

FOR SUCCESSFUL VINEYARD MANAGEMENT

# TECHNOLOGY FOR ROW CULTURES

- SUBSOILING
- PLANTING
- CULTIVATING
- WEED CONTROL
- FERTILIZING
- STEM CLEANING
- HEDGING
- DEFOLIATING
- PLANT PROTECTION
- PRE-PRUNING
- VINE REMOVAL



# A FRAME

## 1 FRAME AR1 / AR2



The A-Frame is a tool carrier frame with mechanical width adjustment to attach various implements such as the CLEMENS RADIUS SL for working light soil, MULTI-CLEAN for weed control or the ROTARY BRUSH for cleaning out the suckers. The 3-point frame is tractor mountable in the front or rear. The frames are available in two different sizes, AR1 and AR2, for row working widths from 55" to 114".

### Technical data:

#### AR1

#### AR2

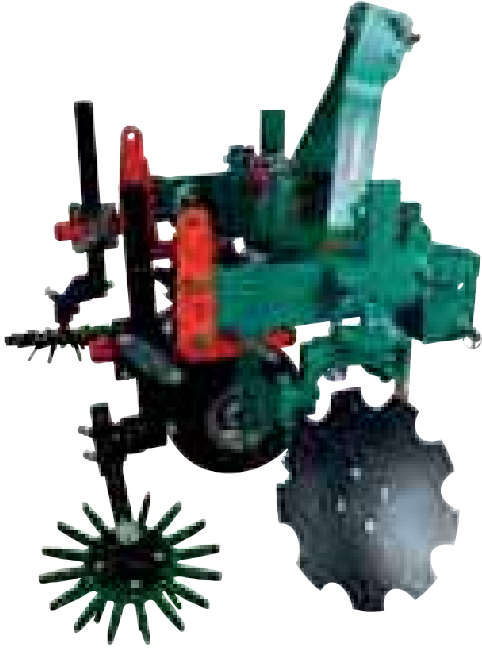
Weight (frame only without tools)	188 lbs	220 lbs
Dimensions L x W x H (frame only)	23" x 25" x 30"	30" x 39" x 23"
For row working widths with Radius blade 14"/20"/24"	57"-86"/68"-97"/78"-106"	70"-109"/81"-120"/90"-129"



# SB FRAME



## 2 SB COMPACT (FRONT AND REAR MOUNTING) (PICTURE SHOWS REAR MOUNTING)



## 3 SB 2 (FRONT AND REAR MOUNTING) (PICTURE SHOWS REARMOUNTING WITH OPTIONAL FRONT MOUNT)



Sturdy implement frames with hydraulic width adjustment for undervine cultivation for tractor mounting in front or rear. A pump tank hydraulic unit is available for smaller tractors. Ideal for mounting the modern undervine weeding system RADIUS SL or ROTARY BRUSH. SB COMPACT and SB2 are available in two different widths for cultivating rows from 51" to 126", width widening up to 142" - depending on the tools.

### Technical data (front and rear mounting):

	SB COMPACT	SB 2
Weight (frame only)	317 lbs	375 lbs
Dimensions L x W x H (frame only)	24" x 29" x 29"	24" x 40" x 29"
For row working widths with Radius blade 14"/20"/24"	57"-79"/69"-90"/78"-99"	68"-107"/79"-118"/88"-128"

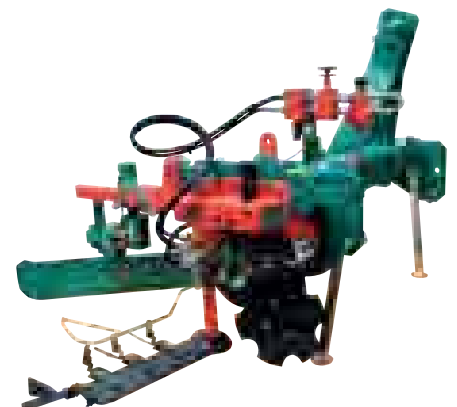


# SB MONO

## 4 ONE-SIDED FRAME



The SB Mono can be attached to the front or the rear of the tractor. The hydraulic width adjustment can be converted from left to right with minimum effort. Using the cylinder, the base frame can be hydraulically extended to the left or to the right by about 20", from 38" to 57".



### Technical data

### SB MONO

Weight (frame only)	265 lbs
Frame width	38"
Extension	20"



## 5 TOOL CARRIER FRAME FOR WIDE ROWS (PICTURE SHOWS FRONT MOUNT)



### Technical data

Weight (frame only)  
Frame width  
Extension

### SB ORCHARD

496 lbs  
89"  
39"

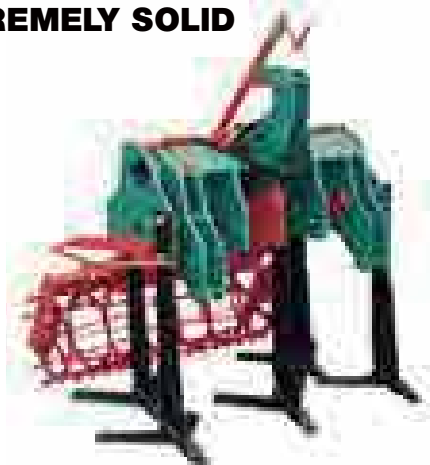
This frame can be adjusted from 89" - 128".

The base frame serves as tool carrier for e.g. RADIUS, MULTICLEAN, GSP Disc or Finger Roller and can as well be equipped with lateral column lifters. The picture shows equipment with 2 double acting COMPACT Lifters. This structure allows the independent lifting of each side and also height adjustments in terraces.



# HEXAGON

## 6 EXTREMELY SOLID



The solid hexagonal sectional frame is suitable for the toughest operating conditions. High-quality spring steel gives enormous strength. The special wing-chisel share undercuts cover crop without destroying it.

## 7 UNIVERSAL



The mounted disc harrow, with hydraulically adjustable units, is suitable for working in all kinds of cover crop.

### Technical data:

Hexagonal base frame  
with hydr. change in width  
with chisel and wing share  
with chisel and wing share

with Radius SL blade 14"  
with Radius SL blade 20"  
with Radius SL blade 24"

Frame width  
Frame width  
Working width  
Row width

Row width  
Row width  
Row width

### HEXAGON 723

27"  
31" - 47"  
47" - 62"  
59" - 75"

59" - 75"  
70" - 88"  
80" - 95"

### HEXAGON 729

32"  
36" - 57"  
52" - 73"  
63" - 85"

65" - 86"  
76" - 97"  
85" - 106"

### HEXAGON 724

45"  
49" - 83"  
64" - 98"  
79" - 114"

78" - 111"  
88" - 122"  
96" - 131"

## 8 SERRATED DISC PLOUGHS



For rational ventilation in the sensitive undervine area with simultaneous weed control.

## 9 ENORMOUS EFFECTIVENESS



With CLEMENS RADIUS mounted on both sides, the row is cultivated completely in one pass.

## 10 IMPLEMENT CARRIER

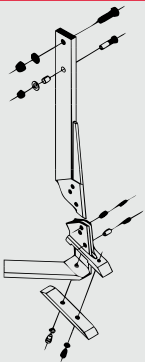


Front or rear mounted and also usable as a cultivator. Implement carrier for the hydraulic undervine weeder RADIUS, Rotary Brush or other implements.

## 11 DEEP FERTILIZATION



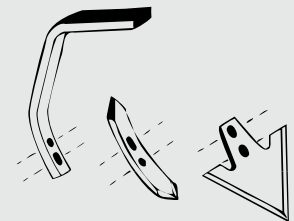
Direct deposit of fertilizer in the root area, the nutrients are immediately available to the plants, even in longer periods of drought. The fine root formation is stimulated and provides for improved growth.



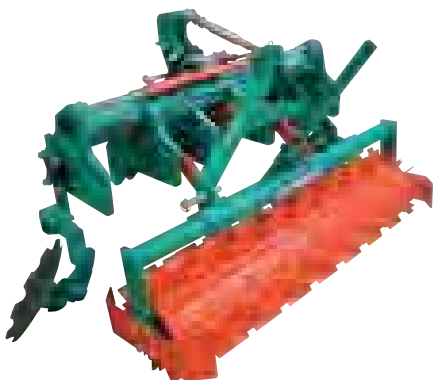
Tine made of spring steel  
80 x 25 mm with shearing  
Fastening adjustable  
Removable wing share  
Chisel can be used on both sides

**TIP! MORE INFOS ONLINE**  
[WWW.CLEMENS-ONLINE.COM](http://WWW.CLEMENS-ONLINE.COM)

C tines 50 x 22 mm  
Grubber share  
Duck-foot share



## 12 CARRIER FOR 'ECO-ROLL'



The ECO-ROLL Bio-Mulch-Roller knocks down the stalks thereby producing a carpet of mulch that encourages good composting.

## 13 LOOSENING + VENTILATING



C-tines made of spring steel for soil tilling with grubber or duck-foot share.

# TERACTIV

## 14 FOR ACTIVE SOILS



TIP! MORE INFOS ONLINE  
[WWW.CLEMENS-AMERICA.COM](http://WWW.CLEMENS-AMERICA.COM)

Extremely solid cultivator for soil cultivation in difficult soil conditions. The special spring loaded shanks provide NON-STOP overload protection and aggressively loosens the soil. Existing organic mass can be worked in effectively and mixed intensively. Optional equipment available.

### Technical data:

Weight (without accessories): 573 lbs  
Dimensions LxWxH: 91"x42"x43"  
(width outside edges, retracted state)

Working width with Radius SL blade 14": 71 to 91"  
Working width with Radius SL blade 20": 83 to 102"  
Working width with Radius SL blade 24": 91 to 110"

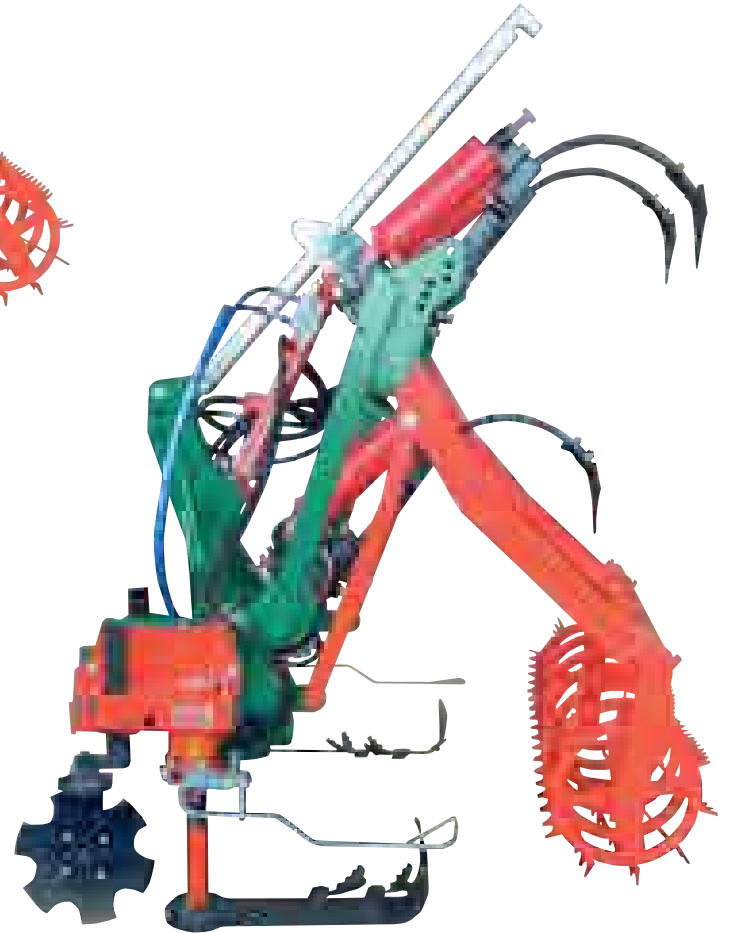
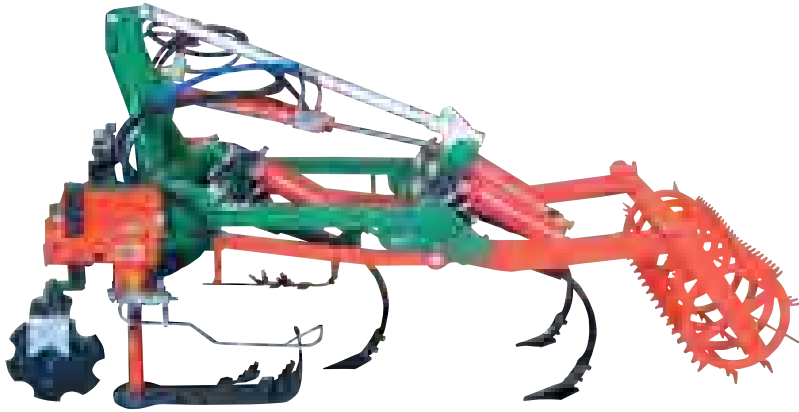
Overload protection: non-stop  
Oil pressure: 2538psi  
Steep-lift: 75°



# TERACTIV DUO



## 15 ONE FRAME - TWO SOLUTIONS



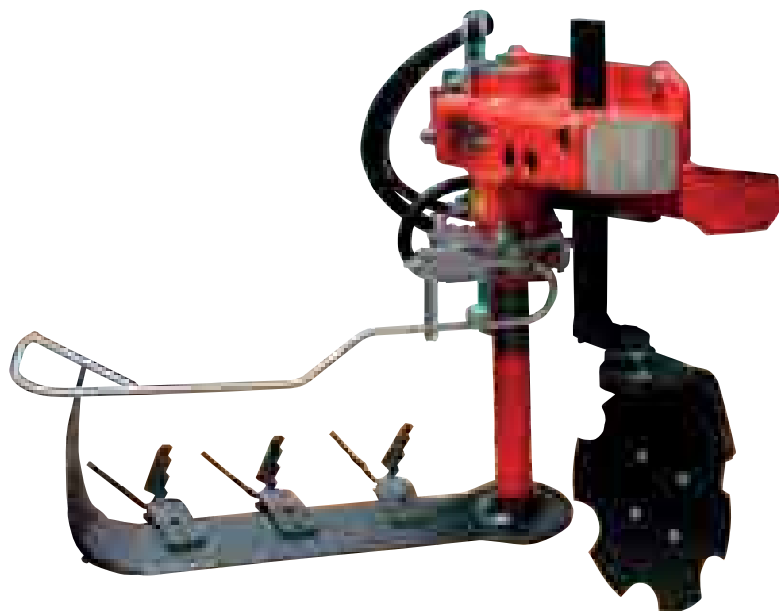
The difference between the TERACTIV DUO and the TERACTIV is that you can work the undervine weeder RADIUS without cultivating the cover crop by lifting the frame with its flexible tines at an angle of 75 degrees and the roller folds under. This allows it to move smoothly and maintains a consistent working depth in the area around the vines.

