# TECHNOLOGY FOR ROW CULTURES





# **A** FRAME

### IFRAME AR1 / AR2





The A-Frame is a tool carrier frame with mechanical width adjustment to attach the CLEMENS RADIUS SL for working light soil, MULTI-CLEAN for weed control or the ROTARY BRUSH for cleaning out the suckers. The frame is mountable in front or rear. The frames are available in two different sizes (AR1 and AR2) for row working widths from 1,40 to 2,90 meters.

Technical data: AR1 (CAT. 0) AR2 (CAT. 1)

Weight in kg (Frame only, without tools)
Dimensions L x W x H (Frame only)
For row working widths with Radius blade (mm) 370/500/620

85 kg 600 x 650 x 775 mm 1455-2185/1735-2465/1975-2705 100kg 775 x 1000 x 600 mm 1770-2770/2050-3050/2290-3290



# SB FRAME



### 2 SB COMPACT FRONT AND REAR MOUNTING (PICTURE REARMOUNTING, FRONTMOUNTING ALSO AVAILABLE)



### SB 2 FRONT AND REAR MOUNTING (PICTURE FRONT- AND REARMOUNTING)



Light 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 1,30 to 3,20 m, width widening up to 3,60 m - depending on the tools.

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

Weight (kg) (frame only) Dimensions L  $\times$  W  $\times$  H (mm) (frame only) For row working widths with Radius blade 370 mm/500 mm/620 mm

### SB COMPACT SB 2

144 kg 170 kg 615 x 740 x 730 mm 615 x 1010 x 730 mm 1460-2000/1740-2280/1980-2520 1720-2720/2000-3000/2240-3240



# SB MONO

### **4 ONE-SIDED FRAME**



**SB MONO** 

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 500 mm, from 960 to 1460 mm.

### **Technical data**

### Weight (kg) (frame only) 120 kg Frame width 960 mm Extension 500 mm



# SB ORCHARD



### **TOOL CARRIER FRAME FOR LARGE ROWS**



**Technical data** 

**SB ORCHARD** 

Weight (kg) (frame only)

Frame width

Extension

225 kg

2258 mm

1000 mm

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. It is also advantageous for the work in Chevron shaped rows or in end rows. By lifting the side that is not being worked on, machines and headland are spared.

### NOTE:

At SB ORCHARD one has to consider the width for road transport, in this example approx. 2950 mm!



# HEXAGON



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

### **UNIVERSAL**



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

Technical data:		HEXAGON 723	HEXAGON 729	HEXAGON 724
Hexagonal base frame with hydr. change in width with chisel and wing share with chisel and wing share	Frame width	685 mm	825 mm	1140 mm
	Frame width	785-1185 mm	925-1460 mm	1240-2100 mm
	Working width	1185-1585 mm	1325-1860 mm	1640-2500 mm
	Row width	1500-1900 mm	1600-2150 mm	2000-2900 mm
with Radius SL blade 370 mm	Row width	1505-1905 mm	1645-2180 mm	1950-2820 mm
with Radius SL blade 500 mm	Row width	1785-2185 mm	1925-2460 mm	2240-3100 mm
with Radius SL blade 620 mm	Row width	2025-2425 mm	2165-2700 mm	2480-3340 mm

Widening possible in 400 mm steps. Height 1600 mm, length 1400 mm, weight according to equipment



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



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



### IMPLEMENT CARRIER

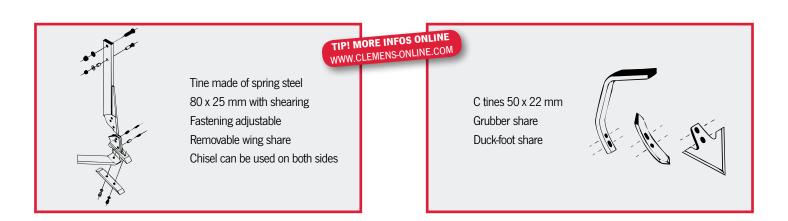


Front or rear mounted and also usable as a grubber. Implement carrier for the hydraulic Around-the-vine weeder RADIUS or Rotary Brush.

