

# System 9000

The most efficient system  
under the sun



**BAUER**

*FOR A GREEN WORLD*





## Satisfied customers make us happy

Our job is to plan, produce and implement turnkey irrigation systems which have already brought our customers many years of success.

Plug & Play – our tailor-made BAUER plants require very little work input from our customers, who are based across the world. Unless, of course, they want to be involved in the control process. They can do this from home, from their car or via an iPad, PC or smartphone.

The challenges are growing all the time – and the demands placed on the materials, technology and electronics involved are forever on the increase. Irrigation systems are now being used in areas where it was once thought impossible. At BAUER, we operate exclusively according to European standards and this has proven to be a valuable decision. We only use the very best materials from the processing to the electronics and the control system, thereby ensuring a unique standard of precision and perfection. Simple, user-friendly and fail-safe – this is our motto and for the last 80 years, we have been investing in the very best experience and quality Europe has to offer.

With the new system 9000, we have equipped the pivot/linear systems with innovative new features for the future. Even greater pivot and drive tower stability, mobile control, improved energy use and lower water consumption guarantee a longer product lifespan and improved operating efficiency overall.

Our 6,000 partners across all 5 continents are the best references we could wish for.

See for yourself.

Otto Roiss  
CEO of Bauer Group

Johann Gallau  
Product Manager



An exemplary  
 irrigation efficiency  
 up to **97%**

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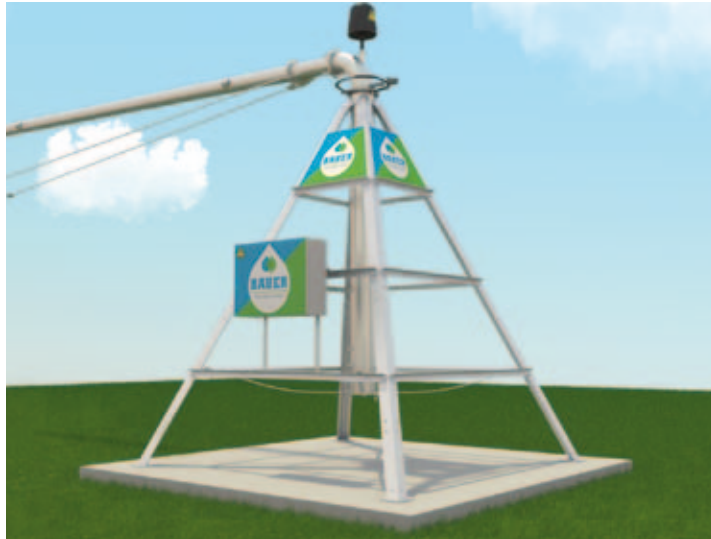
# Centerstar 9000

Optimal use of your water resources

Centerstar 9000 offers innovative new features which make the system easier to operate and more precise, robust and economical. Everything has been perfected and optimised, from the feed pipe to the seals and angle brackets. New elements have been added to the drive towers to ensure better power transmission, easier installation and comfortable control.

## The advantages of Centerstar

-  Minimal work input
-  Low energy consumption
-  High level of irrigation efficiency
-  Irrigation system which does not damage the crops
-  Optimal adaptation to various crop heights
-  Perfect irrigation management



Stationary pivot tower



Mobile pivot tower

## The highest level of stability for continuous operation

- Sturdy structure on four legs with broad support base
- Pivot tower angle 100 x 100 mm for increased structural length
- Broad support plates with large support surface area
- Horizontal braces for increased machine stability
- Entire pivot tower is hot dip galvanized

### Pivot tower 203

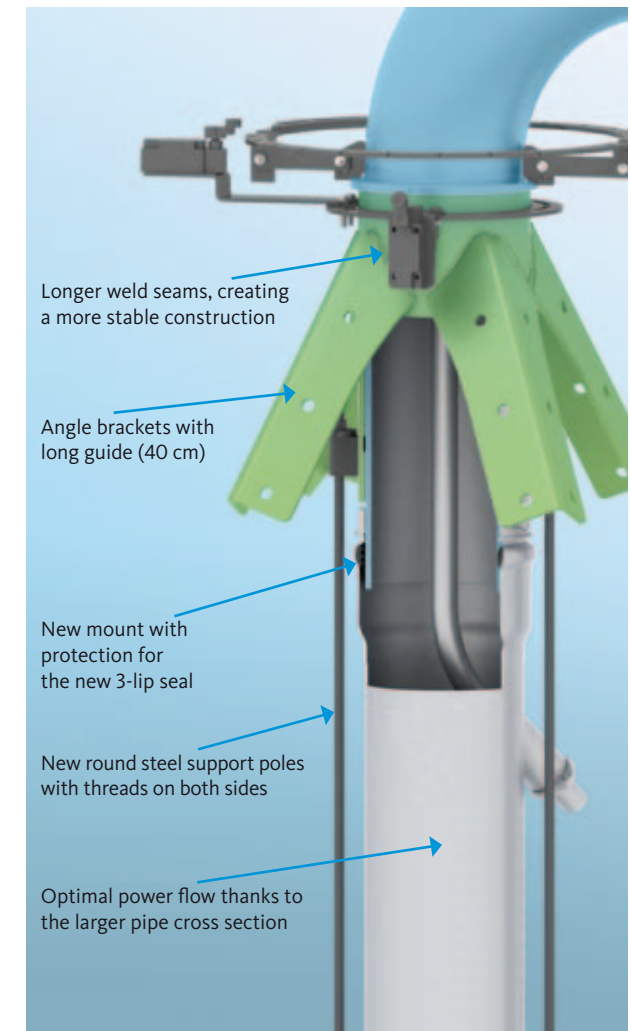
- Recommended up to max. 14 spans
- For spans of Ø 203 mm and 168 mm
- Span lengths: 59.8; 54.0; 48.1; 42.3 m
- For areas of up to 150 ha
- System capacity of up to 400 m³/h
- Connection flange DN200
- Standard height + high design
- Standard design, towable

