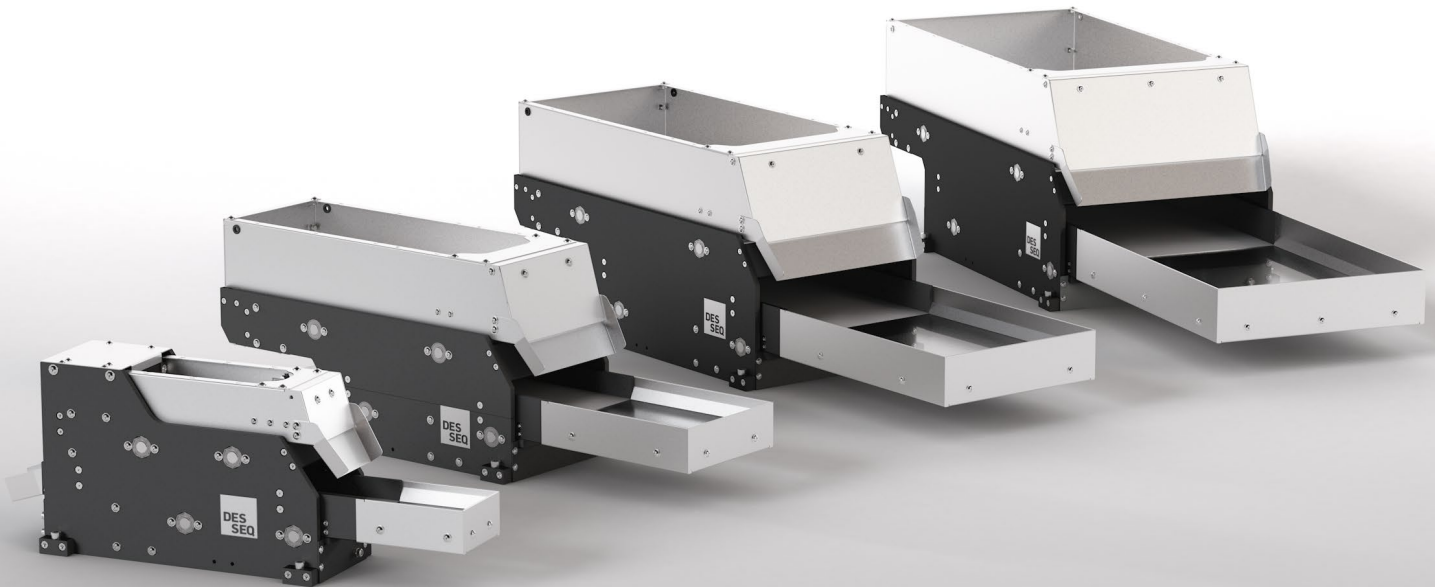


UNIFEEDER™

This universal vibrating feeder for the robotic picking of parts with a variety of shapes is designed to support further integration.



The UNIFEEDER™ is a vibrating feeder from DESSEQ that in many respects provides a universal solution to the problem of picking parts for follow-on processes. It is designed for situations with highly diverse part types and sizes and offers a variety of options for the method and scope of its integration. It is useful wherever there is a need for swiftly, precisely and safely positioning even the smallest components. It is practical both in closed work centres where high-performance robots perform tasks at high speeds and wherever cobots are operating near people in a safe cooperative mode.

The UNIFEEDER™ solution is registered with the Industrial Property Office under ID number PUV 2023-40974.

Solution specifications and benefits

- Highly flexible technology – integrates with all common robot types. Suitable for a wide range of applications.
- Support for a variety of part shapes and sizes without the need to physically adapt the picking equipment.
- Minimal adaptation time needed when switching to another production type; feeder is emptied automatically.
- Support for the use of a camera system to exclude defective and incorrect components from production. A structural design that eliminates jamming and piling up of parts.
- A simple structural design that ensures reliable operation.
- The choice of a separate feeder or a complete set with a robot and a camera system.
- Very easy control of the equipment via a control panel, with no need for knowledge of PLC programming.
- A first-party solution: DESSEQ handles all servicing and enables customisation.



