

Introduction to Wyzo

The first sidebot ever



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Made by: Frank Souyris, Christian Vouillamoz,
Olivier Beutler

The first sidebot ever !



Structure

Safety

System

Software

Digital platform

Applications

> **Integrated vision system with up to 2 cameras**

For the detection of products and/or containers

Flying pick-up on conveyors or at fixed positions

> **Delta robot with large working volume**

Allows to accommodate worktop heights from 650 to 1000 mm.

> **Certified safety system for collaborative work**

Allows to work close to an operator without mechanical protections



> **Cantilever and compact frame**

Easy integration into the production environment

> **Mobile terminal with pick & place optimized software**

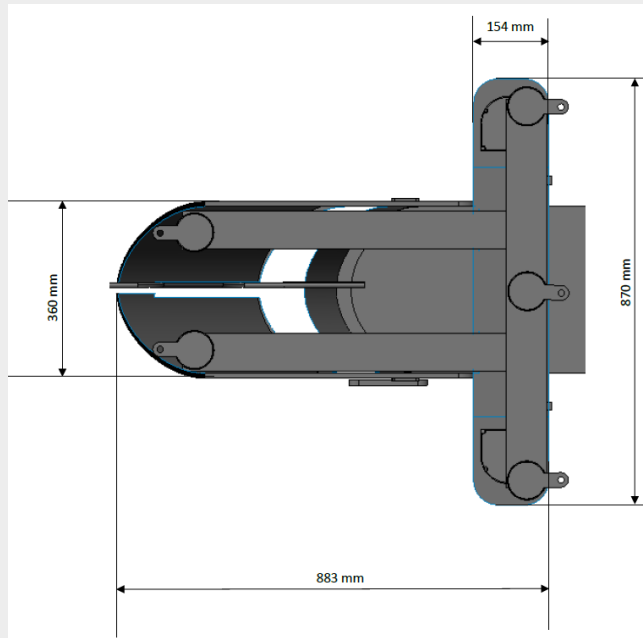
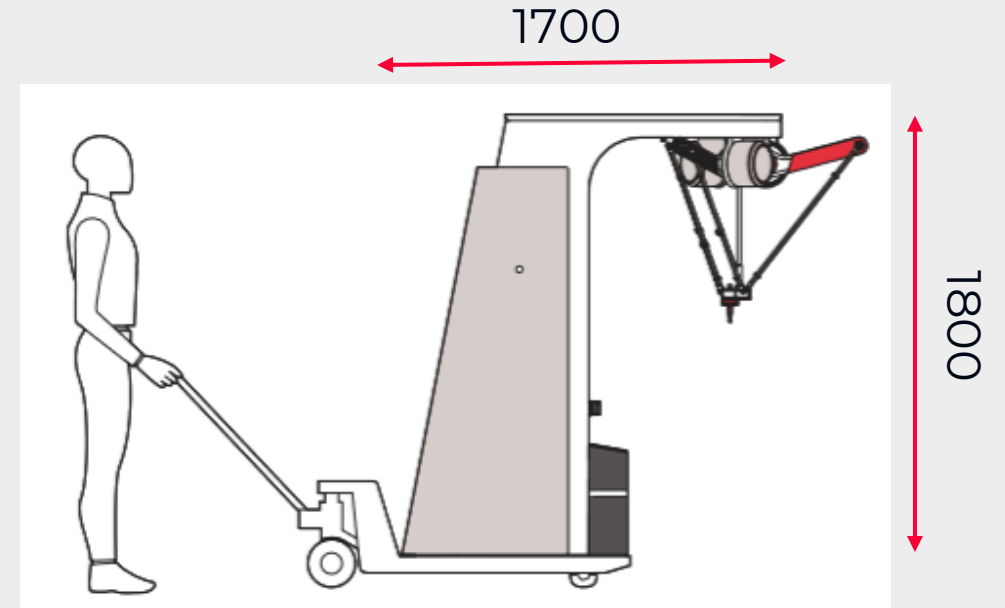
Interface optimized for operators. Simplified programming, no script, no settings. Equipped with emergency stop and deadman control for setup mode.

Height of 1800 mm

Allowing easy handling during transport, change of location, can fit into a standard doorway.

Can be easily moved with forklift

Allows easy movement of the machine (approx. 550 kg).



