Creation of the catalog of the equipment, materials and data processing of project model of three-dimensional configuration of spent fuel pool cooling system in a CAD ”Polynom”

Abstract—

Keywords—

I. Introduction

Information simulation of the building to Create model, to fasten data to a graphics and to receive the output documentation connected to model that changes in model were broadcast in drawings and specifications here the BIM design purpose. At the expense of it the errors connected to a human factor in the course of calculation of specifications decrease collisions of arrangement decisions are eliminated. In information simulation the building and everything that has relation to it, are considered as a uniform object. The CAD is the system realizing design in case of which all project decisions or their part receive as a result of computation and compilation of mathematical models on a computer. CAD ”POLYNOMIAL” a 3D CAD for complex design in case of construction new and upgrades of the existing technological objects.

The object of the research and modeling is a cycle of development of three-dimensional model of Spent Fuel Pool Cooling System. The aim of the work is development of three-dimensional model of arrangement of the Spent Fuel Pool Cooling System.

This paper describes a question of organization of data in a multifunctional CAD systems; methodology of constructing the model on the basis of organized by catalog of equipment and parts; life cycle the project model industrial facility; generating of reporting data based on of the project model. During the work executed PC Setup to optimize CAD ”POLYNOM”of the work performed testing program and modification of the program, resulting in improved performance. Result of the work is developed by the three-dimensional model of Spent Fuel Pool Cooling System, piping, equipment and heating equipment catalog created on the basis CAD system ”POLYNOM”. CAD system ”POLYNOM”was introduced into trial operation and developed by the the 3D model and a catalog of the equipment used for the design of of similar facilities.