



# PIVOT CATALOG

## WESTERN IRRIGATION SYSTEMS





**YOUR TRUE SUCCESS PARTNER**

# ENSURING YOUR GROWING SUCCESS FOR OVER 30 YEARS

As a grower or investor, you understand the importance of selecting the proper irrigation system to meet all your specific needs. With that in mind, our engineers have developed a pivot, which will minimize operating costs while maximizing your return on investment. The WESTERN-CP600 is a system designed to adapt to a variety of weather, crop and field conditions, all the while providing maximum performance as it relates to water efficiency and increased crop yields, year after year.

WESTERN's latest CP600 model can be configured with multiple sprinkler packages and a variety of span lengths and overhang combinations. In addition, and depending on your particular demands, you have the option of an all-galvanized system, or a galvanized structure with Poly-Line pipe components.



## Why WESTERN-CP600?

When you choose WESTERN-CP600 pivots, you're guaranteed a durable, reliable product backed by an experienced team of professionals whose customer service and warranty programs are second to none. In summary -- *You've made the right decision.*

## Field-Tested for Durability & Reliability...

... and featuring pace setting advances available only with WESTERN-CP600 irrigation systems.

# WESTERN - PROVIDING IRRIGATION SOLUTIONS AROUND THE GLOBE



From the Middle East, Africa and Europe, to North and South America, Australia and China, more than 5 million hectares in over 80 countries are irrigated using WESTERN systems

## Maximum Quality

WESTERN irrigation systems are unmatched for durability and reliability. This reputation for excellence can be attributed to the company's commitment to quality.

All WESTERN Pivots are manufactured under strict ISO 9001 quality standards. The quality of their components is the highest on the market.

## Don't stop irrigating

We have the parts you need for your WESTERN machine. Through our extensive official distributor network, and the best warranty programs in the industry, we make sure your irrigation system never stops working.

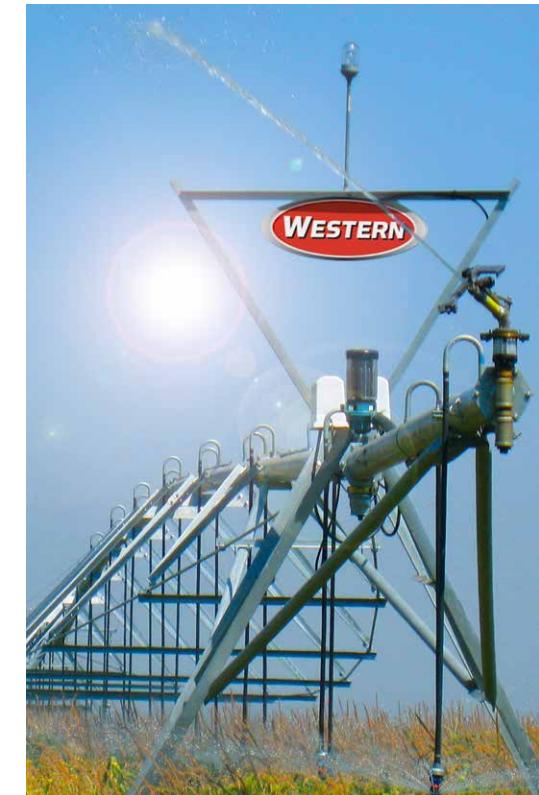
## Customer service

When you choose WESTERN irrigation systems, you select a great team of technicians, professionals, engineers and Ph.D degree consultants.

Our pre-sales service starts by planning and designing your project, advising the best pivot configuration, pump size and power source to buy.

Moreover, we can offer a variety of financial options to setup your project.

After the sale, our professional technicians will install it and do the required services to ensure your system operates effectively and efficiently.





### **Standard Warranty**

All WESTERN systems including all electrical and mechanical features are guaranteed against any manufacturing defects for 6,000 hours or 2 years whichever comes first. In case lined pivots, pipes are guaranteed for 10 years.

### **Warranty Extension Program**

To make sure your machine is always ready and to prolong its useful life, we offer you the option of an extended warranty for up to 5 years. Moreover, in case your irrigation system -- either WESTERN or any other brand -- need maintenance, our service team offers you this option.

### **Maximum Return on Investment**

WESTERN'S professional team provides the best WESTERN-CP600 system configuration, irrigation management program and customized irrigation charts to specifically meet your crops' demand and field conditions in order to achieve maximum return on your investment.