### Pivot tower 133

- Recommended up to max. 7 spans
- For spans of Ø 133 mm
- Span lengths: 59.8; 54.0; 48.1; 42.3 m
- Für Flächengrößen bis 70 ha
- System capacity of up to 150 m³/h
- Connection flange DN125
- Standard design, towable

## Centerstar – pivot tower

### The innovative new features of system 9000:





## Drive tower

### System 9000 brings greater stability

- Broad-based construction
- Optimal power input
- Large-dimension drive tower bracing angle 100 x 75 mm
- The wide wheel base of 4.3 m (standard) and 5.2 m guarantees a high level of stability, including on uneven terrain and in high winds
- 2 construction heights of 4.2 m (standard) and 5.0 m for optimal adaptation to different crops
- Towable – high level of flexibility and adaptation to crop rotation



High level of rigidity thanks to the wide angle brackets



Wide wheel base – particularly stable



Easy towing thanks to the easy rotation of the drive tower wheels

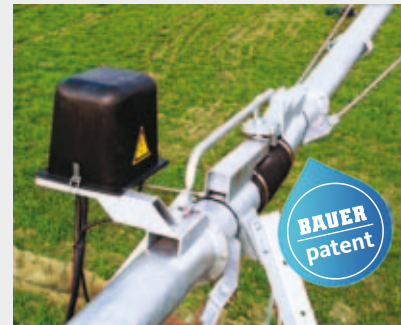
## The control unit – precise and reliable

### 1. Tower coupling



The sturdy drive tower coupling, free from play, with ball and socket perfectly compensates for extreme slopes. Mounted on the outside of the pipe, it does not restrict the cross-section of the mainline pipe, thereby ensuring optimum water flow without pressure loss. The weather, UV and ozone-resistant hose collar facilitates large angles.

### 2. Alignment control



BAUER is the only manufacturer to offer a control lever that is mounted directly above the swivel point of the flexible joint. Any torsion in the pipe has no influence on the control; the entire system is kept stress-free. Optimum adjustment of switching brackets with precision bearings of the control cams ensures precise movement transmission. Precise drive tower control system leads to a long product lifespan.

### 3. Precision control

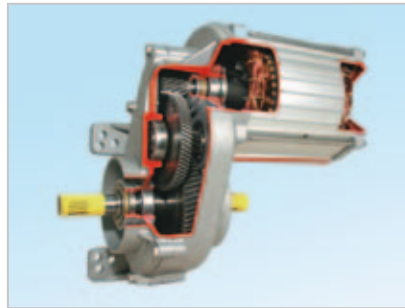


The precision control for extreme precision of linear and centerliner systems and systems with more than 13 drive towers. The angles between the drive towers are transmitted by means of control cables, counter-balancing any torsion in the steel structure.

## Span - trussing

### The highest level of security over many years

- 4 tube diameters for a wide application range (50-500 m<sup>3</sup>/h)
- Optimum adjustment for lowest operating costs
- Just one tube length (5.85 m) for easy assembly and transportation
- Truss rods, diam. 20 mm, with high tensile strength and large safety reserves
- Even arc shape of the trussing ensures high degree of stability
- The 90° arrangement of the bracing angle provides for even load distribution even on the most demanding terrain
- Crossed drive tower braces for high stability on uneven terrain



### Gear motors

- High-torque motor with thermal overload protection
- Enclosed moisture-proof motor
- High-efficiency spur gear
- Shaft seal with specific dirt-repellent profile
- Types: 50:1 0.54 kW / 40:1 0.54 kW / 30:1 1.1 kW



### Gear boxes - for standard systems

- Worm gear for high torques, 50:1 gear ratio
- Large-sized tapered roller bearings
- Integrated expansion chamber
- Shaft seal with specific dirt-repellent profile



### Gear boxes - for mobile systems

- Decoupling of worm for free-travel (towing)
- Simple to change from pivot to towing mode

## Tires

### Comfort tires to meet the highest standards

- Comprehensive range of tires/tire dimensions for adjustment to different soils and crops
- Available dimensions: 11.2-24, 14.9-24, 16.9-24 and 12.4-38
- NEW tires with traction profile
- Retracted tube for the highest levels of operational safety
- Galvanized rims for optimal protection against corrosion



## Drive



# Pivot control mechanism

Perfect irrigation management

Tried and trusted sturdy elements for application under the most extreme conditions. Easy-to-use control surface and robust control elements to ensure smooth operation. All of the basic functions for automatic operation are integrated into all of the control centres. A comprehensive range of accessories is available for retrofitting further elements for additional operating functions.





## Universal



### Innovative irrigation management and accurate control

BAUER pivot control mechanisms are produced according to the strictest of conditions in line with EN or VDE. Contact-free technology offers the highest level of protection and security.

Only standard quality components from renowned manufacturers are used (Schneider Electric, Schrack, Moeller, etc.)

The corrosion protection on the switch cabinets has been adapted to tolerate extreme climatic conditions.

