Automated refurbishment & end-of-life processes research approaches in German and Japanese construction.

Recently, efficiency in the building fabrication process and on construction sites in terms of energy consumption, sustainability and reuse has become more and more important in the discussion of the building life-cycle and the construction site of the future. In this paper, different approaches for the development of automated refurbishment and end-of-life concepts with focus on robotic deconstruction within the construction sector will be introduced. Whereas RWTH Aachen is researching on the integration of industrial robots in the context of smart building automation and the digitalization of the construction site, TU Munich is researching concepts beyond industrial robots and prefabrication as one solution for preplanned deconstruction. An overview of the proposed concepts and the pros and cons of the various methods will be discussed in this paper.

Stichworte:
Automation; Robotics; Deconstruction; End-of-life; Refurbishment; Prefabrication; robot motion programming

Kongress- / Buchtitel:
Proceedings of the CIB*IAARC W119 CIC 2016 Workshop

Jahr:
2016

Sprache:
en

Occurences:
· Hochschulbibliographie > 2016 > Fakultäten > Architektur > Lehrstuhl für Baurealisierung und Baurobotik (Prof. Bock)
· Einrichtungen > Fakultäten > Fakultät für Architektur > Lehrstühle und Professuren > Lehrstuhl für Baurealisierung und Baurobotik (Prof. Bock)

Entries: