CATALOGUE

OTECH
LEADING IRRIGATION


OTECH
LEADING IRRIGATION

H2O

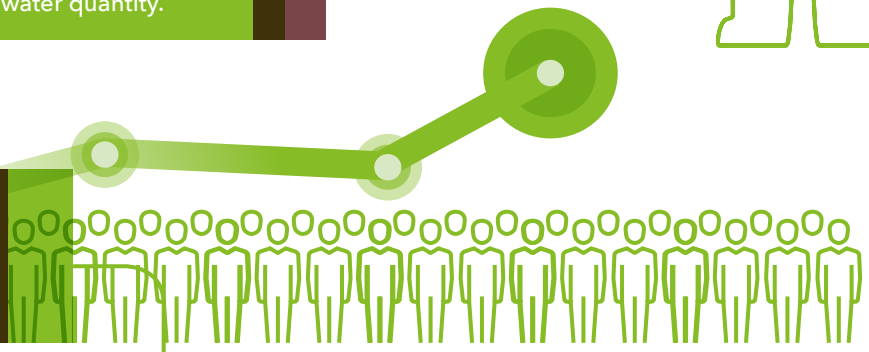
1%

Less than 1 % of the ground water is available for the mankind.

More than 70 % of this tiny quantity goes to agricultural uses.

It is fundamental to optimize the use of this water quantity.

Furthermore, the world population keeps increasing in number. In 2050, we will be a bit less than 10 billion people.



It is our present, it is our future. A hungrier and hungrier and, most of all, thirstier and thirstier planet.

The higher water consumption is for agricultural uses. The outdated irrigation systems reduces the water availability for the local communities and for the environment in general. Also these obsolete irrigation practices jeopardises the productiveness of the fields and cause serious economic and social damages.

With respect to the not irrigated or badly irrigated soils, Otech pivots and laterals products can increase:

+ 90%	+ 60%	+75%	+115%	- 50%
CORN HARVEST	POTATO HARVEST	COTTON HARVEST	WHEAT HARVEST	WATER ECONOMY

Every drop is like gold. It is life, it is the future.

It is getting rarer and rarer, more and more uncertain and precious.

For this reason, water must be collected, guided and
given out with great care and precision.

Otech knows how many water drops
every square metre of your field needs.

We know how to provide and give out these drops
to the ground, in order to let it yield its best
while exploiting as less as possible.

Intelligence, technology, care and passion.

HISTORY OF OTECH PLANT IN PUYOO

At the beginning of the 1980s, Lockwood, an American manufacturer leader in the new pivot industry, decided to establish himself outside the USA to conquer new markets. Aquitaine, a region in the south-west of France, was the destination he chose for its big farming potential and for its opportunities. Thanks to its sanded soils, its adequate climate and its water resources, easily exploitable, the development of the mechanized irrigation by those pioneers rapidly promoted this region in the front row in Europe. Nowadays, this ancient marshy desert is the garden of Europe. Thereby, the plant in Puyoô is the first industrial irrigation pivot production outside the USA. Inside these buildings, built by Gustave Eiffel, they would build the first 62 m span, currently standard. To become compatible with the highest European corn hybrids, they transformed the towers in order to get a better standard ground clearance.
In parallel with the development of a mechanised farming, Otech include the latest technologies, both for the machine production (robotization) and for the irrigation control and management (machine remote control system).

YOUR NEEDS, OUR METHOD. THINKING BEFORE MAKING

STEP 1

Soil, size and field shape, difference in height, relief, outline and obstacles.

STEP 2

Weather forecast.

STEP 3

Cultivation, plant, specific water needs. Method of application for the irrigation.

STEP 4

Available resources (water, electricity, implementation, etc.).

STEP 5

Specific client's needs. Economic survey: investment costs and usage costs.

On a farm, the irrigation is always an important investment.
As we operate on the business outcome, the work organisation and the natural resources, it is fundamental to take the adequate time to choose the most appropriate installation. Otech can be your partner in this project to define with you the best solution for your needs.

STEP 6

Project concept, creation and sizing of water and electric supply.

STEP 7

Production, ISO, NF, EN, etc.

STEP 8

Logistics, preparation, shipment.

STEP 9

Installation, implementation.

STEP 10

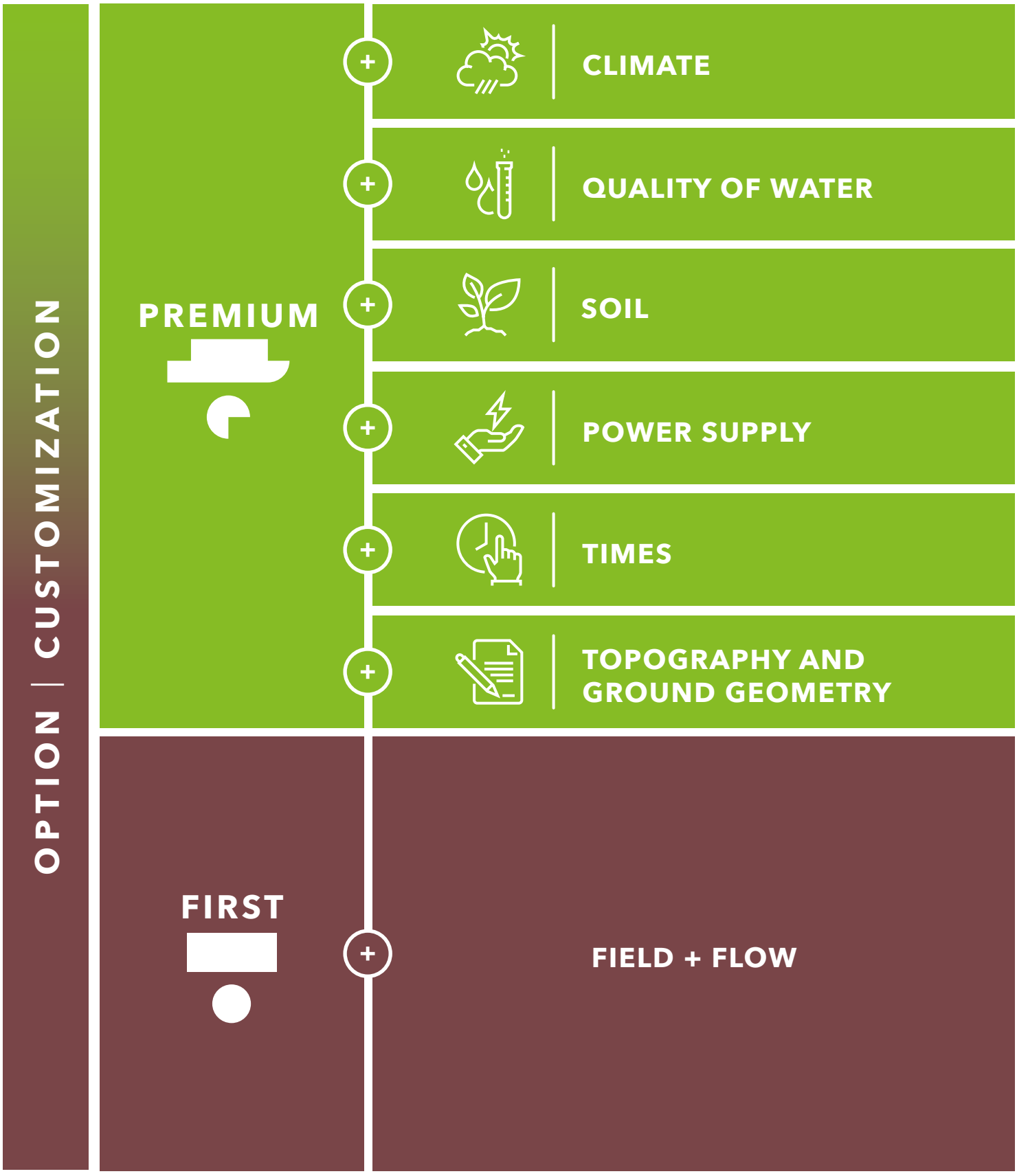
Customer service, spare parts, maintenance.


OTECH
FIRST


OTECH


OTECH

YOUR NEEDS
OUR RANGE



Thanks to the configurator, you can take advantage of Otech decades of expertise to develop your irrigation solution.