The UNIFEEDER™ vibrating feeder

The main component in the UNIFEEDER™ vibrating feeder is an assembly made up of a vibrating plate and a vibrating feeder. The most frequently supplied basic accessory is a controller and a control panel. The assembly overall gives an integrator very easy binary control over the vibrating feeder from the PLC above it in the hierarchy through the calling of individual jobs, which can easily be assigned on the control panel. It can be expanded with Modbus TCP communication to both increase the number of jobs and let the customer work with more optional settings for the drives' motion.

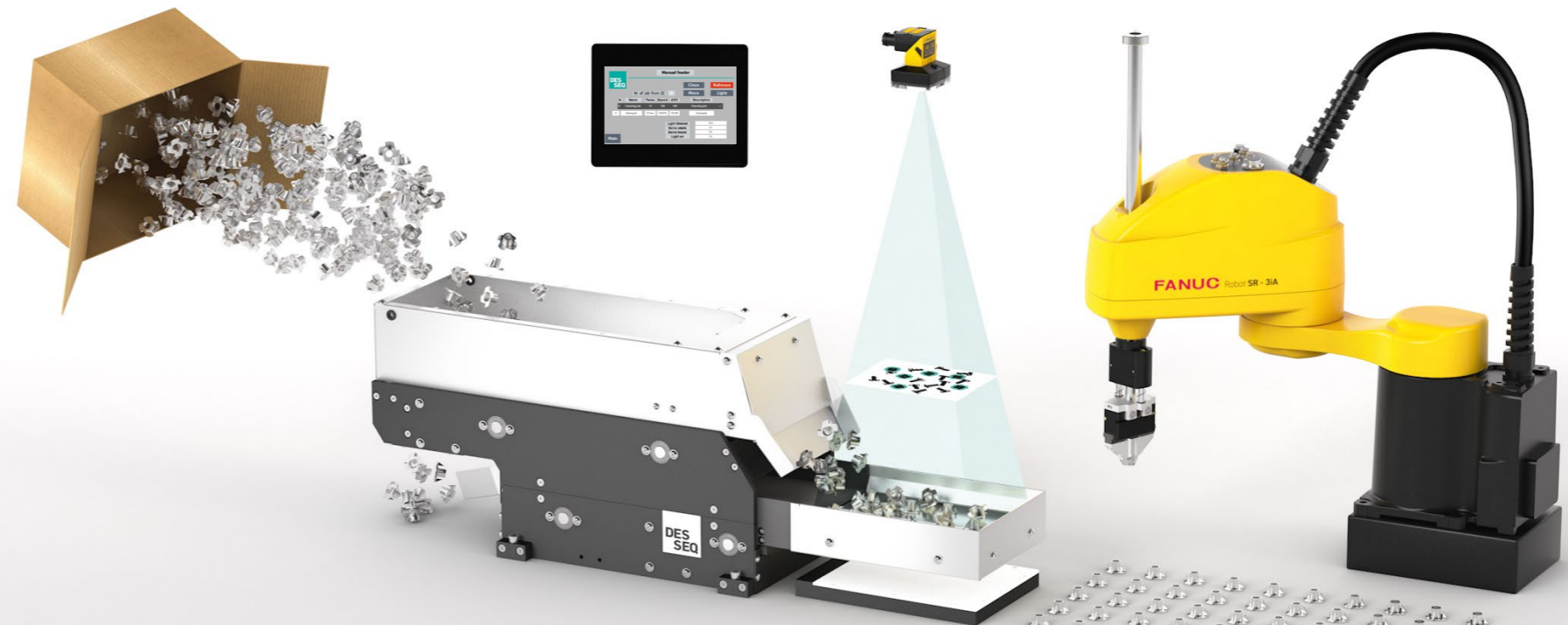
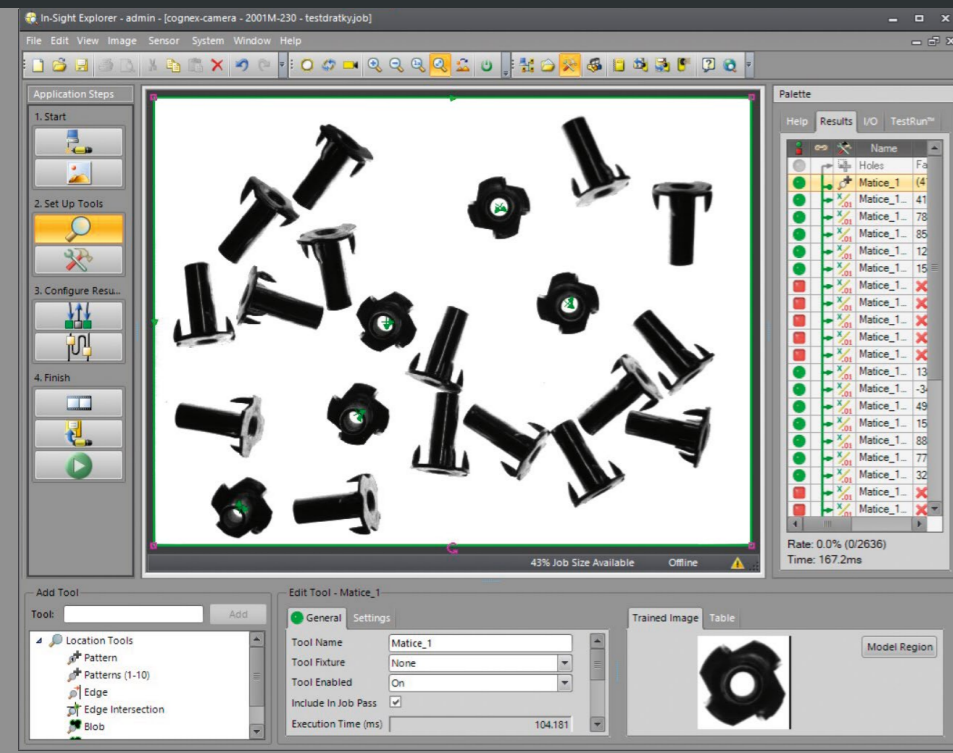
Also available as optional accessories are integrated bottom lights (backlights) with a variety of wavelengths; cameras for localisation of parts on the picking plate; top lighting; prefeeders; a controller for remote administration; a controller for controlling multiple vibrating feeders; and if appropriate, a SW block for deployment onto the Siemens Simatic PLC that is above the feeder in the hierarchy, thereby fully replacing a basic accessory – the controller and control panel.

DESSEQ offers further follow-on services to its customers for performing testing, selecting a suitable camera system with its own integrated lighting, and providing a comprehensive solution: a robotic work centre capable of picking parts into positions within a required takt time.

UNIVERSAL

RELIABLE

FLEXIBLE





Examples of use

Automotive industry

DESSEQ has designed a robotic work centre for leading automotive manufacturers that assembles caging nuts into precise positions within plastic components. The nuts are picked in two vibrating feeders, where they are set into the required positions for a SCARA robot to then grasp them with its appendage. This robot can also distinguish the individual nut sizes and exclude incorrect and defective units from the process automatically. This solution has eliminated manual labour and made the assembly process up to 50% faster and more efficient. It has likewise eliminated assembly defects such as wrong nut sizes and defectively mounted or missing nuts.



Co-funded by
the European Union

Interested in our solution? Contact us for more information.

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DESSEQ

We are an industrial automation and robotisation supplier. Our specialities are robotic work centres, processing lines, special single-purpose machines and our DESSEQ first-party solutions. We offer comprehensive solutions – as well as individual care for every customer. Precision, reliability and innovation are the cornerstones of the services we provide. Our stable and flexible team loves challenges and always seeks a way to meet even the most stringent demands.

**Our design.
Your success.**

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