Get a Grip

INTRODUCTION

We are *Get a Grip*, a team of six passionate students: Jesse van Dee, Laura Brunekreeft, Matteo van den Brink, Nick de Graaf, Coen Janssens, and Robin Oonk. Our project was carried out in collaboration with the company Profextru and our mentor, senior engineer Meike Froklage.

The goal of our project was to create a practical toolkit that enables companies to independently design and develop a gripper – a key component in robotic and cobotic automation. Profextru served as our case company, where we were not only able to apply our toolkit but also design a gripper specifically for their production environment.

We chose this project because of our shared interest in robotics and the hands-on nature of the challenge. It gave us the opportunity to bridge theory and practice in a meaningful way.

JOURNEY & LEARNINGS

Our journey was both exciting and educational. From the beginning, we divided responsibilities based on our strengths and quickly set up a clear plan to reach our goal. Visiting Profextru early in the process helped us understand their needs and the context in which our toolkit would be used.

One major challenge we faced was translating complex technical steps into a toolkit that non-experts could understand and apply. We had to simplify without scrapping key information – a tricky balance. Iteration was key: we tested and reworked both our toolkit and the gripper prototype several times based on feedback.

An eye-opening moment came when we realized how much value a structured but flexible design process can offer to smaller companies. This reinforced the importance of clear documentation and user-friendly instructions. It also taught us the value of communication – both within our team and with the client.

OUTCOME & IMPACT
Our final deliverable consists of two parts:
1. A modular and user-friendly toolkit (instructive guide) that allows companies to develop their own gripper step by step.
2. A fully functional gripper, designed and built specifically for Profextru, showcasing how the toolkit can be applied from start to finish.

What makes our product valuable is its accessibility. Robotic automation is often seen as too complex or expensive for small companies – we aimed to lower that barrier. By empowering companies to take control of their own gripper design, we help them become more self-reliant, innovative, and future-ready.

The ripple effect of this project could be significant: our toolkit could support many companies looking to integrate automation without having to rely on expensive external developers. It promotes knowledge-sharing and practical engineering in a growing tech sector.

We're most proud of the fact that we developed something concrete, useful, and directly applicable. At the symposium, we're especially excited to show the gripper we built and walk people through our toolkit – so they can see how it all comes together in practice.

Ready to grip the future. See you there!