CUSTOMIZED SPRINKLER SURVEY | SPECIFIC OPTIONS AND STRUCTURE | WEATHER STATION AND SOIL HUMIDITY SENSORS

FILTRATION | CUSTOMIZED SPRINKLER SURVEY | STEEL SPAN PIPES THICKNESS 4 MM | PLASCOAT SPAN | POLYPLAS SPAN | STAINLESS STEEL PIPES

CUSTOMIZED SPRINKLER SURVEY | VARIABLE IRRIGATION RATE | ADAPTED UNDER-SPAN GROUND CLEARANCE

ELECTRIC GENERATOR | DOUBLE PIVOT | MOVABLE PIVOT | HYDRAULIC PIVOT | DITCH-FED LATERALS | SOLAR IRRIGATION SYSTEM

AUTOMATION | REMOTE CONTROL

END GUN | PIVOT SECTOR | TOWABLE TOWER | FOLDING TOWER | HYDRAULIC TOWER | FOLDABLE OVERHANG | CUSTOMIZED LATERALS | ADAPTED SPAN GROUND CLEARANCE

STANDARD PRODUCT:

FIRST CHOICE AT THE BEST PRICE

SIMPLE AND RELIABLE:

BETTER VALUE FOR MONEY / IRRIGATED SURFACE

OPTIMISED SOLUTION

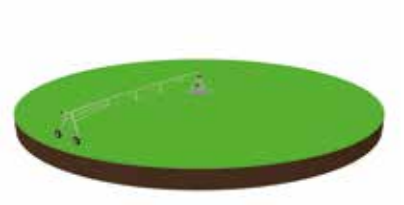

OTECH


OTECH
PREMIUM

PIVOT LATERAL

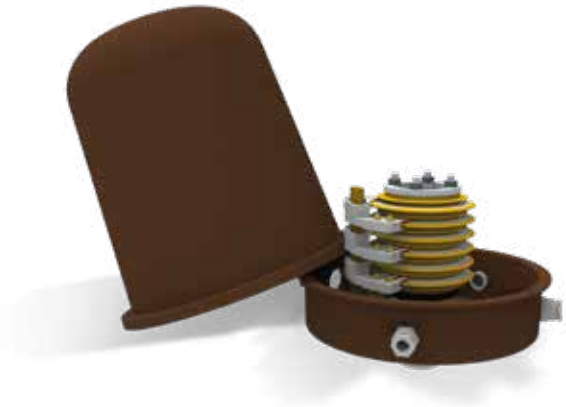
FIRST

PIVOT POINT FIRST



Mini Pivot

Compact pyramidal structure in galvanised steel with two belts on either side with a **4 mm thick pipe**. Watertightness through swivel on vertical pipe guaranteed by lip seal from the low pressures. The best value for money for the appliances up to max two spans that reduces the required volume of the concrete slab to preserve more cultivated surface.



Electric Collector

Electric collector with minimum twelve rings (25 A to 500 V) IP233 anti-UV watertight under cap, mounted on watertight ball bearing, triple reach contacts, terminal block, predisposed for additional rings and angular coder.
French manufacturing on Otech concept

Control box Mini Rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Simple electromechanical control system to manage the irrigation safely on the mini pivots.

Otech
MINI RAIN

The pivot point is the center of the irrigated circle. Its function is to keep the span in the parcel center. Hence, it must withstand two main forces: a traction force of the moving spans and the weight of the first span. Besides the single resistance of each element of the pivot point, the global structural resistance of the assembly is essential. For this reason, Otech uses S275 top-quality steel and a NF EN ISO 1461 galvanisation to get a tried and tested structure, composed of an electric management system in compliance with the NF EN909 February 2009 + A1.

Central Element

As standard, coupling with the first IP233 anti-UV watertight, span relieve pressures on the upper elbow for tough grounds. Galvanised steel coupler to protect two low-pressure lip seals against environmental threats (UV, sandstorms, etc.).

Pivot ST

Galvanised steel pyramidal structure with four belts on either side with **4 mm thick** pipe. Watertightness through swivel on vertical pipe guaranteed by low pressure lip seal.

Control box Eco rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Simple electromechanical control system to manage the irrigation safely on the medium-size pivots (ST127).

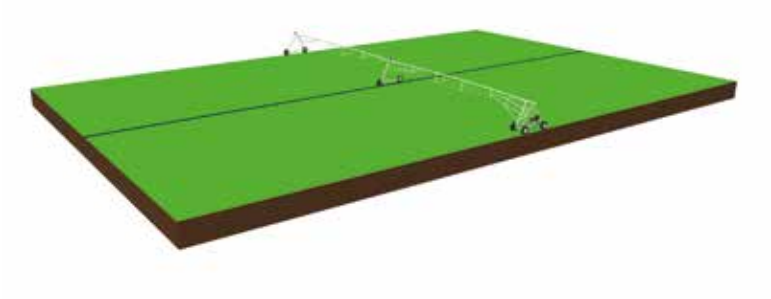
Otech ECO RAIN

Control box Super Rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. The most complete electromechanical control system to manage the irrigation safely.

Otech SUPER RAIN

LATERAL CARTS FIRST



2RM1-S

The 2RM1-S lateral has two drive wheels and allows the machine to move laterally in automated back and forth to irrigate a rectangular parcel. The hydraulic supply is pulled by the motor powered from one or more successive hydrants.

4RM1

The 4RM1 lateral has four drive wheels and allows the machine to move laterally in automated back and forth to irrigate a larger rectangular parcel. Equal to the 2RM1-2, it tows a hose that may be longer thanks to a higher pulling power.

Swivel elbow power supply

The swivel elbow allows the connection of the polyethylene or flexible hose on the cart and the setting up of the buckle at the time of the inversion at the end of the parcel in order to reduce the human interventions on the machine

Wheels

The wheels are ballasted with antifreeze gel to enhance the traction cart function.

Control box Opti Rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Simple electromechanical control system with synoptic for the fully safe management of the irrigation on the 2RM1-S and 4RM1 laterals.

Otech
PTI RAIN

The laterals are moving irrigation systems to irrigate rectangular parcels. On these machines, there is no fixed anchor point to the ground; therefore, the lateral must support the mechanical pressures of the moving loads. Hence, the cart frame is made in S275 galvanised steel in compliance with the NF EN ISO 1461 and it is equipped with an electric management system in compliance with the NF EN909 February 2009 + A1. We chose these top-quality components to make Otech's experience known as global leader in the production of laterals

Above ground guidance

The lateral First is equipped with a hockey stick guidance system based on a furrow dug into the ground to guarantee an easy use, reliability, safety and precision.

Hose traction

According to the needs, the supply hose can be in polyethylene or flexible with a diameter adapted to the machine needs.

Control box Maxi Rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Simple electromechanical control system with synoptic to safely manage the irrigation on the 4RMVE laterals.

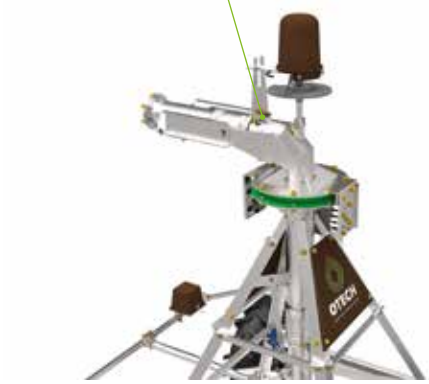
Otech MAXI RAIN

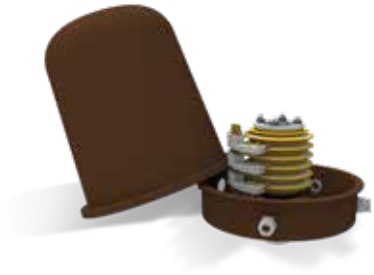
4RMVE

The lateral 4RMVE First allows the irrigation of a rectangular parcel with fewer spans. Indeed, the machine moves on half the width of the parcel and automatically makes a half-turn at the end to start the irrigation on the other half of the parcel. This appliance combines a sideway shifting to a rotating pivot. Its four drive wheels make it able to tow a remarkable hose length.

Upper 90° elbow

The rotating upper elbow is mounted on bearings to balance the loads on the cart axis, simplifies the rotation while ensuring a maximum alignment precision.





Colector

Electric collector with min. twelve rings (25 A at 500 V) under IP233 anti-UV watertight bonnet mounted on watertight ball bearings, triple contact reach, terminal blocks arranged for the addition of extra rings and angular coder.
French production on Otech concept.

ST FIRST TOWER

The tower supports the main pipeline and ensures the hydraulic and mechanical connection between the spans. It is motorized and enables the displacement of the machine. It also must resist to the various mechanical pressures such as the torsions due to the relief, to the stresses on the gear and to the forces between the spans. This span-structured tower is designed with S275 galvanized steel high-quality components. The tower Otech offers an under-span clearance of 3.20 m, perfect for the high-growing crops.

Drive train: Wheels

As standard, 14.9 x 24 wheels six ply irrigation profile with inner tube.

Rims in galvanized steel fitted with valve protection.