## Universal PRO



### SMS control

- Cost-effective monitoring of the irrigation system
- Start of machine at pre-defined precipitation level
- Stopping of the system
- Status acquisition
- Operating status reports
- Error reports

## Universal PRO G



### Determining position with GPS

- Identifying and determining exact position using satellite data transfer
- Communication from the switch cabinet to the GPS receiver via CAN-Bus
- Up to 6 irrigation sectors can be programmed with individual irrigation amounts
- Selection of start time and number of circles
- Recording of the last 20 operating events and error reports

## Pivot control

### Comparing control types

|  | Universal | Universal PRO | Universal PRO G |
|--|-----------|---------------|-----------------|
| Circle/sector and auto reverse operation               | ✓         | ✓             | ✓               |
| Percentage timer for adjustment of speed               | ✓         |               |                 |
| Enter precipitation height in mm                       |           | ✓             | ✓               |
| Enter precipitation height in mm for 6 sectors         |           |               | ✓               |
| End gun IN/OUT for 6 sectors                           |           |               | ✓               |
| Enter start time and pauses                            |           | ✓             | ✓               |
| Enter desired number of circles                        |           | ✓             | ✓               |
| Wet/dry operation mode                                 | ✓         | ✓             | ✓               |
| Restart after loss of pressure or voltage              |           | ✓             | ✓               |
| Automatically switched off in case of error            | ✓         | ✓             | ✓               |
| Recording of last 20 operating events                  |           | ✓             | ✓               |
| Contacts for unit shut-down and shut-down valve        | ✓         | ✓             | ✓               |
| Contact for pump start                                 |           | ✓             | ✓               |
| Contact for pressure sensor                            |           |               | ✓               |
| Contact for flow meter                                 |           |               | ✓               |
| Contact for rain sensor                                |           |               | ✓               |
| Position identification via GPS modem                  |           |               | ✓               |
| SMS control (optional)                                 |           | ✓             | ✓               |
| Visualisation on PC via internet connection (optional) |           |               | ✓               |

### PC control – operation at the click of a mouse!

- Monitoring from up to 32 machines
- Simple input of all operating functions at the click of a mouse
- Display of operating status (color)
- Recording of all operating conditions












# Precision Corner System

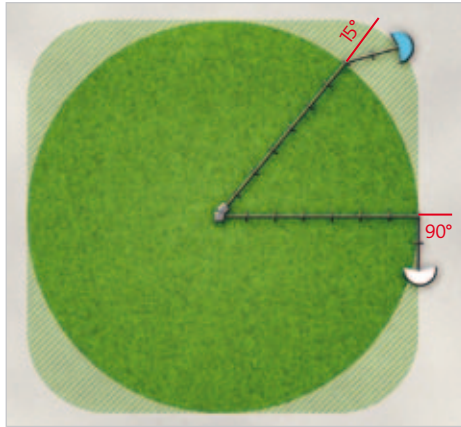
Optimal and fully automatic use of every field

These corner systems make it possible to create a virtually rectangular irrigation area from a circular area and thereby to ensure optimal irrigation of the crops. Corner systems can also be added to existing pivot systems.

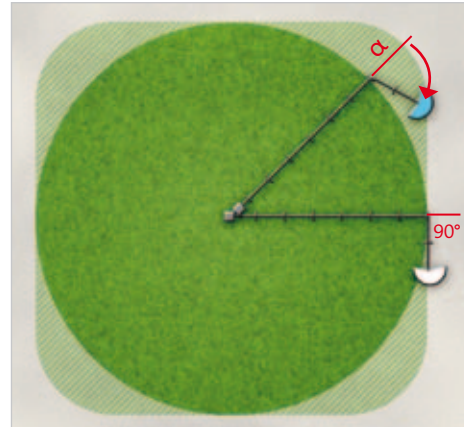
## The advantages of the corner system

-  A fully automated system which no manpower required, thereby improving operating efficiency
-  Up to 98 % irrigation of existing areas
-  Optimal area adaptation
-  Precise water distribution through speed controlled drives
-  Perfect irrigation management
-  Robust construction
-  Corner span up to 90 m long

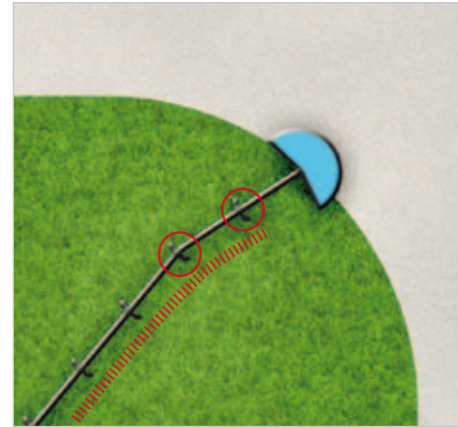




Optimal utilization of area thanks to the large offset of the corner span.



Angle-dependent control of the nozzles and end guns.



CAN-Bus communication between the end tower, corner span and pivot tower.



Nozzle control via pneumatic valves:

- No contact with dirty water
- Blockage-free operation

## Method of operation



Speed-controlled drive for continuous propulsion and precise water distribution.



Robust construction with exact steering; does not damage the ground or structure.



Precise control via guideline as part of underground control system. Drive wheels are rotatable.








# Linestar 9000

The optimal solution for rectangular areas

The Linestar System 9000 from BAUER is ideally adapted to guarantee the secure and ongoing irrigation of large rectangular areas. Perfect directional stability and the independent correction of any deviations between the drive towers also take place on challenging and difficult terrain. Robust, durable, accurate and suited to different sized areas:

A BAUER Linestar system requires minimal work input.

## The advantages of Linestar

-  Optimal area utilisation in rectangular fields (up to 100 %)
-  Gentle irrigation which does no damage to the plants or soil
-  Low pressure system with low energy consumption
-  High level of irrigation efficiency thanks to the ground-level water distribution
-  High level of flexibility due to the towing and rotation options



### 2-wheel central unit for one-sided feed

- For system lengths of up to 440 m - max. 7 spans
- System capacity of up to 200 m<sup>3</sup>/h
- Irrigated area of up to 80 ha
- Extensive area coverage thanks to rotation options
- Accurate control using programmable central controls

### For double-sided feed

- High level of flexibility thanks to towing options
- 2nd device connection at end of system: no time loss due to running dry or rotation process