Floor footprint 360 x 883 mm

Optimizes the production area.
The base with 883 mm legs ensures lateral stability while carrying the safety sensors without compromising the accessibility of the robot and conveyors.

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> **Machine status LEDs**

Operation status clear visible from all sides of the machine

> **Gearless motor with immediate stop**

Optimized winding to allow immediate stop in case of collision.

> **Collaborative certified safety control system**

Safe control of the position and speed of the delta robot by a dedicated processor for the safety function. Safe torque limit for all axis.

Integrates the specific kinematics of the delta robot...

> **Delta robot optimized for collaboration**

Sleek and smooth design to avoid sharp pieces and parts

> **2 safety laser scanners**

With multiple zones/safety distances to slow down the robot depending on the distance from the operator, operation at a slow and safe speed if operator is nearby.



Sidebot

The world's first high-speed pick & place technology able to work with your production team.

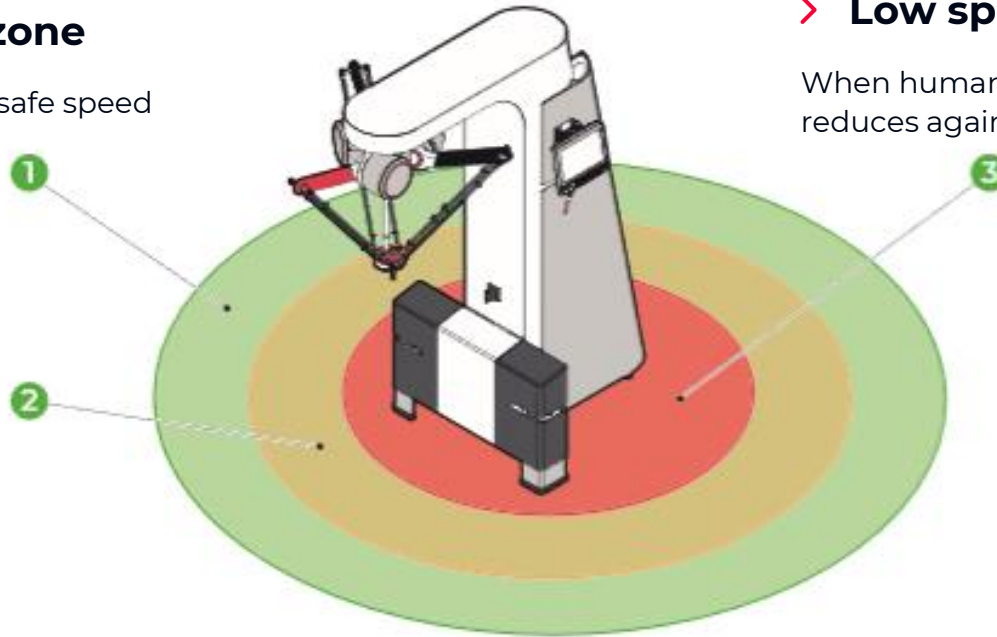


The first sidebot ever !