Tower control unit

Highly reliable control unit equipped with an adjustable circuit breaker to protect the gear motor and an antiparasitic module to guarantee the maximum durability of the micro switches. Control linkage instainless steel and Delrin (no blocking due to oxidation is possible). Rigid connector board in galvanized steel and bonnet in injected anti-UV polyethylene tainted in the mass. Bonnet locking by stainless steel fastenings.

Coupling

4 mm coupling tube in S275 galvanized steel. Cardan hinge with distribution of the stresses on four fixation points. Wind proof undetachable span connection enables a big suppleness of movement and accepts gradients up to 25 %*. Junction with galvanized steel coupler to protect two low-pressure lip seals against environmental threats (UV, sandstorms, etc.).

** It refers to the limits of usage of the technical appendix.*

Centerdrive

Tropicalized motor 055 kW in 1500 tr/min with stainless steel stator. High performance (95 %). Reliable amperage, reliable energy consumption, prolonged lifetime. Watertight cabling made and tested in Otech factory.

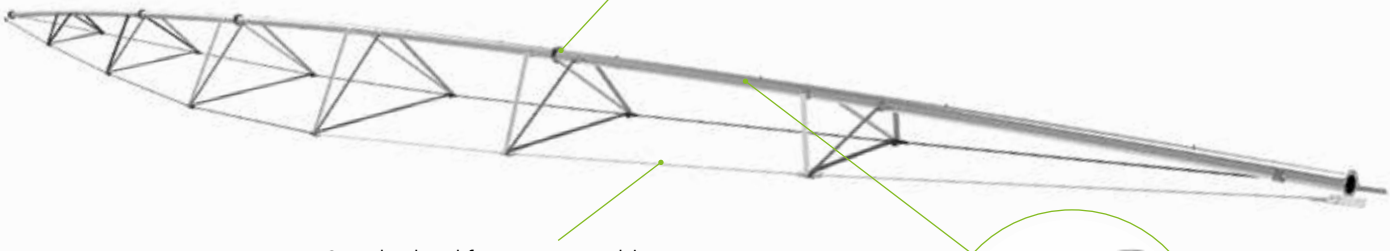
Transmission

22 mm square transmission in galvanized steel and coupled to a cardan in aluminium.

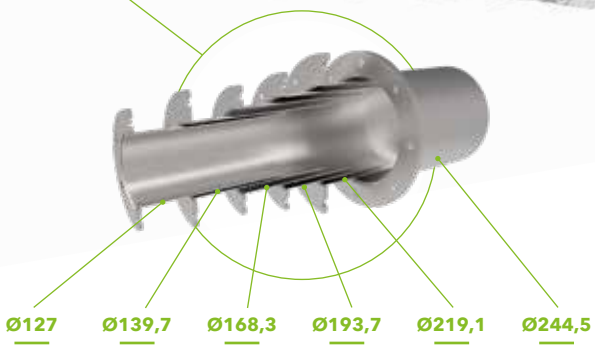
Gearbox

Wheel reduction fitted with reversible mounting. Reduction ratio 1/50.

ST SPAN FIRST



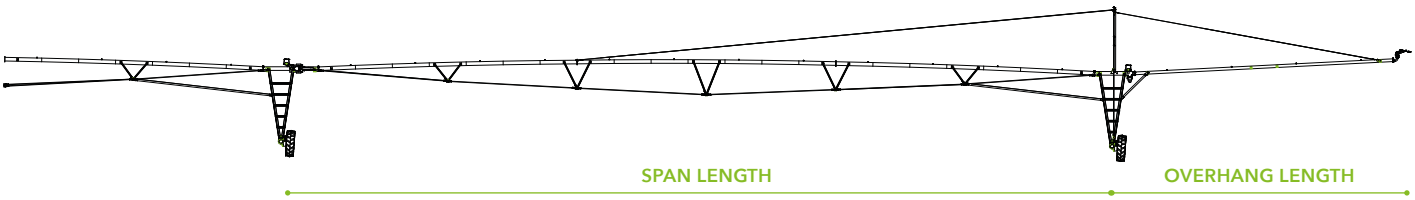
The ST span is the modular structure between two towers composed of 6 and 12 m pipes and stiffened by elements called angles and rods. The diameter sizing of the pipe depends of the machine flow and of the tolerated water speed. The regular and symmetrical bend of the Otech span enables a uniform distribution of the stresses all along the structure. The combination of the S275 high strength steel with the min. 3 mm thick line pipes and the angles, as well as the S355 steel rods guarantees an excellent resistance and durability.



Outside diameter of the tubes, thickness available in 3 and 4 mm

OVERHANG

The machine can have a pipeline at the end supported by wires in galvanized steel. This overhang structure increases the irrigated surface beyond the final tower, hence it lowers the cost per hectare of the system. Besides the wires, additional pipes support the reinforce of the overhang structure in order to support important lengths too.



SPAN	ST127	ST141	ST168	ST193	ST219	ST245	OVERHANG
LENGTH (METERS)	32,40			•	•	•	6,60
	38,35			•	•	38,45*	12,75
	44,30				44,40	•	18,70
	50,30				50,40	•	24,65
	56,25				56,35*	•	30,60
	62,20			•	•	•	•

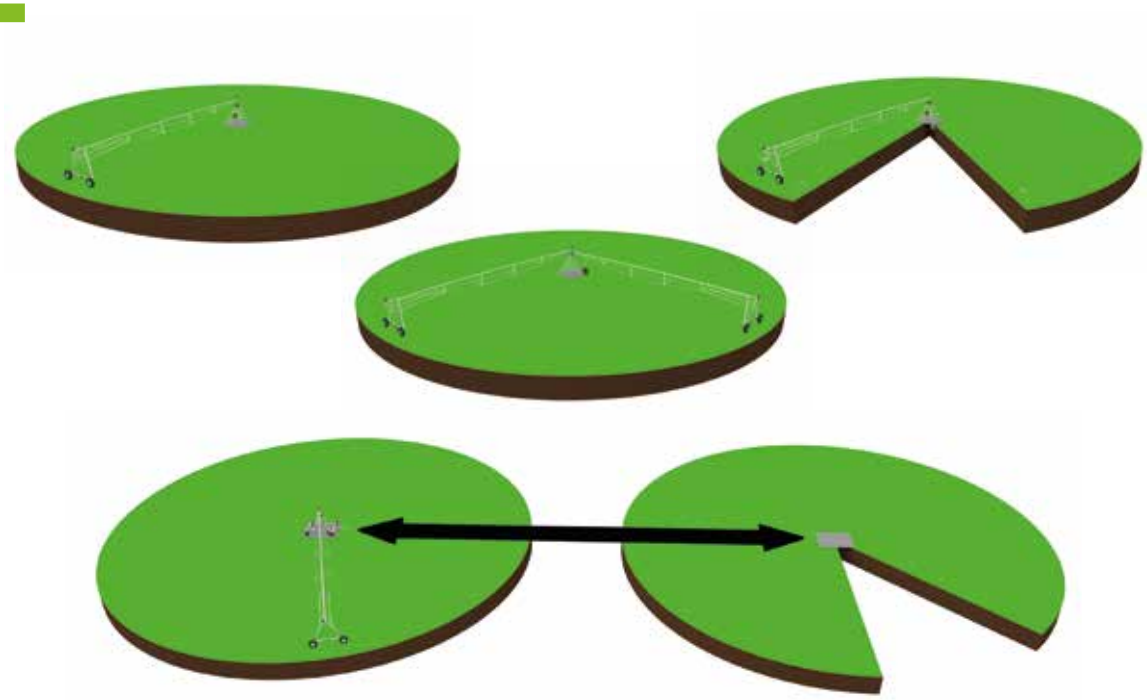
** Only available in 4 mm-thick pipe*

PIVOT LATERAL

PREMIUM

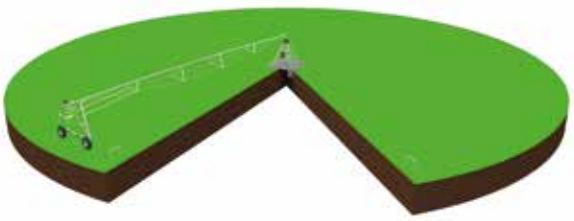

OTECH

PIVOT POINT PREMIUM



Pivot sector

The angular-sector pivot involves an automatic inversion of the spans at the end of the parcel. It enables to cover an irrigated area despite a fragmented parcel.

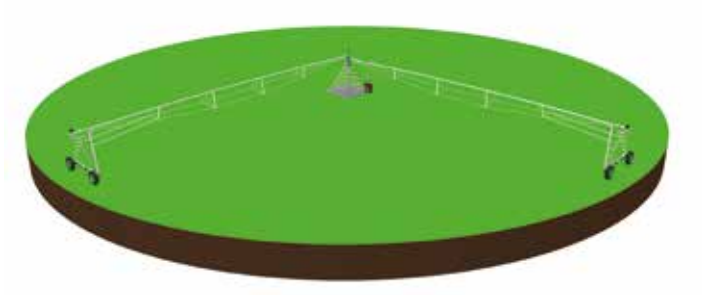


High clearance Pivot

The 4.80 m high clearance pivot suits for high-growing crops (sugar canes, arboriculture, etc.) and to pass above the obstacles (buildings, machines, etc.).