The width of the stable frame can be adjusted from 43" to 63" (models that can extend to 83" are also available). The frame, where the Radius is mounted, has a hydraulic width adjustment. You have the option to mount 3, 5, 6 or 7 flexible tines to the frame, depending on row width. For row widths: 71" to 110", with extensions up to 130".



# RADIUS SL

## 16 WITH CLEARING SHARE



TIP! MORE INFOS ONLINE  
[WWW.CLEMENS-AMERICA.COM](http://WWW.CLEMENS-AMERICA.COM)

RADIUS Around-the-vine weeder is the environmentally friendly alternative to chemical weed control. The blade undercuts the weeds allowing them to decompose in a natural way. Working in this way, it causes less drought stress through destruction of the capillaries and soil activation and promotion of optimum soil condition. Sensitive sensor technology for safe work around the vine. Can be mounted on the rear, mid and front of the tractor. 1 and 2 sided versions are available. Versatility through optional tools.

### Technical data:

Oil quantity/device required: 1.6 - 2.6 gal/min

working depth: 2" - 4"

blade length: 14"/20"/24"

working speed: 3 - 6 mph

weight: 72 lbs

universally mountable, also on already existing cultivators, flail mowers, hydraulic rotary harrow, etc.

**Optional side slope correction**



● Front tool: grubber share

# RADIUS SL PLUS



## 17 RADIUS SL PLUS

The RADIUS SL PLUS (i.e. transition/ changeover shaft) uses the proven technology based on the RADIUS SL.

Additional springs and the modification of the tool support allows the installation of various attachments. With the help of adapters, the following attachments can be installed easily and quickly:

- RADIUS BLADE

This feature can be used when no additional attachments are required such as the standard RADIUS SL. A sensor rod is used to retract the RADIUS blade.

- RADIUS BLADE with a rotary cultivator

With this combination, the blade undercuts the weeds and the tiller destroys the root mass.

Hydraulic requirements for double-sided installation:

Radius SL PLUS: max. 5 GPM

Rotary Cultivator: max. 8 GPM



### Technical data:

Oil requirement RADIUS: 2.5 gal/min per side  
With rotating tools: 5 - 8 gal/min  
Diameter mower: 15.5"

Working depth: 2" - 4"  
Working speed: 3 - 6 mph  
Weight RADIUS: 77 lbs

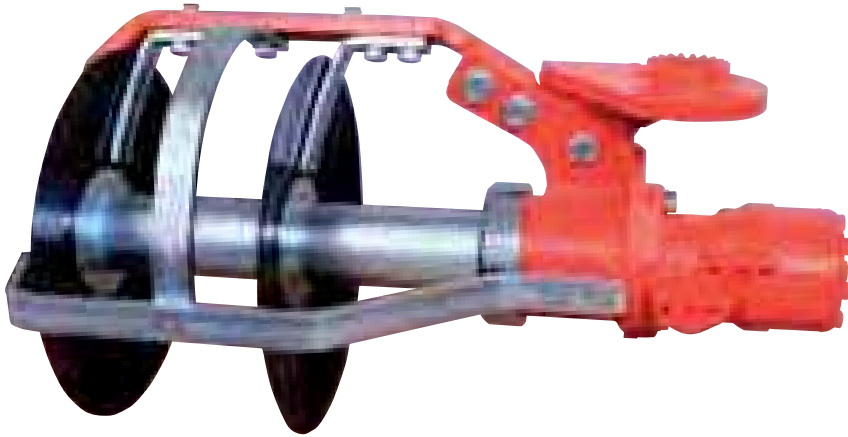
Weight Driven Discs: 88 lbs  
Weight Rotary Cultivator: 50 lbs  
Share lengths: 14" / 20" / 24"



# ACCESSORIES

## 18 HYDRAULICALLY DRIVEN DISCS SL PLUS

The discs (2 pcs.) are used to pull out soil of the vine interspace, for ploughing back or to ridge, for example for a better mixing of fertilizer and compost. The driven discs are equipped with a deflecting rail in addition to the sensor rod to protect the vine.



### Technical data Driven Discs:

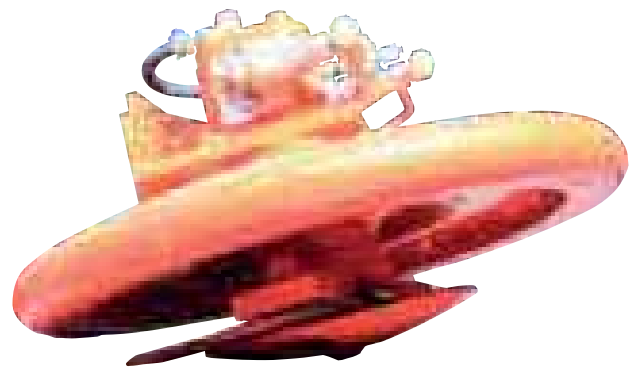
Oil requirement Driven Discs. 8 gal/min  
Weight: 88 lbs



## 19 MOWER SL PLUS

The mower (Ø 15.5") pivots hydraulically between the vines to mow the vegetation with two knife blades.

A protecting ring around the support disk prevents the vine from being damaged. A sensor rod triggers the movement of the mowed head around the vine.