Safety zones

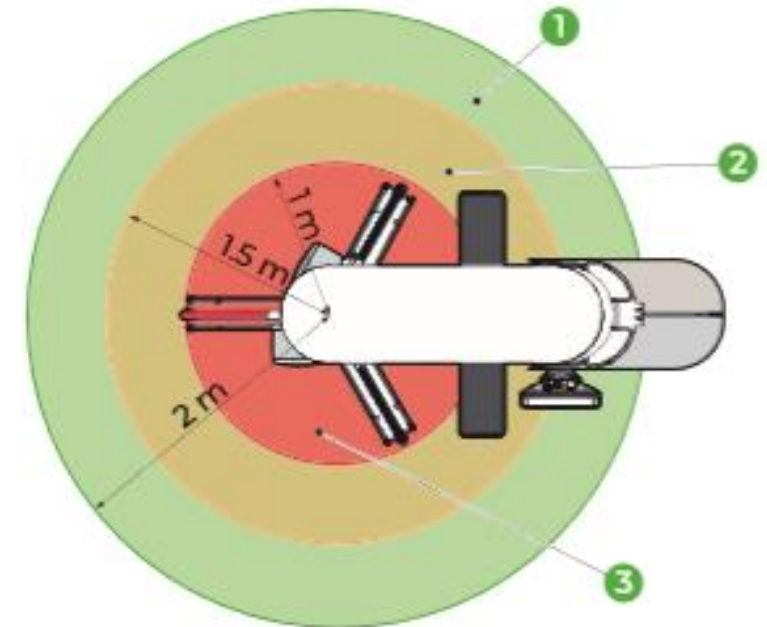
> Approaching zone

The sidebot reduces to safe speed



> Low speed zone

When human is standing nearby, the sidebot reduces again its working speed



> Safety zone

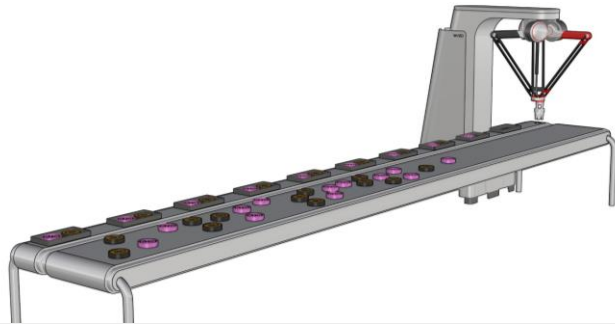
The sidebot runs at a safe speed and check speed, position and torque limitation

The sidebot stops in case of human collision

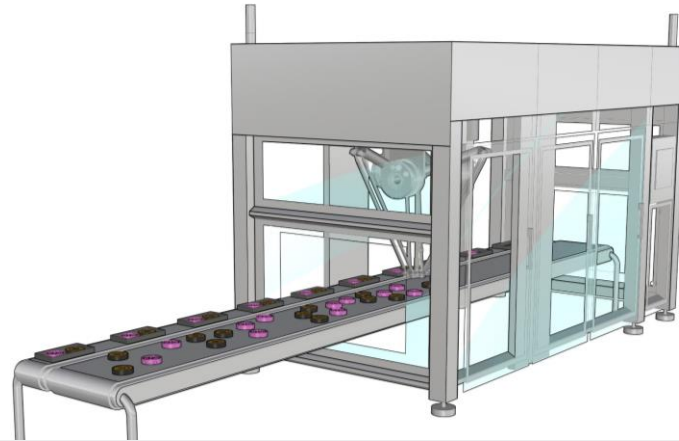
The first sidebot ever !

Sidebots vs robots & cobots

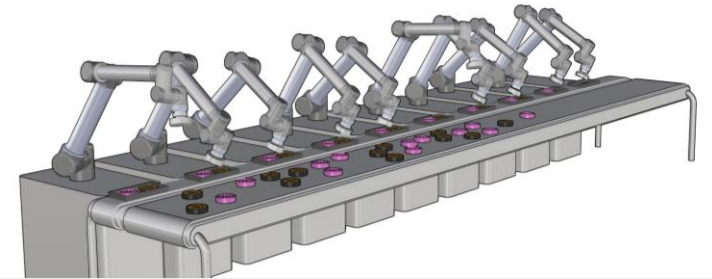
SIDEBOTS



FENCED ROBOTS



COBOTS



The first sidebot ever !

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> Integrated vacuum generation

Control of electrical or pneumatic gripping systems such as Soft Robotics

> Robot control system equipped to control 2 external conveyors

1 functional CPU

1 CPU for safety only

3 axes 12A (robot)

3 axes 6A (rotation, 2 conveyors)

