

**ROBOE**  
**EQUIPMENT**



DENMARK 2022  
ROBOE.INFO@GMAIL.COM

# PROBLEM

Almost 8 pct. of European citizens suffers from work-related health issues. 60 pct. of those are caused by ergonomic risks at work. This makes it a total of 21,456,000 European citizens!

This is especially seen in the manufacturing industry, where hard, manual work tasks are part of their everyday life. This is an issue for the employee and his or her family, the companies and the society in general.

In the small- or medium-sized enterprises within the metal manufacturing industry, an employee would spend many hours doing manually bad ergonomic work tasks, such as thread cutting. One of these enterprises is Metalpres Haarby:

## METALPRES HAARBY

Metalpres Haarby is a local metal manufacturing enterprise in Denmark. They are large enough to have a lot of thread cutting orders, but do not have the resources for a huge investment in a CNC machine. On a yearly basis they do approximately 20,000 manual thread cuts; this means that a person needs to stand full time in front of a column drilling machine for two whole months.

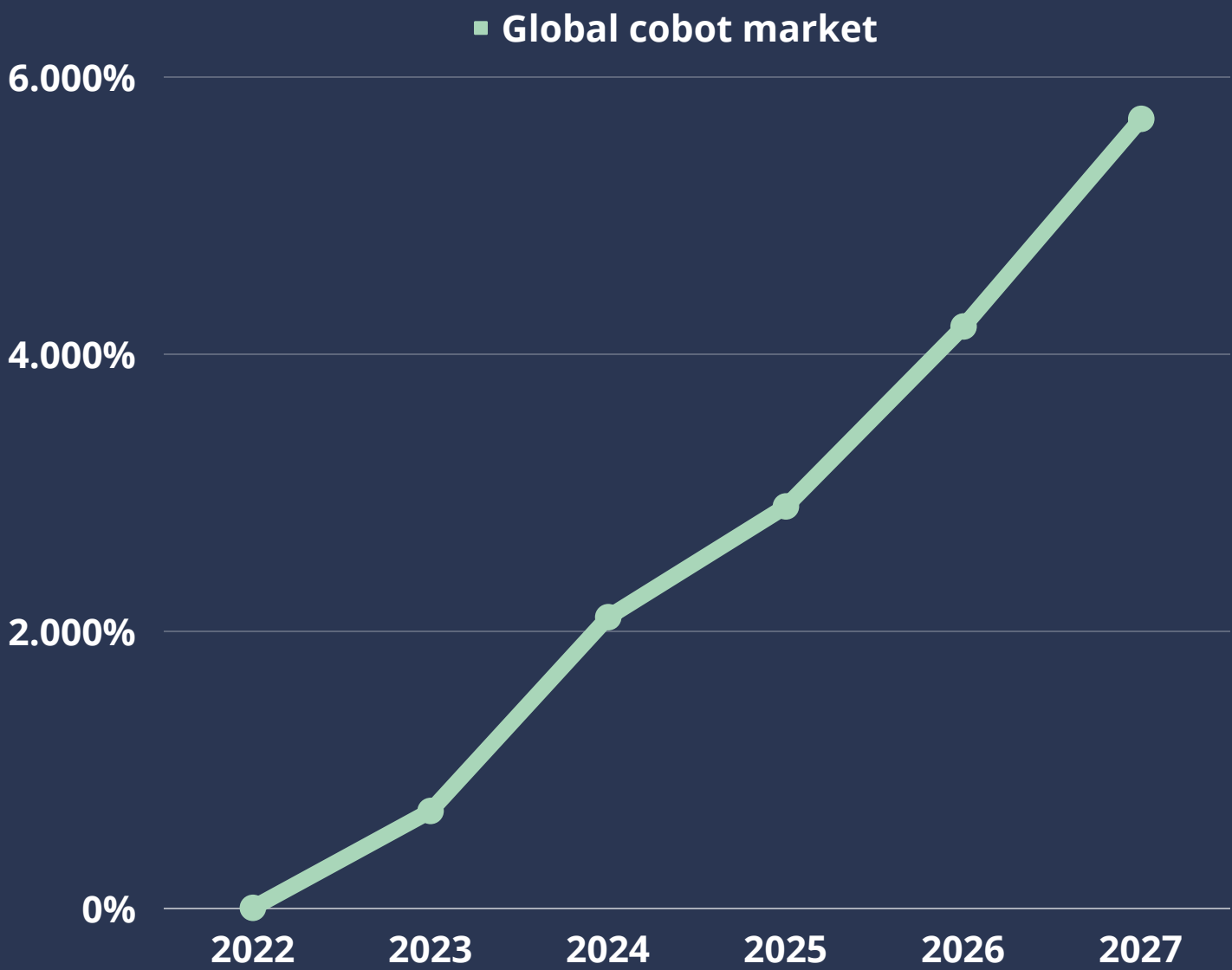
**20,000 thread cuts = 250 hours manual work**

