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| **Title:** | Design, kinematic and performance evaluation of a dual arm bomb disposal robot | | |
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| **Abstract:** |  |
| This paper presents a dual arm bomb disposal robot that is designed to assist bomb disposal unit. Bomb disposal robot has been developed by different experts around the world to make an affordable and safe device designed to be used in emergency situations. Two segmented robotic arms (3 DOF and 3 DOF) are installed on a portable base with an IP camera to dispose bomb safely and easily from distance. The proposed model is controlled wirelessly with its main function to replace human in bomb disposal operation. The unique design and notable features introduced in this prototype add a new dimension in bomb disposal technology. Simulation-based direct kinematics is used to analyze performance along with mathematical modeling of the dual arm to develop an efficient, mobile and safe bomb disposal robot. | |