



# LINEAR CATALOG

## WESTERN IRRIGATION SYSTEMS

**WESTERN**





**YOUR TRUE SUCCESS PARTNER**



# ENGINEERING SUCCESSFUL SOLUTIONS

As a grower or investor you understand that planting every square meter of your land will maximize your yield and increase your bottom line. So regardless your field layout, WESTERN CP600 Linear Irrigation Systems can irrigate complex combinations of smaller and irregular field shapes. WESTERN linears cover 92% to 98% of your rectangular fields, use 60% less water and reduce labor costs as much as 50% when compared with flood irrigation due to its precise water application and high distribution uniformity.

Linear irrigation systems are not like pivots, so the majority of the water is not needed at the outer end of the system. Each fixed or dynamic sprinkler applies the same flow rate regardless of its position on the system, making it ideal for low-pressure applications.

WESTERN-CP600 Linear irrigation systems cart could be standard or high profile with two or four wheels, fixed or swing around structure with a number of guidance options including furrow, above ground cable or buried wire.

Water can be supplied to WESTERN linear systems from a ditch, or buried mainline and hydrants. You can make your choice according to the water source type at your agricultural project to fit your application.

WESTERN CP600 linear irrigation systems are preferred for rectangular field shapes, specialty crops, experimental stations, and hybrid seed operations.



WESTERN CP600 linear offer you the most durable, field proven irrigation systems to provide you with years of reliability.

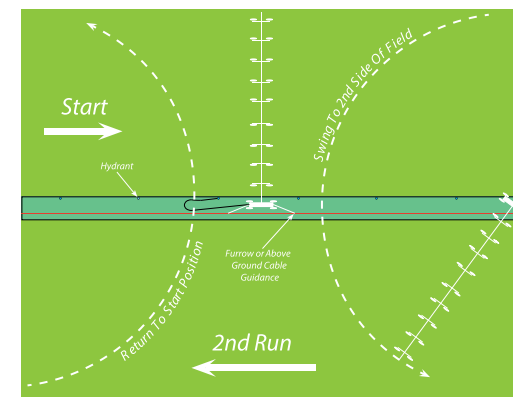
WESTERN CP600's team of engineers and consultants along with your local dealer are your partners; there to help you design a complete irrigation system that fits your situation – including water source, delivery and field application. Your dealer is there to ensure WESTERN CP600 linear irrigation gives you what you need – peace of mind and the potential for greater profitability.



### WESTERN CP600 Linear

Our qualified engineers have developed the WESTERN CP600 linear system, employing uniform components by standardizing the most of the machine's parts to simplify assembly and service, creating a more efficient system. Combine this with the most advanced manufacturing technology methods, quality parts and electronics to achieve an unequalled linear system in terms of providing effective and reliable crop irrigation, chemigation and wastewater management...year after year.