### **III DEEP FERTILIZATION**



Through the well directed 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.



### **EXECUTE EXECUTE EXECU**



The ECO-ROLL knocks down the stalks, thereby producing a carpet of mulch that encourages good shaded composting.

### **■ LOOSENING + VENTILATING**



C-tines made of spring steel for soil tilling with grubber or duck-foot share. Various combinations make soil cultivation possible all year round.

## TERACTIV

### FOR ACTIVE SOILS



Extremely solid cultivator for soil cultivation in difficult soil conditions. The special kinematics of the mechanical NON-STOP overload protection works actively and loosens the soil. Thanks to the special share form, the tools retract quickly. Existing organic mass can be worked in effectively and mixed intensively. Options for the device are a hydraulic steep-lift of 75°as well as widening in 500 mm grids and RADIUS weeders.

### Technical data:

Weight (kg) (without accessories): 260 Working width with Radius SL blade 370 mm: 1800 bis 2300 mm Overload protection: non-stop Dimensions LxWxH (mm): 2320x1070x1085 Working width with Radius SL blade 500 mm: 2100 bis 2600 mm Oil pressure: 175 bar Working width with Radius SL blade 620 mm: 2300 bis 2800 mm Steep-lift: 75°



### TERACTIV DUO

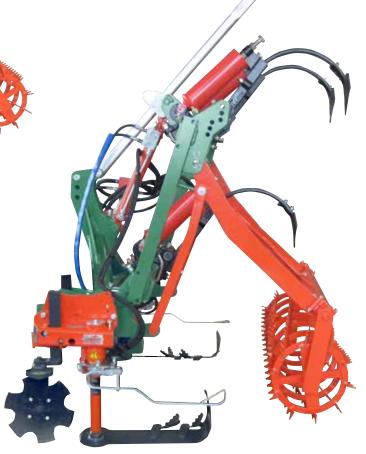


### **ID ONE FRAME - TWO SOLUTIONS**



The difference between the TERACTIV DUO and the TERACTIV is that you can work along a grass track between the vines without cultivating. To make this possible, the frame with its flexible tines lifts up at an angle of 75 degrees and the roller folds under. Thus the frame is stabilized when working in the area between vines, as it rests on the grass track. 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 1,10 to 1,60 m (models that can extend to 2,10 m 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 the width of the frame and how loose you want the soil. For row widths: 1,80 to 2,80 m, with extensions up to 3,30 m.





## RADIUS SL

### **III** WITH ROTARY TILLER

### **WITH CLEARING SHARE**



RADIUS Around-the-vine weeder is the environmentally friendly alternative to chemical weed control. The weeds rot in a natural manner. Less drought stress through destruction of the capillaries. Soil activation and promotion of optimum soil condition. Sensitive sensor technology for clean work around the vine. Rear, mid- and front mounting possible, 1 or 2 sided versions. Versatility through different tools in front of the blade and additional devices.

### **Technical data:**

Oil quantity/device required: 6 – 10 l/min with rotary weed clearer/device: 21 – 25 l/min

working depth: 50 – 100 mm working speed: 5 – 10 km/h

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

blade length: 370/500/620 mm

weight: 33 kg

**Optional side slope correction** 



### RADIUS SL +



### **B** RADIUS SL PLUS

The RADIUS SL PLUS (i.e. transition/ changeover shaft) uses the approved technology based on the RADIUS SL. In addition, the supplement of springs and the replacement of the shaft allow the installation of various attachments. With the help of adapters, the following attachments are quickly installed:

### - RADIUS BLADE

This feature should be used when no additional attachments are required in the area to be worked. The RADIUS SL is still worked with. For all attached tools the triggering off takes place through a feeler.

