

C4 Methods for Human Oriented Automation - Challenge

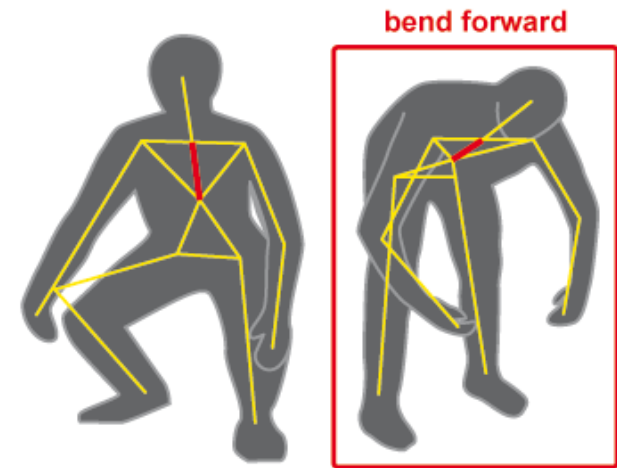
- ▶ Problems of manual work in manufacturing
 - ▶ physically demanding work strains worker's health
 - ▶ high health-related loss for companies
 - ▶ especially severe for elder workers whose number is increasing in industrial countries
- ▶ Our vision: „Human centric methods“ for qualification and work support
 - ▶ equip workplace with automation technology for ergonomic qualification and support
 - ▶ „human centric workplace“ as value creation module which focuses on social sustainability



C4 Methods for Human Oriented Automation - Approach

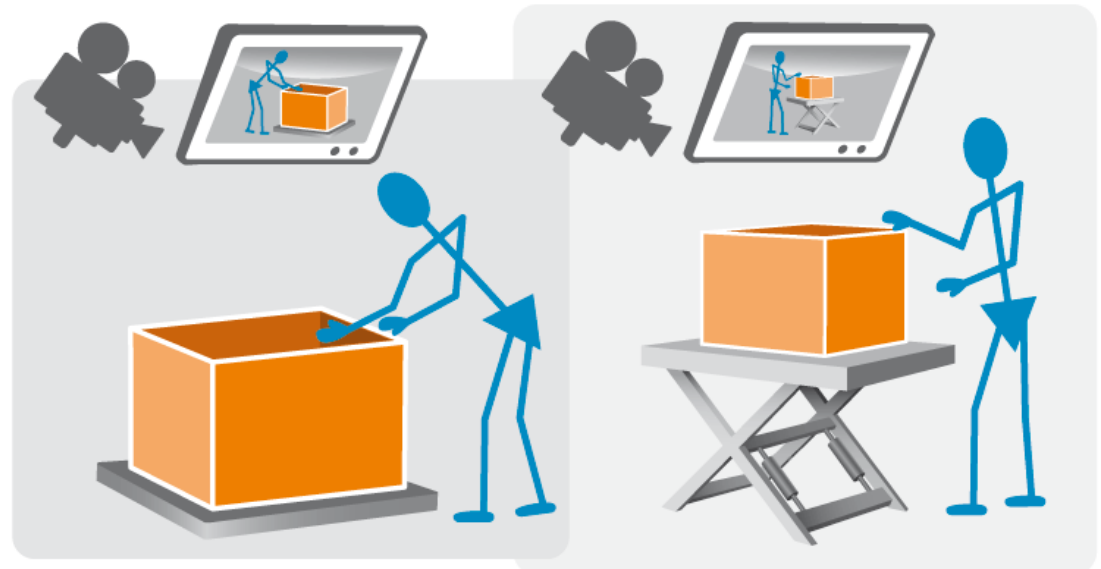
▶ Technology

- ▶ Markerless Motion capturing in industrial environment
- ▶ Automatic in-process worker ergonomics analysis using industrial standard (EAWS)



▶ Applications

- ▶ visual guidance for ergonomic qualification
- ▶ automated support during physical work



C4 Methods for Human Oriented Automation – Results 2012

- ▶ Conception of „Human centric workplace“ for worker qualification
- ▶ Stereo camera algorithms
- ▶ Automatic ergonomics analysis using Microsoft Kinect 3D camera