Double Pivot

The double pivot enables the distribution of the flow along two span lines with independent functioning. This way, the pressure losses and the energy needs are reduced. The immediate pluviometry is reduced as well. This system is particularly adequate on large parcels in arid areas because enables the irrigation to come back sooner onto the cultivation.

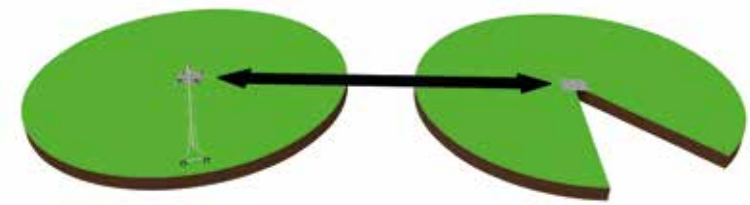


On-wheel movable pivot

The 4-wheeled movable pivot is equipped with a central element on movable frame fitted with a towing bar. The towers with pivoting wheels can be lined up with the axis of the spans to enable a tractor to displace the entire machine. Thanks to this pivot, the cost price per hectare of the irrigation system gets reduced by increasing the area covered by the same structure.

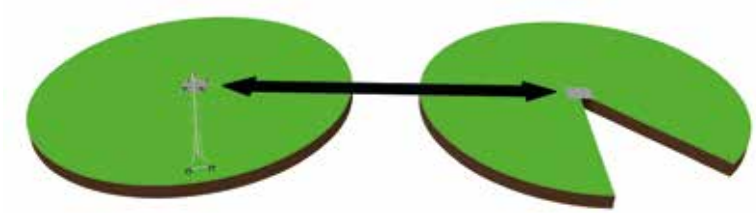
On-ski Pivot

The on-ski movable pivot is equipped with an on-ski central element with coupling. The towers with pivoting wheels can be lined up with the axis of the spans to enable a tractor to displace the entire appliance. Thanks to this pivot, the cost price per hectare of the irrigation system gets reduced by increasing the area covered by the same structure.



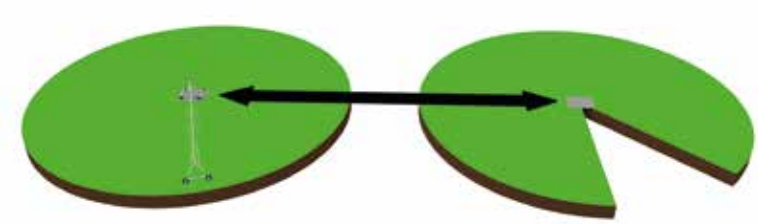
Speedy Rain

The Speedy Rain is an independently movable machine. During the irrigation phase, the pivot point is rotatably driven by the spans. During the displacement phase, the functioning seems like the functioning of laterals. Tractors are not necessary. All wheels are oriented to the same direction – a wired remote moves the system. In certain cases, the guidance system can be used for an automatic functioning between two hydrants.



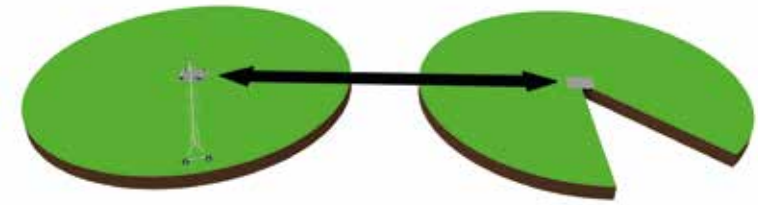
Two-wheeled movable pivot

The two-wheeled movable pivot is equipped with a swivel elbow tied up to the concrete slab and a towing bar. Exactly like Speedy Rain, its pivot point is rotatably driven by the spans. Thanks to towing bar and wheels pivoting on the towers, a tractor can displace the system.



Hydraulic pivot

Compact pyramidal structure in galvanized steel with two belts on each side in 4 mm thick pipe, this structure reduces the volume of concrete slab to preserve more cultivated surface. Sealing by rotating connection on vertical pipe provided by lip seal at low pressures. Device without need of electricity, one span maximum in ST127 length 56 m or 62 m with an overhang of 24 m or 30 m. Flow rate to be respected from 33 m^3/h to 80 m^3/h and pressure from 4.3 bar to 6 bar.



Mini Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system to safely manage the irrigation on the mini pivots, with different electromechanical options available.

Otech
MINI RAIN

Movable hydraulic pivot

The movable hydraulic central unit is a compact pyramid structure made of galvanized steel, with two belts on each side in 4 mm thick pipe, this structure reduces the volume of concrete slab to preserve more cultivated surface. It is equipped with a three-point tractor hitch and a tower with detachable wheels, which allows it to move from one position to another. Sealing by rotating connection on vertical pipe provided by lip seal at low pressures. Device without need of electricity, one span maximum in ST141 length 56 m or 62 m with a overhang of 24 m or 30 m. Flow rate to be respected from 33 m^3/h to 80 m^3/h and pressure from 4.3 bar to 6 bar.

Movable Mini Pivot

The movable mini pivot is a compact pyramidal structure to maximize the cultivation surface. It has a three-point trailer hitch and a tower with disengageable gearboxes to enable its displacement to different positions.

Eco Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system to safely manage the irrigation on the medium-size pivots (ST127), with different electromechanical options available.

Super Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder.
Electromechanical control system to safely manage the irrigation with different electromechanical options available.

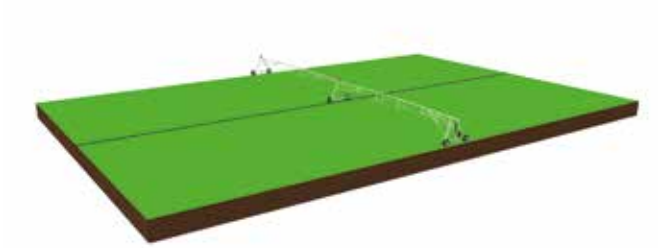
Otech ECO RAIN

Otech SUPER RAIN

LATERAL CARTS PREMIUM

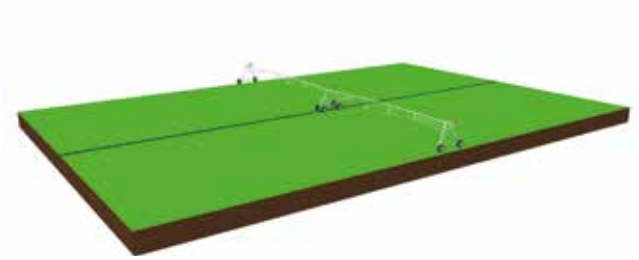
2RM1

The 2RM1 lateral has two drive wheels and enables the automatic lateral back-and-forth displacement of the machine to irrigate a rectangular parcel. This lateral cart can be equipped with disengageable gearboxes that can enable the displacement from a parcel to the other thanks to a tractor. In order to have this function of displacement, please consult us to offer you additional accessoires. The water supply is pulled by the motor powered from one or more successive hydrants.



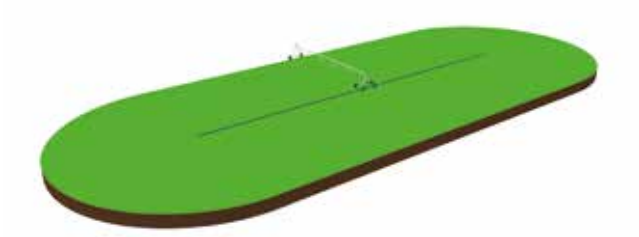
4RM1-2

The 4RM1-2 lateral has four drive wheels and enables the automatic lateral back-and-forth displacement of the machine to irrigate larger rectangular parcels. Like the 2RM1, it tows a hose that can become longer thanks to a higher pulling power. Unlike the 4RM1, the spans are divided on both sides of the cart.



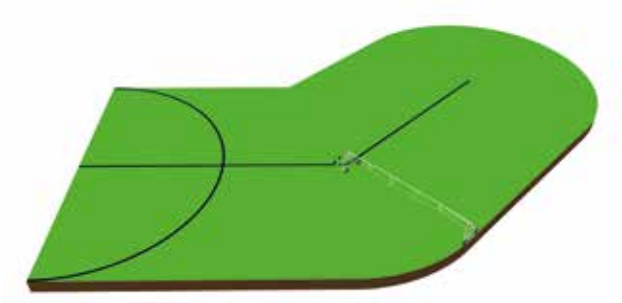
4RMVE

The 4RMVE lateral allows to irrigate Hippodrome parcel type. Indeed, the machine develops on the half of the parcel width and automatically makes a total or partial external - or internal - rotation at the endpoint of the course. Its four drive wheels is able to tow a remarkable hose length. By combining a side-translation displacement with a pivot rotation, this machine allows to irrigate parcels of complex shapes.



