



DIGITAL ROBOT HORST

Product and service overview

Digital Robot HORST

Service overview

As an innovative technology company, we are more than just a robot manufacturer – we are your competent partner for digital transformation! In addition to our innovative Digital Robots, we offer first-class complete solutions for the implementation of your work processes. Our expertise enables us to support companies of any size and industry in the automation of industrial applications.

Digital Robot HORST is a **highly modern** and **efficient** robot system, which is particularly convincing due to its **user-friendly** horstFX operating software. This software is suitable for beginners as well as experts, as it does not require **any programming knowledge** and enables intuitive operation. By means of a graphical simulation, horstFX allows you to design and optimize robot applications as early as the planning phase, enabling you to implement your automation projects **cost-effectively** and **successfully**.

With every Digital Robot package you get:

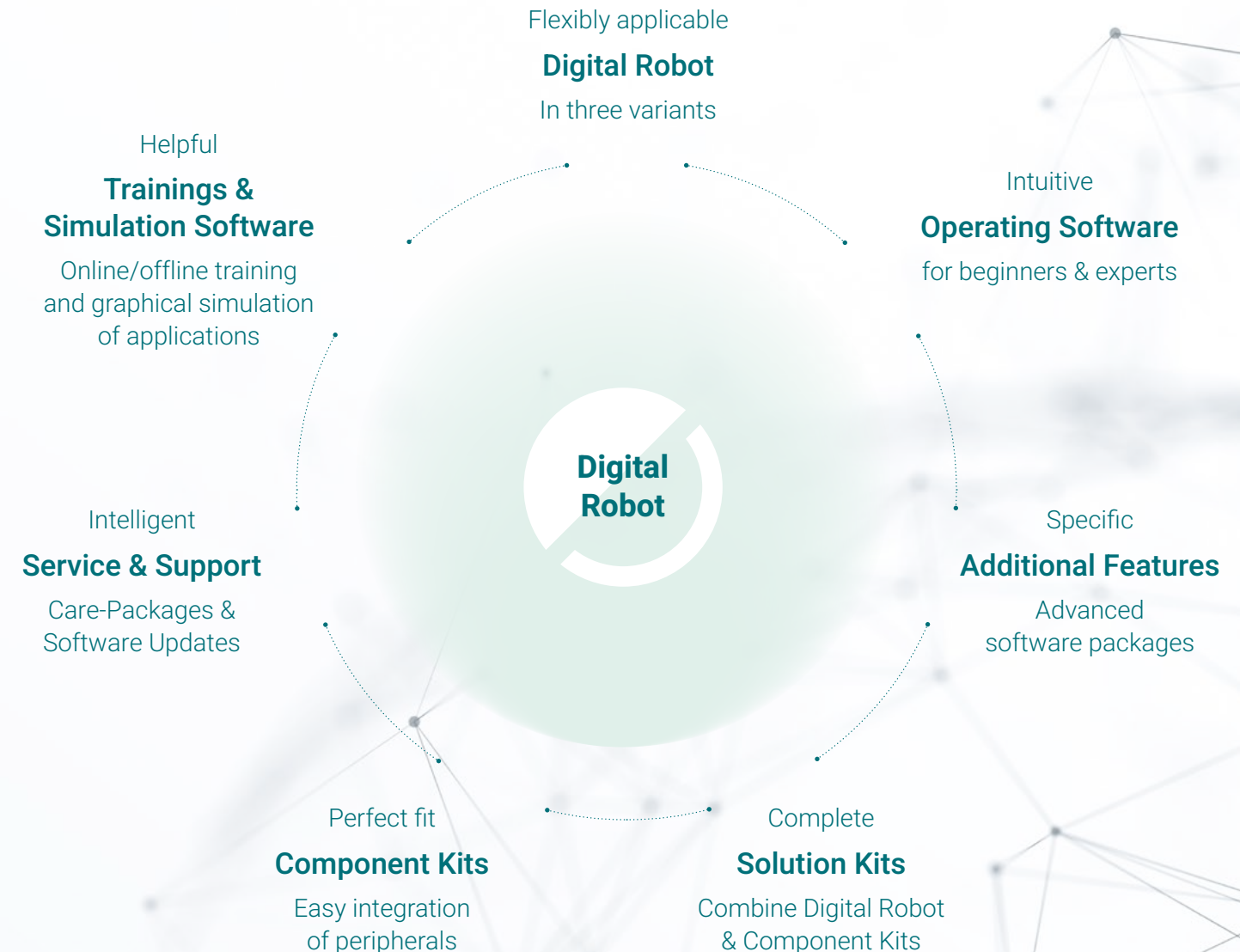
- ✓ A 6-axis industrial robot HORST (HORST600, HORST1000 or HORST1400)
- ✓ A powerful robot controller with various inputs/outputs and interfaces
- ✓ The user-friendly, graphical operating software horstFX
- ✓ A handheld control unit with large 13.3 inch touch display, emergency stop & 3-way enabling button