- RADIUS BLADE in combination with a rotary cultivator With this combination, the ground is broken up by the blade first and afterwards split and partly put away by the rotarycultivator, depending on the rotary speed. If the rotary cultivator is spinning too fast, too much soil possibly be thrown into the row.

Hydraulic requirements for double-sided installation:

Radius SL PLUS: max. 15 liters Rotary Cultivator: max. 35 liters



### Technical data:

Oil requirement RADIUS: 6 – 10 I/min With rotating tools: 20 – 30 I/min Diameter mower: 400 mm Working depth: 50 – 100 mm Working speed: 5 – 10 km/h Weight RADIUS: 35 kg env. Weight Driven Discs: 40 kg Weight Rotary Cultivator: 23 kg Share lengths: 370 / 500 / 620 mm



# ACCESSORIES

### 19 HYDRAULICLY DRIVEN DISCS SUPLUS



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 placement of slurry and dung. In addition to the sensor rod, the disc unit is equipped with a deflecting rail, which pushes the unit away from the vine in case the sensor rod is not triggered, thus preventing injuries and damages to the plant.

### **Technical data Rotary Cultivator:**

Oil requirement Rotary Cultivator: 30 liters Weight: 23 kg

### **Technical data Driven Discs:**

Oil requirement Driven Discs. 15 litres Weight: 40 kg



### FOR RADIUS SL+ CLEMENS TECHNOLOGIE



### 20 MOWER SLPLUS

The mower (Ø 400 mm) pivots hydraulically between the vines, there to mulch the vegetation with two knife blades. A protecting ring around the support disk prevents the vine from being damaged.



### **Technical data Mower:**

Oil requirement Mower: 20 litres Weight: 38,5 kg

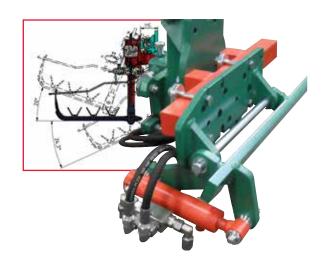




# ACCESSORIES

### 21 SIDE SLOPE CORRECTION 51 & SLPUS

### 22 SOIL & STONE DEFLECTOR SL& SLPLUS





With the slide slope correction you can change the angle of the RADIUS to adapt the position perfectly to the condition in slopes. You can choose between hydraulic or mechanical versions. This unit can be mounted on the tool carriers HEXAGON & SB Frames and also on the column lifters S-2 and S-5.

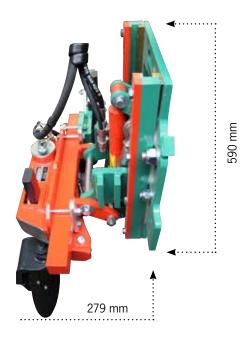
The soil & stone deflector is mounted behind the RADIUS to keep the cover crop clean of soil and stones. It comes with a parallel-ogram for ground adaptation. Different adjustment possibilities allow flexibility to achieve desired results.



## FOR RADIUS



### 23 COMBI-LIFTER SL& SLPLUS



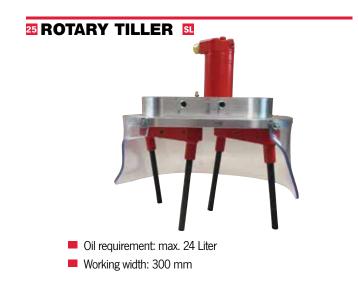
Compact lifter and side slope correction. You can choose between mechanical or hydraulic side slope adjustment. Mountable on HEXAGON and SB-FRAMES.

