# HARVESTING MACHINES FOR STONE FRUITS AND SEED FRUITS



canning | industry | distilleries | fresh market







### **Harvesting machines for stone fruits and seed fruits**

Since 1996, LIPCO has been developing and producing harvesting machines for the safe and fruit-preserving harvesting of stone and seed fruits, recycling sprayers for space crops in viticulture and fruit growing, and underplant cultivators.

Implements and carrier vehicles for horticulture and landscaping, for private users and the public sector round off the versatile product portfolio.

LIPCO hydraulic shakers grasp trunks and branches in seconds. The rubber gripper means that the bark is not damaged in the process. The short but extremely effective shaking process is gentle on the fruit. A high hourly output is achieved.

For more information, please also visit our website at www.lipco.com.

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Your Dealer:



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## **Hydraulic shaker**

**HSA 10** – for trunk or branches (for wide areas) 3-point linkage



The advantage of **LIPCO hydraulic shaker** is the powerful, flexible gripper that is still gentle to the bark.

The pressure on the gripper jaws can be steplessly adjusted.

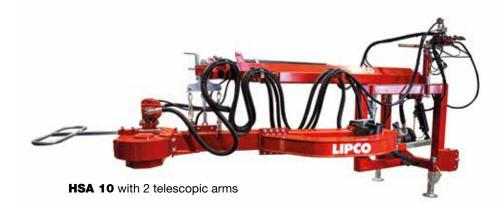
High shaking performance for a trunk diameter of max 55 cm. If the diameter of the trunk is more than 55 cm, branches can be shaken.

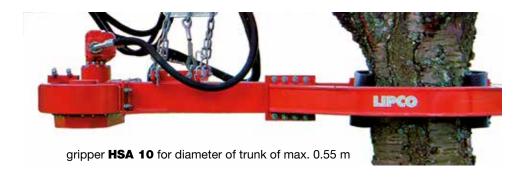
#### **Technical data:**

Length of shaking pole	2.50 m
Hydraulic shift	2x 1.00 m / 3x 1.00 m
Range to the rear	5.60 m / 6.60 m
Gripper	0.08 - 0.55 m (diameter of trunk)
Required power	40 kW
Weight	660 kg/800 kg

The tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow as well as a 12 V socket.







#### **Options:**



proper hydraulic



mechanic or hydraulic turntable to turn the gripper when branches has grown aslope



electrical operation







## **Hydraulic shaker**

**HSA 30** – for narrow cultivation · 3-point linkage: front or rear

For maximum shaking performance and best result without damaging trees!

The outer jaws of the gripper can be folded hydraulically. Electric shaking process.

#### **Technical data:**

Lateral range from centre of machine	1.20 - 2.80 m
Parallel shift	max. 0.65 m
Gripper	0.08-0.25 m (diameter of trunk)
Required power	40 kW
Weight	530 kg
Shaking performance	up to 400 trees/hour

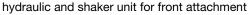
The tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow as well as a 12 V socket.



gripper can be folded

rear attachment hydraulic unit and front attachment shaker unit







hydraulic and shaker unit for rear attachment

control **HSA 30** 

## Video of the shaker in action







## **Hydraulic shaker**



The high shaking performance for a **trunk** diameter of max. 52 cm and the hourly rating of max. 300 trees makes the shaker perfect to work on industrial plants.

Release of tractor hitch and better directional stability because of **serially additional spindle**.



**HSA 50** with industrial pincer

#### **Technical data:**

Hydraulic pivoting from center of tractor to the right	3.00 m
Hydraulic shift	2 x 1.00 m
Gripper	0.08 - 0.52 m (diameter of trunk)
Required power	40 kW
Weight	530 kg

The tractor requires 1x double-acting operating valve or 1x pressure and 1x free return flow as well as a 12 V socket.



industrial pincer with 4-point-chain suspension



# Trailer harvesting unit without shaking device AE

(towed)

for lower link attachment to tractor



#### **Technical data:**

**Tarp size** 5.00 x 5.00 m up to 9.00 x 9.00 m / 12.00 m

(Dimensions: width x length to extract)

Required power 20 kW

Weight approx. 1,100 kg

(depending on machine dimensions)

The tractor requires 1x double-acting operating valve and a 12 V socket.