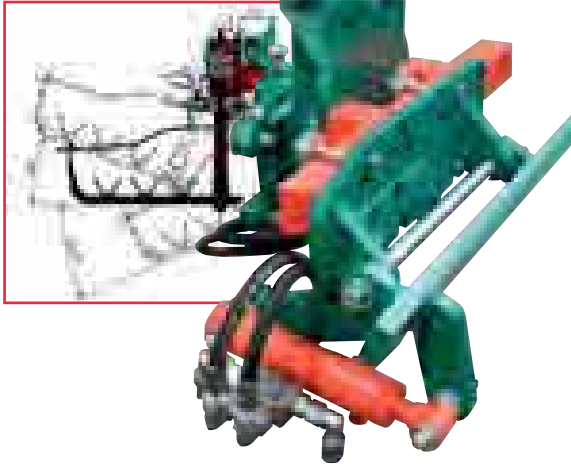
### Technical data Mower:

Oil requirement Mower: 5 gal/min  
Weight: 85 lbs



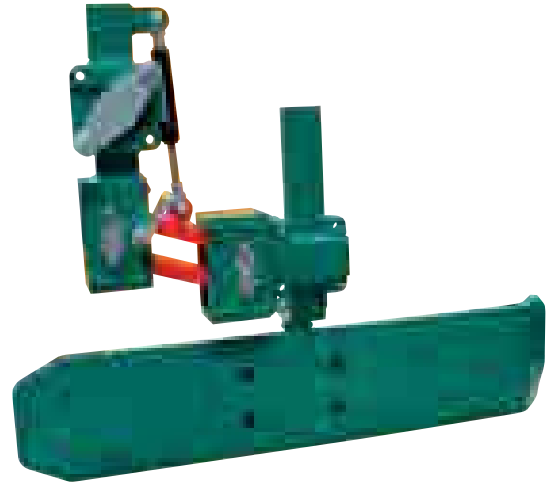
# ACCESSORIES

## 20 ANGLE ADJUSTMENT SL & SL PLUS



With the angle adjustment for side slope adjustment, you can change the angle of the RADIUS to adapt the position perfectly to the condition in slopes. This unit can be mounted on the tool carriers and column lifters. Available in mechanical and hydraulic versions.

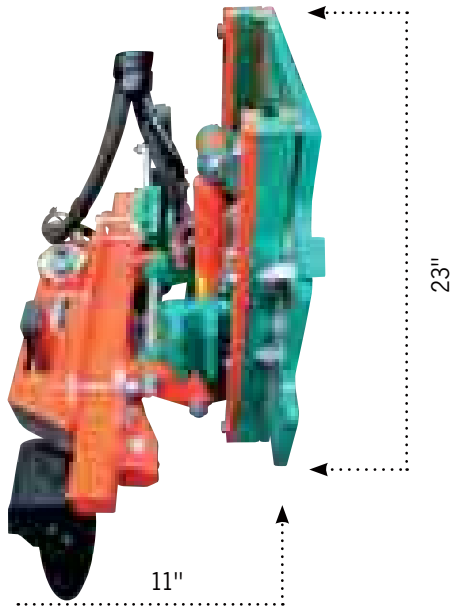
## 21 SOIL & STONE DEFLECTOR SL & SL PLUS



The soil & stone deflector is mounted behind the RADIUS to keep the cover crop clean of soil and stones. It comes with a parallelogram for ground adaptation. Different adjustment possibilities allow flexibility to achieve desired results.



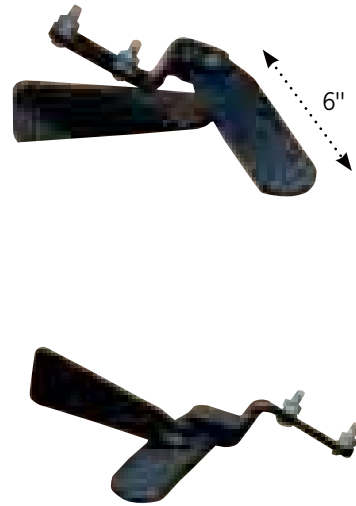
## 22 COMBI-LIFTER SL & SL PLUS



Compact lifter and side slope correction. You can choose between mechanical or hydraulic side slope adjustment. Mountable on HEXAGON and SB-FRAMES.

- Angle adjustment 22° / 28°
- Lifting height 12"

## 23 CLEARING SHARE SL & SL PLUS



- To mount on the blade 14"/20"/24". For close work around the vine.



# GSP DISC

## 24 GSP ø 18"



- simple operation for weeding close to the vines
- can be adapted to any soil type
- higher working speed
- long-term weed control can be achieved by mulching



# FINGER ROLLER

## 25 FINGER ROLLER

Integrated angle adjustment.

The exterior angle can also be altered by reinserting the locking pins.

Allows both discs to work on a a sloped working angle at the same level.

This design avoids creating a clear edge which can become a water channel on a slope.



### Technical data:

Disc thickness: 31"  
Forward speed: between 4 - 5 mph

Diameter external disc: 16"  
Diameter internal disc: 13"

Adjustment axes: 2  
Option: deflector



# FINGER HOE

## 26 DISC DIAMETER 15", 21", 28"

When using the undervine weeder RADIUS in young vines or in existing plantations with crooked trunks, a wider safety zone is required between the RADIUS blade and the vine. The finger hoe works directly around the plant and breaks up the island of unworked area to remove the soil and weeds directly around the vine. Due to the special rubber compound, it works gently and with low wear. The finger hoes are available in various versions and different levels of stiffness and are driven in combination with a variety of machines.



### Technical data:

Diameter 15"  
Color: green, Stiffness: hard

Diameter 21", Color: green, Stiffness: hard  
Diameter 21", Color: yellow, Stiffness: medium

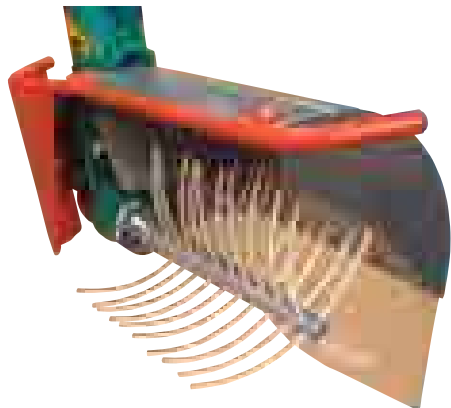
Diameter 28", Color: green, Stiffness: hard  
Diameter 28", Color: yellow, Stiffness: medium



# MULTICLEAN



## 27 MULTICLEAN



## 28 MULTICLEAN XL



The brushes aggressively mulch the weeds and grass under and around the vines yet gentle to the trunk of the vine. The conical aluminum shaft prevents the buildup of vegetation around the shaft. An additional benefit is the removal of suckers.

### Technical data:

### Multiclean

### Multiclean XL

Weight:	88 lbs	115 lbs
Rpm:	1100 rpm	1500 rpm
Cleaning height:	24" (slope 37,5°)	23" (slope 37,5°)
Slope:	0 - 37,5° (in steps of 7,5°)	0 - 37,5° (in steps of 7,5°)
Dimensions L x B x H:	30" x 15" x 20" (without protection)	41" x 14" x 20" (without protection)
Oil requirements		
- single sided	4.2 - 6.3 gal/min	4.2 - 6.3 gal/min
- double sided	4.2 - 6.3 gal/min - in line	Minimum 8 gal/min - two lines

HAVE A LOOK ON VIDEOS:  
[WWW.CLEMENS-ONLINE.COM](http://WWW.CLEMENS-ONLINE.COM)



