PROVITIS

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EQUIPMENT FOR

WIDE-SPACED

VINEYARDS

provitis.eu

THE VINE, OUR SOURCE OF INSPIRATION

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› Located in Alsace since 2006, we are specialized in the design of viticultural machines, and more specifically vine pruning and caring equipment to be mounted on vineyard tractors, straddle tractors and grape harversters.

› Our engineering department takes care of the design, entrusts the production of parts to rigorously selected suppliers, and supervises the assembly by experienced staff. We have chosen this production method to offer you products designed and manufactured using the latest technologies, at the best value for money.

› Innovation, constant improvement of our machines, a presence in wine-growing areas all over the world through a network of hand-picked dealers - these are the features that make up our DNA and the basis of our inspiration.

RESEARCH AND DEVELOPMENT

A team of experts is at your service, constantly seeking new solutions to meet your expectations..

MANUFACTURING

Handpicked suppliers and versatile collaborators for high-end manufacturing quality.

TEST

The testing phases where rigor is required, everything must be on point.

START-UP

Oiling and final preparations.

SHIPPING

Packed, ready for shipping, it's almost at your home!

AFTER-SALES SERVICE

An extensive parts stock, a team of experts in our premises and in technical assistance - all the ingredients are in place to provide you with the best possible after-sales service

INNOVATION AND CONCEPTION

› Research, development, manufacturing, testing, commissioning and shipping are part of the complete process to guarantee maximum quality and performance.

OUR EXPERTS

› Research and development, manufacturing, administrative management, sales, communication - all our employees are passionate and perfectly familiar with their professions, for the full satisfaction of our customers in France and abroad.

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PRODUCTS RANGE FOR WIDE-SPACED VINES

› The Provitis products designed for wide-spaced vineyards are offered in two distinct ranges: Optima and Océa.

In the océa range the carrying frames are specific and dédicated to every machine. This is an ideal solution for medium-sized and large farms, where every tractor is intended for carrying out one or two operations over an entire season.

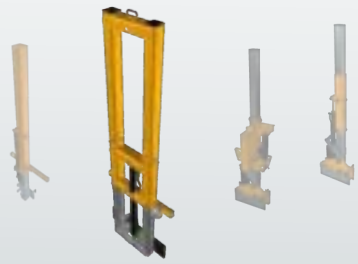
In the optima range the carrying frames are multi-purpose frames (allowing coupling various machines to the same carrying frame). This range suits particularly small and medium-sized enterprises performing many different operations with the same tractor

ocea LINE

A dedicated carrying frame
for each equipment.

optima LINE

Versatile carrying frames
for multiple equipment



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TYING MACHINE

PA 5000

PRINCIPLE

› High-clearance frame equipped with a vine branches lifting device and a clip tying device. The branches are lifted by two wide belts driven by adjustable-speed hydraulic motors and equipped with independent safety devices. A wire is unwound at the rear of these belts, on either side of the row, to hold the branches in vertical position. These two wires are then clipped.

ADVANTAGES

- The rough belts allow optimum lifting of the branches, without constraint or aggressiveness. They also feature comprehensive setting possibilities (tracking, angle and spreading)
- The clip tying device requires little maintenance and setting. The clips are formed by two claws: this technology that prevents shocks and clogging.
- High autonomy (5,000 clips)
- Weight 180 kg
- Independent safety on each of the belts.

SAFETY RETRACTION

- In the case of a shock, the lifting belts retract upwards and downwards.

PENDULAR FRAME

- The frame of the PA 5000 tying machine includes a pendular system with a shock absorber, which can be blocked for road transport.

PAIR OF TIPS (OPTION)

- This option prevents the belts from being damaged by rubbing on the ground.

BEFORE

AFTER

TRIMMER ST 120

PRINCIPLE

› Modular cutting bars with 430 mm rotary blades with a rotational speed of the order of 2,000 RPM.

