
THE IMPORTANCE OF REPAIRS FOR MAINTAINING THE PROPER TECHNICAL CONDITION OF FIXED ASSETS OF COKE-CHEMICAL ENTERPRISES (review)

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Due to the excess operating life of the operating coke oven batteries in Ukraine, it is necessary to systematically carry out repairs to maintain the proper technical condition of the fixed assets of the coke oven production, primarily coke oven batteries.

The article provides definitions of such concepts as the system of scheduled preventive maintenance of industrial buildings and structures, the system of maintenance and repair of mechanical equipment, maintenance, current repairs, major repairs, and the like.

A classification of coke oven masonry repairs according to the scope of work, conditions and time of performance is stated, as well as documents regulating the procedure for their implementation are named. A brief overview of the types of repairs that are used to maintain the technical condition of coke oven batteries: preventive and current repairs (gunning, etc.), Medium repairs (partial relocation of the heads of the regenerator walls, heating walls and replacement of the reflowed packing), overhaul, which consists of partial re-laying a group of furnaces in a cold state (repairing furnace masonry with shifting walls to different depths, repairing and replacing reinforcement, repairing and replacing chimney and gas supply fittings). The main defects of coke oven battery masonry, which are subject to major repairs, are listed. It is noted that the cold group partial relocation of the furnaces is performed with gradual cooling and heating, which requires a complete or partial cessation of operation of the chambers adjacent to the ones being repaired (buffer and semi-buffer furnaces). It is emphasized that the work performed as part of the overhaul is determined by the technical condition of the battery, regardless of its age.

It is noted that in modern conditions, the most effective is the relocation of the extreme and pre-extreme verticals of the coking chamber to a depth of 4-6 verticals on both sides without disconnecting the repaired chamber from heating.

Keywords: coke oven battery, service life, technical condition, types of repairs, regulatory documentation.

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