# S-5

# COLUMN LIFTER

29



- S5-Column lifter
- Compact and robust construction
- For various tools
- Available in single and double acting  
(we recommend to use the S5 with a single acting cylinder with support wheel for depth control. S5 with double acting cylinder only for hard soils)
- Integrated height adjustment with wheel or bolt
- 2-sided lifter can be mounted on a hydraulically adjustable frame mid mounted (the chassis must be adapted to the respective tractor)
- Adjustment of the frame width: 21" + optional 8" mechanical



with Hexagon for micro terraces

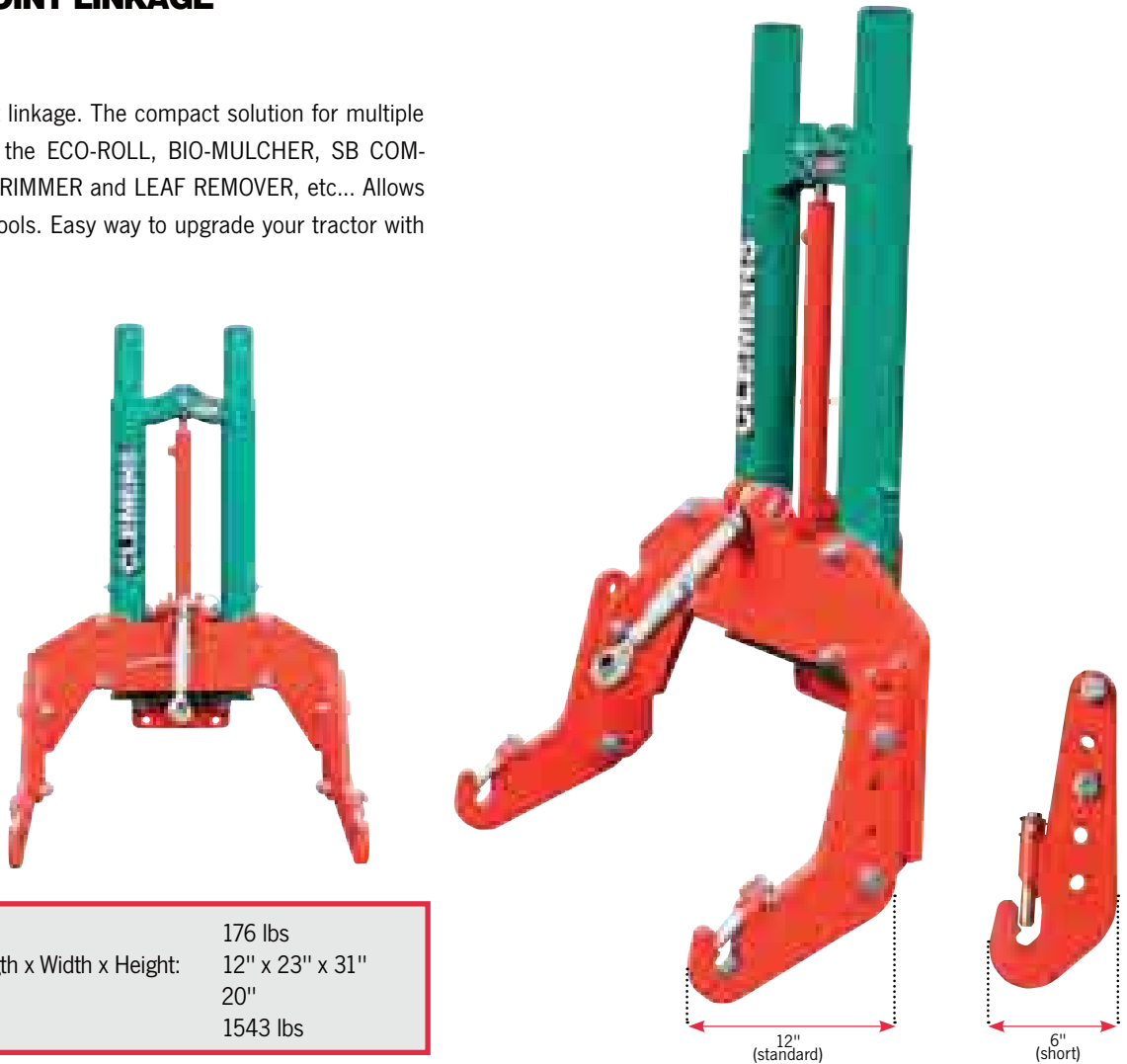
## Technical data:

Weight - without tools	lbs	110
Dimensions (in) length x width x height:	in.	27 x 8 x 39
Stroke (maximum):	In.	20

# 3-POINT + S2

## 30 S-2 WITH 3 POINT LINKAGE

Front mount with 3 point linkage. The compact solution for multiple CLEMENS products like the ECO-ROLL, BIO-MULCHER, SB COMPACT, SB2, SB MONO, TRIMMER and LEAF REMOVER, etc... Allows easy attachment of the tools. Easy way to upgrade your tractor with a 3-point linkage.



### Technical data:

Weight without tools:	176 lbs
Dimensions (mm) : Length x Width x Height:	12" x 23" x 31"
Stroke of S2:	20"
Carrying capacity	1543 lbs



# ATLAS

## 31 LIFT POLE

The ATLAS mast is characterized by the hexagonal profile proven with the HEXAGON frame.

Due to its construction and the resulting load capacity, it is ideally suited for increasing demands. In combination with the hydraulic lateral inclination, the working implement can be optimally placed in working and driving positions.

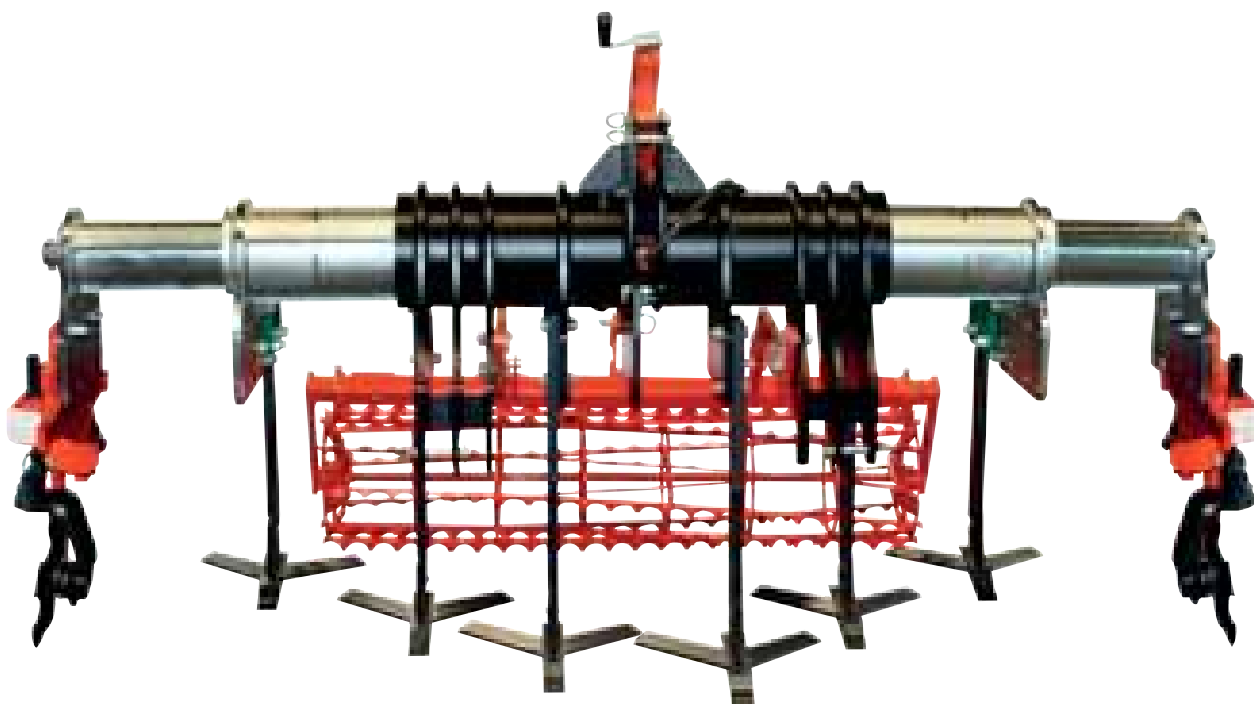
- Weight: 220 lbs
- Stroke: 37"
- Lateral inclination: 26/18°
- Hydraulic widening 16" (Option)
- Adaptability of attachments of all brands