› Drive by serially connected hydraulic motors with transmission by special flat belts without tensioners.

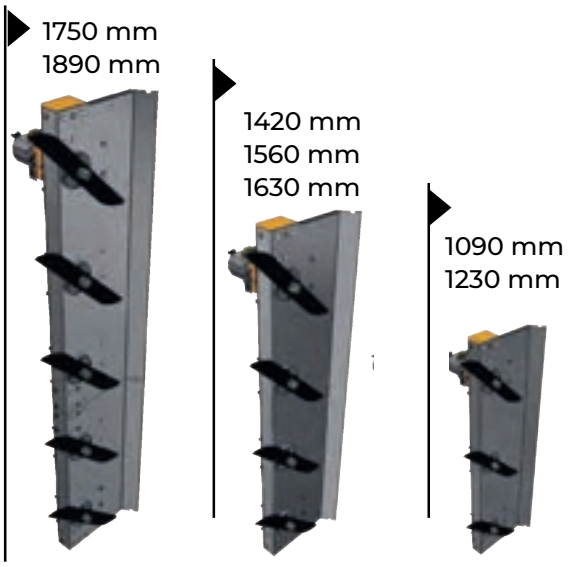
ADVANTAGES

- Blades inclined towards the vegetation to prevent repeated cutting and backward projections
- Maintenance-free flat transmission belts without tensioner
- Quick access to wear parts (international patent)
- Safety retraction with automatic return motion on most of the vertical cutting bars
- Stainless steel sheet metal parts and aluminum components

VERTICAL SAFETY

- In the case of a shock, the vertical cutting bars are equipped with a safety system with automatic return motion.

WORKING HEIGHT SELECTION



INCLINED BLADES

- The blade inclination towards the vegetation prevents repeated cutting and backward

MAINTENANCE-FREE CUTTING BAR

- The flat belt drive using crowned pulleys requires neither maintenance nor tension check.

AVAILABLE MODELS

- One half row
- One complete row
- Two half rows
- Two complete rows

Modular cutting bar ST 120 is protected by a patent

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TRUNK CLEANER

SRB 22

PRINCIPLE

› High-clearance frame equipped with two trunk cleaning heads. The vertically arranged trunk cleaning heads are made of a stack of rings in which special semi-rigid straps are inserted. The heads are driven by 2 serially connected hydraulic motors to perform trunk cleaning.

› Working speed approximately 3 km/h

› Required flow rate 5 to 20 l/min

ADVANTAGES

- The semi-rigid straps provide efficient cleaning without damaging the trunks.
- The two lower rings are equipped with 3 straps instead of 2 to increase the beating frequency by 30% on the base of the trunk, where most of the branches are located

STANDARD EQUIPMENT

- Frame with trunk cleaning modules
- Manual adjustment of the trunk cleaning width (hydraulic optional)
- Manual height adjustment of the external head (hydraulic optional)
- Adjustable guides, protective covers with rubber flap
- Storing rest

SAFETY DEVICES

- Vertical and lateral retraction with automatic return motion on both trunk cleaning heads

OPTIONS

- Hydraulic trunk cleaning head spreading
- Hydraulic height adjustment of the external head
- STOP & GO: this option allows the operator to stop the rotation of the heads instantly to avoid hurting the young vine plants.

AVAILABLE MODEL

- One complete row

TRUNK CLEANER AND WEEDER

SRBH 22

PRINCIPLE

› The trunk cleaner and weeder SRBH 22 is made of a high-clearance frame equipped with two heads whose horizontal axis allows removing the branches (low speed) or weeding (high speed) under the vine rows. The trunk cleaning and weeding heads are equipped with a hydraulic motor and a stack of aluminum rings in which straps are inserted.

› Working speed 3 km/h.

› Flow rate 7 to 30 l/min.

› Weight from 165 to 175 kg.

ADVANTAGES

- Manual adjustment of the angle of each head.
- High-resistance straps.
- Vertical and lateral retraction on every head.

