

## GROW YOUR BUSINESS WITH US

**ROBOTS** 

**END OF ARM TOOLS** 

**AUTOMATION** 

TRAINING/SERVICE

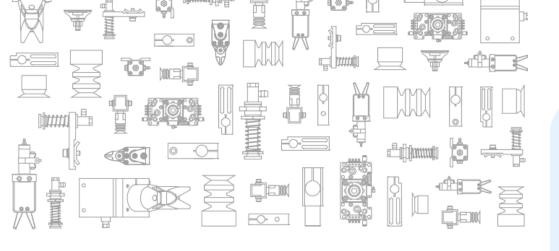
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Perfecting the robotic take-out and automation industry since 1973

### **CONTACT US**

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The End-of Arm Tool (EoAT) is the critical piece of equipment between the take-out robot and your product. EoATs provide a means of reliably removing parts from your mould and then placing them accurately where they need to be.

Over the years, we have designed bespoke tools to meet all sorts of application reuirements and product types. We utilise a variety of design and manufacturing techniques to ensure that the EoAT is fit for purpose and meets all requirements for the intended application at the point of installation.

#### **OUR CAPABILITES**

All bespoke EoAT's are designed in house by our design team at our UK office.

The fundamental backbone of most EoAT designs incorporates picking/placing product with either vacuum, grippers or a combination of both. Within these common functions lies an array of design nuance and detail that can be tailored to your application.

Vacuum solutions need to consider stability of the part; vacuum force and material selection for both the industrial environment and your product. Gripper solutions need to consider how they will be controlled (pneumatic/electric); gripper finger force and how to sense the product has been positively picked.

All this detail and more will be discussed with our design team throughout the project to make sure we deliver to your needs.

Once into the design phase our in house 3D printing capability allows us to prototype and validate design concepts prior to manufacture so we know we can deliver designs 'right first time'.

WE DON'T JUST DESIGN
EOATS FOR YUSHIN
ROBOTS. IF YOU HAVE A 6AXIS OR COLLABORATIVE
ROBOT APPLICATION, WE
CAN DESIGN TOOLS FOR
THESE TOO!



#### EXAMPLES OF OUR WORK



Did you know?
Yushin has its
own catalogue of
off the shelf
pneumatic and
EoAT
components



Yushin has developed a flexible/modular design where the base frames, suction cup assemblies and grippers are structured units. Making design and build of simple EoATs quick and efficient, allowing us to keep costs down.



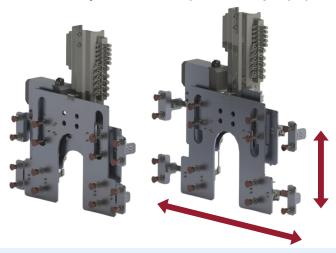
High cavity moulding is a common way to increase production volumes.

Designing EoATs for high cavity take-out requires the selection and use of lightweight materials and components to minimise vibration of the tool at the pick and place locations.

These examples show some of our bespoke designs, including a 64 cavity vacuum EoAT (left) and 32 cavity gripper EoAT (right)

Pitch change EoATs are great for when the pitch of the parts in the mould cavity layout does not match the pitch of the downstream equipment that the parts need to presented too.

e.g. A bin cavity layout that the parts need to be packed into, or the infeed of secondary automation processing equipment.



In this example, parts are picked using vacuum cups, and two sets of pneumatic cylinders are used to change the pitch of the parts in both the vertical and lateral directions.



Sometimes, EoAT design requires lateral thinking. In this example, pneumatic grippers grip a rubber edging, whilst a secondary set of cylinders expand the product outwards, creating clearance to remove the product from the mould cores.

#### **GET IN TOUCH**

OUR DESIGN TEAM CAN PUT TOGETHER A SOLUTION TO MEET YOUR NEEDS

#### A COMPLETE RANGE

Are you looking for a robot? Check out our **ROBOTS** brochure for information on our robot packages. If you require something more specific, it is likely we have the solution you are looking for.





# HOP FIVE SERIES A compact, swing type sprue picker. The HOP FIVE efficient design is the culmination of years of swing type take-out robot development.

#### **SPARES**

We stock and supply on demand to keep you up and running. We understand that the smallest part can have a significant impact on production if the component is no longer functioning correctly. We stock many common spare parts for our robots and anything we don't is available from stock in Japan.

Our spare parts department can provide robot parts and automation supplies, as well as bespoke machine and EOAT parts to meet you requirements.

Whatever your servicing and maintenance needs are; we are here to support.



#### **HSA & HST SERIES**

for fine

precision

moulding in

cleanrooms.

Looking to minimise mould cycle times? The HSA & HST are our fastest robots on the market. Built lighter and faster, they offer world class speed.

cleanrooms and

low ceiling areas





OUR SERVICE TEAM SUCCESSFULLY SUPPORTS CUSTOMERS FROM ALL OVER EUROPE