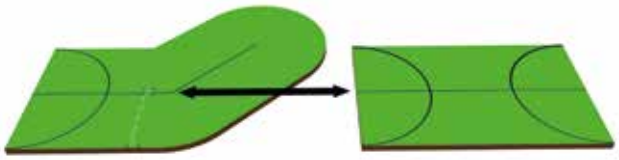
4RMG

The 4RMG lateral can carry out combined courses (linear + circular) like those of the 4RMVE Premium lateral. A wheel rotation wired remote system of the cart enables to change the operating axis and to adapt itself to the parcel shape.



4RMGD

The 4RMG-D lateral has the same functions of the 4RMG and a tractor can displace it thanks to a traction towing bar.



4RMVE – Ditch-Fed

The Ditch-fed laterals - 4RM1, 4RM1-2 and 4RMVE - are water fed through a lateral or central ditch. The water is directly pumped by self-cleaning strainers and an embedded pump unit that can be electrically or diesel powered. The electric energy can be also produced by a generator. These totally automatic machines can have extraordinary path lengths and cover oversized surfaces.

Opti Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system with synoptic to safely manage the irrigation on the 2RM1, 4RM1 and 4RM1-2 laterals, with different electromechanical option available.

Otech OPTI RAIN

Maxi Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system with synoptic to safely manage the irrigation on the 4RMVE, 4RMG and 4RMG-D laterals, with different electromechanical option available.

Otech MAXI RAIN

ST PREMIUM TOWER

High and ultra-High tower

The 4 or 4.90 m under truss rods raised tower is perfect for high-growing crops like sugar canes, arboriculture, etc. and to pass over obstacles like buildings, machines, etc. It also allows an under span ground clearance on uneven parcels. Used on the final tower, it can enable to lift an overhang to pass over the obstacles.

Low tower

The 2.20 m under truss rods low tower is perfect for low growing crops like turf, vegetable gardens, etc. and for tropical areas subject to hurricanes.

Towable tower

The towable tower is fitted with reinforced supports and orientable wheels with disengageable gearboxes. Once the wheels are oriented in the wheel axis of the machine, the machine can be towed to the next position. The wheel orientation can be manual or electric (option).

Folding tower

The folding tower allows to increase the irrigated surface by bordering the obstacles. It can be placed on any tower of the pivot. The system is all automatic and the sprinkler package is properly sized for a regular watering in the folded and deployed modes. The tower is equipped with a ball bearing slewing ring that serves as rotating hydraulic connection. It also guarantees a smooth rotation in order to ensure the watertightness. This unique conception makes it the model with the highest fold angle on the market, of 170°.

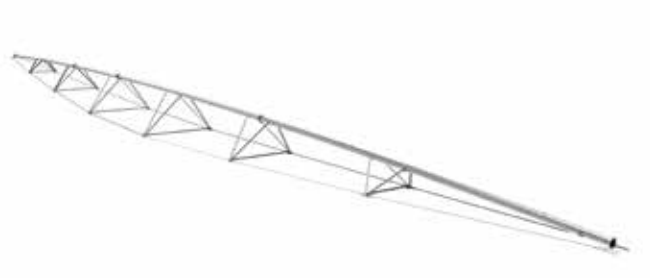
Hydraulic tower

The hydraulic tower (pivot HD) captures the irrigation water power thanks to a turbine and conveys this rotation movement to the wheels. Thus, the pivot HD does not need electric power because the motorisation is given by the combination turbine/gearbox. This system can fully equip the machine on a section of maximum one span plus the overhang. The water necessary for the rotation is entirely re-injected into the irrigation circuit to avoid any losses.

ST SPAN PREMIUM

3 mm and 4 mm thick span

The standard 3 mm thick span is composed of S275 12 m and 6 m pipes in high strength hot dip galvanized steel. The same span is also available in S275 steel pipe 4 mm thick.
This strong thickness guarantees a durability particularly increased in case of aggressive irrigation water.



Plascoat span

The Plascoat coated span is composed of S275 6 m long and 3 mm thick tubes in hot-dip galvanized steel on which is applied a thermoplastic coating as additional protection. This treatment has been used in industry for more than 30 years has a remarkable resistance to abrasion, corrosion and cavitation. This option is particularly suitable to face aggressive waters and chemigation. Its smoothness reduces the pressure losses (energy efficacy) and strongly restricts the sediment adhesion. This protective coating is extended along the entire hydraulic line, from the bottom up to the end of the overhang and can be also applied on the connection accessories. This option is available on the whole span models.

Polyplas span

The Polyplas span with polyethylene protective coating is composed of S275 6 m long and 3 mm thick tubes in hot-dip galvanised steel with an internal polyethylene pipe. This is a further option to protect from the aggressive water irrigation and chemigation. The polyethylene protective coating is available for the ST127, 168 and 193 pipes diameter, others diameter available upon request . In order to increase the protection of the entire hydraulic line, the pivot point pipe, elbows and the tower couplers are coated in Plascoat.

OVERHANG

3 mm and 4 mm thick overhang

The standard 3 mm thick overhang is composed of 12 m and 6 m long pipes in S275 high strength steel hot dip galvanized pipes. Like the premium span, these overhangs are available with S275 4 mm thick pipes too. This higher thickness guarantees a durability particularly increased in case of aggressive irrigation water.

Foldable overhang

The foldable overhang increases the irrigated surface thanks to a pivot or to a lateral in order to automatically avoid the obstacles. While approaching the obstacle, an electric cylinder enables the 24 m (or 30 m) long overhang to fold to 87 ° counter clockwise. The sprinklers and the gun installed on the overhang get interrupted whereas the machine keeps irrigating the obstacle area. In certain cases, a supplementary gun can be fixed on the tower to adjust the irrigated length.

ACCESSORIES FOR PIVOTS AND LATERALS

Water supply accessories for pivot point

Buried gooseneck, connecting tube between flanges and lower elbow.

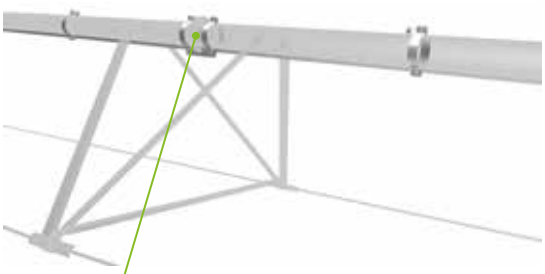
V- and T-filters

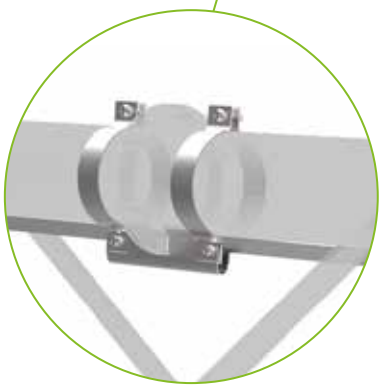
Fertigation

Electric supply accessories

(enclosed or soundproof power generators)

Hydraulic valves and flowmeter





Anti-theft cable system for span

Water supply accessories for laterals

SPRINKLER PACKAGE

In order to optimize the agronomic outcomes and to give more value to the irrigation, the water must be distributed in adaptable ways to plants and soil and according to the climate conditions. The water distribution must be regular in order not to leave over irrigated or under irrigated areas.
Moreover, the water physical-chemical features must impact as less as possible on the machine integrity, on the cultivation and on the soil. A sprinkler selected to respect all these parameters will result in the best long-term outcomes

The main factors to be considered are:

- The type of crop: germination sensitivity, foliage sensitivity to humidity, cultivation practice (rows cultivation);
- The soil features: infiltration capacity, sensitivity to soil sealing;
- The climate conditions: wind and evaporation;
- The water quality: loaded water; ferrous water.

There are a lot of technical solutions to solve these problems and they must be properly found depending on each situation. In particular, you can act on:

- The mode of application of the water (drop shape and speed) thanks to the kind of sprinkler: oscillating, rotary, spray or impact;
- The sprinkler height from the ground, in order to irrigate as close as possible to the crop growing;
- The kind of drop tube to avoid the problems caused by the wind;
- The sprinkler operating pressure to affect the water drop size and speed;
- The distribution and orientation of the sprinklers at the wheels, with sprinklers moved onto boom backs and/ or with sector sprinklers to keep the wheel tracks in good conditions.