You also benefit from:

- ✓ Free use of our IIoT platform horstCOSMOS to manage the robots
- ✓ Technical consulting by sales and application experts on site and remote
- ✓ Non-binding feasibility analyses by our experts
- ✓ Offer of rental equipment for long-term rental or trial
- ✓ Free video trainings as part of our Academy
- ✓ Independent simulation and test of the application with the help of a free online simulation

The integrated fruitcore robotics ecosystem



Easy integration of solution kits

With the help of solution kits, processes such as pick-and-place applications or part separation can be implemented holistically with the Digital Robot. Tech packages (kits for integrating peripherals) and manuals facilitate the simple and fast combination of several component kits to form a customized solution kit.



Digital Robot HORST

The models



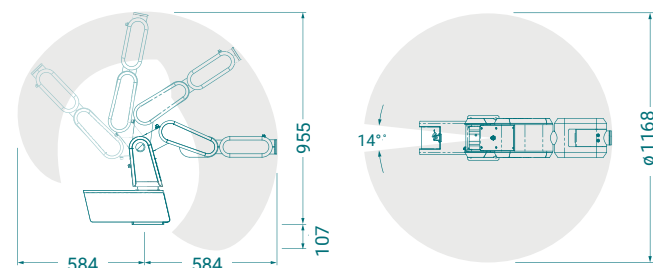
HORST600

Small and perfect for any situation

The smallest member of the HORST family impresses with its small footprint combined with a large work envelope. This makes HORST600 the ideal choice for pick-and-place tasks and for parts handling in a robotic cell.

Technical data

- Max. Range over 584 mm
- Max. Load capacity 3 kg (nominal load 2 kg)
- Max. Speed 4,4 m/s
- Weight around 30 kg
- Repeatability +/- 0,05 mm
- Safety class IP54



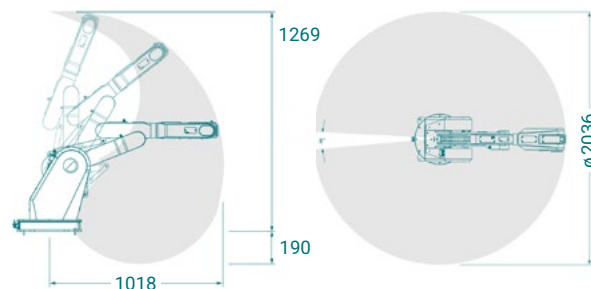
HORST1000

The powerful Allrounder

HORST1000 is characterized by hybrid kinematics based on several four-bar chains. Great maneuverability and an optimum ratio of range to payload are advantages that are particularly noticeable when palletizing larger trays and when loading machines.

Technical data

- Max. Rang over 1000 mm
- Max. Load capacity 8 kg (nominal load 5 kg)
- Max. Speed 4,4 m/s
- Weight around 70 kg
- Repeatability +/- 0,05 mm
- Safety class IP54



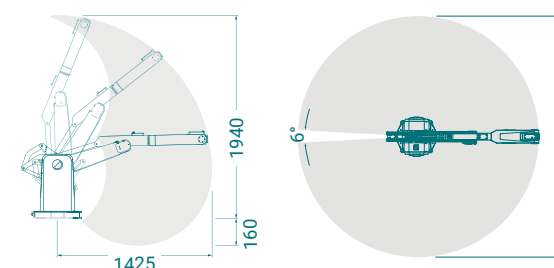
HORST1400

When size matters

HORST1400 is our largest and strongest robot. Its kinematics are also based on several four-bar chains, which is why HORST1400 also ensures an optimal ratio of reach and payload. Heavier workpieces and systems that require a larger working radius are its specialty.

Technical data

- Max. Range over 1400 mm
- Max. Load capacity 12 kg (nominal load 8 kg)
- Max. Speed 4,3 m/s
- Weight around 150 kg
- Repeatability +/- 0,1 mm
- Safety class IP54



PANEL

Intuitive and comfortable like a smartphone: the included panel allows graphical operation and programming of the Digital Robot on the touchscreen. An emergency stop and the three-stage enabling switch on the rear ensure compliance with safety standards.



CONTROL

As the control center for the HORST system, CONTROL offers digital inputs and outputs as well as field-bus interfaces, such as Profinet or Modbus for easy connection to external components, controls and systems.