# TARGET MARKET AND OPPORTUNITY

Metalpres Haarby is not the only one! In Denmark there are approximately 14,000 SME's within the metal manufacturing industry and 500,000 in Europe.

The problem is not only a matter of how many European citizens who suffer from work-related health issues. In Denmark, Estonia and all of Europe, we are looking into a future with a big lack of skilled workers. At the same time there is a growing demand in the manufacturing industry. To solve this we need robots and humans to work together, through collaborative robots (cobots).

This represents a great opportunity for RoboE. This potential is backed up by major industry players like; Universal Robots, The Danish Ministry of Foreign Affairs and trade unions in Denmark.



RoboE sees a gap in the cobot market with great growth potential. The market is expected to hit 600,000 new units annually in 2027, which will lead to an expected growth of 5,700% and a global market of 10,6 billion EUR in total.

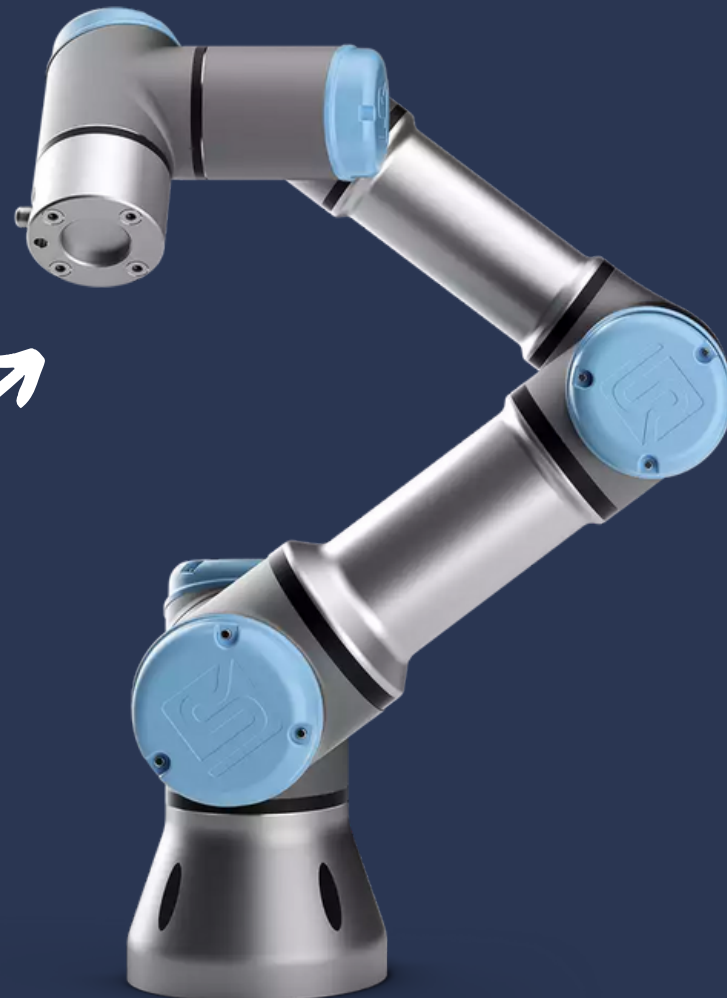
# SOLUTION

We have developed and produced a thread cutting device which will be attached to a programmable robotic arm (also called a cobot). This has the purpose of semi-automating thread cutting processes within the metal manufacturing industry. This will decrease the manual work time by 90%.