Our professional team of consultants offer irrigation management services to growers of a variety crops, including; Sugarbeet, Corn, Potato, Cotton, Wheat and Alfalfa. Records show such service reduces water consumption by 25% when compared with the previous season at the same project.

Our irrigation management consultant service is available not only on WESTERN systems but also all other brands. It starts by evaluating the irrigation efficiency of your pivot system in an effort to improve it to the highest level. We then select the best sprinklers to fit your crop and field demand, create charts, supply weather stations and moisture sensors, which result in establishing the irrigation schedules to assure you are applying the right amount of water effectively and at the right time, minimizing your operating cost, increasing your yield and optimizing your return accordingly.

Moreover, our professional team provides various training sessions and field days for your working team to improve their skills on running and maintaining your WESTERN pivots effectively.

# WESTERN CP600 PIVOT

## Engineered Features for Stronger & Longer Lasting

The entire structure of a WESTERN-CP600 pivot is designed to easily withstand the stress generated while irrigating different crops. For greater durability and longer life, the entire structure of WESTERN-CP600 is made of hot-dipped galvanized steel, including the pipes. This galvanizing process meets the European UNE EN ISO 1461 standard and the American ASTM 123 standard.



## Wide Stand Pivot Point

The WESTERN-CP600 pivot point base is comprised of four hot dipped galvanized structural angle iron steel legs, reinforced with 19 crossties; 4 crossties per side plus 7 crossties at the stainless steel control panel side to provide 4 adjustable mounting positions and support spans length up to 203.5' (62.0m).

The swivel elbow water inlet is made of stainless steel, and riser pipe is equipped with a unique conduit seal to ensure free

smooth rotation.

The 8" riser pipe is equipped with a triple lip gasket to prevent leaks during rotation. The rotating elbow support is comprised of steel pipe 10 mm thick with lubrication points.

The water inlet on the rotating elbow is made of stainless steel.

The rotating elbow is made from a single 8" pieces of galvanized steel.

There are different profiles for any type of crop; sugarcane, corn, potatoes, etc.

Standard equipment for all WESTERN-CP600 pivot points includes

Anchor bolts and pivot feet, reinforcement legs, ladder, rotating elbow, riser pipe, and bottom elbow.

## WESTERN-CP600 pivot points

Pivot point for 5" spans

Standard pivot point for 6" 5/8 and 8" 5/8 spans

Movable trolley with 4 wheels

### Pivot Point Profiles

Low Profile with ground clearance 2.65m

Standard Profile with ground clearance 3.71m

High Profile with ground clearance 5.33m

### Spans & Overhang

WESTERN-CP600 pivots utilize the “Bow String” span design, with a maximum length of 62m (203.5ft) between towers.

WESTERN-CP600 pivots offer different span lengths in order to adapt the lengths of the machine to the dimensions of the field.

Spans with pipe size of 5" and 6-5/8" are available in the following lengths options:

38.2m (125.5ft), 44.2m (145 ft), 50.1m (164.5ft), 56.1m (184 ft) & 62.0m (203.5ft)

In case pipe size of 8-5/8", maximum span length is 50.1m (164.5ft).

Span pipes are available in three different diameters; 5", 6-5/8" & 8-5/8" with pipe thickness ranging from 2.8mm to 3mm.

New truss joiner bracket design provides superior clamping force over the truss rod and reduces stress concentrations when compared with other leading manufacturers.

WESTERN-CP600 Truss Rods are made of high strength steel with hot forged heads on both ends for strength and toughness with two different sizes 3/4" and 13/16".



### Outlets Spacing

The distance between two sprinklers in the span is called outlet spacing. WESTERN-CP600 spans have three different outlets spacing.

\*2.97m (117")

\*1.48m (58.5") - Standard

\*0.74m (29.25")

### Available Ground Clearance

The distance from the lowest point at the span to the ground is called ground clearance. WESTERN-CP600 spans have three different ground clearances to match different heights of the planted crops:

Low profile: 1.9m, (for shorter crops)

Standard profile: 2.9m (Most field crops)

& High profile: 4.52m (Sugarcane)

## Solution for Corrosion, Acidity and Salinity water

WESTERN-CP600 spans provide the solution for corrosion problems by lining the internal surface of its galvanized pipes with a high-density polyethylene (HDPE).

