



ENGINEERING AND EQUIPMENT FOR IRRIGATION

ZIE



- 50 years of French experience and innovation
- Center pivot specialist since 1965:
- first European manufacturer
- Pionnier of the hippodrome linear, patended in 1974



Close to you

2IE supported by a dealer's network, area or department cover, in order to be closer to the users.

The projects are studied in partnership with 2IE; we study together the best implantation of a linear machine or a pivot in order to propose the best offer.

We train our representative for assembly and operation of the linear and pivot technology in order to be autonomous and reacting.

All our representatives have a spare parts assortment to meet the needs within a short time.

Innovating and adapted solutions

- to your fields
- on all soil types
- following the relief
- on all crops.

Optimize water, energy and investment

The linear and pivot machines are known to consume 3-4 times less energy than other more conventional irrigation systems.

Our engineering department designs and manufactures your machines taking into account all your parameters to be the closest to your needs and to bring you full satisfaction.

Our objective is to offer to you the best solutions for best agricultural yield while preserving the invaluable resources than are today water and energy.

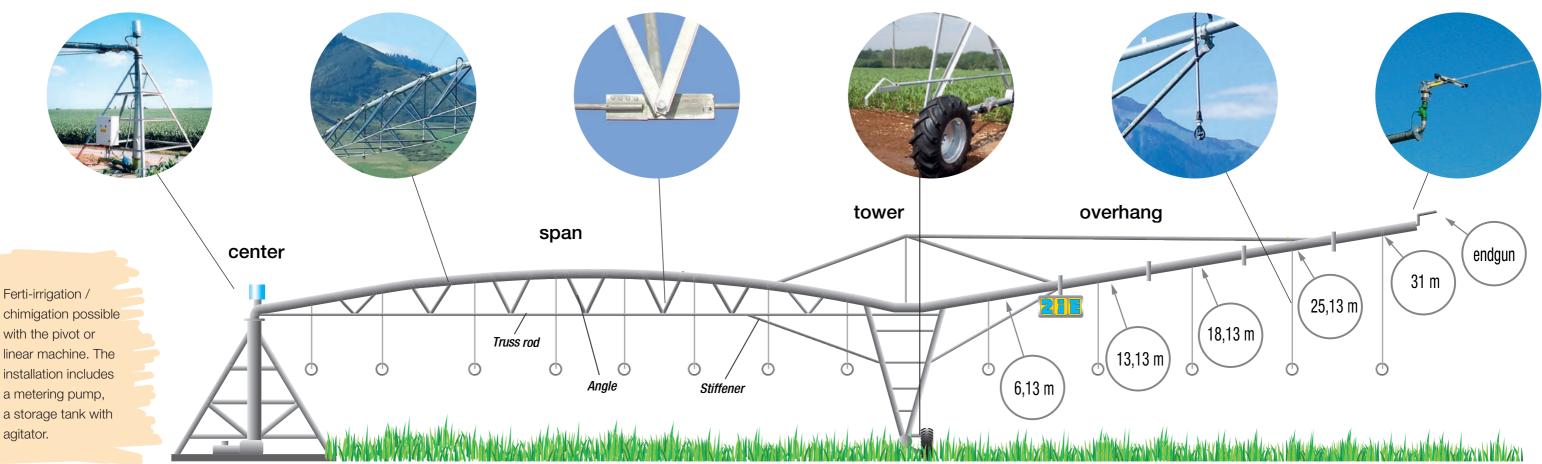
Our products are designed, developed and manufactured in France, with the greatest care to bring the best solution of irrigation and the reliability to you necessary to the good development of your productions.



Our designs and options

Our pivot and linear machine are hot galvanized steel, standard NF in ISO 1461.

The pivot or linear machine can be fixed or towable, diesel or electrical energy. The composition is the same with more or less spans and a fixed or swing boom overhang. Only management is different.



Specifications

		Spans lengths (m)	Ø Pipes	Mini / Maxi clearance	Maxi slope	Maxi flow at 3,5 m/s
SN	550	41,90 47,70 53,50 59,30	5" 1/2 (139 mm) thickness 3 mm or 4 mm	1,8 m - 3,50 m	25 % 20 % 15 % 12 %	151 m³/h
SN	660	42,30 48,10 53,90 59,70	6" 5/8 (168,3 mm) thickness 3 mm or 4 mm	1,8 m - 3,50 m	20 % 20 % 15 % 12 %	260 m³/h
sugar cane	SN 760	42,30 48,10 53,90	7" 5/8 (193,7 mm) thickness 3 mm or 4 mm	3,80 m	25 % 20 % 15 %	348 m³/h
	SN 860	42,30 48,10	8" 5/8 (219 mm) thickness 3 mm or 4 mm	3,80 m et 4,50 m	20 % 15 %	448 m³/h



Overhang (fixed or swing)

The fixed overhang (PAF) or swing boom overhang (PAFE) allows to increase the irrigated area through the avalaible lengths : 25, 31 or 37 meters for the PAFE. The system is fully automated.

When it arrives at the level of the obstacle, the swing boom overhang rotates 90° while cutting water (spans and endgun).

When the swing boom overhang rotates and the irrigation cut, a smaller gun, located at the end of the last span, can then take over.

Center pivots



supplied wir

Fixed or towable the center is anchored to a concrete base.



All our main panels are equipped with Schneider electric components.

Fixed pivot

In electric, diesel or solar version, the center pivot is configured in full circle or sector.