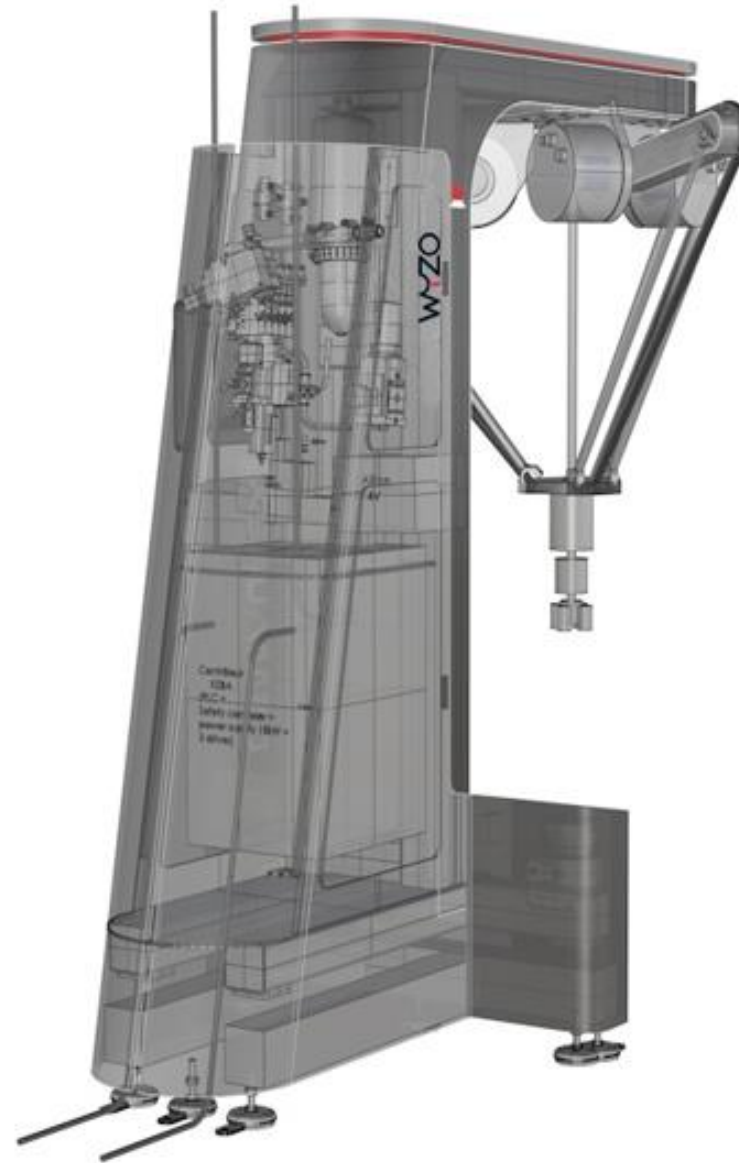
Analog and binary inputs/outputs for the application

> Ready for external communication

1 EtherCAT port for real-time communication

1 Ethernet port

1 Industrial gateway with 4G LTE cellular and Wi-Fi 802.11b/g/h

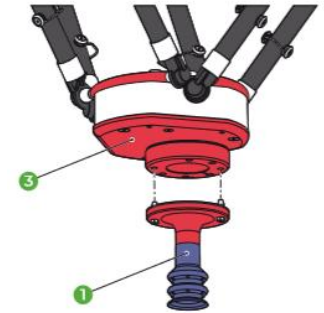


> Standard interface for collaborative grippers

Compatible with commercially available gripper systems.

Incorporates a quick finger change system.

Pneumatic, vacuum and electrical power supply along the forearms



> Power supply 110/230V 60/50Hz

For operation even in small workshops

Top or bottom connection

The first sidebot ever !