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



Rugged Construction  
Down the Line

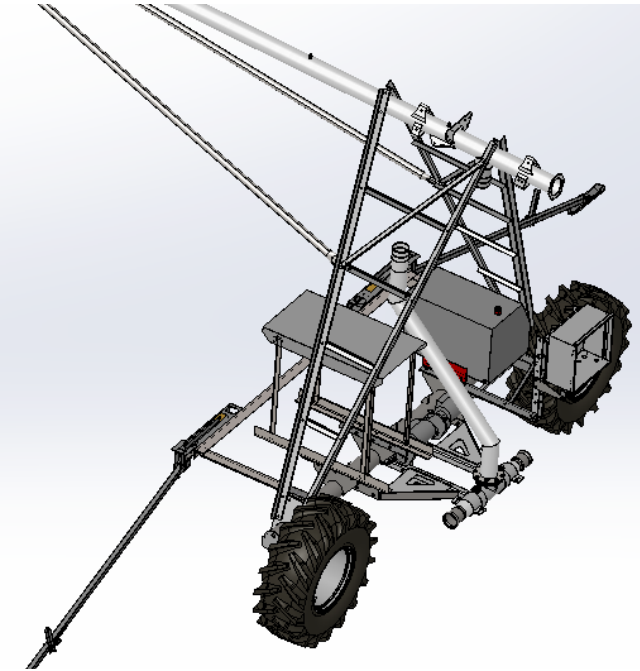
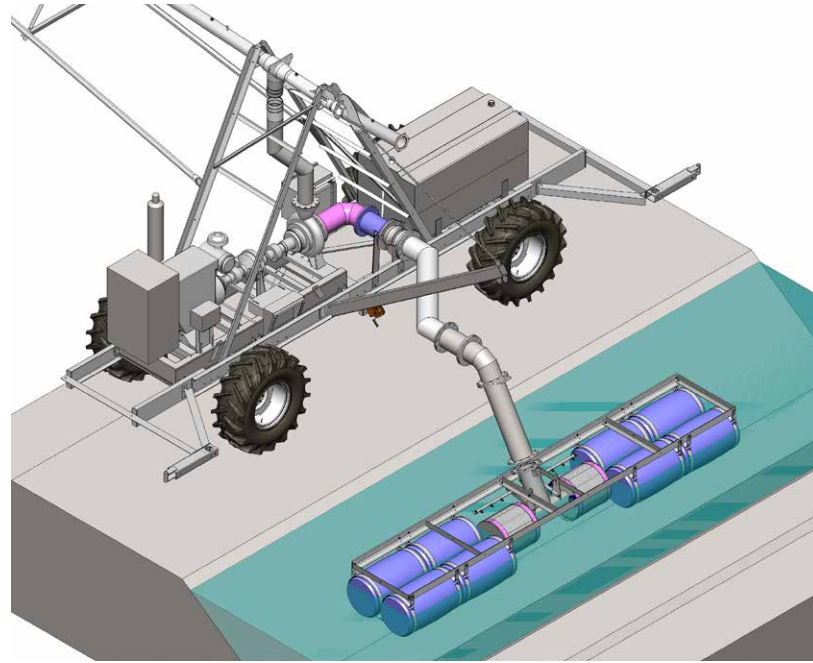
### Tailored for a Perfect Fit

With water delivery to the center or to the end of the system, 2 or 4 wheels carts, two pipe diameters, galvanized or poly lined spans and above ground or buried guidance system, your WESTERN CP600 linear can be adapted to fit your needs.



### WESTERN CP600 Ditch Suction Feed

As an alternative to conventional water delivery for large-scale fields, WESTERN CP600 ditch suction feed can be custom designed to meet a variety of applications.



### WESTERN CP600 Two Wheel Cart

A perfect design for smaller fields, the Two Wheel WESTERN CP600 Linear reduces your investment per unit area with its ability to move from field to field, allowing you to follow crops during the growing season.

### WESTERN CP600 Two Wheel Advantages

Eight span maximum (length dependent) Furrow, cable or below ground guidance



### WESTERN CP600 Four Wheel Tough Carts

WESTERN CP600 linear cart is built to pull. With the largest drive tube available in the industry and its live axle suspension, this cart has pulling power. It is capable of handling up to an eight inch hose according to your flow requirements. It's the ultimate pulling machine.



### Solution for Corrosion, Acidity and Salinity water

WESTERN-CP600 spans' provides the solution for the corrosion problems through 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 as integral part of the liner material.

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



**Modular Components**

Engine, pump and generators are modular and frame mounted. WESTERN CP600 cart can be configured for end or center feed.  
All WESTERN CP600 ditch suction systems feature independent walking beam suspension.

In addition to a wide selection of engine horsepower, flow rate and fuel tank capacity choices, self-priming and self-cleaning options are also available.

System Type	Hose Feed	Ditch Feed
System Length	Up to 1000m	Up to 1000m
Span Length	All Available	All Available
Protection System	Galvanized & Poly Lined	Galvanized & Poly Lined
Span Diameter	5", 6-5/8" & 8-5/8"	5", 6-5/8" & 8-5/8"
Power Source	Generator or Drag Electrical Cable	Generator or Drag Electrical Cable
Guidance System	Below-Ground Cable, Furrow or Above-Ground cable	Below-Ground Cable, Furrow or Above-Ground cable
Field Slope	Up to 6%	Flat
Extended Coverage Option	Yes	No

