

Irripod Plus In-line System



What is Irripod Irrigation?

Irripod Plus is a flexible, cost effective pipeline sprinkler irrigation system for pasture and forage crops.

Designed to operate at low pressure Irripod Plus distributes water on a slow absorption rate over a 12-24-hour period. This allows for effective absorption into the soil whilst eliminating pooling and run off. The system only requires movement once per 12-24 hour period.

Irripod Plus is a component system that is simple to install and manage. The system utilises protective Pod Skid covers over sprinklers that are attached to an irrigation pipeline. Irripod Plus can be configured to suit individual requirements dependant on

application rates, the distance to be irrigated and the rotation intervals appropriate for the situation. Each Irripod irrigation line can be customised to suit varying paddock sizes and shapes while also accommodating existing obstructions.

Irripod irrigation lines are strong, lightweight and flexible, easily moved while the system is operating by attaching the lines to an ATV or farm vehicle.

The flexibility of Irripod Plus means the system can be configured for many different end uses in addition to traditional pasture and forage crop irrigation; these include orchards, golf courses, sports fields and race tracks.

Benefits of Irrigation

The reasons for irrigation are wide and varied and differ for each situation. For example irrigation;

- Provides greater certainty with production than is possible with dryland farming.
- Provides options for diversification or intensification.
- Allows farmers to grow more pasture and increase livestock production.
- Allows farmers to maintain pasture quality over a critical dry period.
- Ensures crops are not affected by moisture stress at critical growing times.
- Provides greater opportunity to gain a pasture / crop response to fertiliser application.

Although irrigation has many benefits, whether to irrigate or not is generally an economic decision. For irrigation to be sustainable, the benefits must increase income sufficiently to cover the costs of development and provide an acceptable return on investment.

Advantages of Irripod Plus Systems

Lower Cost of Ownership

- Allows irrigation of more marginal land.
- Simple to add to irrigation scheme as funding allows.
- Low pressure system translates into lower running costs.
- Only requires one person to shift the lines.

Simple Technology

- Easy to understand and manage.
- Does not require specialist skills or tools.

Efficient Water Application

- Low sprinkler height means less wind drift and effective water distribution pattern.
- Mimics natural rainfall allowing for efficient soil water absorption and less runoff.
- Smaller droplet size means less soil compaction.

Versatile

- Able be used on flat or rolling country and with odd shaped fields.
- Able be turned on and off without waiting for the irrigation cycle to be completed.
- The system can be left on while livestock are in the field.

Irripod Plus is a flexible, cost effective pipeline sprinkler irrigation system for pasture and forage crops.



Reasons to Specify Irripod Plus

Innovative Robust Design

- The white Pods are highly visible minimising the chance of running over the Irripod Plus system with farm machinery.
- Sprinkler Riser, Cross Tee Anchor and Pipe Clamps prevent the Pod unit from slipping or twisting on the pipe when shifting the lines.
- Wire clip across the top of the Pod provides sprinkler protection against mechanical damage when shifting the lines.
- The heavy, rounded Pod base provides a low centre of gravity, improving the efficiency of shifting the irrigation line.

Component System

- Easy assembly of the sprinkler to the Pod Skid Base prior to the Pod body being attached saves on installation time.
- Pods are easily replaced without the need to cut or rethread the pipeline.

- Pod covers are also available in black to accommodate Pod replacement in existing systems.

Multiple Configuration Options

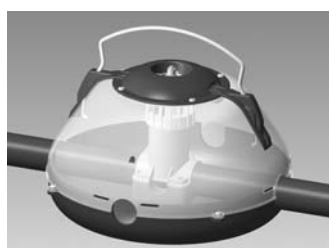
- The system allows for multiple configurations to suit different sprinkler sizes and 32mm, 40mm or 45mm irrigation pipe sizing.

New 'Pop-Up' Sprinkler Option

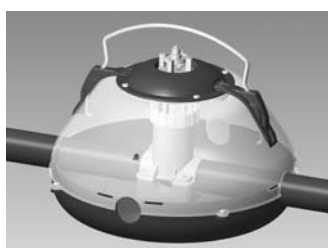
- An innovative 'pop-up' sprinkler option for 32mm and 40mm pipe.
- Provides an effective solution for pastoral areas that are to be grazed with inquisitive livestock such as horses, deer, bull beef and young stock.
- Pod lid prevents hoof and leg injury in young stock and sprinkler damage from older stock.

Quality Materials

- High impact UV resistant plastic construction coupled with long life corrosion proof fastening means Irripod Plus systems are both rugged and durable.



Innovative Irripod Plus 'Pop-Up' with sprinkler retracted. Protective lid prevents hoof injury in young stock.