Connexion box

> **Connection box to quickly connect the sidebot to one workstation**

10 user digital inputs

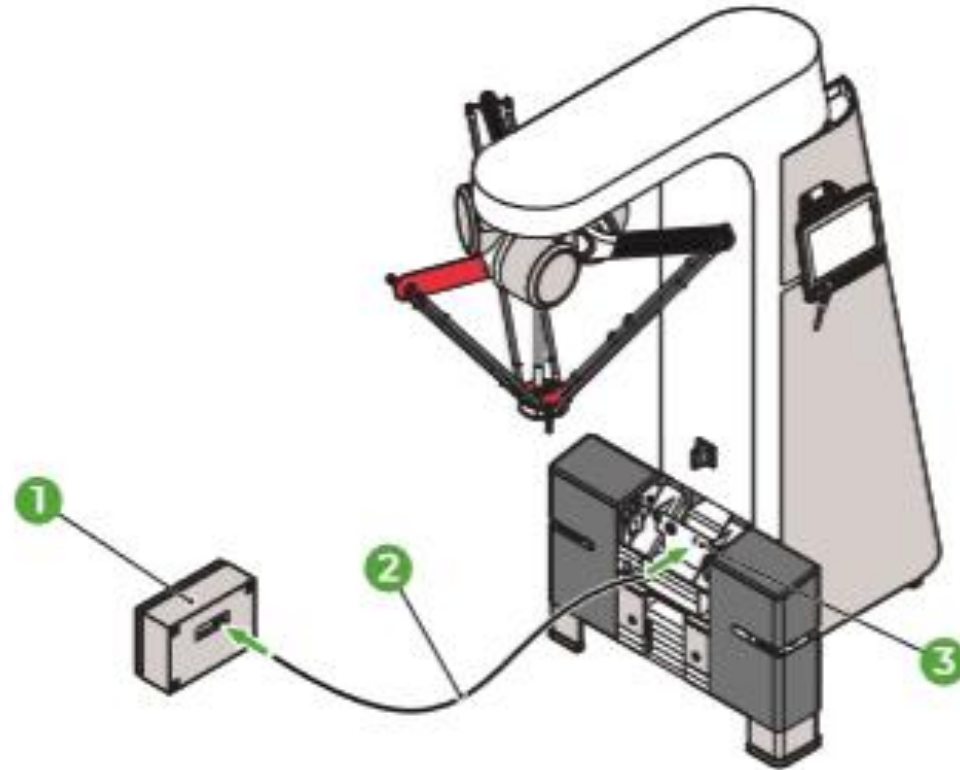
6 user digital outputs

2 user analog inputs

2 analog outputs

2 5V TTL encoder inputs

Predefined I/O for 2 conveyors



> **EtherCAT**

One EtherCAT cable to connect the sidebot to the connection box of the workstation



Standard flange ISO 9408-1-50-4-M6

With integrated pneumatic, electric and vacuum control.
Also includes a quick-change system.