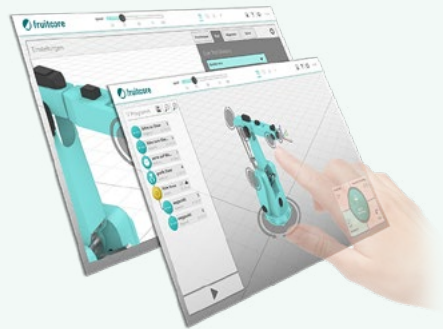


Digital Robot HORST

The Ready-to-Use Package

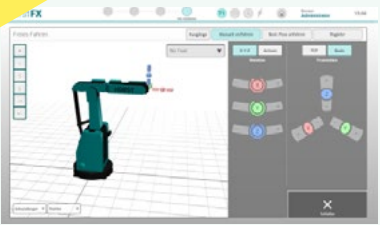
Scope of services

			
	HORST600	HORST1000	HORST1400
Robot specifications			
Max. Range	584 mm	1000 mm	1400 mm
Max. Load	3 kg (Nominal load 2 kg)	8 kg (Nominal load 5 kg)	12 kg (Nominal load 8 kg)
Max. Speed	4,4 m/s	4,4 m/s	4,3 m/s
Weight	30 kg	70 kg	150 kg
Repeatability	+/- 0,05 mm	+/- 0,05 mm	+/- 0,1 mm
Safety class	IP54	IP54	IP54
Control cabinet			
I/O connections on switch cabinet	20 digital inputs 18 digital outputs		
I/O connections on tool flange	2 digital inputs and outputs each		
I/O power supply	24 V / 7 A at control 24 V / 2.5 A at tool flange		
Safety-relevant Interfaces (2 channels each)	7 safety inputs 6 safety outputs		
Control panel			
Display specification	13.3-inch capacitive touchscreen (Full-HD)		
Safety-relevant operating elements	Emergency stop and three-level enabling switch		
Robot Software & Basic Features			
Graphical robot programming on the control panel	✓	✓	✓
Robot simulation on the control panel	✓	✓	✓
Free movement of the robot with a digital twin	✓	✓	✓
Integration of 3D objects and management of 3D worlds	✓	✓	✓
Extended safety functions	✓	✓	✓
Record data for application process analysis	✓	✓	✓
Speed optimization with weight-dependent waypoints	✓	✓	✓
Maximum robot speed, accuracy and performance	✓	✓	✓



Ready to go
with one touch

Ready for use
immediately,
easy to use and
with maximum
performance



Intuitive and fast
programming of
simple robot
applications



Quality assurance
through process
monitoring



Integration of
3D objects and
management of
3D worlds

Digital Robot HORST

Additional Features, Service & Support

Additional Features



ADVANCED GRAPHICAL FEATURES

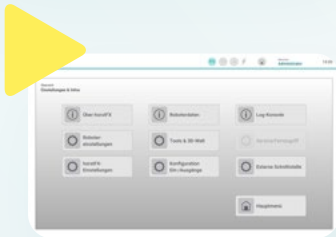
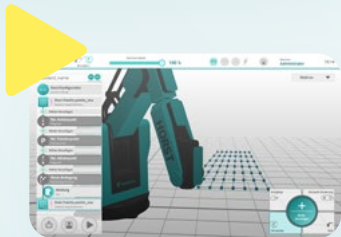
- ✓ Graphical robot programming of palletizing applications
- ✓ Setting up a workspace limitation
- ✓ User-defined operating view with macro buttons
- ✓ User-defined coordinate systems



ADVANCED INTERFACES

- ✓ Access to the primary interface for executing external function calls
- ✓ Access to the modbus interface
- ✓ Access to the profinet interface

With horstFX, implementing a wide range of use cases with light to medium complexity becomes easy at impressive robot speed. The standard horstFX features already provide a solid foundation for successful projects. To achieve customized solutions for specific requirements, you can flexibly access our extended packages at any time.



Service & Support

Scope of services

- Access to the latest software versions
- System check, if necessary (remote or on-site)
- Wear warranty
- Service-Hotline
- Contact via the online service system
- Technical advice from qualified robot experts
- Warranty extension to the entire robot system beyond the warranty period
- Spare parts flat rate and delivery

SOFTWARE UPDATES



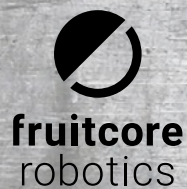
CARE



CARE Plus



Depending on individual needs, care packages can be booked. In addition to support from our robot experts, these also include a wear warranty and the latest updates for horstFX. With the Care Plus package, a warranty extension for the entire robot system is available, including a flat rate for spare parts.



fruitcore robotics GmbH offers simple and efficient automation solutions for industry. In addition to the three digital robots HORST, the portfolio includes: the software horstFX, the IIoT platform horstCOSMOS as well as flexibly deployable complete solutions for the automation of industrial applications. The deep-tech company based in Constance was founded in 2017 and currently employs around 100 employees.

fruitcore robotics GmbH
Macairestraße 3
78467 Konstanz – Germany
+49 (0)7531 97624 0
horst@fruitcore.de
fruitcore-robotics.com

Follow us