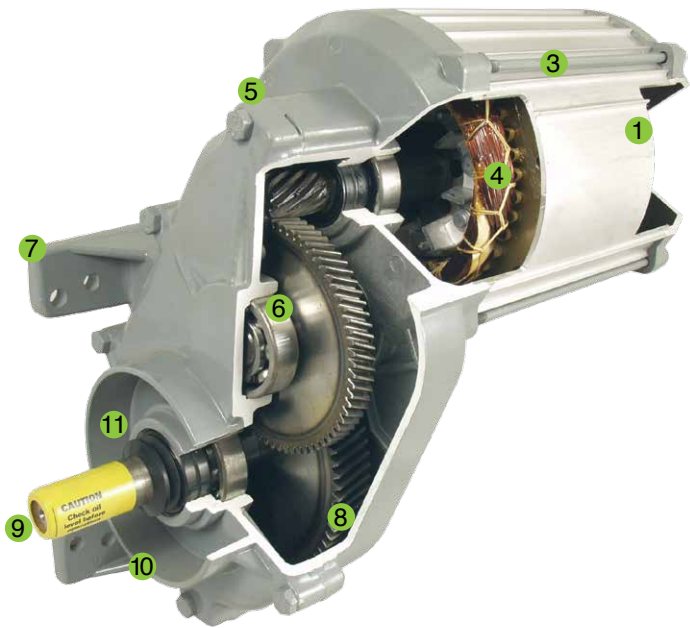
**Drive Train Assembly**

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 extensive experience in the irrigation industry and our knowledge of our customers' needs and concerns.

WESTERN 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, and incorporate the highest quality electrical components and most advanced technology.

WESTERN basic control panel offers the standard features while the Evolution model provides enhanced features to help our customers easily monitor and manage their fields.

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 linear, 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).

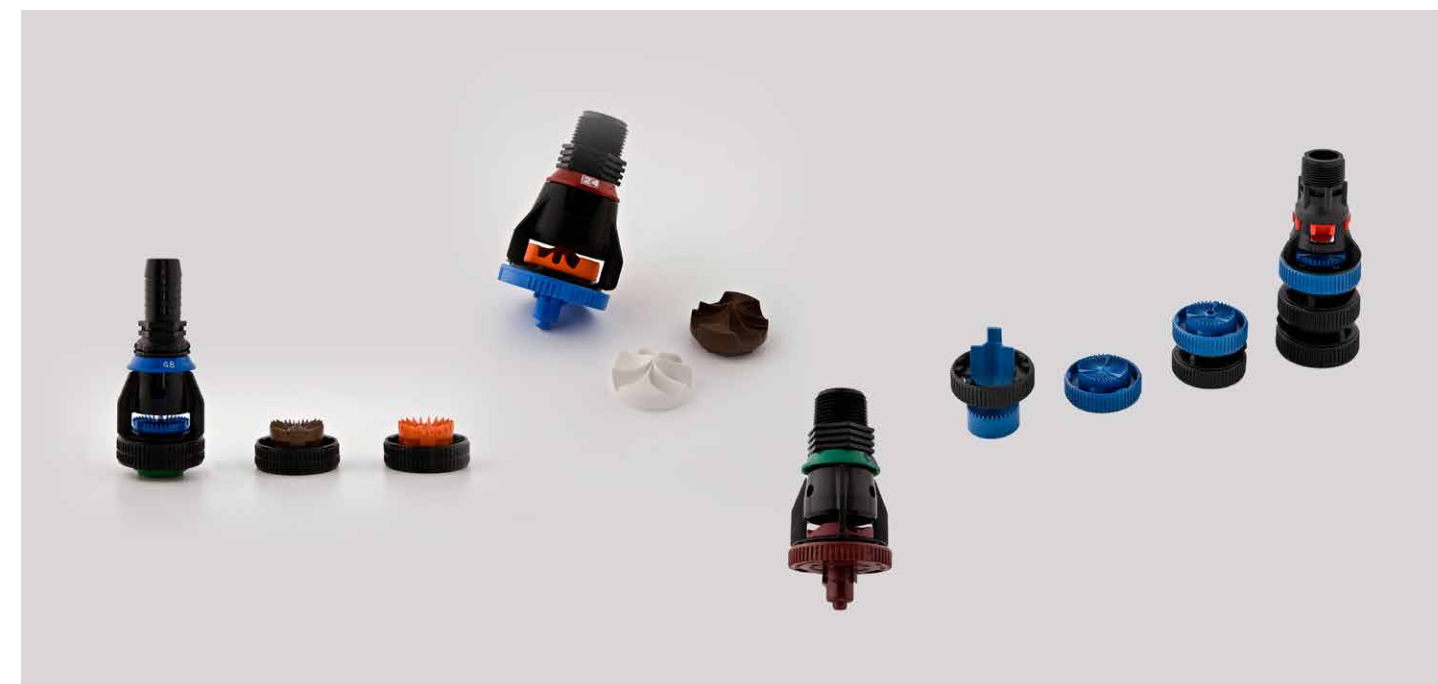
Wetted diameters of 6 to 10 m, depending on the operating pressure and sprinklers heights.

