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 58” to 118”.

### Technical data

<table>
<thead>
<tr>
<th></th>
<th>AR1</th>
<th>AR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight in lbs (Frame only, without tools)</td>
<td>188 lbs</td>
<td>220 lbs</td>
</tr>
<tr>
<td>Dimensions L x W x H (Frame only)</td>
<td>30”x25”x23”</td>
<td>30”x39”x30”</td>
</tr>
<tr>
<td>For row working widths with Radius blade 14in/20in/24in</td>
<td>58”-86”/68”-97”/78”-106”</td>
<td>71”-99”/81”-115”/91”-118”</td>
</tr>
</tbody>
</table>
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. SB1 and SB2 are available in two different widths for cultivating rows from 51 to 126 inches, width widening up to 140 inches - depending on the tools.

SB MONO the one hand sided solution for different row widths with hydraulic width adjustment of 20 inches (picture below).

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

<table>
<thead>
<tr>
<th></th>
<th>SB 1</th>
<th>SB 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (lbs) (frame only)</td>
<td>198 lbs</td>
<td>375 lbs</td>
</tr>
<tr>
<td>Dimensions L x W x H (in) (frame only)</td>
<td>22 x 24 x 24</td>
<td>24 x 40 x 29</td>
</tr>
<tr>
<td>For row working widths with Radius blade 14in/20in/24in</td>
<td>51&quot;-67&quot;/61&quot;-77&quot;/71&quot;-87&quot;</td>
<td>68&quot;-108&quot;/77&quot;-117&quot;/87&quot;-126&quot;</td>
</tr>
</tbody>
</table>
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.

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

### Technical data:

<table>
<thead>
<tr>
<th>Hexagonal base frame</th>
<th>Frame width</th>
<th>HEXAGON 723</th>
<th>27 in</th>
<th>32 in</th>
<th>45 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>with hydr. change in width</td>
<td>Frame width</td>
<td>31-46 in</td>
<td>36-57 in</td>
<td>49-83 in</td>
<td></td>
</tr>
<tr>
<td>with chisel and wing share</td>
<td>Working width</td>
<td>47-162 in</td>
<td>52-73 in</td>
<td>64-98 in</td>
<td></td>
</tr>
<tr>
<td>with chisel and wing share</td>
<td>Row width</td>
<td>59-75 in</td>
<td>63-85 in</td>
<td>79-114 in</td>
<td></td>
</tr>
<tr>
<td>with Radius SL blade 14 in</td>
<td>Working width</td>
<td>61-77 in</td>
<td>67-88 in</td>
<td>80-112 in</td>
<td></td>
</tr>
<tr>
<td>with Radius SL blade 20 in</td>
<td>Working width</td>
<td>71-86 in</td>
<td>76-97 in</td>
<td>88-122 in</td>
<td></td>
</tr>
<tr>
<td>with Radius SL blade 24 in</td>
<td>Working width</td>
<td>80-95 in</td>
<td>85-106 in</td>
<td>98-132 in</td>
<td></td>
</tr>
</tbody>
</table>

Widening possible in 16 in steps. Height 63 in, length 55 in, 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 Radius around-the-vine weeder or rotary brush.

**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.

**CARRIER FOR BIO MULCH ROLLER**

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.

TINE S SPECIFICATIONS:

- Tine made of spring steel
- 3" x 1" with share
- Fastening adjustable
- Removable wing share
- Chisel can be used on both sides

C tines 2" x 1"
- Grubber share
- Duck-foot share

TIP! MORE INFOS ONLINE
WWW.CLEMENS-ONLINE.COM
Narrow all-purpose plough with hydraulic width adjustment. It is particularly suitable for use in nurseries, in vineyards with narrow spacing between rows and for other row crops.

- robust frame construction
- hydraulic width adjustment
- optional supporting roller
- little power required
- mounting bars at the sides, e.g. for all-around weeders

### Technical data:

<table>
<thead>
<tr>
<th></th>
<th>PR7</th>
<th>PR9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine width, in</td>
<td>32</td>
<td>61</td>
</tr>
<tr>
<td>Machine length, in</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Machine height, in</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Weight, lbs:</td>
<td>441</td>
<td>551</td>
</tr>
<tr>
<td>Frame adjustment, in:</td>
<td>32 - 53*</td>
<td>61 - 67*</td>
</tr>
<tr>
<td>Working width, Radius external, in:</td>
<td>65 - 87**</td>
<td>79 - 100**</td>
</tr>
<tr>
<td>Working width, Radius internal, in:</td>
<td>54 - 75**</td>
<td>not possible</td>
</tr>
</tbody>
</table>

*measured from the outer edges of the bar  ** with mounted Radius units with size 14" shares
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 20" grids and RADIUS.