- Angle adjustment 22°/28°
- Lifting height 300 mm

### 24 SENSING SHARE SL& SLPLUS



■ To mount on the blade 370/500/620 mm





# GSP DISC

### 26 GSP ø 450 mm



- simple operation for weeding under the vines
- can be adapted to any soil type
- high driving speed
- long-term weed control can be achieved by mulching
- even water consumption because the capillaries are broken
- reduces most if not all herbicide





# FINGER ROLLER



### 27 FINGER ROLLER

Integrated angle adjustment as is also the case with the disc harrow.

The exterior angle can also be altered with no problems by reinserting the locking pins. Good distribution of force due to the different disc dimensions for the exterior and interior sprockets.

As a result, both discs work in a sloped working angle at the same level.

In comparison to the disc, we avoid creating a clear edge which can become a water channel on a steep slope.



### Technical data:

Disc thickness: 8 mm Forward speed: between 7 and 8 km/h Diameter external disc: 400 mm Diameter internal disc: 340 mm

Adjustment axes: 2 Option: deflector



### FINGER HOE

### 28 DISQUE ø 370, 540, 700 mm

In particular for young plantations or in existing plantations with very crooked stems in which more safety from the sensor is required, the finger hoe works directly around the plant and breaks up the island (also called the shadow) to gently remove the soil and weeds directly around the vine. Due to the special rubber compound, we work gently and with low wear. NOTE: In sandy soil, the finger hoe can also be used as an individual device. This is not possible in harder conditions. The finger hoes are available in various versions and different levels of stiffness

and are driven in combination with a variety of machines for the undergrowth.





### **Technical data:**

Diameter 370 mm, colour: green, stiffness: hard

Diameter 540 mm, colour: green, stiffness: hard Diameter 540 mm, colour: yellow, stiffness: medium

Diameter 700 mm, colour: green, stiffness: hard Diameter 700 mm, colour: yellow, stiffness: medium

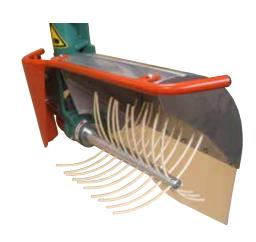


# MULTICLEAN



### **44 MULTICLEAN**







The mulching brush has very strong and smooth cords that protect the vine. The conical aluminum shaft operates smoothly and with little vibration because of its special shape. It is therefore possible to carry out weeding effectively at 1100 rpm. With the MULTI-CLEAN you can remove both the vine buds and the weeds simultaneaously with one machine.

Technical data: Multiclean Multiclean XL

40 kg 52 kg Weight: 1100 rpm Rpm: 1500 rpm 580 mm (slope 37,5°) 580 mm (slope 37,5°) Cleaning height: Slope: 0 - 37,5° (in steps of 7,5°) 0 - 37,5° (in steps of 7,5°) Dimensions L x B x H: 760 x 380 x 510 mm (without protection) 1060 x 370 x 520 mm (without protection) Oil requirements - single sided 16 - 24 I/min 16 - 24 I/min - double sided 16 - 24 I/min - in line Minimum 30 I/min - two lines



### **S**-5

### **COLUMN LIFTER**



- 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
- Available in right or left hand side versions
- 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: 540 mm + optional 200 mm mechanical





### Technical data:

Weight - without tools kg 50

Dimensions (in) length x width x height: mm 700 x 200 x 1000

Stroke (maximum): mm 500

# 3-POINT + S2



### 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 COM-PACT, 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:

Dimensions (mm): Length x Width x Height:

Stroke of S2:

Carrying capacity

80 kg

320 x 600 x 800

500 mm

700 kg







# ATLAS

### **122 LIFT POLE**

The ATLAS mast is characterized by the hexagonal profile proven with the HEXAGON frame. Due to its constru-

tion 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: 100 kg ■ Stroke: 950 mm

■ Lateral inclination: 26/18°

■ Hydraulic widening 400mm (Option)

■ Adaptability of attachments of all brands





# HERKULES



### **SECULTIVATOR**

Versatile capabilities and ruggedness are the main points of the HERCULES. The frame is double extendable and covers a wide working width of 1,45 to 2,70 m (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 is ready to work in the toughest conditions.