STANDARD EQUIPMENT

- Frame equipped with two heads with safety retraction.
- Height between the ground and the first wire minimum 50 cm
- Two serially connected 17 cm3 motors
- Manual heads spreading adjustment.
- Manual height adjustment of the external head.
- Adjustable guides
- Storing rest

SAFETY DEVICES

- Vertical and lateral retraction with automatic return motion on both trunk cleaning heads

AVAILABLE MODEL

- One complete row

OPTIONS

- Stop and go function that allows stopping the rotation of the heads instantly so as not to hurt the young vine plants.
- Hydraulic heads spreading
- Hydraulic height adjustment of the external head.

LEAF STRIPPER

LR 350

PRINCIPLE

- Perforated drum, housing an intake mouth with a turbine at its end. The depression generated by the turbine sucks the leaves against the rotating drum. The (entire) leaves are gripped and stripped by a roller and fall on the ground along the vine row.
- Working height 480 mm.
- The stripping head is available with a parallelogram frame that allows following the vegetation plane or, optionally, with a hydromechanical vegetation following device (A'Syst option).
- The head rests on two guides on the top and on the bottom of the fruit bearing area or on the sensor if the machine is equipped with the A'Syst option.
- The turbine and the roller are driven by serially connected hydraulic motors. The flow rate is 22 to 60 l/min.

ADVANTAGES

- The stripped entire leaves do not pass into the turbine and therefore, they are not crushed and sprayed on the neighboring rows.
- The parallelogram follows the work plane, ensuring a constant leaf stripping.
- Simple lightweight machine with reduced dimensions.
- Quick cleaning.

A'SYST

- The assisted follow-up device allows the LR350 leaf stripper to follow the vegetation plane automatically and without operator intervention. It operates hydraulically, without ESP sensor and without electronic board. A'Syst distinguishes itself by its technological choice and ensures:
  - A great flexibility of use
  - An exceptional efficiency

RECIPROCATING (OPTION)

- Sickle bar with on/off function using a 3-way valve.

AVAILABLE MODELS

- One half row
- Two half rows
- One complete row

LEAF REMOVER

LB 260

PRINCIPLE

› A blower generates air with a pressure of 0.6 to 1 bar, which is supplied to the stripping heads equipped with rotating nozzles. The air expelled through the nozzles shreds the leaves under the pressure. The height varies from 400 mm to 640 mm.

ADVANTAGES

- The pneumatic leaf remover ensures thorough stripping and contributes to the reduction of botrytis. It also allows a better distribution of the plant and grape production products and removes the flowerhoods.
- Used the day before or even the day of the harvest, the pneumatic leaf stripper greatly reduces hand harvesting time.
- The stripping heads are equipped with two rotors - each with a nozzle - driven in rotation. The rotors work behind each other, reproducing a hammer stroke effect for a more efficient shredding of the leaves.

STANDARD EQUIPMENT

- Ecojet double-rotor stripping head mounted on the front of the tractor with or without turning device.
- Gearbox with cardan.
- Blower
- The blower, gearbox and filtration unit is mounted on a frame coupled to the rear of the tractor. This unit is driven by the power take-off of the tractor (PTO).

CYCLONIC FILTER

- Double filtration with a cyclonic prefilter that removes up to 98% of the impurities before entering the air filter. Thanks to its self-cleaning system, the prefilter remains clean.

AVAILABLE MODELS

- One half row
- Two half rows
- One complete row

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PRE-PRUNER

MP 122

PRINCIPLE

› A frame with two disc modules equipped with blades performing a shear cut. The discs are driven by 2 hydraulic motors. All pre-pruner functions are centralized in a hydraulic block.

› Cutting modules opening and closing is controlled by a control switch.

› Rotational speed of the discs is approximately 280 RPM for a flow rate from 24 to 40 l/min.

