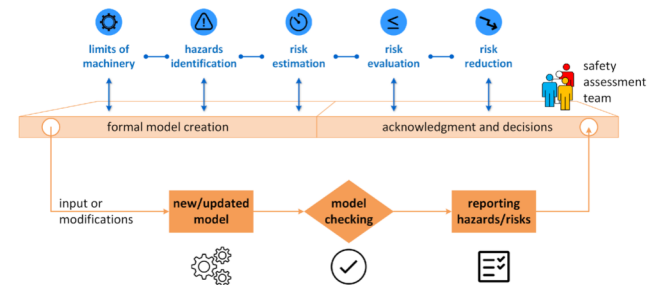


# Safety Assessment of Collaborative Robotics Through Automated Formal Verification

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- A crucial aspect of physical **human-robot collaboration (HRC)** is to maintain a safe common workspace for human operator
- **SAFER-HRC** is an exhaustive methodology for formalizing the executing task and the interactions of human and robot, and finding hazards by satisfiability checking
- It incorporates models and notions of hazards in **ISO 10218-2** and **ISO/TS 15066**, and methods in **ISO 12100**



SAFER-HRC with respect  
to ISO 12100 risk  
assessment