### **Technical data:**

Weight (without attachments) Frame width:

Widening (without attachments):

440 kg 1100 mm 1450 - 2700 mm



# STEM CLEANING

TIP! MORE INFOS ONLINE WWW.CLEMENS-ONLINE.COM

### 22 SPRAY CHAMBER



### **48 ROTARY BRUSH**



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, I/ha: 100 - 300
Area capacity/hour: approx 2,5 acres
Weight, kg: 25

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

### **Technical data:**

Working height (with 22.5° tilt), mm: 580
Oil requirement, I/min: 16 - 24
Weight, kg: 39





### ECO-ROLL

### 22 ALTERNATIVE TO MULCHING

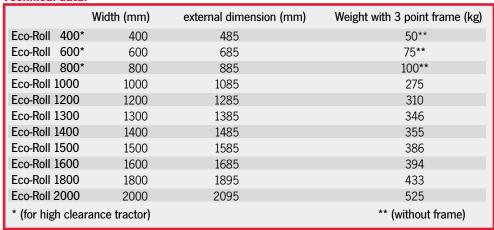
The BIO Mulch Roller ECO-ROLL is the alternative to mulching. The roller can be transported easily as part of any process.

ECO-ROLL compresses the vegetation as the spades fitted to the roller bend and knock down the stalks, thereby producing a carpet of mulch that encourages good shaded composting. The plants then grow through and produce the next carpet of organic material. With legumes, this method stimulates the growth of the rhizobia and increases nitrogen fixing. Standard width: 1000, 1200, 1400, 1600, 1800, 2000 mm. Width 600 and 800 mm are for high clearance tractor.











VIII.	X.1.4	

## POWER HARROW

### WITH CAGE ROLLER AND SEED DRILL

### 28 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:	1155	1425	1695	1915	2135	1030	1425	1695	1915	2135
Nbr of rotors:	4	5	6	7	8	4	5	6	7	8
Weight (kg):	533	618	678	733	788	618	703	778	846	913

Input speed, rpm: 540 Power requir. HP/kW: 40/30

### **SUBSOILER**

### **29 TLK 883 1-SHANK**



### Technical data:

Working depth max. mm: 600 Power HP/kW: 40/30 Width of the vibrating share, mm: 360 Weight, kg: 260

### **50 TRACTOR TRACKS**



Very good for breaking-up vehicles tracks, especially in the case of green areas. Subsoiling shares for optimal subsoil loosening.

# MULCHER TV CLEMENTECHNO.







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 equiped with two freely movable blades guarantee a high speed of mulching at a very low level of power.

Technica data:	width 115-155	width 125-175	width 140-190	width 160-210
Weight, kg	570	580	640	670
Power Required, HP	50-70	50-70	50-70	50-70
Length cm	140	150	160	170



### TECHNOLOGY FOR

### **SHOOT BINDER**

Through the three-dimensional adjustment, the shoot binder can be tailored to the multiple varieties and the design of your vineyard with simple adjustment.



### **Technical data:**

Oil flow: 10 - 20 I/min Hydraulic pressure: 155 bar Weight: appr. 62 kg Work speed: up to 7 km/h

### 39 TRIMMER

Clemens Trimmers offer an impressive range of standard features and options from the single inverted L shape right through to the Dual mast Dual over row designs shown below.



### **Technical data:**

Oil flow: 10 I/min Weight: 39 kg Vertical cutters: from 120 to 190 cm Horizontal cutters: from 30 to 66 cm



# VINE CARE



### **10** LEAF REMOVER

Clemens Leafers can defoliate and blow clean the flower cluster at the same time with optional duo fan. This reduces the fungal infection not only in the grape zone but also in the grapes themselves.



### **11** PRE PRUNER

Due to its modular design, the prepruner can be compiled or modified to suit exactly the conditions in your vineyard.



