



Typical robot system.

1. The articulated mechanical system, or the arm of the robot. It includes the links, joints, and wrist.
2. The end-effector, which performs the usable work by serving as a gripper or tool.
3. The actuators with their power supplies provide the mechanical power to move the robot arm. Actuators are primarily electric, but a few hydraulic and pneumatic actuators are still used.
4. The transmission system (not illustrated), which couples this power to the joints, through connections such as cables, belts, gears, or hoses.
5. Internal sensors, which monitor the motion of the robot.
6. External sensors, which collect information about the surrounding environment and provide this data to the robot.
7. The control system for the robot, which may include computer chips controlling each axis of motion, a robot "brain" or central computer directing overall activity, and the necessary interface with an operator for monitoring, reprogramming, or training.