

FLEXIBLE ROBOTICS

drag&bot OS

Easy setup, programming and operation of robot automation integrated into your machine



Due to the shortage of skilled workers and decreasing batch sizes with more variance in the processes, machines increasingly require flexible automation solutions for upstream and downstream processes such as machine loading and unloading or QA that can also be operated and adapted by end users.

Today, 50% of all machine tools are requested with integrated robot automation. In the future, this number will continue to rise. While nowadays mainly repetitive processes with high quantities are automated, in the future also less repetitive processes with significantly lower quantities will have to be automated in order to counteract the shortage of skilled workers and to remain competitive.

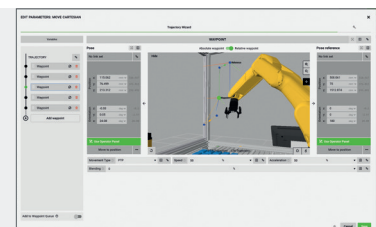
drag&bot OS offers the possibility to integrate robots of different manufacturers into machine tools, with the aim to operate them easily via a uniform graphical user interface and to adapt processes, logic and robot movements quickly and effortless

via no-code programming. This makes economical automation possible even in high-mix, low-volume production.

- // **New market potential** Offer for customers with high flexibility requirements
- // **Added value** Offer integrated robot automation with your machine
- // **Reduced development effort and fast time-to-market** Use of a ready-made solution for robot integration and operation
- // **Independent of robot manufacturers** Low adaptation effort when using a new robot brand, same appearance and operation of the robot GUI
- // **One control platform: Kemro X** All control functions: machine control, robotics, own software functions, safety, visualization in one system reduces hardware, complexity and integration effort

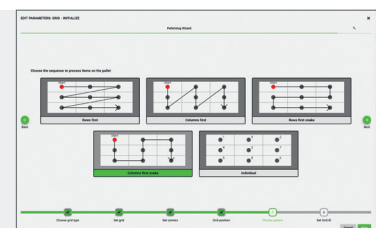
Fast commissioning & programming

- **No code** Create robot programs graphically using drag & drop
- **Plug & produce** New components are ready for use in no time
- **Hardware independent** Same interface for any hardware
- **Customizable and expandable** Add your own specific functions



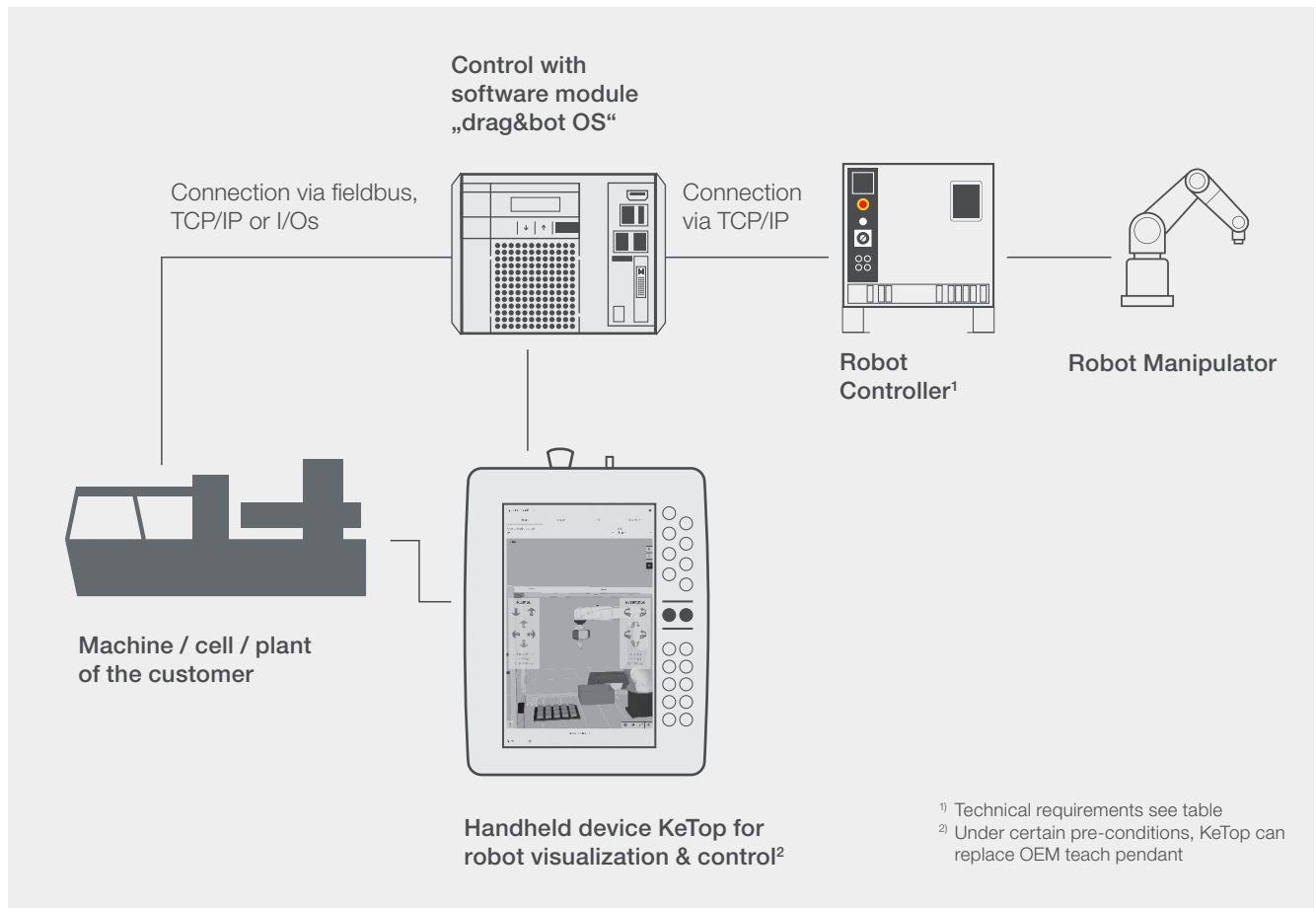
Easy to operate & customize

- **Operator cockpit** Configurable visualization for the machine operator
- **Step-by-step-guides** Easy parameterization of created programs
- **Program templates** Directly usable program templates for many applications



System Overview

KeTop for visualizing robot and machine UI



Technical Data

Supported robots & requirements

Robot OEM	Controller & software versions	Required software-packages from OEM
ABB	IRC5, iRC5 Compact, Omnicore	616-1 PC Interface 623-1 Multitasking
Fanuc	R-30iB Mate & Plus > V8.10 (not V8.33)	R648 User Socket Msg R632 KAREL
KUKA	KR C4 iiwa	RSI > 3.1.6 Sunrise > 1.13
Yaskawa	YRC1000	MotoPlus
Stäubli	CS9	–
Nachi	CFD >4.72	–
Comau	KEBA KeMotion	See Kemro X Licences
Epson	SPEL 7.0+	–
Denso	RC8: VS087	b-CAP (Part of ORiN2 SDK)
Mecademic	Meca500 R3	–
Universal Robots	CB2, CB3, e-series	–

Study

Enables workers and technicians

Comparison of robot manufacturer panel with drag&bot OS at the example of teaching of a screwing application

