

Locking mechanism: Durable, less parts, more affordable

(17.10.2025)

Internship Number 55683

Type Master Internship

Number of positions 1

Length 4-6 months

Hiring time Period 1: February - September (2026)

Company informations

Company (top) Hexagon Manufacturing Intelligence

Company (lab, dpt, ...)

Address c/o TESA Technology, Bugnon 38

URL

<https://hexagon.com/company/divisions/manufacturing-intelligence>

City 1020 Renens Vd, Suisse

Contact informations

Contact Azhdari Sepide

Professional phone +41 21 633 16 50

Title

Cell phone

Email innovation.ch.mi@hexagon.com

Work description

Description and objectives

HexagonMI-Renens is a Swiss division of Hexagon AB, a worldwide group leader in sensors, software, digital factory and digital world, as well as in autonomous solutions. In particular, we design and manufacture precision instruments for Hexagon's Coordinate Measuring Machines (CMMs), notably probes, sensors and robotic heads.

Our robotic heads provide two degrees of rotational freedom in an indexed form. It means that the user can ask it to rotate $n \times \text{step_size}$ degrees and lock it in the new orientation.

We have been using the current locking design for over a decade, but the new market demands require new approach and optimizations.

- 1- Study the current design.
- 2- Define design constraints, e.g., dimension, power, material,...
- 3- propose alternative solutions.
- 4- Desing and prototype.
- 5- cost estimation.
- 6- Fatigue study. The lock should perform 10M cycle.

Required skills

- 1- Mechanical design
- 2- Prototyping
- 3- Fatigue simulation
- 4- Testing and documentation

Languages English (Intermediate)

Location Renens VD

Monthly salary 2300

Other benefits and/or compensation

Subsidized cafeteria (CHF 5 per meal)
Access to a team of experts for guidance and support.
A half-salary bonus at the end of the internship.
12.5 days of vacation.

Remark