuznetsov I., Khazan G.** Research of the effect of the composition of the sand on the properties of cold-basics mixed with furan resin.

According to the results of the experiment determined the effect of grain size characteristics of the sand on the properties of cold-setting sand with different content of furan resin and hardener, as well as the algorithm of stabilization properties of the mixture.

Key words: the sand, cold-setting sand, furan resin.