

FUMO™ - THE FIRE-FIGHTING ROBOT

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Abstract

Smoke diving is the most dangerous mission allowed in the civilian society. A general trend is that dangerous missions are undertaken by robots. Although dangerous missions exist for fire brigades robots are seldom used.

AB Realisator Robotics is together with three of the largest fire brigades in Sweden (Södertörn, Greater Stockholm, and Greater Gothenburg), Swedish Civil Contingencies Agency, and Swedish Fire Research Board developing the fire fighting robot FUMO™. The development takes place in close collaboration with Royal Institute of Technology and Mälardalen University.

The absence of robots implies that due to security reasons, fire brigades sometimes avoid to enter into dangerous complex premises resulting in less effective fire fighting. The idea is that FUMO™ will enter into these dangerous areas and provide situation awareness to the operational command. Such information would imply that chances to save lives are increased, the safety for personnel are increased, and that costs associated to the fire are reduced.

FUMO™ should be looked upon as a robot platform dedicated to fire fighting and is designed with respect to the special requirements that are associated to fire fighting.