Structure

Safety

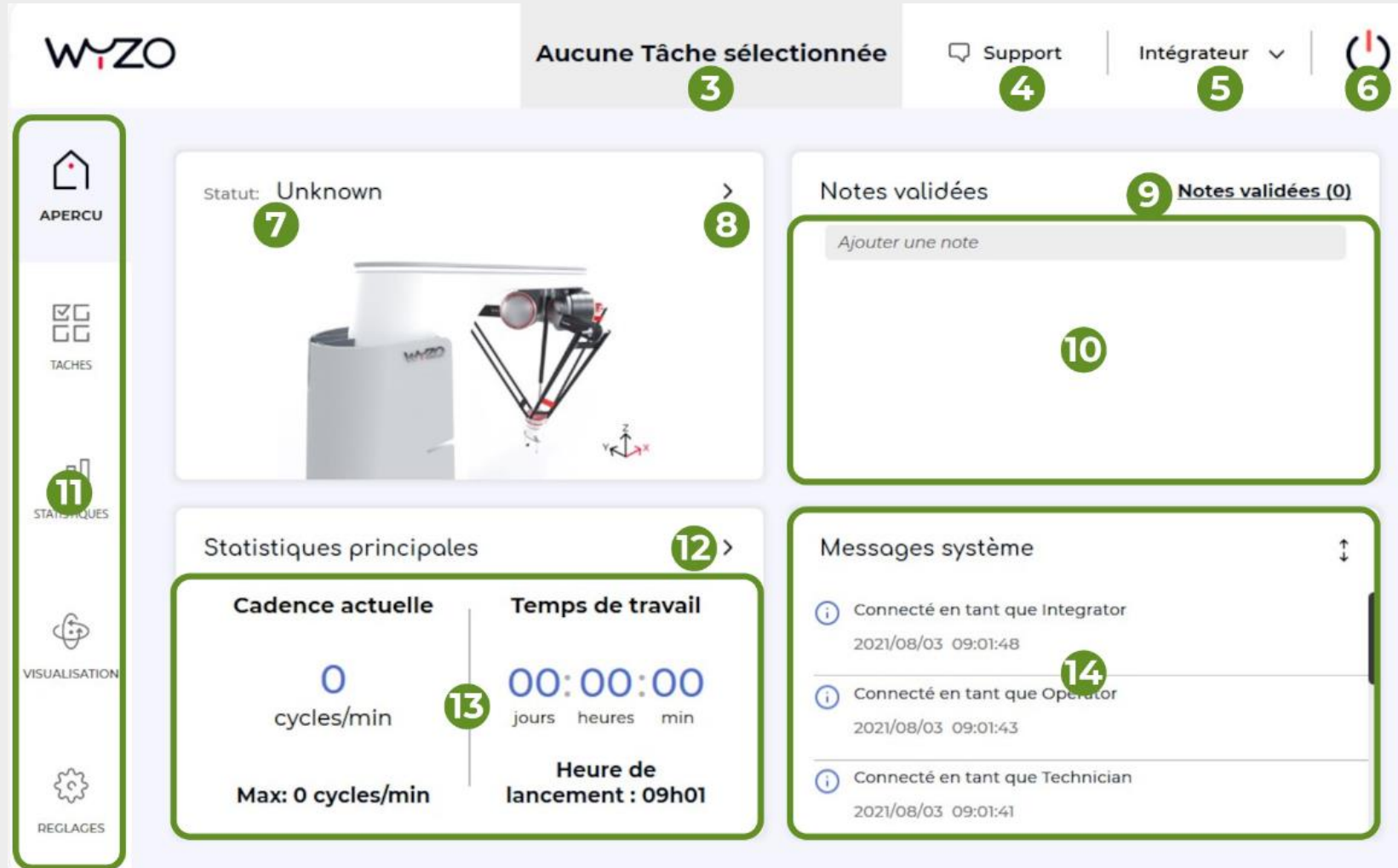
System

Software

Digital platform

Applications

Software - Ease of use



Based on GEMINI and simplified for intuitive use

UX design based on the GEMINI 5 software, developed for almost 20 years for delta robotics.

Software - Optimized for pick & place

WYZO

Aucune Tâche sélectionnée

Support | Intégrateur | Power

Tache: Poste de travail | Préhenseur

Séquence: St 1 | Instruction: W 2

Configuration: Activé 10

Write 3: AuxDigitalOutput15

Etat (on/off)

Annuler | Ajouter 4

Retour

Publié 9

Scenario:

- Start 5
- Wait 6, 7, 8
- Start convoyeur 1
- Start convoyeur 2
- Run
- Pick
- Place
- Stop
- Stop convoyeur 1
- Stop convoyeur 2

Every tasks can be easily defined without programming or script language

Software – Workstation management

The screenshot displays the WYZO workstation management interface. The top navigation bar includes the WYZO logo, the status 'Aucune Tâche sélectionnée', and links for 'Support' and 'Intégrateur'. The main interface is divided into three sections: 'UTILISATEUR', 'WORKSTATIONS', and 'OUTILS'. The 'WORKSTATIONS' section is active, showing two workstation configurations. The first workstation is 'Poste de travail' with 'Convoyeur 1'. The second is 'Poste de travail' with 'Convoyeur 2'. Both have 'Déplacement' settings (Résolution codeur (mm/pas) set to 0.00000) and 'Détection' settings (Type set to Capteur). Below these are 'Calibrer' buttons and 'Dernière calibration' labels. A 'Robot' section shows 'Rotation de la nacelle' set to 'Activé'. At the bottom, there are buttons for 'Annuler', 'Paramètres de Sécurité', 'Modifier I/Os', 'Dupliquer Workstation', and 'Enregistrer'. Green circles with numbers 1 through 5 highlight specific elements: 1 points to the 'Poste de travail' dropdown, 2 points to the 'Déplacement' settings, 3 points to the 'Robot' section, 4 points to the 'Paramètres de Sécurité' button, and 5 points to the 'Modifier I/Os' button.

Each workplace can be configured with its own specific settings and calibration data.

Software – Tools management

The screenshot displays the WYZO software interface for tool management. The top navigation bar includes the WYZO logo, the status "Aucune Tâche sélectionnée", and options for "Support", "Intégrateur", and a power icon. The main interface is divided into three sections: "UTILISATEUR", "WORKSTATIONS", and "OUTILS". The "OUTILS" section is active, showing a list of tools and a configuration panel for a selected tool. The list shows "Préhenseur" with 1 task and "Pince" with no task linked. The configuration panel for "Préhenseur" shows various parameters like Type, Hauteur (mm), Poids (g), and offsets, with a "3" indicating a configuration step. A "4" indicates the deletion step. A "2" indicates the "Ajouter un Outil" button.

A tool can be easily configured and added to the database. The tools are listed with the list of the tasks where they are used.