**Technical data:**

- Weight (lbs) (without accessories): app. 573
- approx. dimensions LxWxH (in): 91 x 42 x 43
  (width outside par edges, retracted state)
- Working width with Radius SL blade 14 in: 71 to 91 in
- Working width with Radius SL blade 20 in: 83 to 102 in
- Working width with Radius SL blade 24 in: 91 to 110 in
- Overload protection: non-stop
- Oil pressure (psi): 2538
- Steep-lift: 75°
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. This stabilizes the frame 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 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 the width of the frame and how loose you want the soil. For row widths: 71" - 91".
RADIUS round-the-vine weeder is the environmentally friendly alternative to chemical weed control. The weeds rot in a natural manner. Less dry 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: 1.6 - 2.6 gal/min
- with rotary weed clearer/device: 5.5 - 6.6 gal/min
- working depth: 2 - 4 in
- working speed: 3 - 6 mph
- blade length: 14 / 20 / 24 in
- weight: approx. 72 lbs
- universally mountable, also on already existing cultivators, flail mowers, hydraulic rotary harrow, etc.

Tip! More Infos Online
WWW.CLEMENS-ONLINE.COM
ACCESSORIES FOR RADIUS

18 SIDE SLOPE CORRECTION

With the slide slope correction you can change the angle of the RADIUS to adapt the position perfect 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 or also on the column lifters S-2 and S-5.

19 SOIL & STONE DEFLECTOR

The soil & stone deflector will be mounted behind the RADIUS to keep the cover crop clean of soil and stones. It comes with a parallelogramm for ground adaption. Different adjustment possibilities allows flexibility to achieve desired results.

20 COMBI-LIFTER

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”
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: 21” + optional 8” mechanical

Technical data:

<table>
<thead>
<tr>
<th>Weight - without tools</th>
<th>lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (in) length x width x height:</td>
<td>inches</td>
</tr>
<tr>
<td>Stroke (maximum):</td>
<td>inches</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>27x8x39</td>
</tr>
<tr>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>
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, SB1, 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:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight without tools:</td>
<td>176 lbs</td>
</tr>
<tr>
<td>Dimensions (in) : Length x Width x Height:</td>
<td>12x23x31</td>
</tr>
<tr>
<td>Stroke of S2:</td>
<td>19 in. (max)</td>
</tr>
</tbody>
</table>
**LIFT POLE**

- Stroke: 37 in.
- Inclination: 26/18°
- Option: hydraulic width adjustment 16 in.

**HERCULES**

**CULTIVATOR**

Versatile capabilities and ruggedness are the main points of the HERCULES. The frame is double extendable and covers a wide working width of 57” to 106” (without the CLEMENS RADIUS). It can be used as the HEXAGON like an equipment rack or like a cultivator with a variety of tools. Due to the special shape, this frame is ready to work in the toughest conditions.
**POWER harrow**

**WITH CAGE ROLLER AND SOWING MACHINE**

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

**WITH PACKING ROLLER**

**Technical data:**

<table>
<thead>
<tr>
<th></th>
<th>TK100</th>
<th>TK130</th>
<th>TK150</th>
<th>TK175</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total width, in:</td>
<td>43</td>
<td>53</td>
<td>62</td>
<td>73</td>
</tr>
<tr>
<td>Working width, in:</td>
<td>43</td>
<td>52</td>
<td>61</td>
<td>72</td>
</tr>
</tbody>
</table>

Weight, lbs with cage roller: 979 1116 1294 1358
Weight, lbs with packing roller: 1254 1455 1554
Input speed, rpm: 540
Power requir. HP/kW: 40/30

**SUBSOILER**

**TLK 883 1-SHANK**

**Technical data:**

<table>
<thead>
<tr>
<th>Working depth max. in:</th>
<th>Power HP/kW:</th>
<th>Weight, lbs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>40/30</td>
<td>573</td>
</tr>
</tbody>
</table>