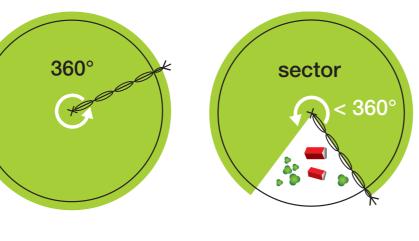
It is the central point by which water is conveyed in the spans. The spans turn around the center pivot. It is provided with a collector when it is in full circle. When the pivot is in sector, there is no collector, but a safety stop on tower and a safety barricade at each ends. Supplied with solar energy, the pivot can be 100% autonomous.

The fixed or towable pivot, is the most economical irrigation system, saving energy and labour. It can be equipped with a standard panel or AGS.

Towable pivot

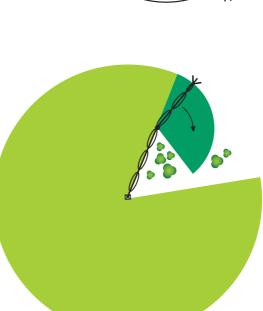
Towable pivot: on skids or wheels, pull by a tractor. The pivot is towable lengthwise. The wheels of each span are rotated 90° manually by using a jack, or semi-automatically by using a box with

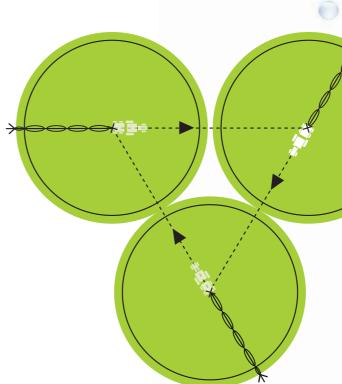
electric drive. The towing of the pivot is carried out using a tractor, by the center after having put a retention cable between the center and the first tower.



Articulated pivot

- The articuled pivot makes it possible to avoid an obstacle and to increase its irrigated surface.





- Possibility of automatic towing laterally from point-to-point (option).

Linear move systems



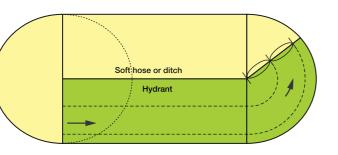




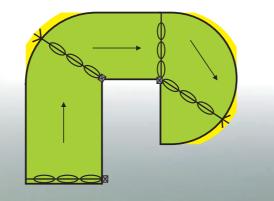
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Hippodrome machine

The hippodrome machine can irriguate in linear or in linear/circular with an automatic double sprinkler package. The alignment of the spans is managed by a double action cable system and by a coder located on the cart for the management of the angles.



➤ Soft hose automatic and motorized device.

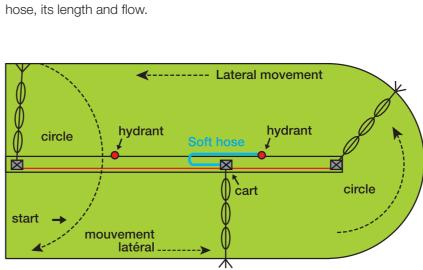


> On a towable linear machine the wheels of spans and cart rotate 90°. The linear machine is equipped with a retention cable of maintenance between the first tower and the cart, and with a draw bar.

Our linear machine: -until 1400 m length with pumping on canal. - until 600m length with soft hose or PE on ground with slope (<10%). - Flow until 720m³/h.

Water supply of the linear machine

It is carried out either from a canal, or by hose connected to the hydrants, spaced from/to each other according to the diameter of the



Guidance

Guidance is carried out using a furrow or by an overhead cable parallel with the way of the cart.

The aligment, by cable double action, optimize the perpendicularity of the spans with the cart.





AGS - Aqua Gestion System

Saving water, energy and labor costs

- Last automat Schneider.
- Easy to program, with colour touch screen.
- Gives spans location with a 0,1 degree precision.
- Precise control: end guns, swing booms, reverse points...
- Adjust water application depths on different areas, depending on the soil and crops.
- Indicates why the system stops, with the faulty tower number.
- Timer, base of 15 to 120 second, useful for fertilization and chimigation.
- Hour counter (dual) total and watering time.
- Memorizes the programs of the different fields where the systems works.
- Communication by GSM: control, alarm, command...
- Save the data on USB key.

System AGS equips all the machine hippodrome. It is strongly recommended for the pivots equipped with PAFE.

AGS Net

Control your remote installation

- Transmission of the data via network GSM.
- Allows to establish communication with the machine via a phone, tablet or computer.



al electric Schneide

Components and accessories of quality, reliable and durable

Our devices are equipped in partnership with leading brands to ensure reliability.



Different type of wheels

 Several wheels are available to adapt your equipment to the nature of the ground, its relief and the type of culture. Exist in 11,2/24 - 14,9/24 - 16,9/24 (wheel grass or iron wheel in option).

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Complete drive chain

- UMC gearbox.
- UMC or US Motor gearbox
- UMC device or cardan transmission.







Rubber boot and aluminuim shields for the span coupling

• These give more flexibility and better stability on hilly fields. Easy to assemble and disassemble.

Sprinklers

 2IE proposes a choice of sprinklers and regulators to ensure the best possible distribution according to the ground, crops and the slope.

Туре	Pressure bars	ø Irrigated (m)
Wobler	0,7 / 1	15 / 20
Rotator	1,4 / 1,7	10 / 16
Spray	1 / 1,7	8 / 13
LDN	1 / 1,4	9 / 12
Sprinkler	1,8 / 4	22 / 30



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