RoboE



Cobot



## Easy to use

The cobot and RoboE is easy to programme within minutes. It is not going to replace the employee, but instead take over the physically hard and repetitive thread cutting.



# COMPETITION

RoboE's main competition is the CNC-machines and in the future also other manufacturers of devices for cobots.

CNC-machines with a price tag of EUR +160,000,-, are not really an option for RoboE's customer segment. It is expensive, takes up a lot of electricity and space in the production area.

At the moment, there is no other alternative thread cutting device for cobots. This gives RoboE a great opportunity to take up market share. The unique storytelling and below-mentioned collaboration with Universal Robots will make RoboE able to defend this market share in the long term, as well as proceeding to develop the RoboE product line.

*"We love seeing entrepreneurs like you with your vision.  
You have spotted a market with huge potential and have  
found the right approach"*

- Testimonial from Universal Robots



# MARKET APPROACH & STRATEGY

RoboE's launch approach will be targeting SME's that already have a cobot in their production. The launch market will be Denmark, which at the moment holds 20,000 cobots in SME's within the metal manufacturing industry. These types of companies have already had a positive experience of the benefits from a cobot. Studies support this approach; In this segment, the economic gain is not the main driving force, but instead benefits of being an attractive workplace and to develop employees. This aligns with RoboE's main mission and storytelling - so that makes it an ideal segment to launch to.

When launching to the European market, RoboE will still be following the same approach and target SME's that already have a cobot. This will be done in close collaboration with Universal Robots. RoboE will eventually expand their customer segment to also include SME's that don't have a cobot.

As RoboE gets more SME's onto their customer list they will expand their product line to keep adding more value to the business and keep helping to automate more manual work tasks.



# MOMENTUM/TRACTION



# TEAM

RoboE consists of an innovative collaboration between four mechanical engineering students and two innovation and entrepreneurship students.

Combined, this creates a profile for the team with lots of opportunities to complement each other internally. The team has the needed competences to carry out the upcoming tasks such as producing the device, executing on sales strategy and overall realising the business. The team at RoboE also possesses a strong network in the metal industry and business in general.



Mohamad

Bjørn

Andreas

Mette

Jannek

Patrick

*"You are combining innovation and technology in businesses and you represent both sides in the founder team. We are convinced that you will succeed with your project"*

- Quote from the judges at the National Championship

# KEY STAKEHOLDER

Universal Robots is the world market leader of the cobot industry. RoboE has partnered up with them to join their UR Lab in a Lean Start up programme to build the finished RoboE robotic head.

Furthermore, Universal Robots provides knowledge and help for the go-to market strategy as well as doing marketing and PR activities for RoboE on their channels.



