

Flexible solution for Injection Molding

Many injection molding companies are faced with increasing demand for greater production flexibility. Cobots from Universal Robots are unbeatable in terms of providing such flexibility – they are the best tool currently available for addressing high volume production requirements.

Using the Euromap 67 industry standard for connecting handling devices with injection molding machines (IMMs) provides direct communication between Universal Robots cobots and the injection molding installations. This makes this kind of setup ideal for virtually all tasks associated with injection molding – including picking, cooling, unloading, palletizing and packaging. UR robots have a built-in palletizing wizard.

Because of their small footprint and light weight, installing UR cobots to work with IMMs is relatively fast and inexpensive. These cobots can be mounted on top or beside an IMM, and they can work alongside human operators without needing safety cages (subject to risk assessment), thus saving valuable space on the workshop floor.

It's also easy to “teach” a cobot where the appropriate parts are located: the operator simply drags the cobot arm to the right

position and saves this information in the software. UR cobots can also be easily redeployed in between different IMMs to service and assist them in accordance with changing production requirements. Cobots from Universal Robots provide injection molding companies with exceptional consistency in terms of speed, quality and accurate repeatability, making it possible to relieve operators from the most repetitive and burdensome tasks.

PolyScope is the easy-to-use interface that provides specific templates for creating programs that comply with the Euromap 67 industry standard for rapid, easy integration with IMMs. Programs can also be created offline using the free UR Simulator. The hardware required to interface between the cobot and the injection molding machine, in accordance with Euromap 67, is available from distributors/system integrators of Universal Robots.

The capabilities of Universal Robots cobots are constantly being expanded in the Universal Robots+ ecosystem, where a wide range of accessories – such as grippers and vision systems – is available to make it easier than ever to get your particular setup configured and running, almost out of the box.



CONTACT

Keen to find out more about how cobot-assisted process work can help your business?

Contact us: ur.na@universal-robots.com

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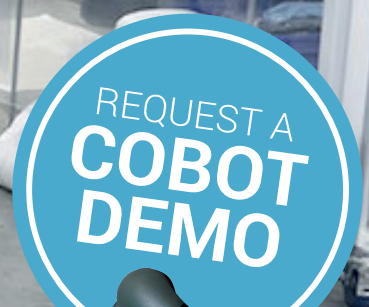
South Central US – LATAM Office:

Phone: (734) 249 6016

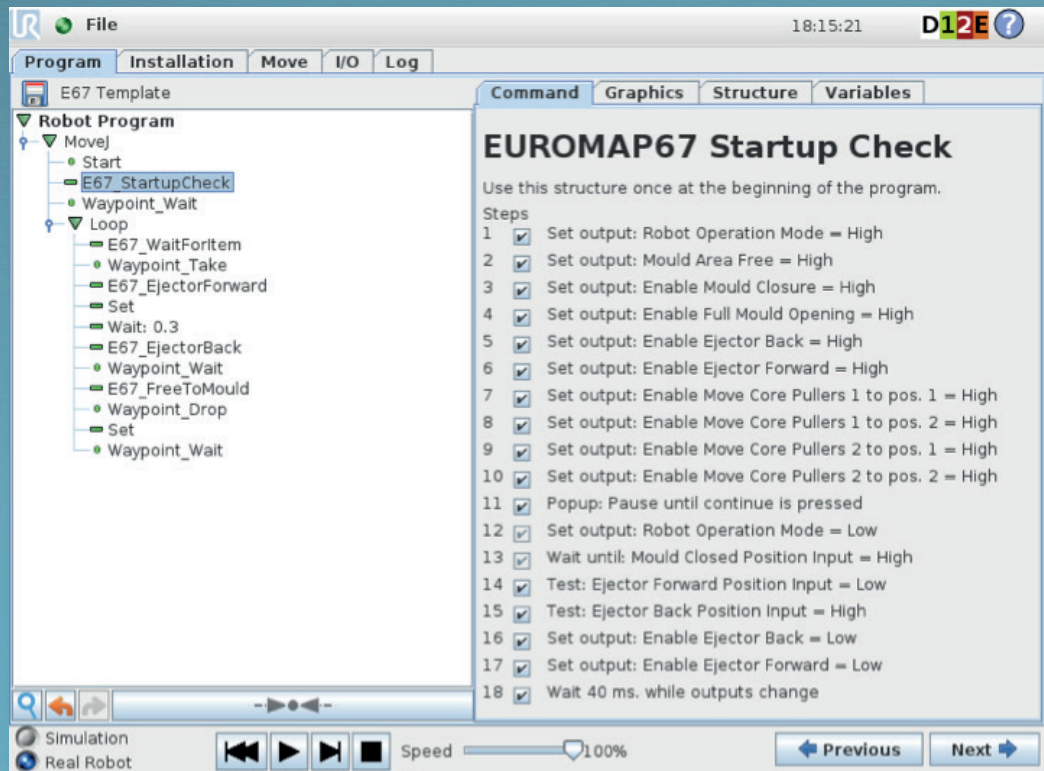
Phone: (844) 462 6268

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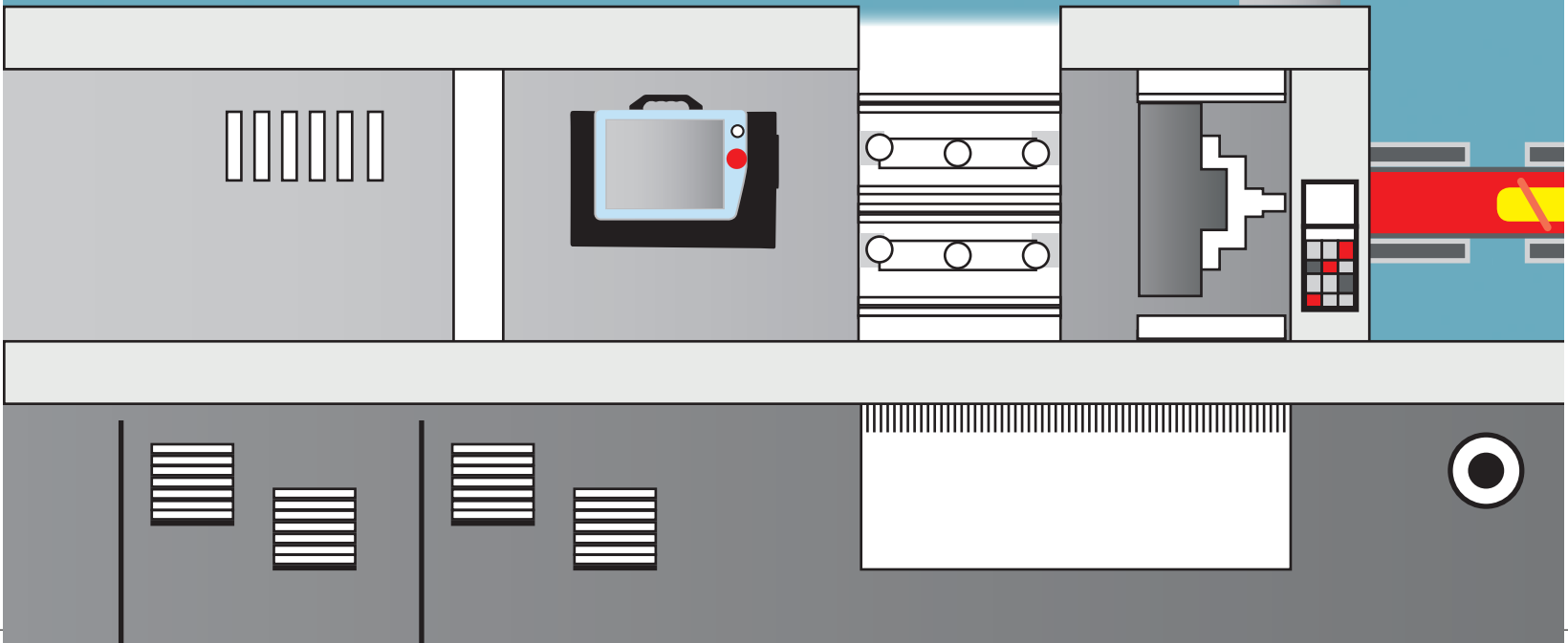
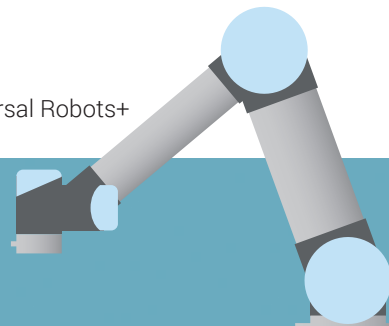