Irripod Plus 'Pop-Up' sprinkler mechanism operates like a piston and is activated by water pressure.



Irripod Plus 'Pop-Up' is ideal for paddocks with young stock.



Getting Started

Once you have made the decision to install an Irripod Plus system you will need to consider the following:

- Area to be irrigated
- Water requirements
- Pump requirements

You will need to consider the property size and terrain, land use, water supply, number of days in the watering cycle, soil types and soil water holding capacity on the property while also considering your budget.

A good design will ensure you are getting the right amount of water onto the required area in a uniform pattern, thereby avoiding waste, for the lowest cost and effort.

System Specification

Listed below are the typical design specifications. Please note that Mainline and Pump requirements will depend on the design of the system.

Pod Skid Spacings

Pods are typically spaced at 15m intervals on an irrigation line but can be up to 25m with different sprinkler designs.

Sprinklers

Typically 15-20mm male, full-circle, impact sprinklers; other types may also be used.

Nozzle Size

Usually in the size range 2.4-4mm, but can vary as per specification.

Wetted Diameter

Most designers work on 225m² wetted area after allowing for 15m spacing on the irrigation line and ignoring cross over of sprinklers.

Operating Pressure

Typically 2.5 Bar to 4.0 Bar.

Fittings

1. On the tow end of line use a Hansen Tow Eye and Tow Rope.
2. Connect to the Hydrant using a Hansen Female Straight Coupler.
3. Insert a Hansen Barrel Union into the irrigation line if the irrigation line is to be stored or shifted out of the paddock when not in use.

Defining Your Irripod System Requirements for Ordering

- Choose the colour of the Pod; white or black
- Determine the pipe size; 32mm, 40mm or 45mm
- Determine the sprinkler type
- Determine the sprinkler nozzle size
- Determine the pressure regulator required, if applicable

When ordering please specify pipe size, sprinkler type and nozzle size and if required pressure specification of the pressure regulator. The Irripod team will then assemble the components required for your design.








Black Pods are ideal for Pod replacements in existing systems.




Irripod Plus Hydrant and Pipeline Components

Component	32mm Irrigation Pipe	40mm Irrigation Pipe	45mm Irrigation Pipe
Hydrant			
	Male Brass Quick Coupler Key		
	Part No QCK40BSP	Part No QCK40BSP	N/A
	Female Brass Quick Coupler Valve		
	Part No QCV40BSP	Part No QCV40BSP	N/A
	Brass 90 Degree Swivel		
	Part No QCS40BSP90	Part No QCS40BSP90	Part No QCS50BSP90
	Female Straight Coupler		
	Part No HFS32	Part No HFS40	Part No HFS50
	Camlock (Available August 2006)		
	Part No HCE32	Part No HCE40	Part No HCE45
Pipeline			
	Straight Coupler		
	Part No HS32	Part No HS40	Part No HS45
	Male Straight Coupler		
	Part No HMS32	Part No HMS40	Part No HMS45
	Reducing Straight Coupler		
	Part No HRS40-32	Part No HRS40-32 or	Part No HRS45-40
	Barrel Union		
	Part No SBU32	Part No SBU40	Part No SBU50

Irripod Plus Towing Accessories and Fence Signs

Component	32mm Irrigation Pipe	40mm Irrigation Pipe	45mm Irrigation Pipe
Towing Accessories			
	Tow Eye		
	Part No HTE32	Part No HTE40	Part No HTE45
	Tow Rope		
	Part No TR2	Part No TR2	Part No TR2
	Tow Ball (Available August 2006)		
	Part No TBY	Part No TBY	Part No TBY
	Tow Trailer		
	Part No Towtrailer	Part No Towtrailer	Part No Towtrailer
Fence Signs			
	Numbered Fence Signs		
	140mm x 140mm Part No FS1110 240mm x 240mm Part No FS1120	140mm x 140mm Part No FS1110 240mm x 240mm Part No FS1120	140mm x 140mm Part No FS1110 240mm x 240mm Part No FS1120

Irripod Plus Sprinkler Options

Sprinkler Options	32mm Irrigation Pipe	40mm Irrigation Pipe	45mm Irrigation Pipe
15mm 	Naan 5022 Aquaflo Brass Torro PPC15 Torro AR3 Nelson R2000WF Rainbird LF1200	Naan 5022 Aquaflo Brass Torro PPC15 Torro AR3 Nelson R2000WF Rainbird LF1200	Naan 5022 Aquaflo Brass Torro PPC15 Torro AR3 Nelson R2000WF Rainbird LF1200
20mm 	Naan 5035 Aquaflo Brass Torro S2	Naan 5035 Aquaflo Brass Torro S2	Naan 5035 Aquaflo Brass Torro S2
15mm 	Irripod Pop-Up (See page 3)		
	Nelson R2000WF	Nelson R2000WF	N/A

Note: Other sprinkler types maybe compatible. Please contact Irripod for verification.