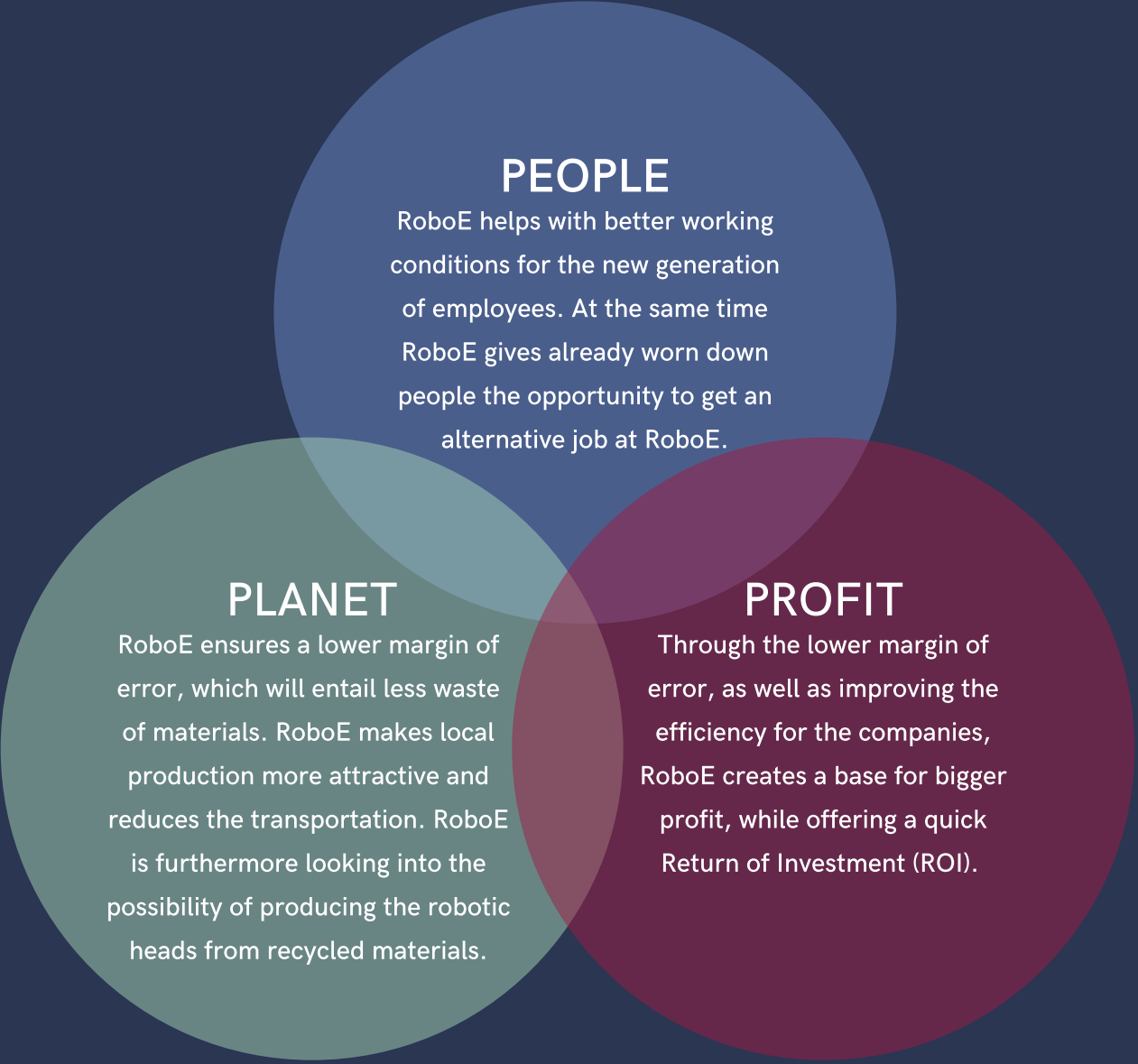


# BUSINESS MODEL

## BUSINESS MODEL CANVAS




## TRIPLE BOTTOM LINE



8

DECENT WORK AND ECONOMIC GROWTH



RoboE’s value propositions are in line with UN’s Sustainable Development Goal number 8 - Decent Work and Economic Growth, in particular 8.2 and 8.3, which tackles technological innovation and the development of micro, small and medium-sized Enterprises.

## FINANCIALS

RoboE is a cheaper solution for SME's both in regards to the competition from CNC machines but also in regards to the manual thread cutting.

The Return of Investment (ROI):