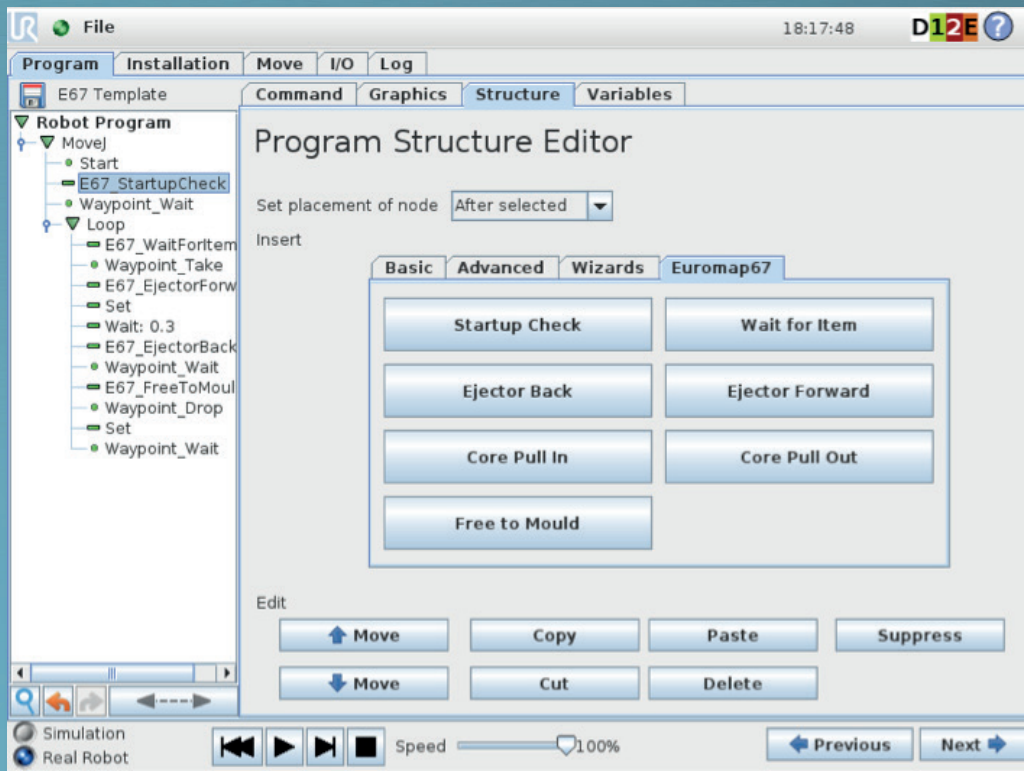
User friendly
Polyscope
interface with
inbuilt templates
for rapid and easy
installations



ADVANTAGES

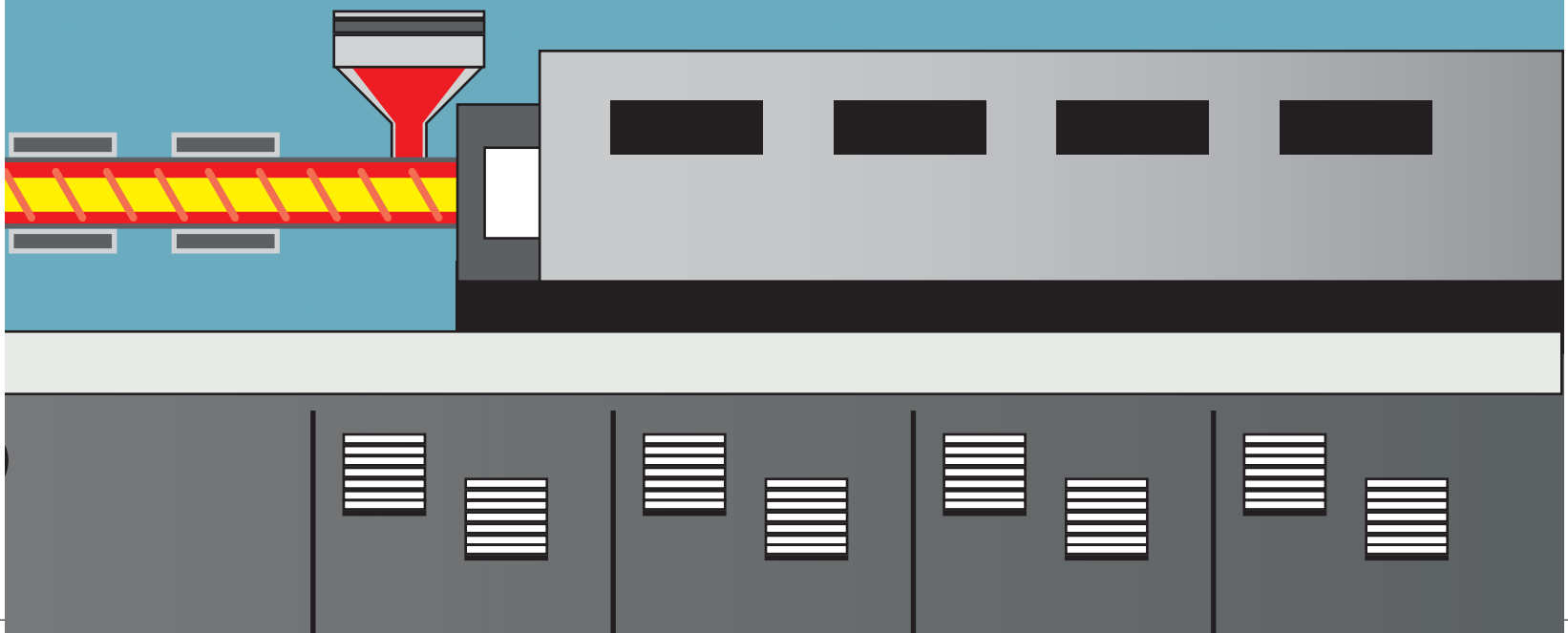
- Direct communication between UR cobots and injection molding installations.
- Easy to install anywhere – can operate without a safety cage (subject to risk assessments) even in space-constrained areas
- Built in palletizing wizard
- Euromap 67 interface hardware (optional) and software
- Exceptional repeatability (+-0.1 mm/0.004")
- Easy to integrate with grippers, vision systems, force sensors, etc. from Universal Robots+





