Introduction Robotics application in construction is quite low. We need to adjust the construction environment to robotic technologies. This paper describes the re- and engineering of construction processes and re- and design of building components in such a way that construction robots can be easier implemented. The primary goal is to realize modern and flexible floor plans with high-quality installation economically to enable robotic construction and maintenance by robot oriented design. Summary In the 1970s, many companies producing building materials on an industrial basis were founded by companies not otherwise engaged in construction. Ideas from automobile manufacturing, ship building and the chemicals industry were adopted by the construction industry. The 1980s saw the introduction of robots on building sites where they carried out specialized tasks such as spraying, smoothing concrete, distributing materials, fitting equipment to ceilings, assembling form-work, installing facades, painting and many more. In the 1990s, integrated systems for high-rise building were developed. These automated construction sites used robots for logistics and assembly. For around six years, humanoid robots have also been used for various applications on site. The idea of the ROD is to engineer robotic construction processes and robotic building services. Results The research, development and application of industrialization to construction during the last three decades shows that by using robotic technologies in prefabrication, on site construction and services, we will be able to achieve customized building
products at affordable construction costs and constant quality. The mps (module plug in system) is an
good example for a construction-tool, that offers the opportunity to be handled by construction robots.
Through the possibility - given by the mps - to transfer the interior fittings away from the inefficient and
weather dependent construction site into the factory, a high degree of time reduction and costs
reduction can be reached. Less tolerance, cut up and defects as well as constant and ergonomic
working conditions, short ways and optimized warehouse bearing provide a decisive competitive
advantage to the robotic building construction and rehabilitation process. Based on producer
independent subsystems and processes developed in the mps project it is possible, by concentration of
operations in factory as well as by automation of the fabrication-lanes, to realise a more efficient,
computer-aided fabrication, without narrowing the desire of the constructor, neither for individuality nor
for specific solutions.

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