
Robotic Product Ideas targeting Medical Applications in Diagnosis and Intervention

Fraunhofer Institute for
Manufacturing Engineering and Automation

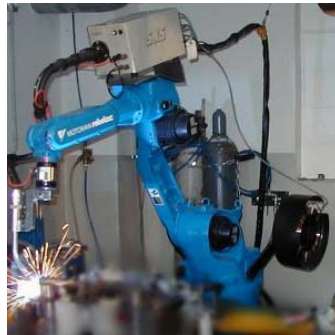
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Requirements regarding Robotics in the OR

Industrial requirements:

- High Speed
 - > High Accelerations
- High Payload Capacity
- High Accuracy
 - > High Stiffness



OR requirements:

- Slim and sleek design
- Fail-safe actuation
- low speed, less accuracy
- Payload capacity ~ 5kg
- Active constraints in real-time
- redundant DOF



Possible new robotic applications in the OR

1. Instrument-holding and guiding device with slim contours
2. intracorporal micro-kinematics

