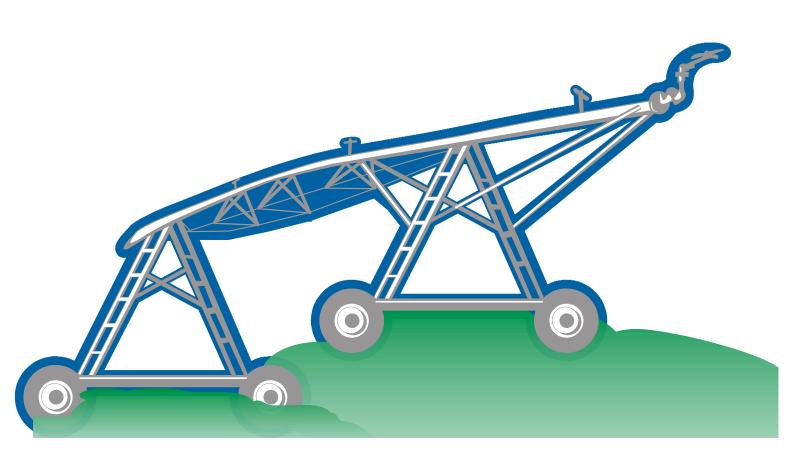


RAINFALL





# **Rainfall Center Pivot**

Simply ranked the best

Irrigation is the chemistry among energy, land, and water.

Having better yield, preserving nature and economical use of natural resources is a continuous research at Rainfall.

The Center Pivot is a long term investment to the farmer. Rainfall Engineers are the pioneers in designing, manufacturing and supplying long life equipment.

Rainfall Research and Development Department is continuously committed to saving energy, water consumption, and supply versatile and efficient Center Pivot. Ultimately our team is aiming at maximizing profit and minimizing production cost to the farmer.

The simple secret is our only commitment to providing heavy duty and state of the art

electrical parts, gear boxes, shielded center drives, double shielded cables, pipe galvanization of 0.51-0.76 mm and weight efficient both low profile to resist high speed wind and high profile for high crops structures. Moreover the steel specification is of high tensile strength which enables span to carry more continuous load than any other Center Pivot.

Rainfall minimizes installation time and parts replacement, by supplying uniform and standardized parts and components. Replacing standardized parts decreases inventory investment and cost.

Rainfall is manufactured to operate on rugged terrain, to resist hard water, and to achieve efficient and economical irrigation. It is custom designed in high profile or low profile to meet crop requirements and windy fields.

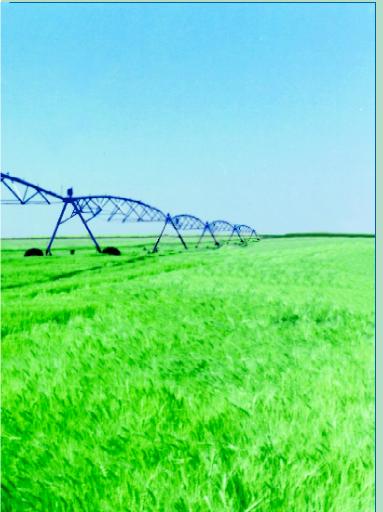
Rainfall Center Pivot is custom designed from 24 meters up to 700 meters. Numerous integrations of span's lengths varies from 24m to 60m each with 5 inch, 6 inch, 65/8 or 8 inch pipes.

They give flexibility and reliability to meet farmer's custom requirements.



The farmer plants various crops and thus needs variable water application. Rainfall provides the computer software to analyze the water application required resulting in

custom design and specification of sprinklers and pressure regulators to achieve crop water needs. Low pressure sprinklers are designed to sustain hard water containing suspended solids and are much less susceptible to clogging than regular sprinklers. They are easy cleaned of any accumulated material. The Rainfall Center Pivot is well known for uniform water application resulting in higher yield.



The span structure is coated with a special resistant to salty water paint that has proven durability in marine equipment. Galvanized structure is also available upon request.

All Center Pivot are furnished with new tires and covered drive shafts to ensure long life and cheaper maintenance. The wide wheel base up to 4.25 meters and the 10 cm X 10 cm X 6.40 cm pivot legs gives the stability and rigidity to the span and Pivot point respectively.