### 4-wheel central unit for central feed

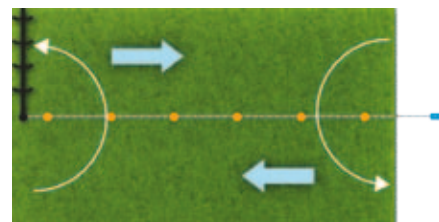
- For system lengths of up to 760 m
- System capacity of up to 300 m<sup>3</sup>/h
- Irrigated area of up to 120 ha
- Extensive area coverage through 4-wheel drive operation
- Accurate control using programmable central controls

### For one-sided feed

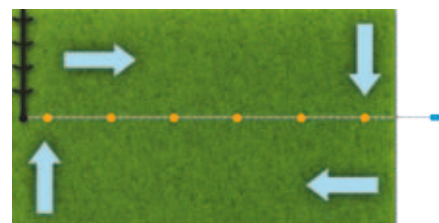
- Low operational input
- High system capacity of up to 300 m<sup>3</sup>/h



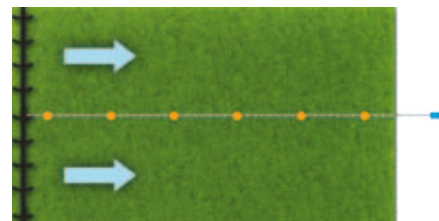
One-sided feed - straight



One-sided feed - rotating



Double-sided feed



Central feed - max. 14 spans



One-sided feed - max. 7 spans

## Linestar – hose feed

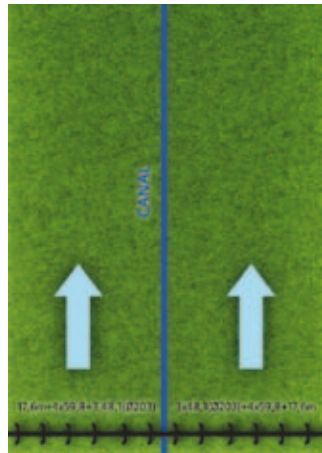
### Accuracy on straight strips

The energy-saving low pressure system with low energy consumption, a high level of irrigation efficiency, optimal area utilisation with rectangular fields (up to 100 %) and a high degree of flexibility thanks to the towing and rotation options.

| 2-wheel | 4-wheel | Linestar Key data                                     |
|---------|---------|---|
|         | •       | Rigid connection (4 couplings)                        |
| •       |         | Rotatable connection                                  |
|         | •       | Feed – system centre                                  |
| •       | •       | Double connection with use of 2 drag hoses            |
| •       |         | Towable design  |
| •       | •       | Span 168LL rigid length: 42.3 to 59.8 m               |
| •       |         | Span 168LL towable length: 42.3 to 59.8 m             |
| •       | •       | Span 'high design'                                    |
| •       | •       | LINESTAR-PRO switch cabinet                           |
| •       | •       | max. system length 440 m = 7 spans                    |
|         | •       | max. system length 760 m = 14 spans with central feed |
| •       | •       | Overhang Ø 133 length: 5.9 to 23.4 m                  |
| •       | •       | End gun   |
| •       | •       | Booster pump  |
| •       |         | Towing equipment from overhang                        |
| •       | •       | Drag hose 4" (200 m 4-wheel, 160 m 2-wheel)           |
| •       | •       | Drag hose 5" (150 m 4-wheel, 110 m 2-wheel)           |
|         | •       | Drag hose 6" (110 m 4-wheel)                          |
| •       | •       | Furrow guidance                                       |
| •       | •       | Cable guidance  |
| •       | •       | Buried wire guidance                                  |
| •       | •       | SMS control – option                                  |



## Linestar - ditch feed



### The irrigation system for large areas

- System length up to max. 1.200 m
- System capacity up to 1.000 m³/h
- Possible area size of 400 ha
- High level of operating efficiency thanks to low energy consumption
- Lowest investment cost per ha
- Self-sustaining irrigation system



Individual solution: floating suction line



Suction line with optional channel gate

## Linestar – central control



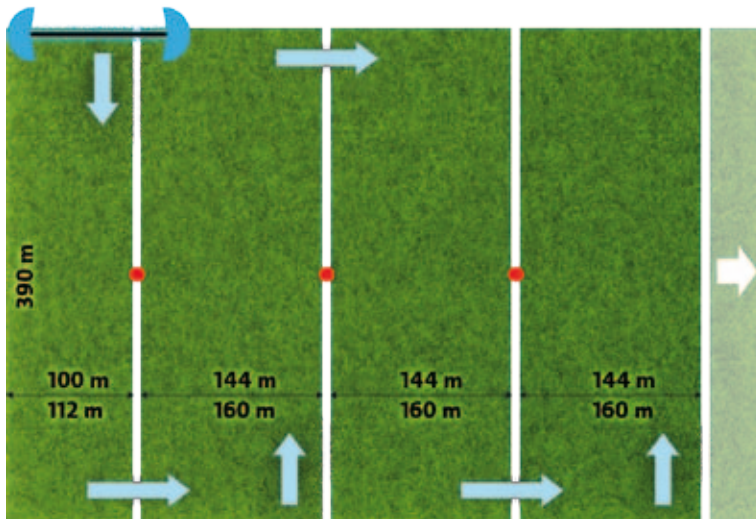
### LINESTAR PRO – The central control system for linear systems

- Control via electronic module
- Simple operation
- Entering of irrigation height
- System monitoring and shut-down in the event of an error
- Efficient irrigation management
- Protocol – recording of the last 20 operating events
- SMS control available and can be added later
- PRO-software guarantees exact control of the system and therefore less stress on the construction