› Available in four frame versions with stacks varying from 6 to 28 disks with intervals of 60 or 90 mm.

ADVANTAGES

- The shape of the disc ensures a good grip on the vine shoots and a regular feeding of the machine, without damaging the tying wires.
- The 90 mm interval between the disks furthers the cleaning of the tying wires thanks to the cutting sections mounted on a carrier disk whose thickness prevents the wire from penetrating between the teeth of the cutting sections
- Reduced maintenance, lightweight (from 145 to 270 kg) and low flow rate.
- Reduced projections thanks to a low rotational speed.
- The bottom section of the discs is totally flat, preventing any stripping of the spurs.
- Working speed up to 10 km/h.

SIDE CUTS (OPTION)

- The side cuts are supplied with safety retraction and manual setting of the cutting angles and width.
- They are serially connected with the pre-pruning head and require no additional flow rate.

AUTOMATIC OPENING (OPTION)

- The optical detection operates for any type of post (wood, steel, concrete). There must be no leaves left. The system requires posts without holes in the reading axis and with a cross-section larger than or equal to 25mm.
- The inductive detection (not shown) only operates with steel posts. But it allows pre-pruning immediately after the harvest, even if there are leaves.

SHARP DISK

- A circular disk with a sharp edge on one of the cutting modules, facing a toothed disk on the other module, ensures a clean sharp cut, without cracking of the wood. The cutting effect of the disk avoids pinching the wood, which is a common phenomenon in shear cutting. A specific configuration of this equipment ensures the respect of the environment (posts and tying wires).

AVAILABLE MODELS

- Extra short frame
- Short frame
- Short frame «plus»
- Long frame

*The MP122 pre-pruner and the sharp disk are protected by a patent

MECHANICAL PRUNER

MPH 44

PRINCIPLE

› The MPH 44 pruner is made of four cutting modules equipped with saws (diameter 450 mm). Driven by hydraulic motors, the saws perform a side cut (front modules) and a horizontal cut (rear modules). The modules are equipped with retraction devices to allow following the row and retracting at the posts. Only the working height must be controlled by the operator.

ADVANTAGES

- The speed and the diameter of the saws ensure a clean sharp cut of the vine shoots.
- The retraction discs have a larger diameter than the saws to avoid damaging the posts.
- Low-maintenance, lightweight .
- The side saws of the front module are covered with an abrasion-resistant plastic disk to protect the cordons.
- The combs on the front cutting modules and the retraction system allow following the row automatically. A disk out of synthetic material maintains the distance between the saw and the cordon.
- The opening/closing of the modules is controlled from the driver's cab to facilitate entering and exiting the vine rows.

STANDARD EQUIPMENT

- Frame: tubular structure 100 x 50 mm.
- The rear horizontal cutting modules are adjustable in height and retractable when passing posts.
- Front side cutting modules with row follower and vertical safety.
- Hydraulic front and rear cutting modules opening for entering and exiting the rows.
- Electro-hydraulic valve block (capacity 60 liters/min) with ergonomic joystick (Océa range).
- The rotational speed of the saws is oaround 2,000 RPM (flow rate 44 l/min).
- Working speed up to 2.5 km/h

RETRACTION DEVICE

- The rear cutting modules are retractable to allow the saws to turn safely and automatically round the posts.

AVAILABLE MODEL

- One complete row

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MECHANICAL PRUNER

MPH 422

LE PRINCIPE

› The MPH 422 pruner has been developed both for vines planted for short pruning and for vines converted for short pruning.

› The MPH 422 features two units:

- A front section with two vertical cutting bars arranged on either side of the row.

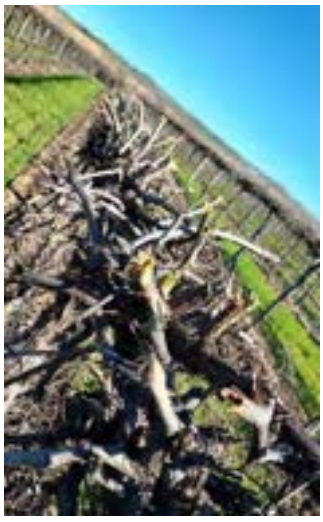
- A rear section with two modules with stacked disks.