Width of the vibrating share, in: 14

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

<table>
<thead>
<tr>
<th>Technica data:</th>
<th>width 45-61</th>
<th>width 49-68</th>
<th>width 55-74</th>
<th>width 62-82</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, lbs</td>
<td>1014</td>
<td>108</td>
<td>1146</td>
<td>1433</td>
</tr>
<tr>
<td>Power Required, HP</td>
<td>50-70</td>
<td>50-70</td>
<td>50-70</td>
<td>50-70</td>
</tr>
<tr>
<td>Lenght inches.</td>
<td>55</td>
<td>59</td>
<td>63</td>
<td>67</td>
</tr>
</tbody>
</table>
MODEL M1 AND G1

Technical data:

<table>
<thead>
<tr>
<th></th>
<th>Typ M1</th>
<th>Typ G1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull power requirements</td>
<td>from 110 HP</td>
<td>from 136 HP</td>
</tr>
<tr>
<td>Weight:</td>
<td>app. 2205 lbs</td>
<td>app. 2535 lbs</td>
</tr>
<tr>
<td>Width of blade</td>
<td>app. 35/39 in</td>
<td>app. 47/51 in</td>
</tr>
<tr>
<td>Work speed</td>
<td>max 6.21 mph</td>
<td>max 6.21 mph</td>
</tr>
</tbody>
</table>

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

MODEL C1

Technical data:

<table>
<thead>
<tr>
<th></th>
<th>from 88 HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull power requirements</td>
<td>from 88 HP</td>
</tr>
<tr>
<td>Work speed:</td>
<td>3.11 mph</td>
</tr>
<tr>
<td>Length of plant:</td>
<td>35 in</td>
</tr>
<tr>
<td>Capacity range:</td>
<td>single row max. 40,000 plants/h</td>
</tr>
<tr>
<td></td>
<td>two rows max. 70,000 plants/h</td>
</tr>
</tbody>
</table>

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.
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.

### Technical data:

- **Capacity range:** 1200 – 1800 plants/h
- **Power requirement, HP/kW:** over 80 / 60
- **Weight, lbs:** 3530

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

### UNIVERSAL VII

#### Technical data:

- **L X W X H:** 83 x 67 x 87 in
- **Work speed:** depends on conditions appr. 1.5 mph
- **Weight, lbs:** app. 840
- **Oil:** 6.6 gal/min. Oil via a snap-in valve is required
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 able 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 experience in producing of spraying technologies, LIPCO is among the leaders in this technology.

**Technical data:**

<table>
<thead>
<tr>
<th>L x W x H: 138 x 91 x 83 in</th>
<th>Row width: 67 to 94 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance adjustment: 8 - 43 in</td>
<td>Weight: 990 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L x W x H: 94 x 94 x 98 in</th>
<th>Row width: 67 to 94 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance adjustment: 8 - 43 in</td>
<td>Weight: 3090 lbs</td>
</tr>
</tbody>
</table>
**Technical data:**

- Length of the tunnel wall: 49 in
- Max. row height: 87 in
- Tunnel width adjustment: 8 to 43 in
- Min. row width: Width of the tractor / trailer / saddle-mount
  + 32 in for the treatment of one row
  + 47 in for the treatment of two rows

---

**Technical data:**

- Tunnel lengths: 49 in
- Max. row height: 87 in
- Tunnel width adjustment: 8 to 43 in
- Row width: 71 to 94 in
- Weight: 1940 lbs
**SHOOT BINDER**

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

**Technical data:**
- Oil flow: 2.6 - 5.3 gal/min
- Hydraulic pressure: 2250 psi
- Weight: approx. 137 lbs
- Work speed: up to 4.3 mph

**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: 2.6 gal/min
- Weight: 86 lbs
- Vertical cutters: from 49" to 75"
- Horizontal cutters: from 12" to 26"
**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.

**Technical data:**
- Oil flow: 5.8 gal/min
- Weight: EL50: 110 lbs
- We offer different sizes: EL 50=20 in

---

**PRE PRUNER**

The pruner can be ordered to suit your vineyard due to the modular design. It can be ordered or modified to suit exactly the conditions in your vineyard.

**Technical data:**
- Oil flow: 5.8 - 6.6 gal/min
- Cutting high: from 20" to a cordon cut (variable depending upon model selected)
Drift-free application of contact herbicides for the rational removal of suckers. Additional benefit: Application of soil and leaf herbicides for weed control in the plant strip.

**Technical data:**

- Application quantity, gal/acre: 26/741
- Area capacity/hour: 2.5 acre
- Weight, lbs: 25

Simple mounting on column lift, front mounted, over-the-row frame, cultivator or hexagon. Swivelling path and spring pressure adjustable. Options: Water injection against dust, wire lifting device.