Step 1

The Tow Eye will need to be fitted to the end of the Feed/Sprinkler line that is furthest from the irrigation hydrant.

Step 2

With the Tow Hook fitting in place, mark a position that is 1m from the Tow Eye fitting. This is where you will install the first Pod Skid.

Step 3



Lay pipe over Skid Base and secure in position with Cross Tee Anchor and Pipe Clamps.



Drill 15mm (9/16") hole at required spacing for the sprinkler type being used and remove all drilling swarf.



Select the Riser to suit your sprinkler size. Fit rubber seal to sprinkler riser, locate riser onto pipe and cross tee anchor – ensure fastening nuts are tightened evenly.



Screw sprinkler into sprinkler riser.



Locate body on skid base and push firmly down to engage grip lugs.



Secure top body by screws around the base.



Fix wire clip into opposing holes on body sides.



Screw wire clip holders into the holes provided.



Flush the irrigation line prior to fitting the pipeline end cap to remove any drilling debris left in the pipe.

Step 4

Having completed the assembly of the first Pod Skid, measure along the pipe 15m from the last Pod Skid.

This is where you will place the next Pod Skid. You now need to assemble the Pod (repeat Step 3).

When you have completed the assemblies of the Pod simply follow Step 4, and Step 3 until you have completed all Pod Skids.

Step 5

You should now have all the Pod Skids fitted to the Feed /Sprinkler line and the Tow Hook on the sprinkler end of the line 1m from the first sprinkler.

Operating Guidelines

Irripod Plus System Management

- Moving Times – 12 or 24 hours, dependant upon system design.
- Return Times – Range from 8 to 14 days and are determined by soil structure, pasture/crop type, water availability and local climate conditions.

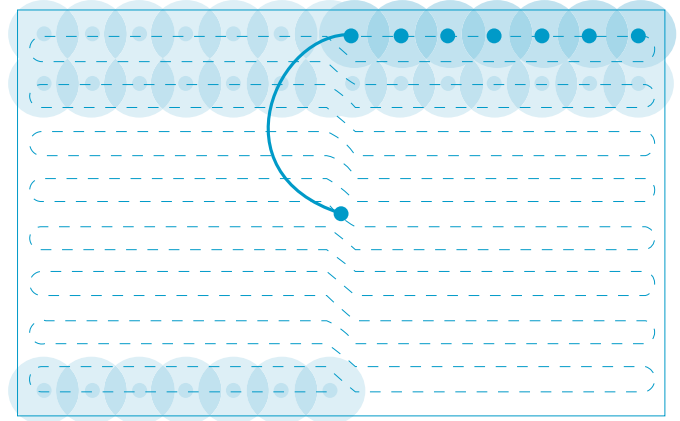
Moving Irrigation Lines

Irripod Plus lines have been designed to be moved whilst still operating. The system can be moved simply and safely with very little effort.

- Movement is typically done by an ATV. Do not exceed ATV manufacturer's recommendations for maximum towing weight.
- Use markers on the fence to align the irrigation line movements at required increments.
- Picking up irrigation lines is done using the Hansen Tow Hook and Tow Rope which is secured to the ATV or other farm vehicle.

- Ensure the ATV or farm vehicle is facing the direction the line is to be towed.
- In one smooth movement proceed to skid the Feed/Sprinkler line towards the marker sign at the other end of the field. Once the line is in place unhook, and proceed to the next line.

See example below, Shifting your Irripod System.



New Irripod Tow Trailer – designed to enable the easy movement of Irripod irrigation lines.



Quick release mechanism allows the shift to be completed without leaving the towing vehicle.



For further information contact:

Irripod Ltd

8 Manchester Square, PO Box 526, Feilding, New Zealand.

T +64 6 323-1583,

F +6 4 6 323-1371,

E info@irripod.co.nz

W www.irripod.co.nz



Disclaimer

Whilst every effort have been made to ensure accuracy, neither Irripod Limited nor any employee of the company, shall be liable on any ground whatsoever to any party in respect of decisions or actions they may make as a result of using this information. Irripod reserves the right to make changes without notice to any service or product specification to improve reliability, function or design. Irripod is a registered trademark of Irripod Ltd. © 2006 Irripod Limited. All rights reserved. Patents pending.

Hansen is a registered trademark of Hansen Products (NZ) Ltd.