The uni-knuckle flexible joint is advantageous to span tilt around 18% on rough terrain without any harm to the tower pipes, joints, and legs.

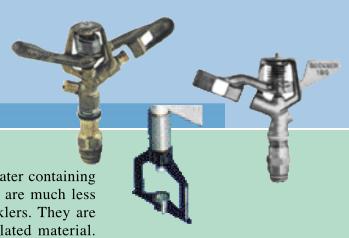
Rainfall design and specification result in long life machine, efficient irrigation, better yield, and lower cost.

Rainfall is your only reliable trouble free Center Pivot that never lets you down. *Our* ultimate objective is a long term investment and shortest payable period to the farmer.

Rainfall is eager to assist farmers in early return of their investment by providing a

superior quality Center Pivot at very competitive price.

We provide, part time and full time trainee to assist in installation or maintenance ensuring proper and efficient equipment performance.



## **Sprinklers**

Sprinklers are designed to sustain hard water containing suspended solids. Low pressure sprinklers are much less susceptible to clogging than regular sprinklers. They are designed to easy cleaning of any accumulated material.

# Drop tubes

Ensure closer water application to the soil and reduce water evaporation in hot dry climates. They conserve water more than sprinklers on top pipe. They come in 1.5 and 2 meters lengths.

# Tower boxes and alignment

They are made of high strength fiber glass to resist rain, dust and ultra violet sun rays.

The alignment circuits are the state of art. The alignment system ensures aligned movement of the Center Pivot around the field.

The safety shut off switch is standard on the Rainfall.





## Electrical span cables

All cables are double shielded. 4 conductor 10 gauge copper and 7 conductor 14 gauge copper.

#### Panel control

Main panel control is fully water proof with internal insulation pads and is standard on all Rainfall models.

It is assembled with voltmeter indicators, start and stop heavy duty push buttons, variable speed

control switch, timer to specify destination

stopping point, and standard fertilizer injector plug.

Operation instruction and safety remarks are easy to read and self explanatory.

The standard power circuit is 480 volt/3 phase/60 Hz., whereas 380 volt/3 phase/50 Hz. is optional.

Control circuits are 110/220 volt, 1 phase, 50/60 Hz.





Every farmer requires special accessories such as Booster pumps, flow meter generators, vertical turbine pumps, fertilizer injector pump, drop pipes, sprays, pressure regulators sprinklers, End Guns. All are available in Rainfall.

Nadco-Rainfall reserves all the rights to change the engineering, design, suppliers, and any specification of the Center Pivot, equipment without any responsibility or obligations.

All metric figures are approximate.

## **Options**

Rainfall can be supplied with various option list such as auto reverse, auto shut own, auto restart, low temperature switch, 38X61 cm high flotation tires, test voltmeter.



#### **Tires**

All center pivots are furnished with brand new tires from well known international companies.

The standard tire is 28.5X61 cm, whereas high flotation tires of 38X61cm are optional.



#### **Tower Motors**

Center drive motors are heavy duty and fully insulated water proof. Center drives standard is 50:1 ratio with 1 HP motor. Optional is 60:1 ratio with 1.5 HP motor.



#### End gun

Increases irrigated area with out additional major investment in the Center Pivot. The end gun is your choice to irrigate additional corners and increase your hectares. It comes in various sizes to meet the source water supply and pressure.

#### **End Booms**

End booms are convenient to meet farmers custom design center

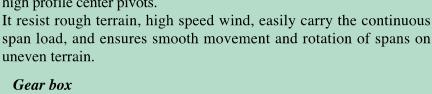
pivots lengths. They are connected to the last tower with the same high tensile steel strength in the span. Farmer can increase the irrigated area with the extra end booms ranging from 3 meters up to 24 meters in length.

#### Tower Wheel Base

the 4.25 meter wheel base provides the highest stability available in center pivot design.

It is designed to accommodate low and high profile center pivots.

span load, and ensures smooth movement and rotation of spans on uneven terrain.



Rainfall is supplied with best gear boxes of 58:1 ratio and from well known brands.

The one mold high strength cast iron, fully insulated is capable to resist dust, water, and bad weather conditions.

> The heavy duty gear box with its 2 inch shaft is manufactured to facilitate rotation on roughest terrain. The heavy duty bearings increase the life span of the gear.



