

The industrial intelligence is still forwarding.[2] The production strategy focused to time requires the change from traditional functional production structure to a production used flexible manufacturing systems. Production by flexible manufacturing systems (FMS) is the most important manufacturing philosophy in the last years. Main requirements in installing of intelligent production systems are: shortening of running production times, higher production productivity, economic expediency, elimination of worker hand intervention. Recognition of the similarity of manufactured parts allows to assort them to the groups by machines required for its manufacturing. Basics which are needed for realization of machine intelligence in manufacturing systems is so called monitoring, which is able to monitor an internal stay of the system and also changing conditions coming from environment. Monitoring systems are using sensors which are located at some proper place of the system, usually such place is the tool stand, machine or some manipulating device. Sensors are identifying parameters, which are then used as input data of control system. On the present, new solutions of artificial intelligence implementation into machine production are searched.