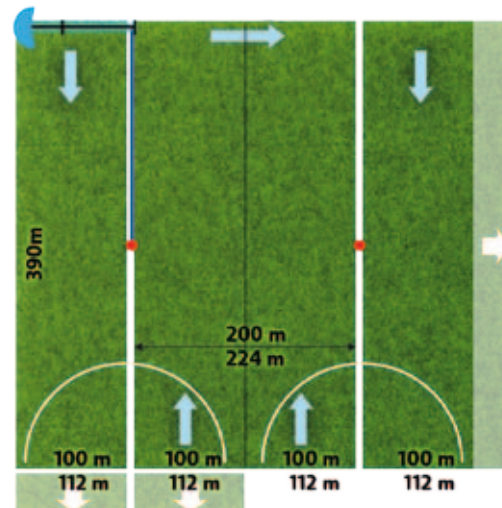


## The optimal irrigation system - economic and flexible

- Ideal for intensive farming
- Flexible irrigation system – rotatable, towable, mobile
- Optimal adaptation to crop rotation
- Energy-saving low pressure system
- Low operating costs
- Optimal rain quality thanks to spray nozzles
- High level of irrigation efficiency (up to 93 %) through ground-level distribution
- No damage to plants – ruts follow plant alignment
- Comfortable: can be controlled by mobile phone



Monostar with double-sided overhang, enables strip widths of up to 160 m.



Monostar with one-sided overhang, enables strip widths of up to 224 m by rotating the system.

## Monostar 9000



- Exact furrow guidance
- Optimal directional accuracy thanks to skid tows which run along a furrow
- The skid tows can be lifted up for transportation or rotation



- Wheel rotation at the touch of a button
- The wheels on the drive motors can be quickly and easily rotated using a control station (optional with end tower)



- Time-saving towing
- After rotating the wheels, the Monostar can be towed on both sides to the next irrigation strip or field

### Monostar: a comparison

|                             |                             |
|-----------------------------|-----------------------------|
| System length:              | 82.5 or 106 m               |
| Width of irrigated strip:   | 101 to 160 m                |
| Irrigation capacity:        | Up to 120 m <sup>3</sup> /h |
| Device connection pressure: | 3 bar with end gun          |
| Feed tube:                  | Up to 4" / 200 m            |
| max. drive speed:           | 165 m/h                     |








# Centerliner 9000

The multi-talented irrigation system

The economic solution for all farming areas and crop types. Optimal utilisation of the area thanks to the intelligent control system and high levels of flexibility, including on uneven terrain. The Centerliner 9000 is characterised by its top quality irrigation and low energy consumption.



## The advantages of Centerliner

-  Optimal area utilisation, including on uneven terrain
-  Intelligent control with low operational input required to control the system
-  Setting of various irrigation precipitation rates across one area
-  Energy-saving low pressure system
-  Towable and with a high level of flexibility

## Centerliner - systems

### The optimal solution for all areas

This energy-saving low pressure system with optimal area utilisation impresses with its automatic irrigation and top irrigation quality. The innovative and intelligent control systems ensure low operational input. High degree of flexibility thanks to the easy-to-use tow option.



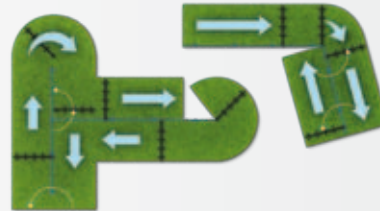
## Centerliner central units



### CLX Multistar

#### 4-wheel central unit:

- Automatic rotation of drive towers
- Flexible hose connection for automatic reverse without having to re-couple the hose
- Rotation option on central unit for L-shaped irrigation areas
- SELECT switch cabinet



### CLE

#### 4-wheel central unit:

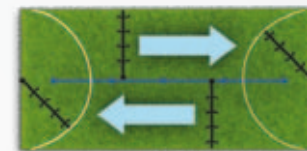
- Automatic rotation of drive towers
- Flexible hose connection for automatic reverse without having to re-couple the hose
- SELECT switch cabinet



### CLS

#### 4-wheel central unit:

- Manual rotation of drive towers
- Rigid device connections
- STANDARD switch cabinet



## Centerliner: a comparison

| CLX | CLE | CLS | Details   |
|-----|-----|-----|---|
|     |     | •   | 4-wheel central unit for manual rotation of the drive towers with rigid connections at the front and back         |
| •   | •   |     | 4-wheel central unit for automatic rotation of the drive towers with flexible hose connection – automatic reverse |
| •   |     |     | Possible rotation of central unit for L-shaped irrigation areas   |
|     |     | •   | Double connector – with use of 2 drag hoses   |
| •   | •   | •   | Central unit in towable design  |
|     |     | •   | STANDARD switch cabinet   |
| •   | •   |     | SELECT switch cabinet with 2 LINEAR speeds, PIVOT speed and nozzle change between PIVOT/LINEAR mode               |
| •   | •   | •   | Span 168LL rigid length: 42.3 to 59.8 m   |
| •   | •   | •   | Span 168LL towable length: 42.3 to 59.8 m   |
| •   | •   |     | 'High span design'  |
| •   | •   | •   | Max. system length 440 m = 7 spans  |
| •   | •   |     | Overhang Ø 133 length: 5.9 to 23.4 m  |
| •   | •   |     | End gun   |
| •   | •   |     | Booster pump  |
| •   | •   |     | System capacity up to 200 m <sup>3</sup> /h   |
|     |     | •   | System capacity up to 300 m <sup>3</sup> /h   |
| •   | •   | •   | Drag hose 4" - max. 200 m   |
|     |     | •   | Drag hose 5" - max. 130 m   |
| •   | •   | •   | Drag hose 6" - max. 110 m   |
| •   | •   | •   | Furrow guidance   |
| •   | •   | •   | Cable guidance  |
| •   | •   |     | Buried guidance wire  |
| •   | •   |     | SMS control - option  |



## Centerliner - Ditch feed



### Ditch feed

- |   |   |
|---|---|
| • Significant capacity of up to 450 m <sup>3</sup> /h | • High level of flexibility: rotatable, towable |
| • For areas of up to 150 ha                           | • Low investment costs / ha                     |
| • Complete independent systems                        | • CLX, CLE and CLS designs available            |