According to the needs, it is possible to install a watering device at the end. Such device can be useful to cover areas outside the covered area by the machine. As it is installed at the end of the machine, the irrigated surface can be remarkable, therefore such an investment is particularly profitable. You can install:

- A gun, useful for its irrigation efficiency;
- An end sprinkler, that works with the same pressure of the sprinklers to save some energy on the pumping plant.





Otech works with the best international sprinkler suppliers and can satisfy all your requests. Your Otech dealer can help you to make the best choice that will make the difference for your machine.






SUPER RAIN

MAXIMUM INTERACTION BETWEEN CONTROL SYSTEM AND MACHINE

Thanks to our experience started dozens of years ago in the irrigation field and in the control of our machines, Otech has developed intuitive and simple systems, in accordance with the ground needs. Thanks to a constant exchange of information with our users and our clients, we succeeded in developing a complete range of irrigation management systems suitable for different constraints.
For a recognised and experienced reliability, we work with the most performing partners and select our material to guarantee the best trustworthiness even in the most difficult operating conditions.
Whatever your needs are, we have the solution that will best suit your expectations.

ELECTROMECHANIC CONTROL BOX FOR PIVOT/LATERAL

According to your needs, Otech offers different technical management tools to help the users to control the operations of their machines. Depending on control panel models you choose our systems help you to save time, energy and money for a smarter irrigation solution.
The control panels are offered in three different body, our standard model is in Steel RAL 8028:

- **Standard Steel**, colour RAL 8028, IP66 conforming to IEC 60529, IK10 conforming to IEC 62262, surface finish Epoxy-polyester powder, three points lock, 3 mm double-bar;
- **Option Stainless steel 304L**, surface finish lock: chromium plated - body and door: Scotch-Brite® brushed, IP66 conforming to IEC 60529, IK10 conforming to IEC 62262, two points lock, 3 mm double-bar. Easy management for small pivot;
- **Option Polyester** reinforced with fiberglass, colour grey RAL 7035, IP66 IEC 60529, IK10 IEC 62262, fire resistance 960 °C IEC 62208, ambient air temperature for storage -35 ° to 90 °C, 3 mm double-bar lock.

Control Box Stainless Steel

Control Box Polyester

Easy management for small pivot

Otech MINI RAIN

- Exclusive Otech cyclic dispenser for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, delay, dosing pump, booster pump, etc.

Easy management for medium pivots

Otech ECO RAIN

- Exclusive Otech percent timer compressor, delay, dosing pump, etc.
- Safety warning light
- Change of direction
- Water or dry movement management
- Multi options available: reversal, delay, dosing pump, booster pump, etc.
- **Lockable switch**
- **Hour counter**

Easy management for large pivots

SUPER RAIN Otech

- Exclusive Otech percent timer for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, booster pump, delay, dosing pump, etc.
- Safety warning light
- **Lockable switch**
- **Hour counter**
- **Voltmeter with changeover switch on all three phases**
- Machine operating synoptic: machine setting in motion, ongoing displacement direction, low pressure / status mechanical machine
- Almost unlimited number of integration option

Course management of the back-and-forth lateral machine

OPTI RAIN Otech

- Exclusive Otech percent timer for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, booster pump, delay, dosing pump, etc.
- Safety warning light
- **Lockable switch**
- **Hour counter**
- **Voltmeter with changeover switch on all three phases**
- Machine operating synoptic: machine setting in motion, ongoing displacement direction, low pressure / status mechanical machine
- Almost unlimited number of integration option

Course management of complex laterals for racecourses with outward/inward rotations

MAXI RAIN Otech

- Exclusive Otech percent timer for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, booster pump, delay, dosing pump, etc.
- Safety warning light
- **Lockable switch**
- **Hour counter**
- **Voltmeter with changeover switch on all three phases**
- Machine operating synoptic: machine setting in motion, ongoing displacement direction, low pressure/ mechanical machine status
- Almost unlimited number of integration option
- **Compatible box for gyratory and movable laterals**

ADVANCED IRRIGATION MANAGEMENT AND REMOTE CONTROL SYSTEMS

For an advanced management of your irrigation, Otech presents the DOSITECH the fully integrate management and remote control system. The control panels are offered in three different bodies, the standard model in Steel RAL 8028, options in stainless steel and Polyester.

Complete local irrigation management for a simple field

Otech DOSITECH BASIC

- High brightness display colour
- Analog pressure sensor
- Management of irrigation by doses or speed
- Delay programming
- Weekly programming of automatic operating slots
- Display of machine mechanical and hydraulic status
- Hour counter and theoretical or real water assessment
- Multi options available: booster pump, delay, dosing pump, etc.

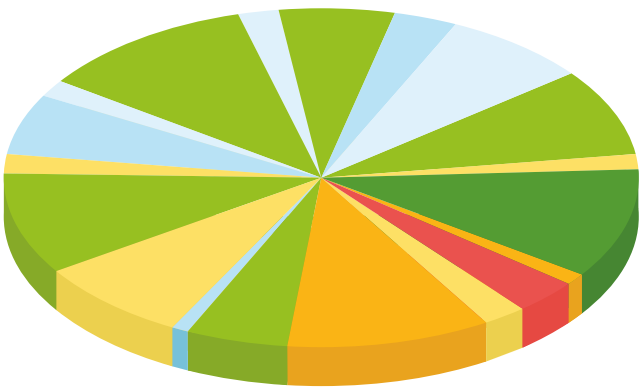
Complete local irrigation management on a multi-sector field

Otech DOSITECH PLUS

- High-brightness display colour
- Analog pressure sensor
- Management of the irrigation by doses or speed according to the sector and the direction of the machine
- Delay programming
- Weekly programming of automatic operating slots
- Display of machine mechanical and hydraulic status
- Information on position via GPS or angular coder
- Automatic stop for a given position
- Automatic reversal for a given position
- Endgun management by area
- Auxiliary management by area
- Anti-skid safety
- Arrival date and time calculation of the machine to a set position
- Multi options available: booster pump, delay, dosing pump, etc.

Complete local and remote irrigation management on a multi-sector field

To retain the possibility of using the machine through a simple electromechanical control, the simplified control option is available.



Adjust the correct dose brought to your crop growing according to its needs and save water thanks to Otech VRI system.

MASTER RAIN

Prenez le contrôle de vos machines à distance

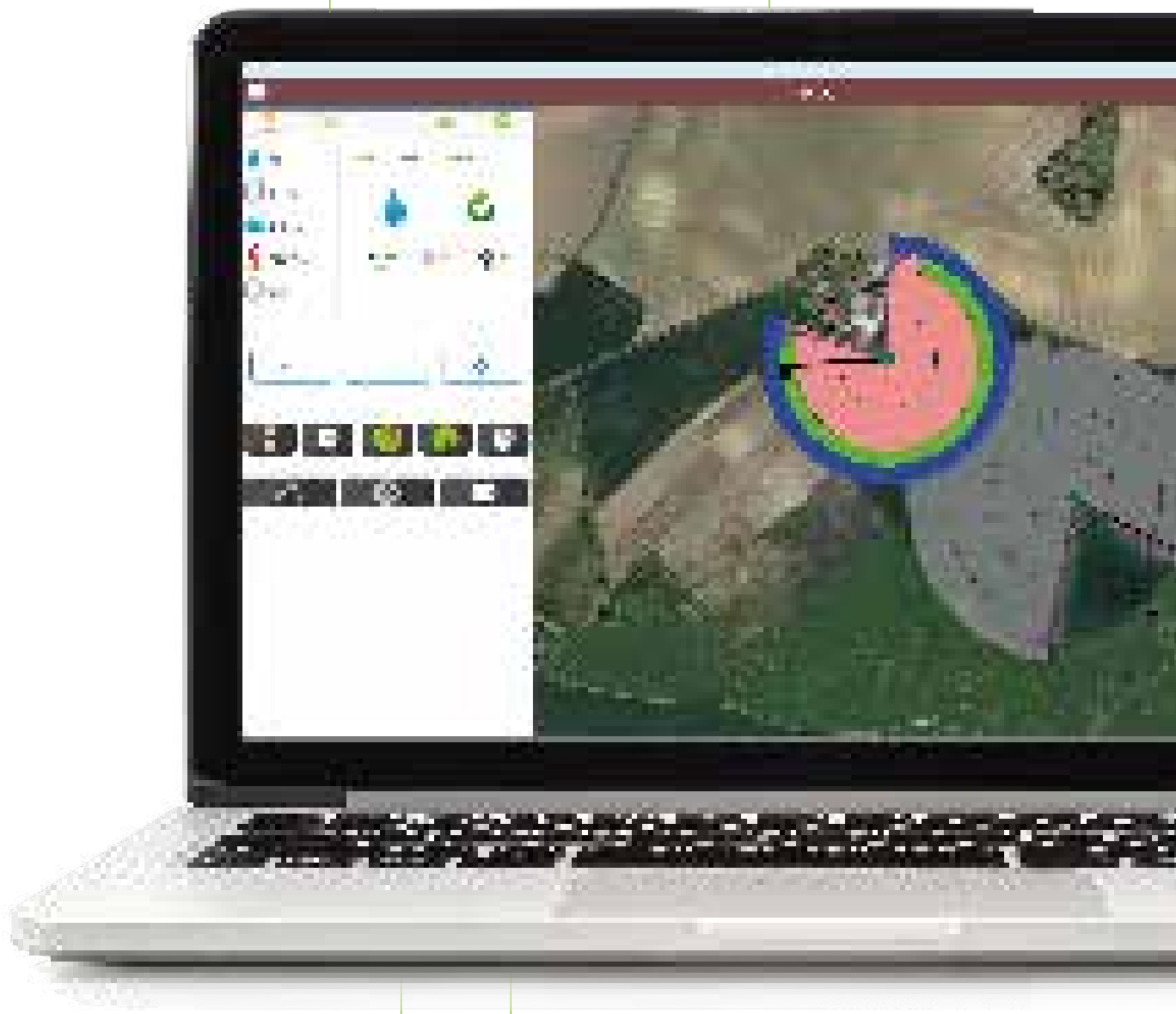
Le temps c'est de l'argent.
Un simple clic permet de vérifier le statut de toutes les machines et éviter de nombreux déplacements.
Le contrôle c'est la qualité du travail.
Grace au management en temps réel de votre irrigation, Master rain est la solution idéale pour maitriser à distance sur une seule interface les différentes machines pivots et rampes dans plusieurs parcelles et s'assurer de leur bon fonctionnement pour garantir de meilleurs rendements avec une économie d'eau et d'énergie.
Master rain c'est la solution la plus innovante dans l'industrie de l'irrigation.