# HERKULES

## 32 CULTIVATOR

Versatile capabilities and ruggedness are the main points of the HERKULES. The frame is extendable and covers a wide working width of 59" to 106" (without the CLEMENS RADIUS). It can be used like the HEXAGON as tool carrier or like a cultivator with a variety of tools. Due to the special shape, this frame will work in the toughest conditions.



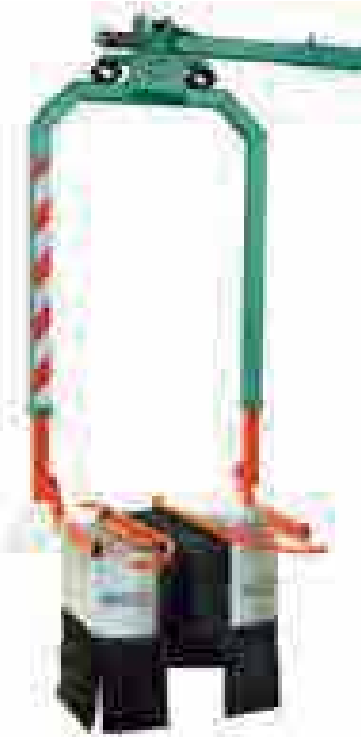
### Technical data:

Weight (without attachments)	970 lbs
Frame width:	43"
Widening (without attachments):	57" - 106"



# STEM CLEANING

## 33 SPRAY CHAMBER



TIP! MORE INFOS ONLINE  
[WWW.CLEMENS-AMERICA.COM](http://WWW.CLEMENS-AMERICA.COM)

Drift-free application of contact herbicides for the economic removal of suckers. Additional benefit: Application of soil and leaf herbicides for weed control in the plant strip.

### Technical data:

Application quantity, gal/acre:	26 - 79
Area capacity/hour:	approx 2.5 acres
Weight, lbs:	55

## 34 ROTARY BRUSH



Simple front mounting with over-the-row frame, cultivator or hexagon. Swivelling path and spring pressure adjustable.

### Technical data:

Working height (with 22.5° tilt):	23"
Oil requirement, gal/min:	4 - 6.3
Weight, lbs:	86





# POWER HARROW

## 36 WITH CAGE ROLLER AND SEED DRILL



## 37 WITH PACKER ROLLER, NEW DESIGN



### Technical data:

#### with cage roller:

#### with Packer roller:

	V100	V125	V140	V170	V190	V100	V125	V140	V170	V190	
Total width, mm:	45"	56"	67"	75"	84"	41"	56"	67"	75"	84"	Input speed, rpm: 540 Power requir. HP/kW: 40/30
Nbr of rotors:	4	5	6	7	8	4	5	6	7	8	
Weight (lbs):	1175	1362	1495	1615	1737	1362	1550	1715	1865	2013	

# SUBSOILER

## 29 TLK 883 1-SHANK



## 30 BISON TINES



### Technical data:

Working depth: max. 24"	Power HP/kW: 40/30
Width of the vibrating share: 14"	Weight, lbs: 573

Very good for breaking-up compaction of the wheel zone.

## 38 VARIABLE MULCHER



The mulcher works exceptionally well in Vegetation Management and is also suitable for the shredding of cut wood. Attachment to the carrying vehicle is performed by a stable category 1 three point attachment. Drive is provided by a power take-off shaft set to 540 rpm and a drive shaft with slip clutch that is supplied from the factory. A double-action control unit is necessary for the hydraulic width adjustment.

The two rotating blade holders that are both equipped with two freely movable blades guarantee a high speed of mulching at a very low level of power.

Technica data:	width 45" - 61"	width 49" - 69"	width 55" - 75"	width 63" - 83"
Weight, lbs:	1256	1278	1410	1477
Power Required, HP	50-70	50-70	50-70	50-70
Length, in:	55"	59"	63"	67"

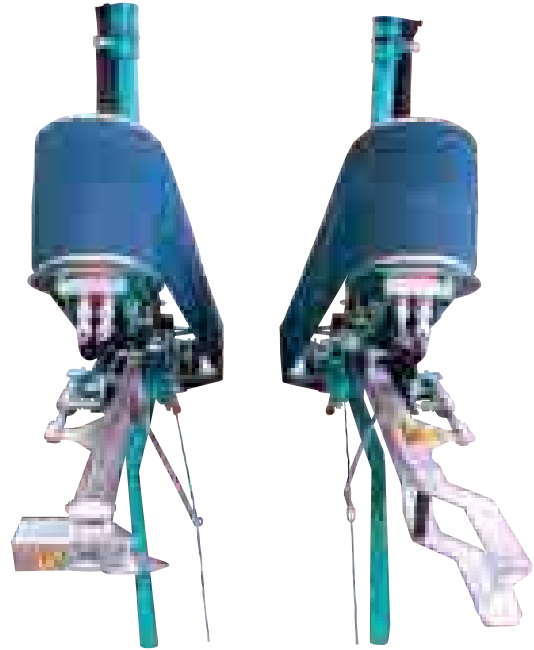


# VINE CARE

## 39 SHOOT BINDER

- LIGHTWEIGHT! The shoot-binder only weighs approx. 355 lbs
- ADAPTABLE! To all kinds of vineyards
- EASY! To use, maintain and adjust!
- ECO-FRIENDLY! Concept with biodegradable clips
- VERSATILE! A machine that was also developed for the use of bio-

- degradable yarn and operation on various machines (tractors, light-weight caterpillars...)
- GENTLE! Gently raises the tendrils, high-powered raising of foliage without hurting the vines.