**Technical data:**

- Working height (with 22.5° tilt), in: 23
- Oil requirement, gal/acre: 17.25
- Weight, lbs: 86
The brush harvester has very strong and smooth cords that protect the vine. The conical aluminium 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 simultaneously with one machine.

<table>
<thead>
<tr>
<th>Technical data:</th>
<th>Multi-Clean</th>
<th>Multi-Clean XL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, lbs.:</td>
<td>88</td>
<td>115 kg</td>
</tr>
<tr>
<td>Rpm:</td>
<td>1100 1/min</td>
<td>1500 1/min</td>
</tr>
<tr>
<td>Cleaning height:</td>
<td>3.3&quot; (slope 37,5°)</td>
<td>23&quot; (slope 37,5°)</td>
</tr>
<tr>
<td>Slope:</td>
<td>0 - 37,5° (in steps of 7,5°)</td>
<td>0 - 37,5° (in steps of 7,5°)</td>
</tr>
<tr>
<td>Dimensions L x B x H:</td>
<td>30”x15”x20” (without protection)</td>
<td>41”x14”x20.6” (without protection)</td>
</tr>
<tr>
<td>Oil requirements</td>
<td>- single sided: 4.2 - 6.3 gal./min</td>
<td>- double sided: 4.2 - 6.3 gal./min - in line</td>
</tr>
</tbody>
</table>
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
**ALTERNATIVE TO MULCHING**

The NEW „ECO-ROLL“ BIO Mulch Roller 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: 39, 47, 55, 63, 71, 79 inches. Width 24 and 31 inches are for high clearance tractor.

**Technical data:**

<table>
<thead>
<tr>
<th>Width (in)</th>
<th>external dimension (in)</th>
<th>Weight with 3 point frame (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eco-Roll 400*</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>Eco-Roll 800*</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>Eco-Roll 1000</td>
<td>39</td>
<td>43</td>
</tr>
<tr>
<td>Eco-Roll 1200</td>
<td>47</td>
<td>51</td>
</tr>
<tr>
<td>Eco-Roll 1400</td>
<td>55</td>
<td>58</td>
</tr>
<tr>
<td>Eco-Roll 1600</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>Eco-Roll 1800</td>
<td>71</td>
<td>75</td>
</tr>
<tr>
<td>Eco-Roll 2000</td>
<td>79</td>
<td>82</td>
</tr>
</tbody>
</table>

* (for high clearance tractor)  ** (without frame)
**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 KOBOLD which is installed in the front will be driven over the vine row. A pair of finger wheels will take the vine wood which was released at the elbow from the bending wire and put it into the KOBOLD. There the pair of finger wheels and a roller keep the capturing wire down. Two driven tires pull the vine wood carefully out of the wire frame. The brushing-wheels which are installed in front of the tires center the rods which makes a clean pulling in of the vines possible.

After this, the rods will be led to the middle of the row by the cover and put down. Optionally the cover has a chopper which will crush the pulled out vine wood before putting down.
FLEXITREE, a design also known as „Baum“ or „The Bonner“ for mechanical crop load Regulation. Based on the development by Dr. Damerow and Dr. Blanke, protected by international patent, the FLEXITREE is now produced by CLEMENS in Germany. In heavy flowering fruit trees, FLEXITREE can remove excessive undesired flowers in pome and stone tree using several Rotors with elastic strings. This application reduces the use of chemicals designated As (phyto-) Hormones. 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-e for lifting pole
1 x d-e for angle adjustment for Lift pole ATLAS
1 x d-e 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
The “VINESCOUT” system is an automatic steering system that can be adapted to all existing types of tractors with hydraulic steering, it can be used in viticulture and fruit-growing with a spacing of 60 in and 138 in between rows.

The plotting of the row takes place by means of a 3D camera system. The optimal track calculated is driven along by means of a separate steering valve with a potential of ± 1 in.

The greatest potentials of the fully automatic “VINESCOUT” tractor steering system lie in taking the strain of the actual steering process off the tractor driver thus allowing him to give his attention to stress-free operation of the multi-row cultivating appliances (foliage work, plant protection).
EFFICIENCY ON SITE

Our location in Wittlich (Germany), with more than 120 employees and more than 25 young people as apprentices, make 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 permanent 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 of machines for viticulture in mass production, CLEMENS distinguishes itself also in the field of design and construction of stainless steel tanks, custom-made installations of wine cellars and the conception and the construction of special machines for individual needs.
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 an under vine de-weeder, HEXAGON, a strong utility frame for different cultivation tools, the „SPRAYING CHAMBER“ 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.