**LIPCO-catcher unit** with sliding roll-up tarp to collect the fruits after shaking process. **The fruits do not touch the soil at any time.** 

Cloth, conveyor belt and cleaning system can be **steplessly adjusted from rear operator station**. Hydraulic steering axle - controlled from tractor - for turning in tight spaces.

Drive via rear PTO shaft (540 rpm) of the tractor unit.



#### Advantages at a glance:

- perfectly cleaned fruits in the final boxes
- the good smell of the plums, prunes and mirabelles is conserved







Photo shows picking belt (optional)



# Trailer harvesting unit with shaking device AES

(towed)

for lower link attachment to tractor



The shaking unit is serially equipped with a powerful, flexible shaking device and a pincer that is gentle to the bark.

Suitable to work on trees with a trunk diameter of 8 to 45 cm. If the diameter of the trunk is more than 45 cm, branches can be shaken.

Cloth, conveyor belt and cleaning system can steplessly be adjusted via rear control seat. Every operation of the shaker unit can be controlled from the seat. Hydraulic steering axle - controlled from tractor - for turning in tight spaces.

Drive via rear PTO shaft (540 rpm) of the tractor unit.

#### **Technical data:**

Range of gripper - from center of machine	max. 4.20 m
Gripper	0.08 - 0.45 m (diameter of trunk)
Tarp size	5.00 x 5.00 m - 9.00 x 9.00 m / 12.00 m (Dimensions: width x length to extract)
Required power	50 kW
Weight	approx. 3,400 kg (depending on size of machine)

The tractor requires 1x double-acting operating valve and a 12 V socket.

#### Video of the shaker in action











# **Extension system ASS** (shear system)

for attachment to LIPCO trailer harvesting unit AES



#### **Technical data:**

Extension system	double shear with hydraulic cylinder
Tarp size	6.00 m x 6.00 m (Dimensions: width x length to extract - other dimensions on request)
Weight	750 kg



#### Advantages at a glance:

- Support via 2 support wheels
- Controlled via controller of LIPCO harvesting unit AES



# Extension system ASR (arch extension)

for attachment to LIPCO trailer harvesting unit AES



#### **Technical data:**

Drive	hydraulic motor
Tarp size	6.00 m x 6.00 m (Dimensions: width x length to extract - other dimensions on request)
Weight	500 kg



### Advantages at a glance:

- stainless steel (VA) circular arche
- controlled via controller of LIPCO harvesting unit AES



# **Conveyor and cleaning unit**





**Technical data:** 

Required power	30 kW
Required oil quantity	min. 30 l/min
Weight	500 kg

The tractor requires 1x pressure and 1x free return flow.

#### There are some more options:

conveyor belt, proper hydraulic, stalk-removing unit, picking belt, picking table, weighing system, spraying device, oil cooler



Photo shows proper hydraulic on **FRD** including oil cooler 12 V (optional, kit, for tractor that has an oil pump output of less than 40 l/min) The **conveyor and cleaning unit FRD** cleans the fruit and removes leaves and wood faster than by using conventional machines. The good (industrial) quality of the fruit in the final box is preserved.

When the harvested fruit is collected on the cloth it can easily be discharged into a bin. There is no need to pour the fruits into small boxes or to lift it several times by hand.

The bin is lifted hydraulically and the fruit is charged via an elevating conveyor belt (the height of bars is defined).

The **conveyor and cleaning unit FRD** is serially equipped with a plug-in console for big crates and with a metal plate to hand over the boxes.



# Conveyor and cleaning unit FRT

### for attachment to grape transport wagon

The standard unit is connected to the tractor hydraulic.

By using the option "proper hydraulic" the unit is powered by the rear PTO shaft (540 rpm).

An additional conveyor belt is another possible option. To mount it on 90° the conveyor belt makes it possible to fill-in big crates. Industrial processing is then possible as well.



#### **Technical data:**

Required oil quantity

Weight 460 kg

2.00 m (tray height max. 1.56 m)
2.30 m (tray height more than 1.56 m)

min. 30 l/min

The tractor requires 1x pressure and 1x free return flow.