Structure

Safety

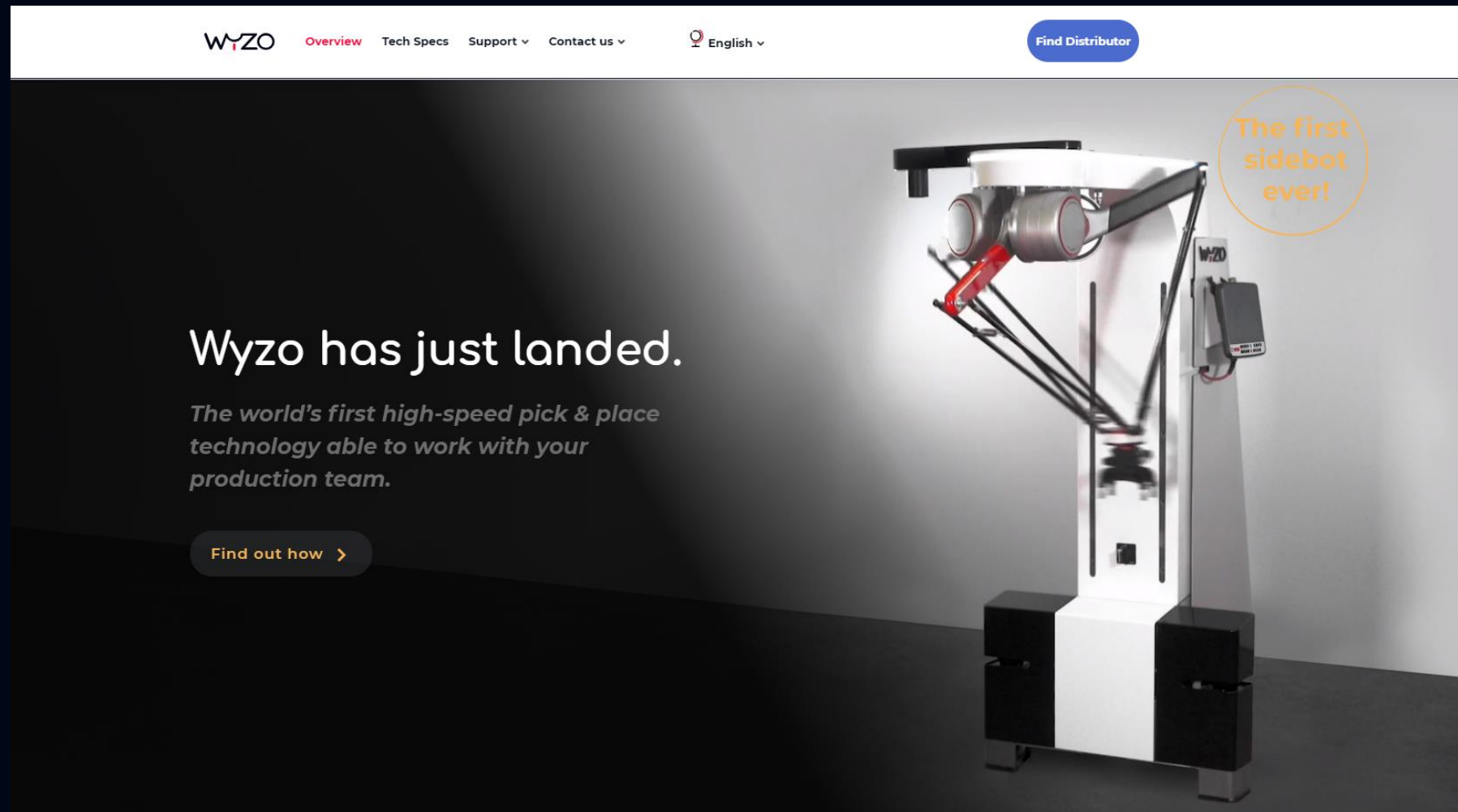
System

Software

Digital platform

Applications

Digital platform for support, accessories, training
www.theWyzo.com



The first sidebot ever !



Structure

Safety

System

Software

Digital platform

Applications

Different applications



The first sidebot ever !

Biscuit industry



Chocolate industry



Sidebot – Your applications ?

The first **high-speed collaborative pick and place solution** accessible and driven through a state-of-the-art digital platform.



We want to model and make available to our clients the know-how acquired over 25 years in the form of a service.

Fast and further, together

Visit our website

theWyzo.com

