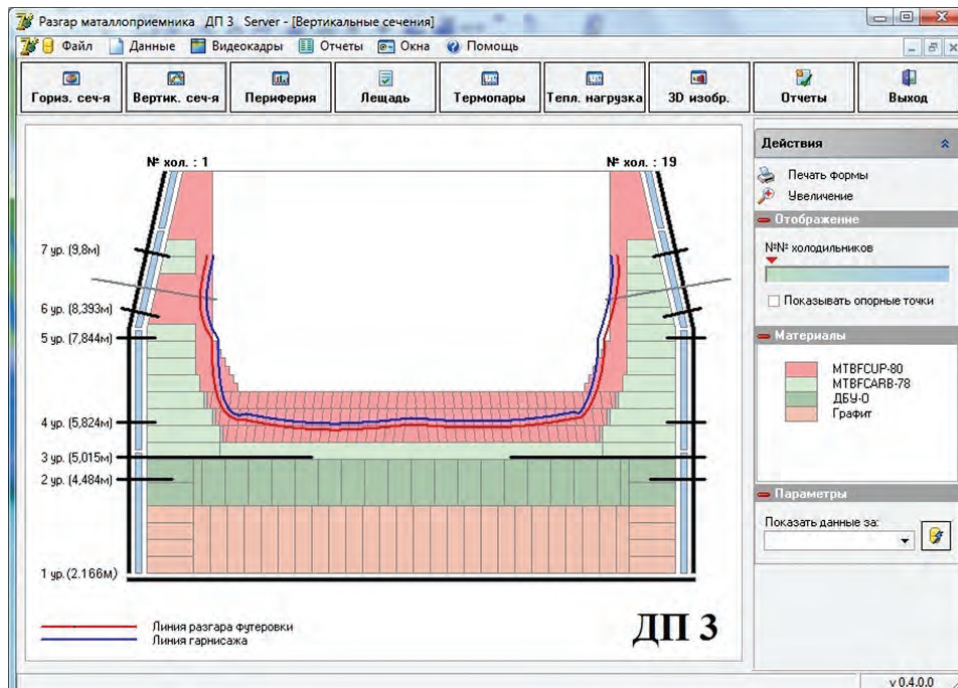


RAZGAR SYSTEM FOR CONTROL OF CRUCIBLE AND HEARTH INWALL RESIDUAL THICKNESS



Snapshot of Razgar system

Areas of Application

The automatic control system is designed to monitor the remaining thickness of crucible and hearth inwall and the skull formation. This enables a safe and long-term operation of blast furnaces

Specification

The system visualization includes 3D image of vertical and horizontal erosion of hearth inwall. The adaptation to specific blast furnace takes up to 1 year

Advantages

The Razgar system functions enable:

- displaying changes in inwall temperature and average temperature at the horizontal levels of thermocouples;
- taking into consideration the thermal load on the hearth;
- taking into consideration the depth of hearth erosion;
- taking into account the skull thickness;
- calculating crucible and hearth wear rate;
- displaying the horizontal profiles of inwall erosion along the crucible perimeter by the levels of thermocouples

Stage of Development. Suggestions for Commercialization

IRL8, TRL8
System installation, warranty service, and staff training

IPR Protection

IPR3

Contact Information

Oleksii Ye. Merkulov, Iron and Steel Institute of Z.I. Nekrasov of the NAS of Ukraine;
+38 056 790 05 15, e-mail: office.isi@nas.gov.ua