THE SMARTER MANAGEMENT TOOL PROVIDE A COMPLETE REMOTE CONTROL OF A SINGLE OR GROUP OF EQUIPMENTS.

ON/OFF STATUS, WATER, ENERGY, WEATHER AND HISTORY FOR A BETTER AND EFFICENT DECISION.

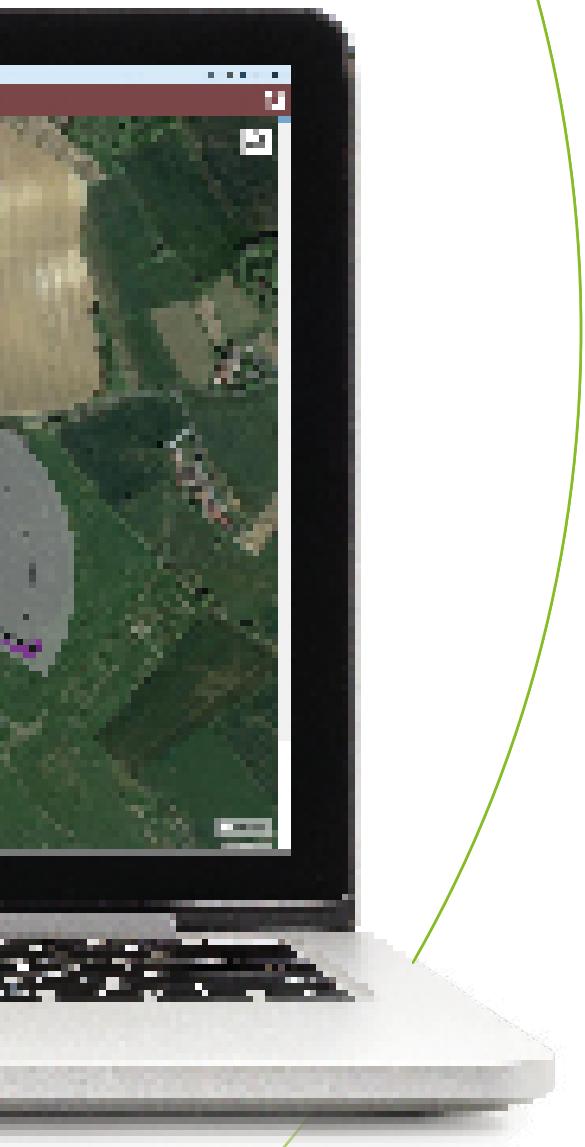
Complete operation status updated every minute

Clear and complete representation of the machine parameters and status



Access to the functioning and irrigation record

Quick and intuitive access to the machine setting-up



Mobile functions

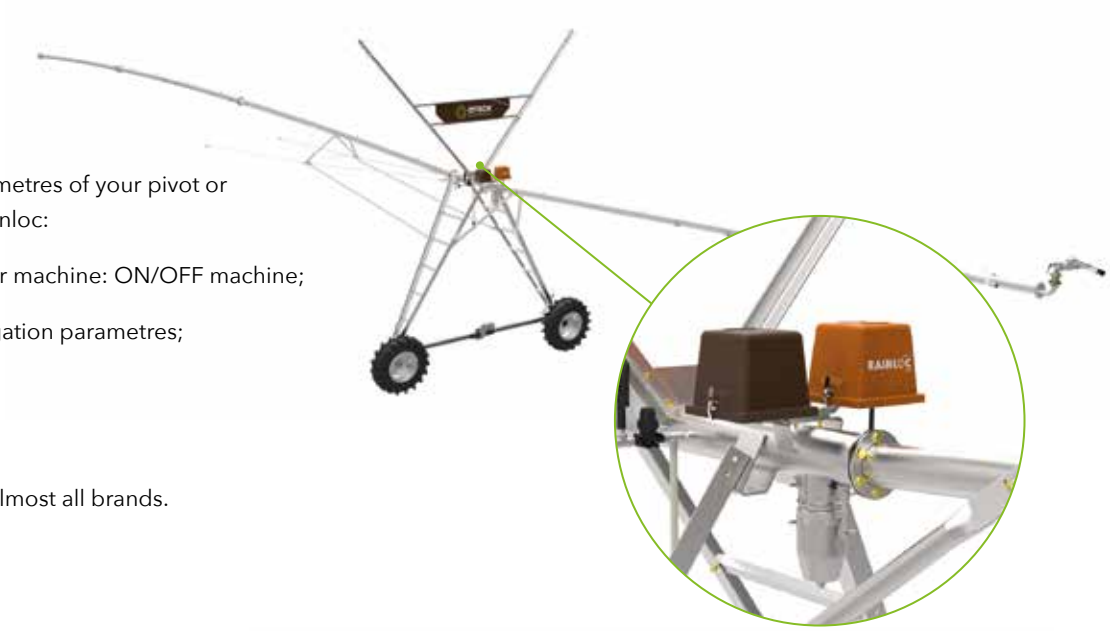
Access to all Master Rain functions from your smartphone.

COLOUR AND ICON STATUS FOR EACH MACHINE TO DIRECTLY VISUALISE THE OPERATION STATUS OF ALL MACHINERY

REMOTE CONTROL PRODUCTS FOR PIVOTS AND LATERALS

The farmers are requiring more and more performing tools to manage the irrigation. Otech offers you its range of remote management tools which represent one of the best technical solutions in the field of irrigation by pivots and laterals.

Rainloc

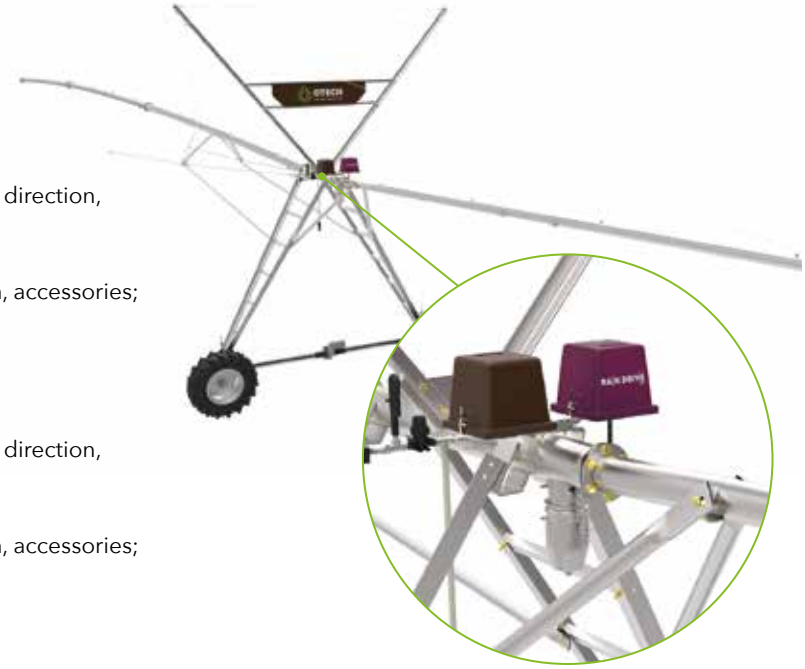


Manage the critical irrigation parametres of your pivot or lateral easily and remotely with Rainloc:

- Easy and remote control of your machine: ON/OFF machine;
- Management of the critical irrigation parametres;
- SMS alarm on machine failure;
- GPS position and pressure;
- Easy and quick installation on almost all brands.