# Flexible joint

The uni-Knuckle joint ensures safe towers connection and flexible operation of towers in various different tilts avoiding any harm to towers or pipes.

This joint allows frictionless water flow ensuring reduction of pressure loss, consequently, required pressure is achieved.



### **Pipes**

All pipes are of high tensile steel strength with various diameters of 14 cm (6"), 17 cm (65/8"), and 20 cm (8").

Custom design center pivots lengths require specific pipe diameter to meet required pressure at end of Center Pivot . Rainfall accommodates the most efficient pipes combination.

The pipes are all galvanized, whereas epoxy is optional. The galvanization of pipes ensures long life and anti corrosion problems resisting water with high suspended solids. Pipes are hot dipped,

Steel

galvanized, and protected with 0.51mm up to 0.76mm of galvanized thickness.

Rainfall is manufactured to operate on rugged terrain to resist hard water and achieve efficient and economical irrigation. It is custom designed in high profile or low profile to meet crop requirements

and windy fields.

Zinc

Rainfall Center Pivot are custom designed from 24 meters up to 700 meters. Numerous integration of spans lengths varies from 24m to 60m each with 5 inch, 6inch, 65/8 or 8 inch pipes.

#### Structure

It can be manufactured in low profile or high profile. The structure custom design meets various crops and requirements.

The high tensile steel strength ensures structure durability. Tower legs are 10X7.5X6.35 cm. Truss rods are 16, 19 and 22 cm.

Pivot riser and elbow are of 20 cm diameter. Pivot legs are 10cmX6.35mm fixed by achors on a concrete slash that secures rigidity, strengths, and stability to the Center Pivot.

Spans are custom designed from 24 meters up to 60 meters, fitted with 14, 17 and 20 cm galvanized pipes.

The standard structure is painted by marine anti corrosion special paint that has proven its resistance to hard and high salty water. Structure galvanization is optional.



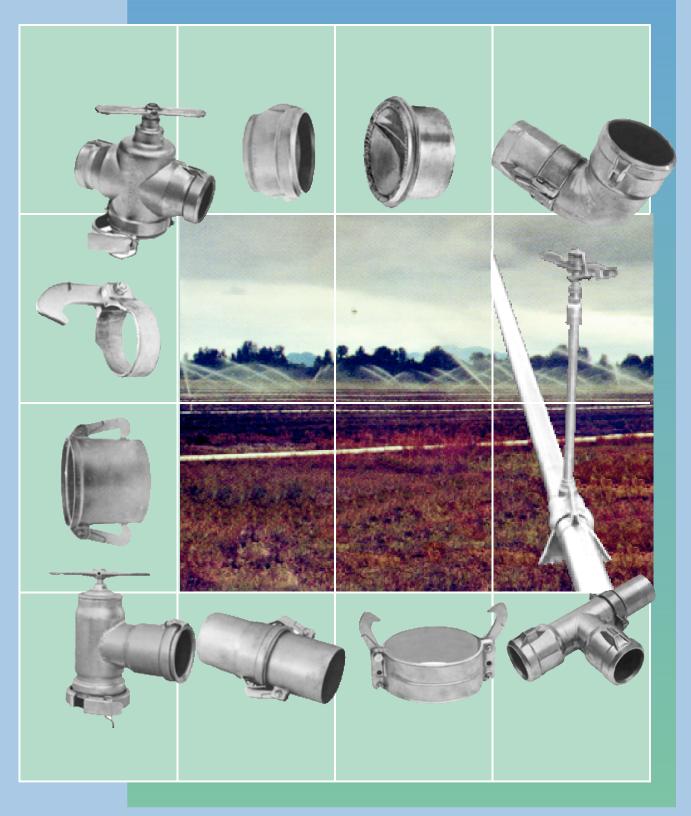
The span structure is coated with special resistant to high salty water paint that has proven itself durable in marine equipment. Galvanized structure is also available upon request.