### **Technical data:**

Oil flow: 22 I/min We offer different sizes: Weight: EL30: 30 kg, EL50: 50 kg EL 30=30 cm / EL 50=50 cm

### **Technical data:**

Oil flow: 22-25 I/min to a cordon cut (variable depending Cutting height: from 50 cm on model selected)



# PLOUGH for vine removal

### 32 MODEL M1 AND G1

### **Technical data:**

Model M1Model G1pull power requirementsfrom 110 HPfrom 136 HPweight, kg:app. 1000app. 1150Width of bladeapp. 900/1000 mm1200/1300 mmWork speedup to 10 km/hup to 10 km/h

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 C1



### **Technical data:**

pull power requirements from 66 KW/90 HP

Work speed: 5 km/h

length of plant: 900 mm staggering up to +/-480 mm capacity range: 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. Videoeye for the driver.

# PLANTING machine



### **IPS DRIVE**

### **Technical data:**

Capacity range: 1200 – 1800 plants/h

Power requirement, KW/HP: over 60 / 81 Weight, kg: 1600

The IPS-DRIVE is the result of an intelligent conjunction of the possibilities of satellite technology with a planting machine, and is usable for multiple tasks in any terrain.



### 35 UNIVERSAL VII



L X W X H 210 x 170 x 220 cm

Work speed: depends on conditions appr. 2,5 km/h

Weight,kg: app. 380

**Technical data:** 

Oil: 25 I/min. Oil via a snap-in valve is required

Light weight planting machine for replanting, planting in the vine nursery and planting with roots in vineyards. For narrow track tractors from 47 HP.

### RECYCLE

### 36 GSG AN2

Saddle-mount fan with tank trailer



### **ADVANTAGES**

1.

The most important advantage is the recovery of the chemicals that did not stay on the vine. They are pumped back to the tank and are reused again. In springtime the savings in chemicals can be up to 70% while later during the vegetation period when the foliage is closed and dense the savings can still be up to 20%. So throughout the season a saving of approx. 40% is possible.

### 2.

Less drift factor up to 99% at the beginning of the season. With this machine offering better application, it is possible to work longer before having to refill the tank.

### 3.

With a tunnel system you are able to work more independent from wind and weather. With more than 15 years of experience in producing of spraying technologies, LIPCO is among the leaders in this technology.

### **Technical data:**

L x W x H: 350 x 230 x 210 cm Distance adjustment: 20 - 110 cm Row width: 170 to 240 cm

Weight: 450 kg

### 37 GSG NV2

A new series in crop protection, equipped with hydraulically driven cross-flow blowers



L x W x H: 240 x 240 x 250 cm Distance adjustment: 20 – 110 cm Row width: 170 to 240 cm

Weight: 1400 kg

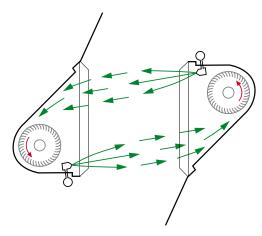
# SPRAYING



### 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 plant protection agent and reach 95 % loss reduction.



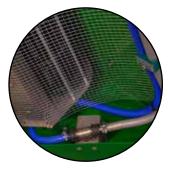


ATTACHMENT OF FANS Flexible pendulum suspension

### ADJUSTABLE AXLE

When type NV (hydraulic equipment and stroke 2x300 mm optionally). The wheels can be adjusted infinitely variable to the maximum possible width in the row. Thus silent running. While driving on the road, the axle is adjusted to the maximum width (about 2 m / 78.74 in.).





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

### **DRAWBAR**

The plant protection agent pump of all GSG trailermount machines is mounted on drawbar. This permits a maximum angle of turn without wide angle cardan shaft.

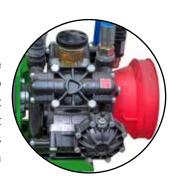




CROSS-FLOW FANS AS
MODULAR SYSTEM
With hydraulic drive (infintely variable), flat fan venturi nozzles individually adjustable.

