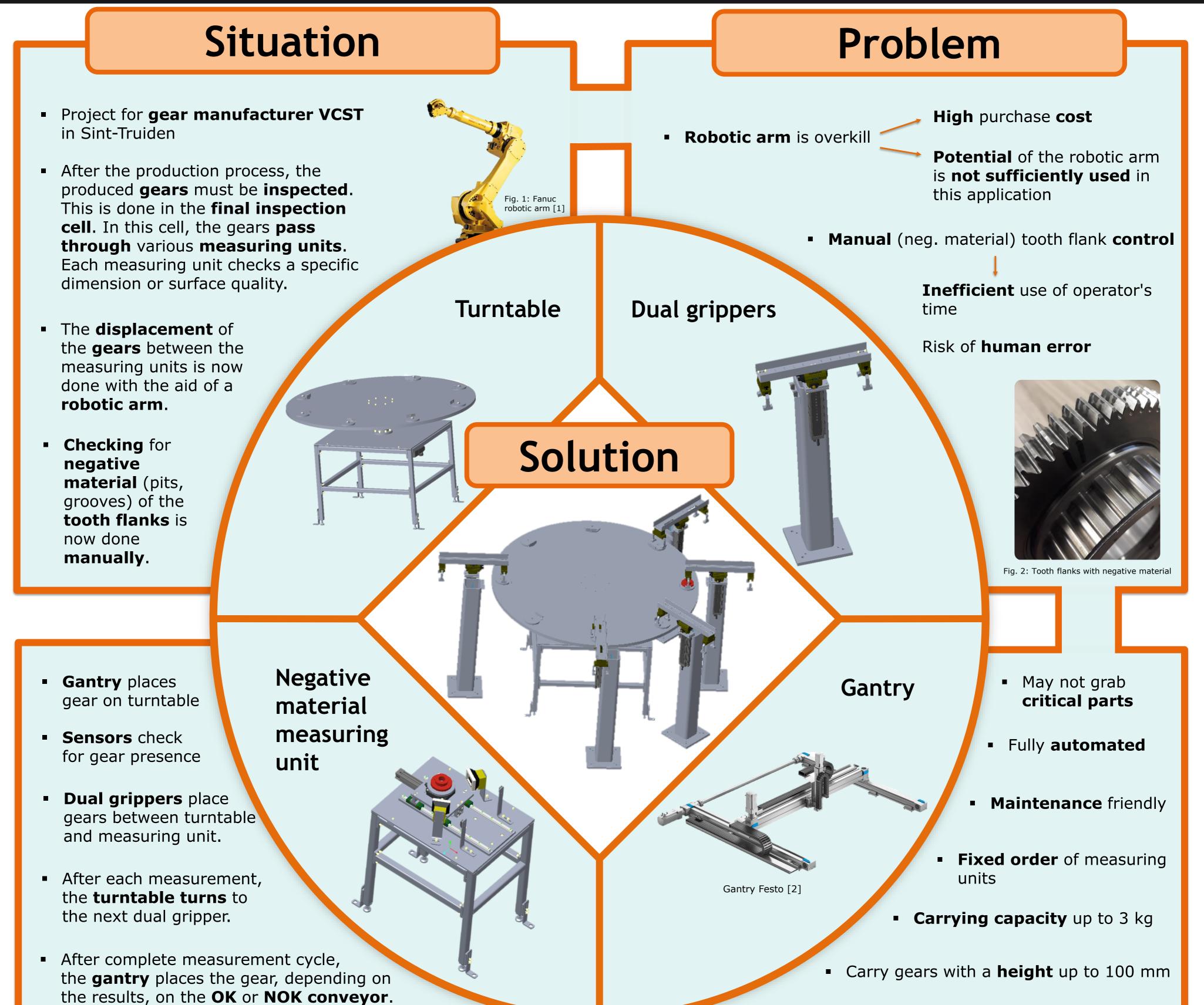
Bachelor's Thesis Engineering Technology

2021-2022

DESIGN OF AN ALTERNATIVE DISPLACEMENT SYSTEM FOR AN AUTOMATED GEAR INSPECTION LINE

Niels Craninx and Ruben Van Opstal

Specialization Electromechanical Engineering Technology



- On the **negative material measuring unit**, gears are placed on an **indexing table** that turn the gear. Negative material errors get detected by two cameras.
- A **pneumatic piston** moves the gear in and out of the measuring box.

Method

- Carry gears with outer diameters up to 120 mm
- Must have at least the same performance as the original cell

Requirements

Supervisors / cosupervisors:

Prof. Dr. Ir. Michael Daenen Prof. Dr. Ing. Karel Kellens

Ing. John Bijnens Prof. Dr. J. Lievens [1] Fanuc, "Fanuc M-710iC/50 industrial robot," 2022. [Online]. Available at: https://www.fanuc.eu/be/nl/robots/robot-filter-pagina/m-710-serie/m-710ic-50 [Accessed 13 April 2022].

[2] Festo, "3D-portal manipulator YXCR," 2022. [Online]. Available at: https://www.gamedesigning.org/gaming/pay-to-win-games/ [Accessed 13 April 2022].





