POLYGON Technologies

# Polygon Overview

Invent, design and built the FUTURE of robotics

# THE VISION

- In a world infested with robots and AI technologies Polygon is well positioned to become a global leader
- Our  quick engineering response team will provide immediate answers in this dynamic environment for robotic solutions, based on the growing product platforms, robotic building blocks and proven success.
- Polygon seeks to become a strategic  partner to key players in the robotic domain from the academy to the industry

# Road Map

- Starting point – Assets:
  - Polygon has extensive robotic knowhow and IP
  - Polygon is a leading engineering house for robotic & automation with an existing loyal customer base and international recognition
- Our goal
  - To leverage the Polygon assents to create:
    - New robotic ventures with high business potential and unique IP
    - To work with strategic partners to create an array of robotic based products and solution
    - Create stream of revenues from recurring sales of product and solution while launching new ventures
- The method
  - Screen possible venture for growth – a new venture every year
  - Work with strategic customers to validate ventures and create a bridge head to the market
- Potential venture under investigation
  - Construction robotics
  - Agri-robotics
  - Industrial application – assembly

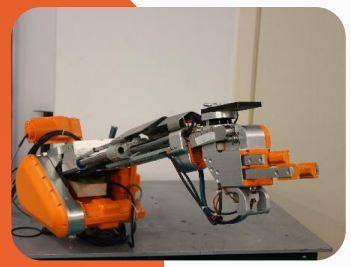
# THE BACKGROUND

Polygon developments and capabilities

01

**Robotics**

- Robotic products
- Custom robotics solutions
- Robotic new IP
- Robotic ventures



02

**Automation**

- Hi-end automation
- Over 120 automation projects were delivered to leading customers

03

**Customer base**

- Industry & Defense
- Over 15 different Robots designed and developed for Defense and military applications to date, mostly classified, for the largest Defense companies in Israel

Over 20 years in robotic & automation

# ROBOTICS

## Over 50 robotic projects:

- Medical Robotics
- Military Robotics
- Micro-Robotics
- Agriculture Robotics

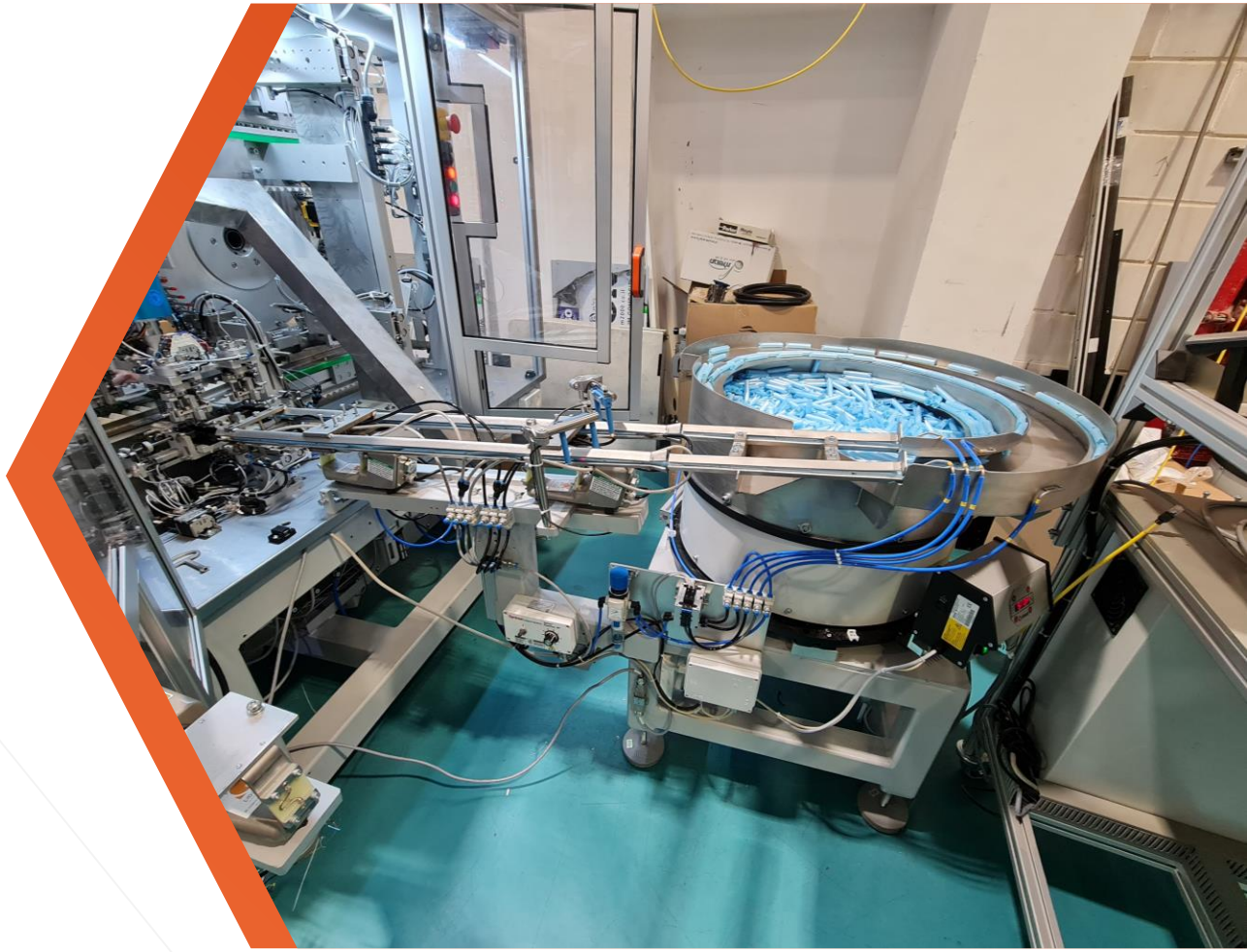
## Specializes in fields of:

- Design to spec and manufacture
- Electrical and mechanical engineering
- Algorithms and A.I

# Automation

Over 130 automation projects were delivered to leading customers:

- Hi-speed, continuous motion
- Micro-Automation (Assembly, grinding, inspection)
- Index based discrete automation
- Complete production lines
- Inspection & QA lines



# Assembly of deformable objects -

# The ART Consortium

**Supported by the Israeli Innovation Authority**

## Polygon leads the Israeli consortium for industrial robotics ART – Assembly by Robotic Technology

Developing breakthrough technology for intuitive grasping and manipulation.

The first system will be for LDO (Linear Deformable Object) Manipulation.

We use Reinforced Learning for cable handling, Deep Learning for components location and advanced AI for process sequencing along with a smart intuitive cable and object manipulation.

## The consortium members

Assembly by Robotic Technology

**Lighting fixtures cell -**

רשות החדשנות
Israel Innovation Authority

Electrical cabinet sample

# The WireBot

## Positioning

- A robotic system for **cable wiring of electrical cabinets**
- Addressing a **$150B/year untapped market** of control cabinet integrators.
- Converting expensive Manuel labor to **fast automatic process**
- The solution uniquely addresses the challenges of quick panel change over and consistent wire handling By using **AI algorithms for wire insertions** and **operation sequence automation**


**A robotic wiring systems for electrical cabinets Leading the way to robotic touch and feel**


# Thank You

Invent, design and built the FUTURE of robotics