## Centerliner - central controls

### SELECT central control



#### SELECT CLE, SELECT CLX

- |   |
|---|
| Control center with integrated SPC                              |
| Linear/pivot and swivel operation                               |
| Program selector switch for 11 programmes                       |
| 2 speeds (percentage timer) for linear operation                |
| 1 percentage timer for pivot mode                               |
| Wet/dry operation   |
| Automatic change-over for nozzle fitting                        |
| Operating switch for drive motors of the central unit (for CLX) |
| Voltmeter   |
| Operating hours counter   |
| Plastic casing IP66   |

### STANDARD control center



- |                                   |
|-----------------------------------|
| Control center with relay control |
| Linear operation                  |
| Manual rotation process           |
| Wet/dry operation                 |
| Voltmeter                         |
| Operating hours counter           |

## Linestar & Centerliner - control systems



### Furrow guidance

In order to control a Linestar/Centerliner, a furrow is created along the route in order to determine the direction of travel of the system.



### Cable guidance

The steering arm with its pulleys moves along a stretched cable, thereby determining the direction of travel of the machine.



### Buried guidance wire

Sensors track the induction field of a buried cable and thus indicate the direction of travel (available for Centerliner and Linestar systems).

#### Advantages of the buried guidance wire:

- No obstacles in irrigation area
- Permanent indication of deviations from the ideal line
- Simple programming and implementation
- Assembly height of up to 3 m above buried cable
- No maintenance work










# Polystar 9000

For aggressive water

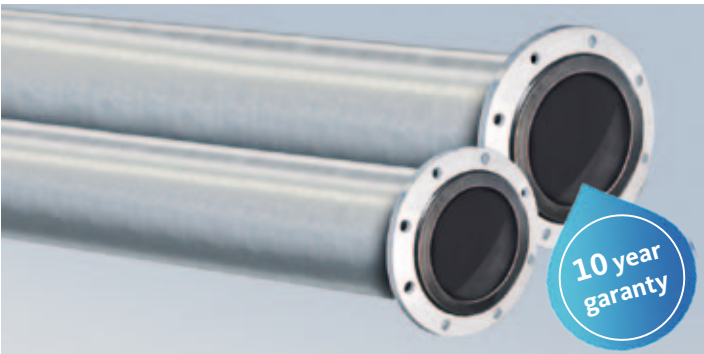
Corrosive liquids require optimal solutions. With its Polystar system, BAUER offers comprehensive corrosion protection for elements which transport water. This means that there are no limits to the use of waste water, separated liquid manure and aggressive water.

## The advantages of Polystar

-  Comprehensive protection against corrosion
-  Longer product lifespan
-  Higher level of operating efficiency
-  Reliable irrigation
-  Optimal flow properties

# The ideal solution for corrosive liquids

The economic solution for poor quality water. BAUER guarantees complete protection against corrosion and offers perfect comprehensive solutions, even in these difficult areas. Ready to use, including irrigation.



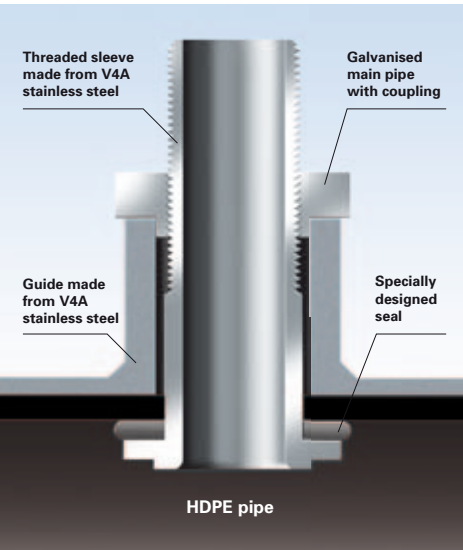
Span pipes are produced in sizes 168 and 203 mm inside with HD-PE 4.0/4.9 mm. Sealing surfaces are produced using precision tools to guarantee a completely tight seal and time-saving assembly.

| Water quality   | POLY-STAR | Stainless steel | Galvanised steel |
|---|-----------|-----------------|------------------|
| <b>Soft:</b> high proportion of carbonate, bicarbonate, calcium and magnesium | ★★★★★     | ★★              | ★                |
| <b>Saline:</b> high levels of dissolved solids & high electrical conductivity | ★★★★★     | ★★★             | ★                |
| <b>Saline or alkaline:</b> pH lower than 6.2 or higher than 8.5               | ★★★★★     | ★★★             |                  |
| <b>High concentration of chlorides and/or sulphates</b>                       | ★★★★★     | ★★              |                  |

Stainless steel

The first nozzle connection made from high quality V4A stainless steel for a long product lifespan

## Polystar 9000



# A clear solution for various situations



Water is becoming ever scarcer as a resource. For this reason, recycled substances and waste water are increasingly being used for irrigation.



Water from rivers, sewage treatment plants, slaughterhouses, the food industry and the paper and sugar industry.



Aggressive water can significantly reduce the lifespan of normal irrigation systems. BAUER offers a 10 year guarantee on all its Polystar span pipes.



Stable spray nozzle outlets made from high quality V4A stainless steel guarantee an exceptionally high product lifespan. Specially designed connectors offer a high level of stability and enable the assembly of nozzle pipes without any additional support.



## Spray nozzle options

A system for all kinds of soils and plants

Depending on the type of soil, crop and climate, the comprehensive BAUER spray nozzles program enable precise adaptation to the conditions in question. As a result, the system ensures a high yield and guarantees a more economic use of cultivation areas.



**KOMET KPS**

Low pressure spray nozzle in a compact design for irrigation near to the plant. Nozzles come with color coding for easy exchange.