› The vertical cutting bars mounted on a spreading device cut the side vine shoots as close to the cordon as possible.

› The disks on the rear of the frame are provided with blades and perform the cut on the top of the cordon. Mounted on oscillating arms, the disks can be moved apart when passing posts (vines converted to short pruning). The lower end of the disks can be equipped either with a sharp disk or with a saw (vines with high vegetation density).

ADVANTAGES

- Versatile machine performing pre-cutting and trimming in a single pass
- Working speed
- Low-maintenance



AVAILABLE MODEL

- One complete row

STANDARD EQUIPMENT

- Frame with front modules equipped with 2 vertical sickle bars and rear modules equipped with cutting disks
- Hydraulic spreading of the vertical cuts.
- Opening of the cutting disks
- 4 serially connected hydraulic motors
- Safety and stainless steel deflectors on the vertical cuts
- Storing rest

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VINE SHOOT EXTRACTOR VSE 230

PRINCIPLE

› The vine shoot extractor VSE 230 has been specially and exclusively developed for double arched guyot vines.

› The VSE 230 features a high-clearance frame with, on the one side, prehension means and, on the other hand, gripping, extraction and shredding means.

› The gripping means comprise a worm screw and a brush that feed the vine shoots to two rollers arranged one against the other. These rollers are driven in the inlet direction, they grip and extract the shoots. When exiting the two rollers, the vine shoots are shredded and fall on the ground.

› The VSE 230 requires a 45 l/min flow rate and a double-acting function for the hydraulic spreading of the high-clearance frame. It weighs 350 kg and its working speed is of the order of 2 to 3 km/h.

ADVANTAGES

- The extraction of the vine shoots from the bottom reproduces the manual operation and preserves the tying wires.
- The shredder is integrated.
- Remote and grouped lubrication of the various bearings.
- Operates for any type of posts and tying wires.

STANDARD EQUIPMENT

- Extraction head equipped with two extraction rollers and a shredder.
- Feeding worm screw on a pivot axis with hydraulic feeler.
- Lifting brush.
- Electro-hydraulic valves block for the control of all machine functions.
- Electrical control box.
- Centralized greasing.

AVAILABLE MODEL

- One complete row

VINE SHOOT EXTRACTOR VSE 430

PRINCIPLE

› While the VSE 430 vine shoot extractor works on all types of Guyot pruning, its performance is at its best on flat-tied Guyot, without any increase in preparatory pruning time. Its frame is equipped with a feeding disk and extraction wheels. Located in front of the wheels, the feeding disk pushes the vine shoots towards the wheels; a toothed chain grips the shoots and places them between the wheels, which complete their extraction towards the side. Once free from the tying wires, the shoots fall in the center of the row. A shredder can be mounted on the rear of the tractor to shred the shoots as they are extracted.

ADVANTAGES

- The extraction of the vine shoots from the side reproduces the manual operation.
- Remote and grouped greasing.
- Operates for any type of posts and tying wires.
- Working speed

STANDARD EQUIPMENT

- Frame with feeding disk and extraction wheels.
- Opening of the feeding disk with a cylinder.
- Extraction wheels rotation reversing function.
- Opening of the extraction wheels in case of jamming.
- Hydraulic functions centralized in a hydraulic block.
- Protective cover with adjusting flap to optimize the shoot ejection.
- Control box or connection on Provitis electro-hydraulic valves block.
- Storing rest.

WIRE LIFTER (OPTION)

- The VSE 430 can be optionally equipped with a wire lifting device that allows removing the wire(s) when the machine passes (removable lifting wires, posts with notches allowing the automatic upward removal of the wire

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