

This thesis belongs to the implementation category of diploma theses. The work contributes to the EC project COSPAL, IST-2003-004176. The main goal of the project was the creation of the system of control and processing of the camera information for the assembly task. The demonstrator is used within the scope of the COSPAL project to solve a child's game – shape sorter puzzle. For solving the puzzle, the industrial robot CRS Robotics A465 was used. The robot has been available at the supervisor's place.