#### **Options:**



digital balance (optional), with steelplate to push the boxes



proper hydraulic (optional)



external filling of boxes (additional conveyor belt is mounted to 90°)



Stalk-removing unit for cherries - built-on

for attachment to

- Trailer harvesting unit without shaking device AE
- Trailer harvesting unit with shaking device AES

Conveyor and cleaning unit FRD (3-point linkage)

For stalk-removing of cherries, width of dividing mesh 0.50 m



#### **Technical data:**

Engine	hydraulic motor
Water connection	3⁄4''
Flow rate	300 - 1,000 kg/h
Weight	48 kg



## Stalk-removing unit for **cherries RUPFI - stationary**



75 kg Weight

Dividing mesh 400 mm, stationary, electrical engine



## Picking belt SB-001

with lateral ejection



By help of conical O-belts, damaged and too small fruits are sorted out and - via a transverse transport belt - ejected to the side. The width of the O-belts can exactly be adjusted by interchangeable spacer sleeves.

The picking belt can be mounted to all units, e.g. **AE / AES**, **FRD / FRT**.

#### Technical data:

	SB-001
Engine	electric (400 V) or hydraulic motor
Weight	55 kg
Picking width	0.50 m
Picking length	0.60 m
Number of holto	15 ncs

## Picking arrangement SB-015

Sorting fruits in three different sizes; damaged, too small fruits and fruits of bad quality are sorted out.

The charge belts can be adjusted from 18 to 28 mm. The width of the O-belts can exactly be adjusted by interchangeable spacer sleeves.

#### Technical data:

	SB-015
Engine	hydraulic motor
Weight	185 kg
Picking width	0.70 m
Picking length	1.60 m
Number of belts	16 pcs.





## Picking belt SB-020

Sorting of fruits in 4 different sizes according to your requirement. Damaged or too small fruits and fruits of bad quality are sorted out.

The charge belt can be adjusted from 18 to 28 mm. The width of the O-belts can exactly be adjusted by interchangeable spacer sleeves.





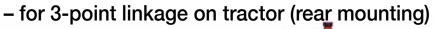
**SB-020** mounted on **LIPCO AES**, with lateral lift fork for rejection in big crates, with steelplate to push the boxes and with platform on both sides for manual prescreening.

#### Technical data:

	SB-020
Engine	hydraulic motor
Weight	350 kg
Picking width	0.80 m
Picking length	3.00 m
Number of belts	20 pcs.



## **Underplant cultivator BP2/4**





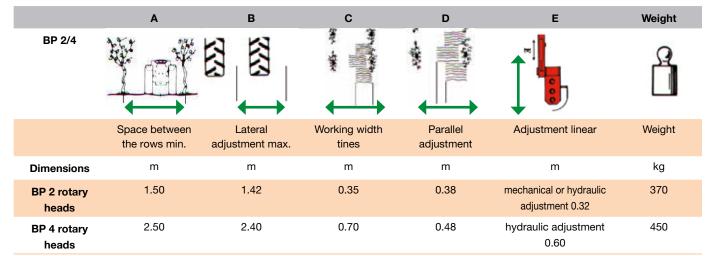


#### The advantages at a glance:

- proper hydraulic
- device via PTO shaft 540 rpm
- hydraulic parallel adjustment by push button
- adjustment of the working depth of tines via supporting wheels
- incline of the tines is adjustable
- additional manual activator of lever by an electric press switch (controlled from driver)
- counter-rotating rotary heads, each equipped with 2 tines (no soil displacing thereby flat levelled surfaces)









## What's special about the special







top quality of harvested fruits;

work process is gentle to the fruit therefore top quality in the end box



#### costum-made solutions

for the treatment and finishing of the harvested fruits from the beginning to the end box



#### shaking power / LIPCO-aggregate

 compact construction and high shaking power (aggregate is available in 2 different sizes)



#### gripper

permits a gentle shaking
even after years there is no visible sign of where the gripper had enclosed the trunk



#### exhauster

 separates even very dirty fruit completely from wood, leaves and other contaminants

### LIPCO

### LIPCO harvesting machines/technique



steering axle

- for quick turning and central seat for the operator - all control lever are well-arranged



lift fork
- for palettes and big crates
height / inclination adjustment
- for compensation on slope



**extension**hydraulic shear system as an option



extension

- hydraulic extension system
(round arche system) as an option



**control**– full-electric control



additional control (as an option) integrated Fendt Varion control (professional) allows to work without tractor driver while shaking

## Our product portfolio



We produce additionally:

TUNNEL®-sprayers for viniculture and fruit growing and for similar special crops



Underplant cultivators for viniculture and fruit growing



Over-row cross-fl ow fan units for viniculture and fruit growing and for similar special crops



Carrier vehicles and implements for landscaping, municipal services and facility services



We look forward to hearing from you.

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