### 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.





### Customer Service

We maintain continuous specialized training programs for our technicians as well as our official Distributor network, to help you keep your WESTERN linear operating correctly and efficiently.

When you purchase a WESTERN linear, our network of distributors will install your machine in accordance with our recommended standards in order to ensure maximum efficiency and durability.

### Quality

WESTERN irrigation systems offer incomparable durability and reliability; this reputation can be attributed to the company's commitment to quality.

All WESTERN irrigation Systems are manufactured under the ISO 9001 quality standard to guarantee our efforts to maintain the highest levels of quality for our irrigation systems.

Other brands of linears

Don't stop irrigating, whether your machinery is from WESTERN or another manufacturer. Our Distributors are trained to fine-tune your machine and provide any parts you need.

Universal parts

WESTERN linears use parts that are universal and adaptable to most brands.

### 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 linears, pipes are guaranteed for 10 years.

### 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.



## Our Affiliates



### **Alkhorayef Industries Co.**

Riyadh's Second Industrial  
City Road 5602  
Riyadh 11551,  
Saudi Arabia  
T: +966 11 265 1124  
F: +966 11 265 2348  
[www.alkhorayef.com](http://www.alkhorayef.com)  
[western@alkhorayef.com](mailto:western@alkhorayef.com)  
[Info@western-irrigation.com](mailto:Info@western-irrigation.com)

### **AIscCoCorporation S.A.U.**

Vía Dos Castillas 33,  
Ática 7. 28224  
Pozuelo de Alarcón,  
Madrid. Spain.  
T: +34 913 510 766  
[www.aiscosolutions.com](http://www.aiscosolutions.com)  
[info@aiscosolutions.com](mailto:info@aiscosolutions.com)

### **Trans Orient for Marketing (TOM)**

Egypt, Second Industrial  
Area-Second Service Road-  
No.18- 6th October City  
T: +20238202091  
[www.alkhorayef.com](http://www.alkhorayef.com)  
[AIC\\_Egypt@alkhorayef.com](mailto:AIC_Egypt@alkhorayef.com)

### **Pierce Corporation**

PO Box 458  
93747 Highway 99 South  
Junction City, Oregon USA 97448  
Phone: +1-541-998-0300  
Fax: +1-541-998-0301  
<http://www.piercecorporation.com>  
[info.us@piercecorporation.com](mailto:info.us@piercecorporation.com)

### **AMAKO**

2 Brovarska str., Prolisky vil.,  
Borispol district, Kiev region,  
Ukraine, 08322  
+38 (044) 490-77-81  
+38 (044) 490-77-80  
+38 (044) 490-77-82  
<http://www.amacoint.com>  
[ukraine@amacoint.com](mailto:ukraine@amacoint.com)

### **Pierce (Tianjin) Irrigation Equipment Company Ltd**

No.1 Shunyi Road,  
Beihuan Industry Area,  
Jinghai District, Tianjin,  
People Republic of China 301600  
Tel:+86-22-68608866

Talk to your local Distributor to find out what we can offer you.





صناعات الخريّف  
Alkhorayef Industries

[www.alkhorayef.com](http://www.alkhorayef.com)  
[western@alkhorayef.com](mailto:western@alkhorayef.com)



[www.western-irrigation.com](http://www.western-irrigation.com)  
[info@western-irrigation.com](mailto:info@western-irrigation.com)

Kingdom of Saudi Arabia - P.O. Box 42852 Riyadh 11551 - T +966 11 265 1124 - F +966 11 265 2348