

Human and robot collaboration in timber construction

Access to new resource related to robotic building construction projects added to PMWL



Resource provided by [Sagar Gogate](#)

28 July 2019 – Mumbai, India – Access to a new resource has been added to the PM World Library (PMWL) related to Automation in Construction. The new resource is titled “**Human and robot collaboration in evolving timber construction**” was published on World Economic Forum website in March 2018. It was created in collaboration with ETH Zurich.

Traditional timber construction depends on manual assembly of raw material while cutting the material is done by machines. But robotics is making its way in the construction industry and is enabling efficient construction and assembly of complex timber modules. This new timber construction method is developed by National Centre of Competence in Research (NCCR) and ETH Zurich’s Chair of Architecture and Digital Fabrication.

The article explains an entire assembly process in steps and how multiple robots can work together to position beams without colliding them. It further describes the advantages of Spatial Timber Assemblies over traditional timber frame construction. Authors also explain how these assembled frames will be used in the DFAB HOUSE project in Dübendorf for the first time. Article highlights the digital architecture of the entire system and the way it closes the gap between design, planning and execution. Matthias Kohler, Head of the DFAB HOUSE project, has also expressed his views on craftsmanship and the Spatial Timber Assemblies.

To access this new resource, go to the “Solving Global Problems” section of the library at <https://pmworldlibrary.net/industries-and-organizations/> click on “Automation in Construction”, scroll down to resource. Must be a registered member and logged-in to access. If you’re not yet a member, try the Trial Membership for a month; it’s FREE.

This new resource provided through the PMWL university research internship program; [to learn more, click here](#)

For PMWL Post

ETH Zurich (2018). [Human and robot collaboration is evolving timber construction](#) - Article published on 26 March 2018 on the World Economic Forum website. It explains how robotics is making its way in the construction industry, leading to reduced human involvement in construction. <https://www.weforum.org/agenda/2018/03/robotic-collaboration-in-timber-construction> ([Gogate](#))

Where to post in the library: <http://pmworldlibrary.net/automation-in-construction/>