Moreover, lined pipe with HDPE does not require gaskets between flanged pipes because of the unique mold-a-flange technology, which makes sealing an integral part of the liner material.

The outlets of WESTERN-CP600 lined system are made of special high-strength polymer for attaching drops. A unique system of polyethylene weights on the drops is provided.



## Overhangs

The Overhangs of WESTERN-CP600 have many different length options starting from 1.8m to 25.6m to fit the field edge and increase the planted area.



### Tower

WESTERN-CP600 tower is designed to resist the stress generated by gradients and maximize roll resistance.

Welded ball joint and tapered weldments provide stress-free flex for smooth running on rough terrain. A Ball and Socket Construction connect the spans. The flexible hose boots with clamps seal the water joint, so no obstruction to the flow of water occurs.

Tubular compression and diagonal force braces, a suspended span-to-tower attachment, and a lower center of gravity provide greater tower strength and roll-resistance.

The tower legs are made of four V-shaped angles; the structure of the legs is bolted in two positions to the triangular tower bracket to minimize stresses to pipe fixtures, making the WESTERN-CP600 Tower Leg Bracket the strongest on the market.

The structure of the legs is reinforced with 4 crossties and one diagonal brace to secure the structure on the most difficult terrain.

Alignment system's rod has a new attached position to the pipe for better alignment in different field terrain.

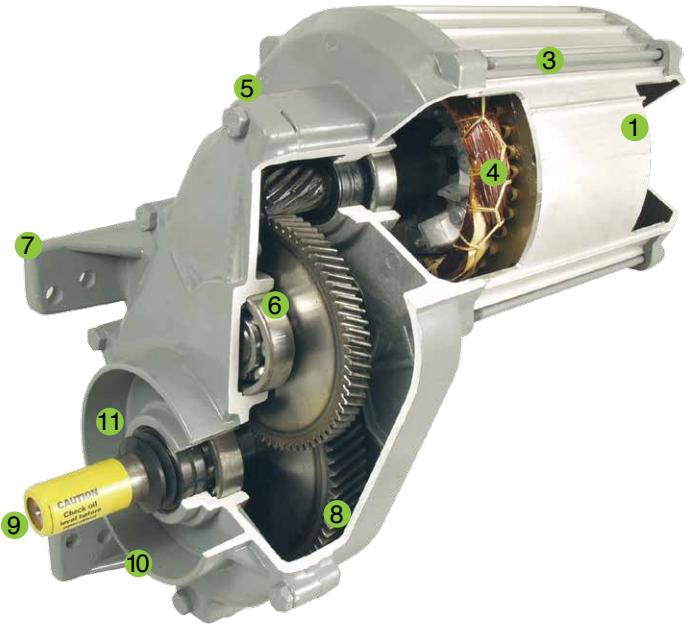
### Drive Train Assembly

WESTERN-CP600 drive train assembly is specifically designed to meet the challenges of today's longer span lengths. Each component of gear motor, gearbox, coupler, shaft and wheels is engineered to deliver the torque requirements demanded by your soil and tire combinations.



## Gear motors

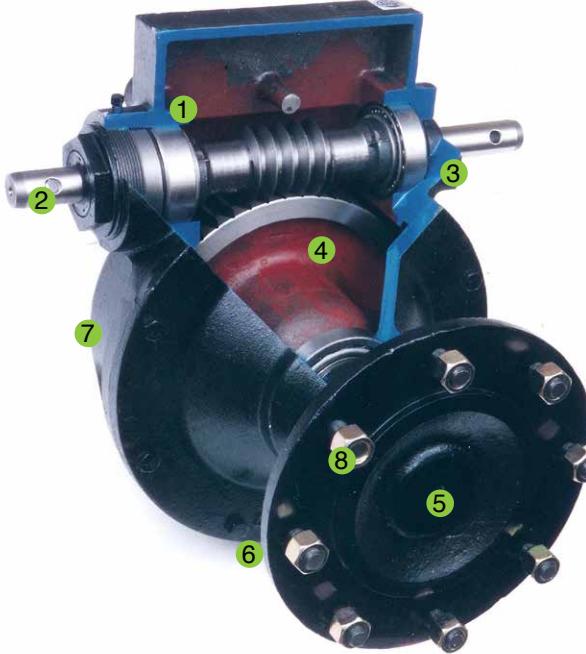
High-strength motors with proven reliability and irrigation duty with an efficiency of 95% make it possible to use small generators and cable with a smaller cross section.