**Superspray®**

Tried and tested for over 30 years. The significant distance between the nozzle and deflector plate enables easy cleaning. Top and bottom assembly possible.



**LDN®**

The quantity of water is divided into up to 3 different levels where there is a high nozzle diameter. This results in gentle rainfall at a lower intensity.



**i-Wob®**

Spray nozzle with rotating deflector plate. Wide ejection and excellent distribution. Low impact irrigation which is easy on the ground.



**Pressure reducing valve**

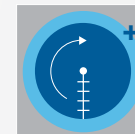
For precise water distribution on the pivot. Independent of swaying nozzles and height differences in the terrain. Even flow through the nozzles is guaranteed.

## TWINmax end gun

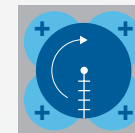
Tailored for pivot and linear systems. High functionality even at low operating pressure. Nozzle diameters from 10 - 24 mm for a wide range of applications.

### End gun for better optimisation of land use

End gun mounted on the overhang ensures maximum water supply even on exposed cultivation areas. The end guns can be equipped with a booster pump to ensure a reliable water pressure. When used for circle irrigation, the end guns deliver the water even to the outermost edges, thereby increasing the yield. An economic solution for minimal additional expense.



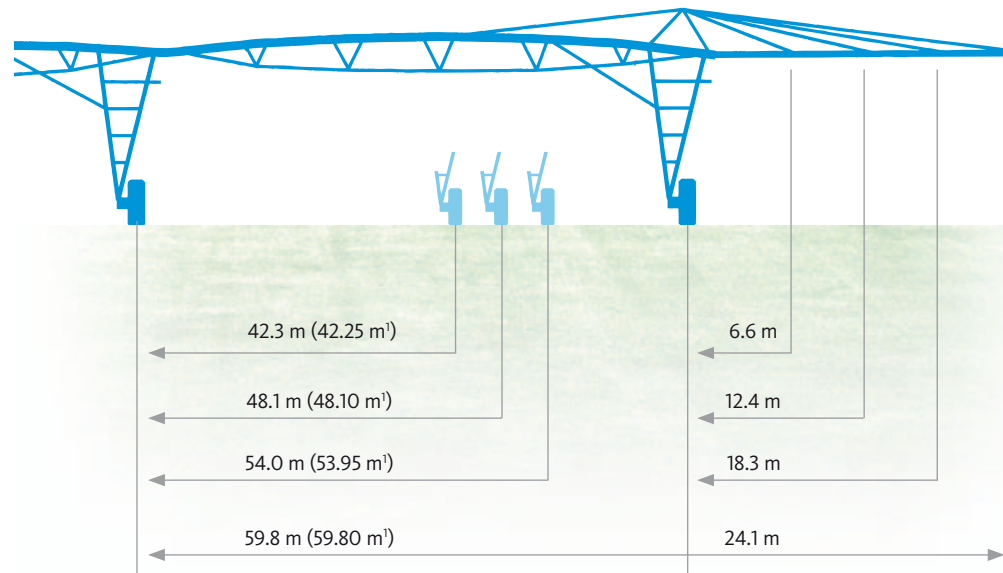
With end gun



Sectored irrigation limits



## Technical details



|                          |                           |                   |        |                    |        |                   |       |
|--------------------------|---------------------------|-------------------|--------|--------------------|--------|-------------------|-------|
| Centerstar 9000          | 133 EL                    | 168 EL            | 168 E  | 203 EL             | 203 E  | 219 EL            | 219 E |
| Centerliner 9000 - hose  | -                         | 168 LL            | 168 LH | -                  | -      | -                 | -     |
| Centerliner 9000 - ditch | -                         | 168 LL            | 168 LH | 203 LL             | 203 LH | -                 | -     |
| Linestar 9000 - hose     | -                         | 168 LL            | 168 LH | -                  | -      | -                 | -     |
| Linestar 9000 - ditch    | -                         | 168 LL            | 168 LH | 203 LL             | 203 LH | -                 | -     |
| Pipe diameter mm         | 133 mm/<br>5 1/4"         | 168 mm/<br>6 5/8" |        | 203 mm/<br>8"      |        | 219 mm/<br>8 5/8" |       |
| Span length m            | 59,8 - 54,0 - 48,1 - 42,3 |                   |        | 54,0 - 48,1 - 42,3 |        | 48,1 - 42,3       |       |
| Overhang m               | 23,4 - 17,6 - 11,7 - 5,9  |                   |        |                    |        |                   |       |
| Construction height m    | 3.1                       |                   | 3.9    | 3.1                | 3.9    | 3.1               | 3.9   |
| Wheel base m             | 4.3                       |                   | 5.2    | 4.3                | 5.2    | 4.3               | 5.2   |

1) All machine types with a pipe diameter of 168 and 203 mm are available in the Polystar design.

## Product overview - System 9000

| Centerliner      | Pipe Ø   | Construction height <sup>2)</sup> 3.1 m | Construction height <sup>2)</sup> 3.9 m | Rigid design | Towable design |
|------------------|--|---|---|--------------|----------------|
| Hose feed        | 168  | ✓                                       | ✓                                       | ✓            | ✓              |
| Ditch feed       | 168  | ✓                                       | ✓                                       | ✓            | ✓              |
|                  | 203  | ✓                                       | ✓                                       | ✓            | ✓              |
| Forms of design  | CLS, CLE and CLX                                     |   |   |              |                |
| Central controls | STANDARD CLS, SELECT CLE, SELECT CLX                 |   |   |              |                |
| Control systems  | Furrow control, cable guidance, buried guidance wire |   |   |              |                |