### Technical data:

- weight: approx. 355 lbs
- working speed: +/- 3 mph
- magazine capacity for clips: 300 pieces
- yarn brake for initial tension
- biodegradable clips
- built-in block to control motion function
- hydraulics: 1x single-acting with at least 12 liters and pressureless return + 1 double-acting for the lift mast



## 40 TRIMMER SINGLE-SIDED OVERROW & TWO-SIDED L VARIABEL PLUS

### Standard equipment singled-sided:

- manual side adjustment
- Manual cutting width adjustment up to 27"
- mechanical angle adjustment completely cutter bar 30° right/left
- manual angle adjustment horizontal cutter bar 90°
- manual height adjustment horizontal cutter bar 16"
- manual transport position horizontal cutter bar
- start-up collision for vertical cutter bars
- Start up collision horizontal cutter bar with gas spring
- assign from wire polychrome sickle knife
- oil requirement 20l/min, working pressure 150 bar
- connections required: 1 x sa, 1 x pressure free return line



### Standard equipment two-sided:

- manual width adjustment line width 4.7" - 11.5"
- mechanical angle adjustment completely cutter bar 30° right/left
- manual angle adjustment horizontal cutter bar 90°
- manual height adjustment horizontal cutter bar 16"
- manual transport position horizontal cutter bar
- start-up collision for vertical cutter bars
- automatic accrual with gas spring
- assign from wire polychrome sickle knife
- oil requirement 20l/min, working pressure 150 bar
- connections required: 1 x sa, 1 x pressure free return line, 12 V electrical support



# VINE CARE

## 41 LEAF REMOVER SINGLE-SIDED

### Standard equipment:

- parallelogram impact protector
- speed adjustment for perforated roller
- hydraulic hoses 98"
- rubber roll with 23 disks
- steel propeller
- steel deflector
- perforated roll
- cover of bedding below
- lubrication of bedding below
- cover of cleanig grooves
- hoses for leakoil of fanmotor with collecting reservoir
- connections required 1 x sa, 1 x return line



### Technical data:

Oil flow: 5 gpm  
Weight: EL50: 110 lbs



## 42 PRE PRUNER CORDON-TRAINED VINES

### Standard equipment:

- disc diameter 17.5"
- frame with cutting discs
- control block / manual trigger
- protective flaps at rear / protective discs in front
- central mounting, 1" dia,
- for 12 V supply
- connections required 1 x sa, 1 x return line



### Technical data:

Oil flow: 5-6 gpm to a cordon cut (variable depending  
Cutting height: from 20" on model selected)



# PLOUGH for vine removal

## 43 MODEL M1 AND G1

### Technical data:

	Model M1	Model G1
Pull power requirements:	from 110 HP	from 136 HP
Weight:	approx. 2205 lbs	approx. 2535 lbs
Width of blade:	approx. 35"/39"	approx. 47"/51"
Work speed:	up to 6.21 mph	up to 6.21 mph

The models M II and G II are available with a second spin roll. To work with these models a four-wheel drive tractor is required. Further sizes are possible.



# NURSERIES technology

## 33 MODEL G1



### Technical data:

Pull power requirements:	from 66 KW/90 HP
Work speed:	3.1 mph
Length:	35" staggering up to +/-19"
Capacity:	single row max. 40.000 plants/h two rows max. 70.000 plants/h



Harvesting of single and double rows. Oscillating conveying attachment. Hydraulic models with own oil supply system. Disc coulter in tight rows. Videoeeye for the driver.

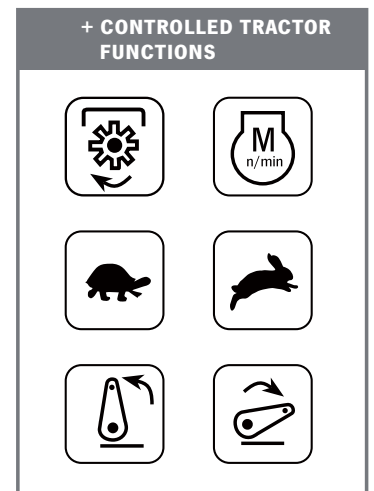
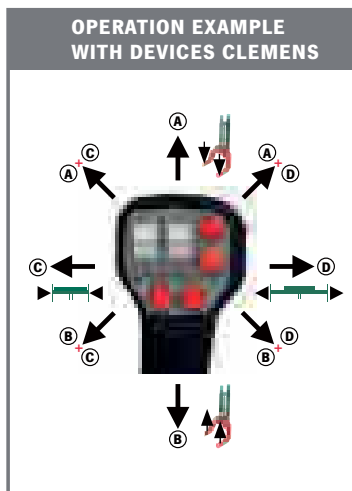
# C-CONTROL

## 44 THE EVOLVING HYDRAULIC CONTROL

The hydraulic control system C-CONTROL is operated via a touchscreen and a multifunctional joystick. C-CONTROL not only allows you to control all functions of the CLEMENS attachments, you can also use it for the regulation of certain tractor functions, such as the engine speed or the PTO drive.

C-CONTROL is designed for easy and fast programming and advanced in terms of current and future requirements. Due to its digital connectivity, we can always guarantee technical remote maintenance by the manufacturer, if desired by the user.

Versatile application possibilities, ergonomic design, progressivity: C-CONTROL is the intelligent control system, adapted to the current machines and tractors and prepared for future hydraulic and electrical developments.



# RECYCLE

## 45 GSG AN2

Saddle mount version: equipped with hydraulically driven cross-flow fans with a tank trailer.



### ADVANTAGES

- 35% - 40% less plant protection agent
- Saves time as several rows can be treated simultaneously
- Up to 99% less drift factor
- Greater selection of plant protection agents
- Allows for less distance for use to open waters
- Neighbor friendly due to better containment of chemicals versus other conventional sprayers
- The person applying is better protected
- A very high degree of intermediate sediment after every spraying
- Allows marketing 'environmentally friendly'

The most important advantage is the recovery of the chemicals that did not stay on the vine. They are filtered back to the tank and are reused again.

In springtime, the savings in chemicals can be up to 70%. During the vegetation period when the foliage is closed and dense, the savings can still be up to 20%. The average seasonal saving of approx. 40% is possible. Drift is reduced up to 99%. Using these machines is an enormous benefit to the environment, your vineyard, and your bottom line. This innovative technology applies the agent evenly from the sides with fan assist to ensure optimal application. The units can be operated at fast speeds due to wide track tires and telescoping balancing.

### Technical data:

L x W x H: 138" x 91" x 83"      Row width: 67" to 94"  
Distance adjustment: 8" - 43"      Weight: 992 lbs

## 46 GSG NV2

Trailer version: equipped with a hydraulically driven cross-flow fans.



### Technical data:

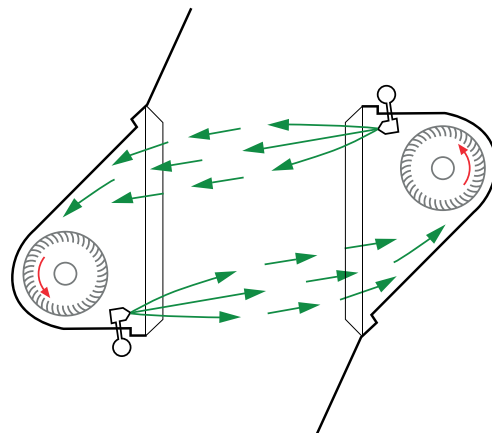
L x W x H: 94" x 94" x 98"      Row width: 67" to 94"  
Distance adjustment: 8" - 43"      Weight: 3086 lbs

# SPRAYING

## ■ SPRAYING DETAILS

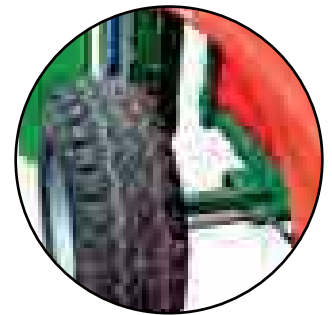
### RECYCLING: IT'S PAYING OFF

A new arrangement of the fans (suction side and pressure side are on opposite side) you use up to 40 % less chemicals and reach 95 % loss reduction.