GLOBAL BUSINESS BENEFITS

- Rapid, accurate handling of injection molds for prototyping and short-run manufacturing
- Relieves injection-molding machinery operators from physically demanding, repetitive work and helps eliminate the risk of injuries
- Ensures consistent quality, reduces production costs and optimizes operations
- Makes it possible to automate almost any manual task, including those with small batches or that require fast change-overs
- Removes robotic capabilities from the confines of safety cages, as a result of 15+ special features



Cobot-assisted injection molding in *your* industry

PLASTICS AND POLYMERS

- Can be used in virtually all aspects of plastic and polymer production, including de-gating, PCB loading and unloading, and pick-and-place projects
- Less employee exposure to noxious gases given off during the production of plastics and polymers
- Greater safety as a result of protecting production line employees from plastic shavings and any need to handle sharp objects
- Reducing repetitive work for employees, while being able to extend production capabilities
- Lightweight, space-saving and easy to redeploy to multiple applications without altering production layouts

CASE: **Dynamic Group**
Country: **North America**
Cobot: **UR5**

Joe McGillivray, CEO: **“Compared to traditional robots, I would say the UR robots are a lot easier to teach and program from drag-and-drop applications.”**



KPIs/benefits

- Improved product consistency
- Production capacity increases of up to 400%
- Significant scrap reduced to near-zero
- Workers relieved from repetitive and strenuous tasks
- Staffing shortages eliminated

Scan the code and see the video:

www.universal-robots.com/case-stories/dynamic-group/



AUTOMOTIVE

- Enabling task automation in contexts not even thinkable with traditional industrial robotics
- Faster assembly line throughput
- High flexibility, because the average set-up time is only about four hours
- Lightweight, space-saving and easy to redeploy to multiple applications
- All the advantages of advanced robotic automation, with none of the added costs traditionally associated with such setups

CASE **Linaset**
Country: **Czech Republic**
Cobot: **UR5**

Petr Šromota, Major Production Manager: **“There was no waiting time and the robot was deployed at our plant within a few days, and began to operate reliably.”**



KPIs/benefits

- Time taken for processing one single molding reduced by as much as 30%
- Relieves employees of a particularly time and energy-consuming production line task
- Blasting media consumption reduced by 35%

Scan the code and see the video:

www.universal-robots.com/case-stories/linaset/



PHARMA AND CHEMISTRY

- Class Room clean certification of robots
- Compliance with industry specifications for accuracy, precision and hygiene
- Mixing, counting, dispensing and inspection that deliver consistent results for business-critical products
- Ideal for sterile handling and assembly of small, delicate parts used in prosthetics, implants and medical devices
- Easy, rapid deployment, average set-up time reported by our customers is only four hours

CASE **Oticon**
Country: **Denmark**
Cobot: **UR5**

Arne Oddershede, Maintenance Unit Group Leader: **“With a traditional robot it was impossible to reprogram the robot, but with the UR5 any member of the technical staff can literally grab the robot and show it the motion sequence using waypoints.”**



KPIs/benefits

- ROI 60 days
- Automation of small production runs with many variables
- Flexible production, easy robot reprogramming

Scan the code and see the video:

www.universal-robots.com/case-stories/oticon/