| Linestar         | Pipe Ø   | Construction height <sup>2)</sup> 3.1 m | Construction height <sup>2)</sup> 3.9 m | Rigid design | Towable design |
|------------------|--|---|---|--------------|----------------|
| Hose feed        | 168  | ✓                                       | ✓                                       | ✓            | ✓              |
| Ditch feed       | 168  | ✓                                       | ✓                                       | ✓            | -              |
| Central controls | LINESTAR PRO   |   | Options: SMS control                    |              |                |
| Control systems  | Furrow control, cable guidance, buried guidance wire |   |   |              |                |

| Centerstar       | Pipe Ø          | Construction height <sup>2)</sup> 3.1 m | Construction height <sup>2)</sup> 3.9 m | Rigid design | Towable design |
|------------------|-----------------|---|---|--------------|----------------|
|                  | 133             | ✓                                       | ✓                                       | ✓            | -              |
|                  | 168             | ✓                                       | ✓                                       | ✓            | ✓              |
|                  | 203             | ✓                                       | ✓                                       | ✓            | ✓              |
|                  | 219             | ✓                                       | ✓                                       | ✓            | ✓              |
| Central controls | UNIVERSAL       |   |   |              |                |
|                  | UNIVERSAL PRO   |   | Options: SMS control                    |              |                |
|                  | UNIVERSAL PRO-G |   | Options: SMS control + visualisation    |              |                |

2) Construction height = headroom. Subject to technical modification.








# The advantages of Bauer

## The benefits at a glance

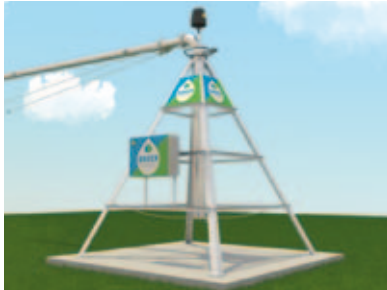
We have acquired extensive expertise over several generations during our 80 years of activity in the agricultural irrigation field. This represents an excellent basis because our long-standing and accurate knowledge of the requirements means that we are better able to develop ideal solutions for optimal water use.

As a medium-sized company based in Europe, BAUER is big enough to offer perfect irrigation solutions even for large-scale areas. We are also flexible enough to provide tailor-made solutions for all areas of application. This combination is our real advantage, as valued by some 6.000 satisfied customers across the world.

### Leading innovation and operating efficiency

-  The new system 9000 with all-round optimal quality including GPS control
-  Tried and tested and tailor-made pivot/linear systems and system combinations for individual requirements
-  Robust European quality which also functions perfectly on difficult terrain and heavy soils
-  High level of service quality: fast delivery of spare parts
-  Optimal water use, improved area utilisation and a longer service life offer benefits in terms of the investment and operating costs and ensure a higher level of operating efficiency

## BAUER – quality factors



### Pivot tower

- Sturdy structure with broad support
- High level of structural strength thanks to high pivot tower angle 100 x 100 mm
- Angle brackets with long duct to ensure optimal power transmission
- Specially formed angle brackets with long weld seams for the highest levels of stability
- Optimal hydraulics and seals



### Trussing

- All construction components galvanised to a high standard in line with DIN EN ISO 1461
- BAUER only uses 1 length for the pivot pipe (5.85 m). Low weight, easier assembly and logistics
- We offer the highest level of common parts, customer-friendly assembly and time-saving logistics



### Electronics

- BAUER controls are produced in accordance with the strict terms of EN 4.VDE
- Non-contact technology offers the highest level of protection and security
- Only standard quality components from renowned manufacturers are used (Schneider, Schrack, Finder, Moeller etc.)
- Excellent corrosion protection even under extreme climatic conditions



### Alignment control

- BAUER offers a control lever that is mounted directly above the swivel point of the flexible joint. Any torsion in the pipe has no influence on the control and the entire system is kept stress-free. Optimum adjustment of the switching brackets with precision bearings of the control cams ensures precise movement transmission.
- The alignment control is pre-assembled at the factory and the switching points adjusted



### Drive tower

- Highly stable thanks to wide angle brackets
- High level of rigidity thanks to the large support brackets
- Harmonised power input for even load distribution across components and increased product life
- Wide wheel base guarantees high stability including on uneven ground and in high winds



### Packaging

- BAUER offers the highest levels of packaging comfort
- All of the important components of a span are packaged in a box
- Span cable is pre-produced and cut to length
- Simple assembly and storage



## Service is our strength



For more information on the BAUER products, please see:

[www.bauer-at.com](http://www.bauer-at.com)

### Planning

BAUER has decades of experience in planning and implementing individual irrigation systems. Our specialists can plan both ready-made and tailor-made systems from standalone plants to extensive irrigation systems. Planning is always based on the principle of sustainability in accordance with European quality standards. This provides our customers with ecological and economic benefits through the efficient use of water and a high product life.

### Installations

To ensure that an irrigation system functions perfectly, every movement during the installation process must be perfect. BAUER guarantees this through the use of technicians who are specially trained both within the company and by dealers. Logistically well-devised packaging units simplify and shorten the installation time. The clear and easy-to-read operating instructions form an integral part of any system acceptance.

### Maintenance

In order to guarantee sustainably irrigation solutions, the BAUER quality assurance handbook specifies concrete maintenance intervals. Numerous authorised BAUER dealers offer attractive maintenance packages.

### Spare parts

To keep downtime to a minimum, all BAUER service support points across the world offer a comprehensive spare parts store. Special BAUER advantage: thanks to their particularly high product life, BAUER provides spare parts which last significantly longer than is legally prescribed. Optimised spare parts packages (repair sets) are also available as well as packaging units for faster repairs and improved storage.

### Configurator

An important sales support tool for all BAUER employees and dealers to ensure the fast and professional preparation of offers, taking account of individual details.

## Service-Center

In over 80 countries across the world - on 5 continents

More than 6.000 customers across the world trust the quality service from BAUER

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Subject to technical modification. Pivot 10-2011 e