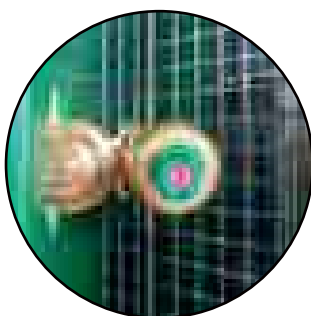
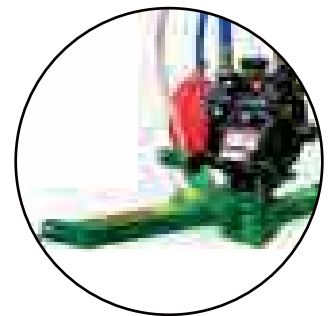
**ATTACHMENT OF FANS**  
Flexible pendulum suspension

**ADJUSTABLE AXLE**  
Optional: hydraulic axle adjustment to increase stability.



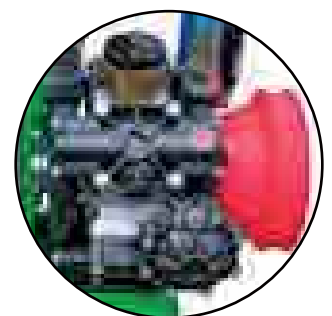
**RECYCLING TROUGH**  
Collecting tray with injector and screen to filter out big pieces

**DRAWBAR**  
The pump on all GSG trailer mount machines is mounted on the drawbar. This allows a tight turning radius with a standard PTO shaft.



**CROSS-FLOW FANS AS MODULAR SYSTEM**  
With hydraulic drive (infinitely variable), flat fan venturi nozzles individually adjustable.

**PUMP**



# KOBOLD

## 47 CANE PULLER

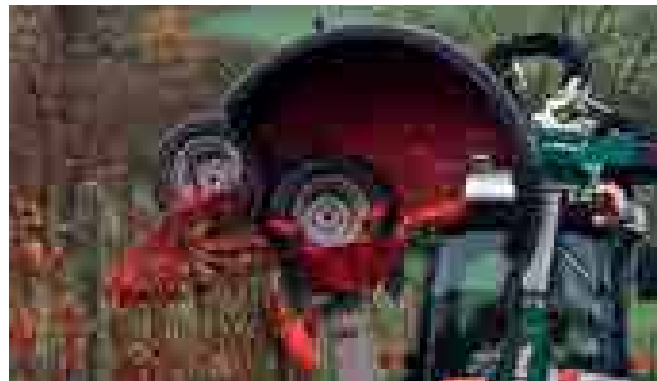
### ■ FUNCTION

The front mounted KOBOLD is placed above the vine row. A pair of finger wheels guides the vine wood, that has been cut off at the arch or the lead cane at the lower or fruiting wire, into the KOBOLD's catchment area while holding the tying up or top wire down so that it cannot enter into the machine. The brush wheels mounted in front of the tires center the rods, which allows a clean pulling in of the cut material. The rods are then guided to the center of the row by means of the hood and laid down. Optionally, the cover is equipped with a chopper, which crushes the drawn-out vine shoots before dropping them.

### ■ PREPARATION OF THE VINEYARD:

To ensure the function of the cane puller KOBOLD there are just two important preparations necessary:

1. The shoots have to be at least 14" higher than the highest wire.
2. The wire-frame has to be in a good condition and has to be as tight as possible



● Without chopper



● With chopper



## 48 MECHANICAL THINNING

**FLEXITREE**, a design also known as „Baum“ or „The Bonner“ for mechanical fruit load regulation. Based on the development by Dr. Damerow and Dr. Blanke and protected by international patent, the FLEXITREE is now produced by CLEMENS in Germany.

In heavily flowering fruit trees, FLEXITREE can remove excessive undesired flowers in pome and stone fruit trees by using several rotors with elastic strings. This application reduces the use of chemicals designated as phytohormones. The objective is to remove individual flowers of the flower cluster in order to improve fruit quality (fruit size, fruit color and sugar content). FLEXITREE offers a wide variety of options to adjust the device and its rotor to different tree heights and shapes and is particularly suited for tall and slender spindles, central leader and fruit wall.

### HYDRAULIC REQUIREMENTS

- 1 x d-a for lifting pole
- 1 x d-a for angle adjustment for Lift pole ATLAS
- 1 x d-a for hydraulically width adjustment (optional)
- 1 x s-a with pressure free Return line and oil flow divider

### BENEFITS

- healthy fruit
- fast and efficient flower thinning e.g. at the balloon stage
- improved fruit coloration
- low cost, long-term investment
- combination with aero canopy trimmer
- wide range of three dimensional individual adjustments



● Action



● Details

HAVE A LOOK ON VIDEOS:  
[WWW.CLEMENS-ONLINE.COM](http://WWW.CLEMENS-ONLINE.COM)



# PRODUCTION

## ■ EFFICIENCY ON SITE

Our location in Wittlich (Germany), with more than 120 employees and more than 25 young people as apprentices, makes it possible for us to produce unaffected from mass production and efficient as well as reacting quickly on the always changing market demands. With a permanently modernized plant, well trained employees and selected materials we are able to carry out a variety of jobs in highest quality including cutting, plasma burning, turning, milling, drilling, welding, painting as well as assembling of hydraulic, pneumatic and electronic controlling systems. All this know-how and qualified employees allow us the production of machines for viticulture with highest quality and reliability for more than 62 years.





After the origin in serial production of machines for viticulture, CLEMENS is also profiled in the field of design and construction of stainless steel tanks, customized installations of wine cellars and the conception and the construction of special machines for individual needs.



FOR SUCCESSFUL VINEYARD MANAGEMENT

# HISTORY

## CLEMENS

■ Since its foundation in the year 1952 by Bernard and Mathias Clemens, the CLEMENS Company has been producing vineyard and agricultural machines with superior strength and durability. The company is family owned and is represented today by Thomas and Bernhard Clemens, both sons of Bernard. CLEMENS develops, manufactures and distributes high quality, unique and innovative products like the RADIUS Around-the-vine Weeder, HEXAGON, a strong utility frame for different cultivation tools, the automatic steering system VINESCOUT and ROTARY BRUSH for sucker removal, and several more machines for various applications. CLEMENS machines are the key to successful vineyard management. Besides special services for winery technologies, we also supply special tank-designs with equipment and materials based on the customer's demand. Individual tasks are always taken care of with total dedication, to ensure our client's needs are fulfilled. More than 70% of all products are exported all over the world, which shows the strength and demand of our machines. Currently CLEMENS is represented in more than 35 countries.



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