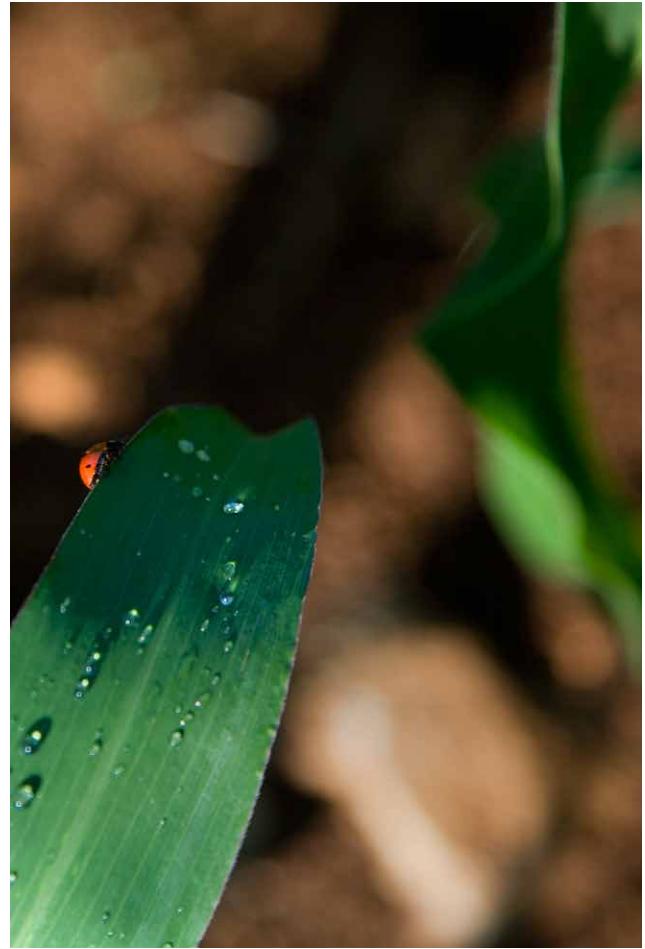
1. Forged aluminum housing.
2. Thermal overload protection.
3. Stator with aluminum blades resists corrosion and cools the motor, extending its life.
4. One-piece rotor with hardened helical gears.
5. Oversized rotor bearings.
6. Primed interior reduces corrosion.
7. Hardened helical gears for longer life and quieter operation.
8. Gear oil under extreme pressure provides maximum protection for internal parts.
9. Dual inlet joint designed for high temperatures.
10. Dual outlet joint provides greater protection high-strength intermediate bearing.
11. External joint for protection from dirt and chemicals.
12. Top fill tank with level indicator to ensure the appropriate oil level.
13. Easy access to the drain plug for easy maintenance ISO 9001 quality.
14. Standard speed: 44 rpm and 3/4 HP.
- Others: 34 rpm (1/2 HP); 68 rpm (1.5 HP); 73 rpm (1.2 HP).
15. Class F insulation

## Gearboxes

High-strength steel gearboxes designed to work under any conditions.



1. Full-cycle Diaphragm keeps the increase in pressure to a minimum, increases the useful life of the joint, and reduces the accumulation of moisture.
2. Protective inlet joint keeps out dust, water and chemicals.
3. Dual input axle for the left or right wheel interchangeably, to facilitate installation and replacement.
4. Stainless steel expansion chamber to protect against oxidation. Avoids breakage during transport.
5. Forged steel worm gear. Greater strength, compacted grain structure.
6. Large drain plug facilitates maintenance, inspection and refilling.
7. Internal joints protected from water, dust and chemicals.
8. 52:1 long axle gearbox (steel). Compatible with other brands.
9. 50:1 short axle gearbox available.
10. Option for towable machines.



### Universal joint

- Heat-treated aluminum construction,
- Self-aligning design and UV/chemical resistant
- Polyurethane star seal or inserts that doubles its strength.
- For use under harsh operating conditions.
- Does not require lubrication.
- ISO 9001 quality.



### Drive shaft

Square profile shaft made of high-density steel.

Completely covered with a protective plastic coating for safety reasons, and for protection from dust and moisture.