### OWN HYDRAULIC

By using 6 cross-flow fans or more the hydraulic equipment (pump capacity I/min.) of tractor is not sufficient anymore that means that a gear drive with 2 oil pumps has to be attached to the drive through of the plant protection agent pump.



### KOBOLD

### 48 CANE PULLER

### 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.

### 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.



Without chopper



With chopper



## FLEXITREE



### 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.



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







Details



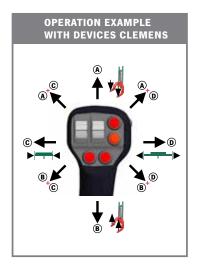
### C-CONTROL

### 11 THE EVOLVING HYDRAULIC CONTROL

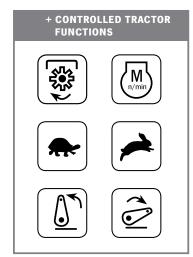
The hydraulic control system C-CONTROL is operated via a touchscreen and a multifunctional joystick. C-CONTROL not only allows you to control all functions of the CLEMENS attachments, you can also use it for the regulation of certain tractor functions, such as the engine speed or the PTO drive.

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.









### PRODUCTION CLEMENTECHNOL



### ■ 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.











### PRODUCTION



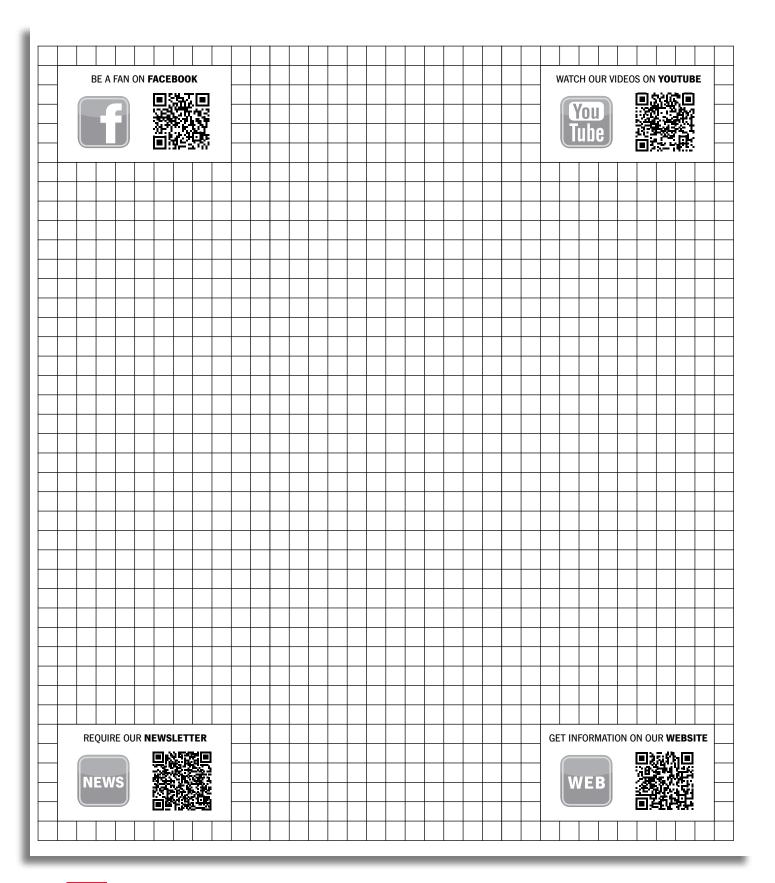


After the origin in serial production of machines for viticulture, CLEMENS is also profiled in the field of design and construction of stainless steel tanks, customized installations of wine cellars and the conception and the construction of special machines for individual needs.





# NOTES AND DRAWINGS



# 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 automatical 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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