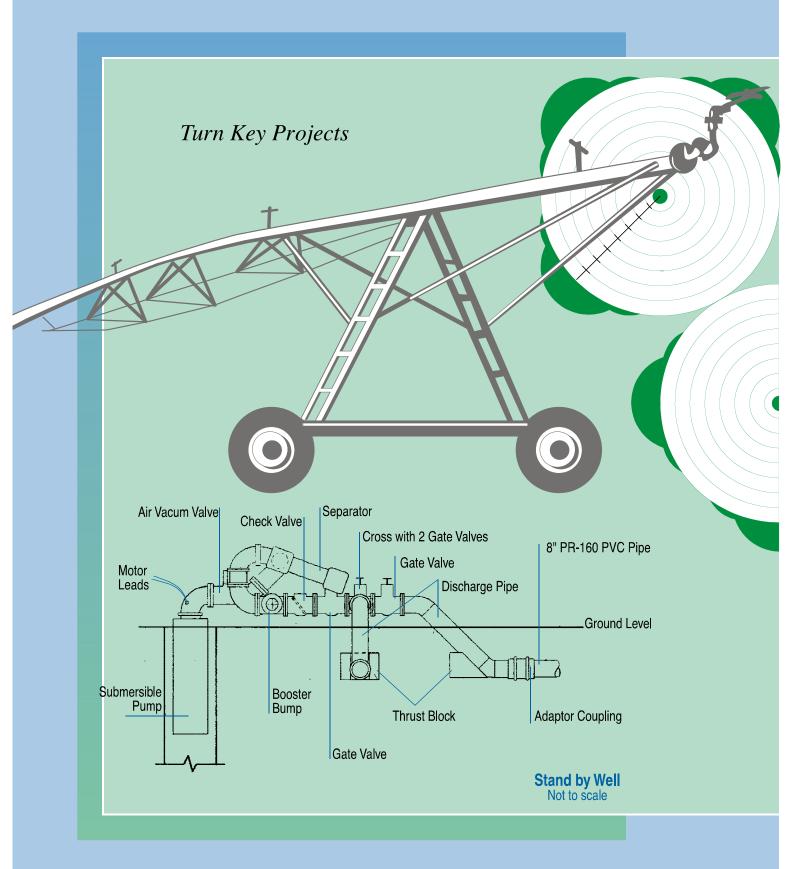
Nadco supplies and install silos for grain storage.

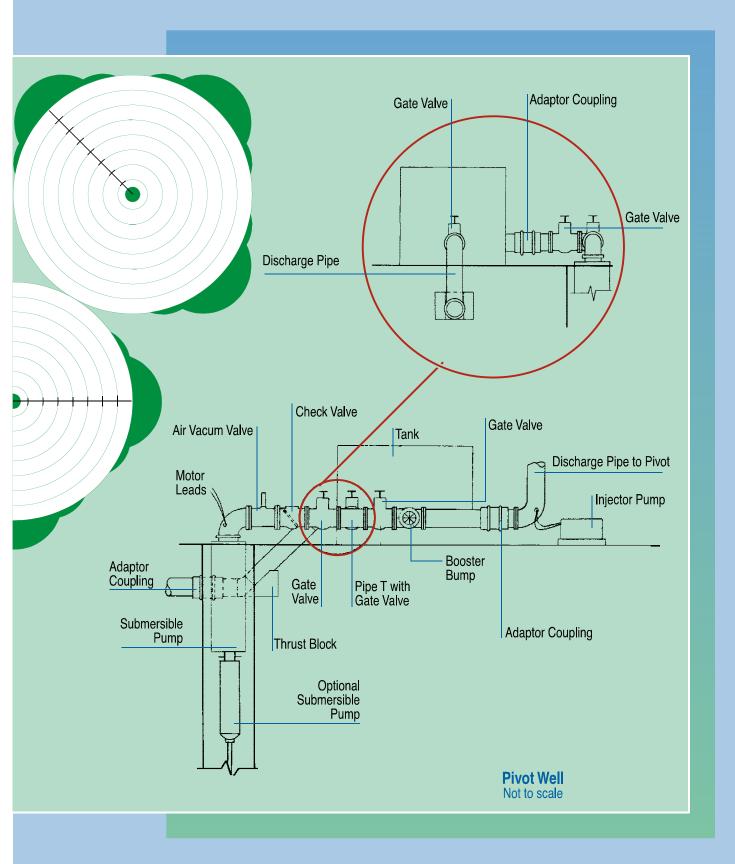
Silos are manufactured in all sizes and dimensions of high tensile steel strength.



Pipe Line Irrigation









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