### Wheels

- Hot-dip galvanized 8" or 12" rims.
- High-traction tires for heavy-duty work in the fields:
  - High lugs (32 mm) for extra traction, even on muddy ground.
  - Large number of lugs (38).
  - Open area in the center of the tread to facilitate self-cleaning
  - Large tread for even wear.
  - Standard tire size: 14.9"x24" High flotation

Other sizes like 11.2 x 24, 16.9 x 24 and 11.2 x 38 are available.



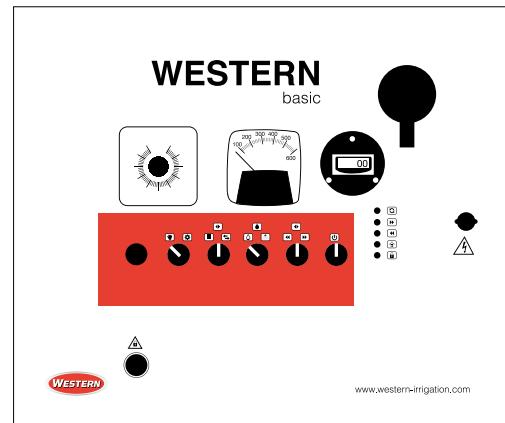
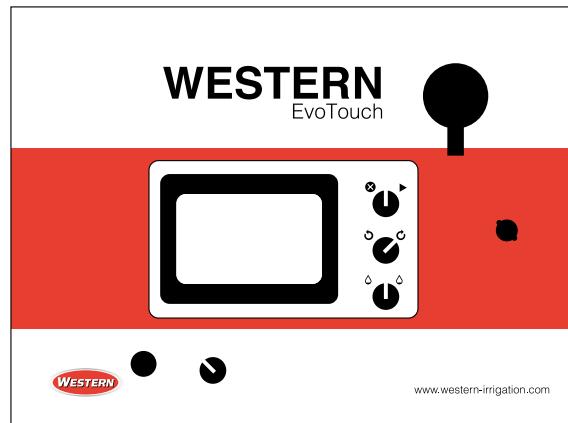
## Control Panels

WESTERN-CP600 control panels are the result of our long experience in the irrigation industry, available panels in the market and our knowledge of our customers' needs and concerns.

WESTERN-CP600 panels are mounted in a stainless steel enclosure for maximum protection and safety, manufactured under strict ISO 9001 quality standards, operator-friendly and easy to understand, incorporating the highest quality electrical components and most advanced technology.

WESTERN-CP600 Basic Control Panel offers standard features while the Evolution model improves monitoring field-management.

Our Evolution Series integrated monitoring and control system saves time and expense by allowing you to monitor performance and position of your system from home, office, or even the cab of your truck.



## Sprinkler package

The WESTERN-CP600 irrigation system includes a complete package of sprinklers, both fixed and rotating, in order to accommodate any type of terrain, crop or weather conditions. The sprinklers operate at low pressure, uniformly along the entire pivot, reducing operating costs through low operating pressure, efficient water application and minimizing losses caused by evaporation, wind drift and surface run-off.

## Fixed sprinklers

High efficiency, especially on sandy soil. They operate at low pressure, from 6 to 20 psi (0.4 to 1.4 bar).

Wetted diameters of 6 to 10 m, depending on the operating pressure and sprinklers heights.

## Rotating sprinklers

High irrigation efficiency.

Low instant application rate, ideal for medium and heavy soil.

The rotary action makes it possible to throw the water further, achieving wetted diameters of 10 to 20 m.



## End Gun

Whether you like to extend your planted area by irrigating the outer circumference of your pivot or you like to grow a wind resistance fence or just irrigating the corners, WESTERN-CP600 systems could be equipped with different types of End Guns, with or without booster pump, to help you achieve your goals.



## Why use pressure regulators?

Using pressure regulators maintain constant pressure and flow at even and uneven fields and create the ideal conditions for sprinklers for maximum application efficiency.

## Excellent wetting range

Our technicians will design your sprinkler package to provide uniform water distribution over the largest possible surface.



## The struggle against wind

By maintaining lower trajectory angles and larger droplet sizes, the WESTERN-CP600 sprinkler package offers solutions for the wind drift loss to maximize application efficiency.

## Dry wheel package

A system mounted on each side of the tower that keeps the nozzles away from the wheels, reducing wheel-tracking, runoff and surface soil compaction.



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