naïo Technologies

JO

THE AUTONOMOUS CRAWLER
FOR NARROW VINES,
NURSERIES & BERRIES

Developed in collaboration with the Comité Interprofessionnel du Vin de Champagne, JO offers essential versatility for soil tillage, meeting specific requirements identified during the specification process. Ideal for narrow vineyards, nurseries and berry production, the robot carries electrical or mechanical intervines. Many other wine-growing implements can be attached on its standard bar (or 3 point hitch) in order to work on the row and in the inter-vine in one pass.

The autonomous crawler JO is 70 cm wide. A perfect feature in narrow areas and highly constrained headlands! The JO robot can be launched in a quick and cost-effective manner. It can be transported in a van for maximum time savings.

JO BENEFITS

PROFITABLE

- *Reduce your weeding times*
- *Kill the weeds and increase yields*
- *Cut down your input expenses*

ACCURATE

- *Centimeter RTK GPS guidance*
- *Control weeds in the row*
- *Manage complex parcels*

COMFORT

- *No more hand catch-up in the vines*
- *Work in co-bot mode*
- *Optimize logistics thanks to its compact design*

SUSTAINABLE

- *The first 100% electric crawler robot*
- *Reduce your greenhouse gas emissions*
- *Reduce your chemical inputs*

LIGHT

- *Avoid soil compaction with less than 1 ton*
- *Widen operating windows*
- *Maintain the fertility and life in your soil*

VERSATILE

- *Draw your planting lines for the following years*
- *An EVOLT® electric intervine from Boisselet*
- *Attach implements on a bar or 3-point hitch*

CHOOSING JO MEANS :

- **Saving time and freeing up** your staff to focus on high value-added tasks
- **Accelerating the ecological transition** through mechanical weeding operated by a 100% electric robot that respects the soil
- **Letting the robot work in the vineyard** without on field supervision, thanks to a CE-certified safety system
- **Monitoring** progress and robot operation remotely using the Naïo Companion application

IMPLEMENTS FOR A VARIETY OF TASKS

Attach implements you own and new-generation mechanical weeding implements.

A wide choice for greater versatility:

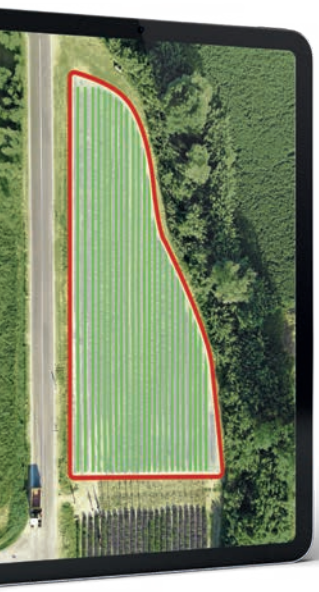
- *EVOLT® intervine*
- *mechanical intervine*
- *ploughshares*
- *lump breakers discs*
- *serrated discs*
- *weeding fingers*
- *implements on 3 point hitch*

EASILY MAP YOUR VINES

1. When planting: retrieve RTK GPS maps of vines already planted or install the GPS antenna (supplied with your JO) to record the planting site.

2. Manual mapping of vines in production: record the position of your vines by placing the GPS antenna on a surveyor's pole and taking points at the foot of your vines, in winter conditions to limit the impact of vegetation on the accuracy of the recording. Create as many points as you need for each row of vines, depending on how long they have been there, and if points A and B at the beginning and end of the row are not enough.

3. Mapping by drone: to ensure the compatibility and accuracy of the maps produced by drone for the JO robot, send these maps to our teams.



In situ validation of the vines is required for Augmented Autonomy work (no on-site supervision required). Naïo adds a virtual geofencing to the plot map.

NAÏO COMPANION APP

Manage your robot from your smartphone thanks to an intuitive interface and powerful features.

- *Set your robot with the application*
- *Save your tools and their settings*
- *Consult your work maps*
- *Monitor the work progress, battery level*

YOUR TESTIMONIALS

"JO uses a number of implements to weed the graft vineyards. In particular, the mechanical inter-vine that we already had on a thermal crawler."
PHILIPPE & ANTOINE MATRAT *(France)*

"When we have a lot of work to do to protect the vines from diseases, JO takes care of the mechanical weeding and relieves us. It also reduces the risks for tractor operators in steep plots."
CUMA DE LA FAYE *(France)*

TECHNICAL SPECIFICATIONS

MOTORS & BATTERIES	
Rated/maximum power	6 kW / 10 kW
Battery capacity (standard / HD)	16 kWh / 21 kWh
Autonomy on a charge (standard / HD)	up to 8h / up to 10h
Fast charge 20 to 80% (standard / HD)	1h05 / 2h00

DIMENSIONS & WEIGHT	
Width	0,70 m
Standard track width	0,18 m
Length (excluding tow bar)	2,10 m
Height (work/transport)	2,07 m / 1,60 m
Unladen weight including batteries (standard / HD)	850 kg / 900 kg

PERFORMANCE & SAFETY	
Working speed	0,5 <-> 2,2 km/h
Lift capacity	250 kg
Augmented Autonomy (no supervision)	yes

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Certified B Corporation

5 ANS DE GARANTIE

CE FC

235 rue de la Montagne Noire - 31750 ESCALQUENS, France
tél. +33 9 72 45 40 85 - contact@naio-technologies.com
naio-technologies.com

MADE IN FRANCE