

Robotics and Assembly Lines
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Knowledge Test - Questions

1. Sensors

- a) What are the differences between direct and indirect measuring systems at machine tools?
- b) Please describe the structure of an incremental impulse generator.

2. Control

Please explain the difference between point to point control and path control.

3. Drives

Why are nowadays asynchronous motors instead of DC motors used as servomotors?

4. Mathematics

Write down the transformation for a turn around 30° counterclockwise and a linear moving for $\begin{pmatrix} 1 \\ 2 \end{pmatrix}$ in plane of a square in matrix notation.

5. Vibrations

Which influence do the parameters stiffness c and mass m have on the natural frequency of a frictionless vibratory system?