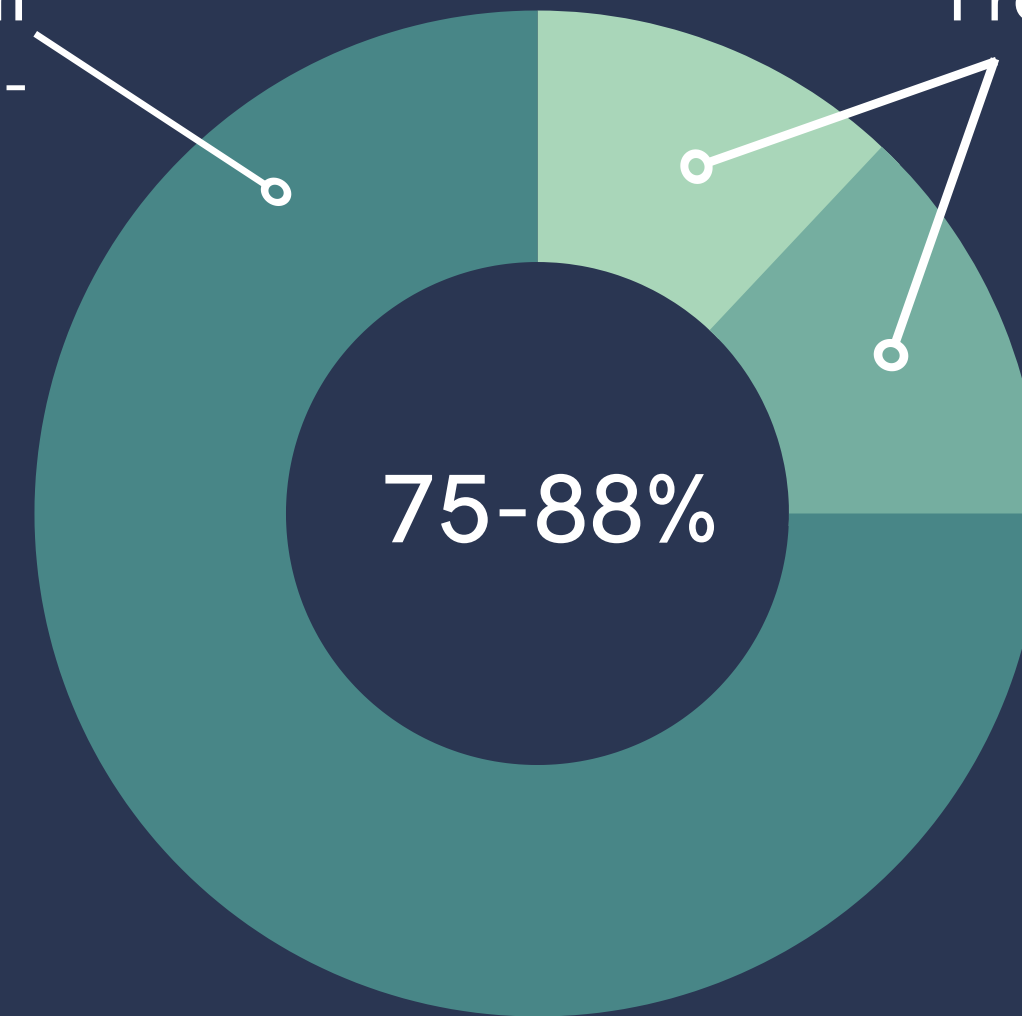
- RoboE robotic head: 3-4 months\*
- CNC machine: 11 years and 6 months\*

*\*Estimated ROI at 20,000 thread cuts annually*

## PENETRATION RATE

Sales price from  
€ 4,000-5,300,-

Productioncost from  
€ 660-1,300,-



A RoboE robotic head has an estimated production price of approximately € 660-1,300,-. With a sales price of € 4,000-5,300,- RoboE has a penetration rate between 75-88%.

# INVESTMENT AND USE OF FUNDS

At the moment, RoboE has an equity of EUR 6,700,- This equity will be used to finish up the final RoboE device and start sales to generate the first revenue. Incoming EUR 4-5,300 from our first sale to Metalpres Haarby. This will be used to produce more RoboE devices to generate more sales.

RoboE has access to a production area at our partners Universal Robots and Metalpres Haarby. This will be used to kickstart the production.

RoboE won free counseling from EY, this will be used to establish the practicalities around RoboE. Furthermore RoboE will make use of free counseling alternatives through the municipality.

At the moment, RoboE are in dialogue with 3 investment funds about further collaboration and investment of funds.







DENMARK 2022  
[ROBOE.INFO@GMAIL.COM](mailto:ROBOE.INFO@GMAIL.COM)