Otech RAINLOC

Raindrive



Driving and setting up your irrigation completely and remotely with Raindrive.

Pivot:

- Total remote machine control: gun, pump, dose, speed, direction, one accessory;
- Management via GPS: machine position, VRI sector, gun, accessories;
- Complete machine status by sms notification.

Linear:

- Total remote machine control: gun, pump, dose, speed, direction, two accessories;
- Management via GPS: machine position, VRI sector, gun, accessories;
- Complete machine status by sms notification.

Otech RAIN DRIVE

Dositech

Drive and set up your irrigation remotely with Dositech.

Pivot:

- Local interface installed in the intuitive box for a quick programming of the machine;
- Possible addition of modular extension board according to the client's needs;
- Total remote or local machine configuration;
- Management via GPS: machine position, VRI sector, gun, accessories;
- Complete machine status notification by SMS.

Lateral:

- Local intuitive interface installed for a quick machine programming;
- Possible addition of modular extension board according to the client's needs;
- Total remote or local machine configuration.

Otech DOSITECH REVOLUTION

COMPARATIVE TABLE

PIVOT BOX LATERAL BOX ELECTROMECHANICAL/ELECTRONIC	MINI RAIN	ECO RAIN	SUPER RAIN	OPTI RAIN	MAXI RAIN	DOSITECH BASIC	DOSITECH PLUS	DOSITECH REVOLUTION
LOCAL CONTROLS/AUTOMATION								
Machine speed adjustment								
Water application								
Sector VRI								
Machine stop								
Direction control								
Start delay								
Reversal delay								
Arrival delay								
In-line stop								
Automatic reversal								
Gun management with auto stop per area or ON/OFF**								
Accessory management with auto stop per area or ON/OFF**								
Dosing pump management / ON/OFF stirrer								
Voltage drop safety								
Pressure drop safety								
Booster pump control								
Weekly program								
VISUALISATION								
Water failure lamps								
Simple mechanical failure lamps								
Advanced mechanical failure lamps								
Advanced machine functioning lamps								
Complete machine functioning lamps								
Tower default indicator								
Machine input voltage reading								
Functioning in water hour counter								
Machine pressure reading via sensor								
Flowmeter								
Machine position representation in parcel								
Ongoing implementation speed								
Ongoing implementation dose								
DESIGN								
SCHNEIDER electromechanical parts								
High brightness screen display colour								
Irrigation remote management								
Report of machine status every minute								
Functioning history								
Hybrid system enabling a simple electronic or electromechanical control								

Always included | Possible as option only | Not suitable

* Unavailable function on Raindrive lateral

° On pivot
1 accessory is managed
Simple ON/OFF

** Just ON/OFF

TELEPROCESSING PRODUCT RAINLOC/RAINDRIVE / DOSITECH FOR PIVOT AND LINEAR	RAINLOC	RAINDRIVE	DOSITECH REVOLUTION
REMOTE CONTROLS / AUTOMATION			
Machine speed adjustment			
Water Application			
Sector VRI			
Machine stop			
Direction control*		*	
Start delay			
Reversal delay			
Arrival delay			
In-line stop			
Automatic reversal			
Gun management with auto stop per area or ON/OFF			
Management of 2 accessories with auto stop per area or ON/OFF°		°	°
Dosing pump management / ON/OFF stirrer			
Pressure drop safety			
Booster pump control			
Weekly program			
VISUALISATION/INSPECTION			
Simple remote visualisation of machine functioning			
Advanced remote visualisation of machine functioning			
Complete remote visualisation of machine functioning			
Alarm SMS/simple machine notifications			
Alarm SMS/advanced machine notifications			
Control and complete box visualisation of the machine			
Tower default indicator			
DESIGN			
Hybrid system enabling a simple electronic or electromechanical control			
High brightness box display			
Machine GPS position			
Machine pressure via pressure sensor			
Flowmeter			

TELEPROCESSING PRODUCT ACCESSORY

Further to the high request of the irrigation market, Otech is more and more engaged in the development of control and remote-control products for your installations.

Powerain

Thanks to Powerain control and easy remote control of your power generator, you can save time and energy:

- Simple functioning status of the power generator visible remotely: from functioning to default stop;
- ON/OFF start-up remote control generator;
- SMS alarm for generator status;
- Power generator battery voltage with remote access.

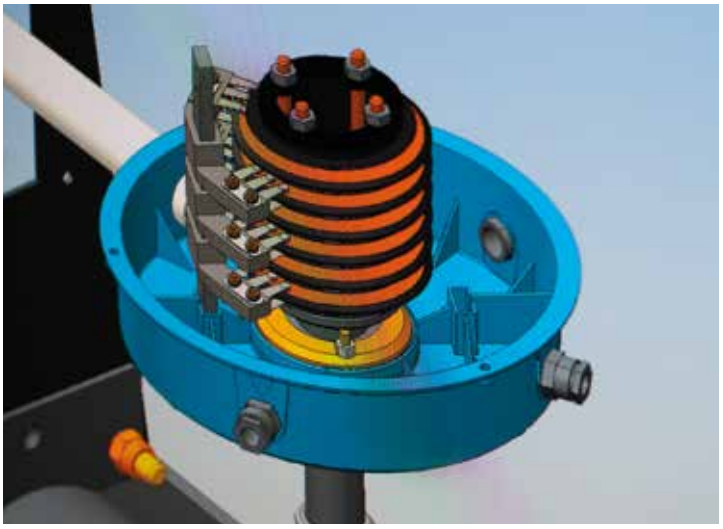
Otech POWERAIN

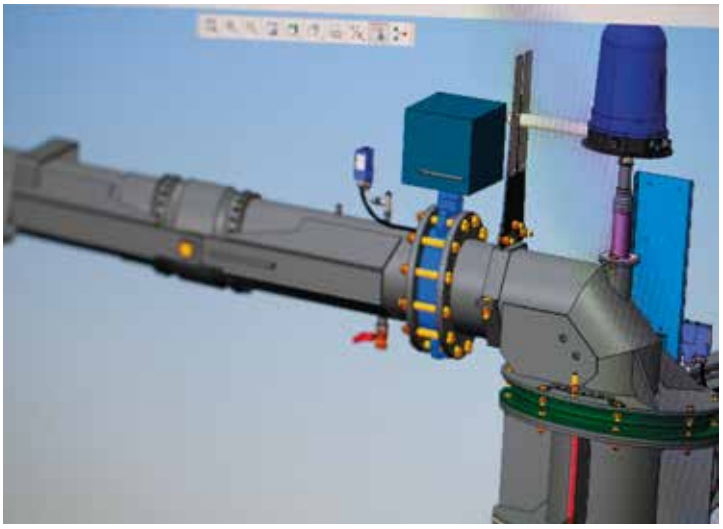

OTECH
LEADING IRRIGATION

OTECH:
HEART, HEAD, SOUL

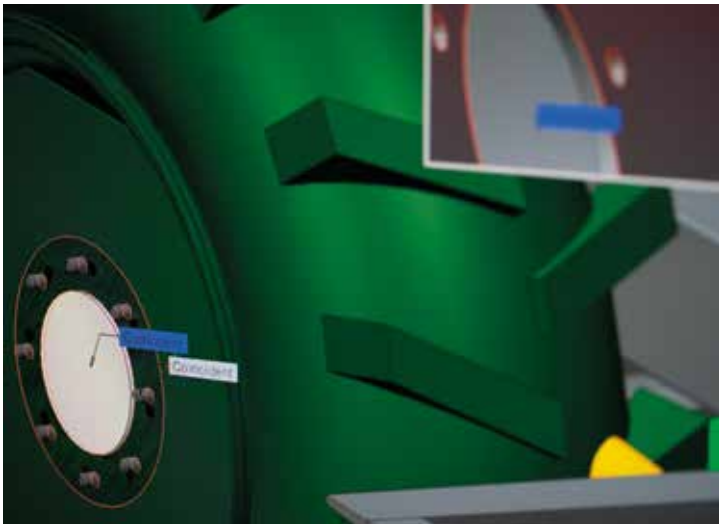

Véhicules à 1 place!
VITESSE = DANGER
13 15


OTECH
LEADING IRRIGATION



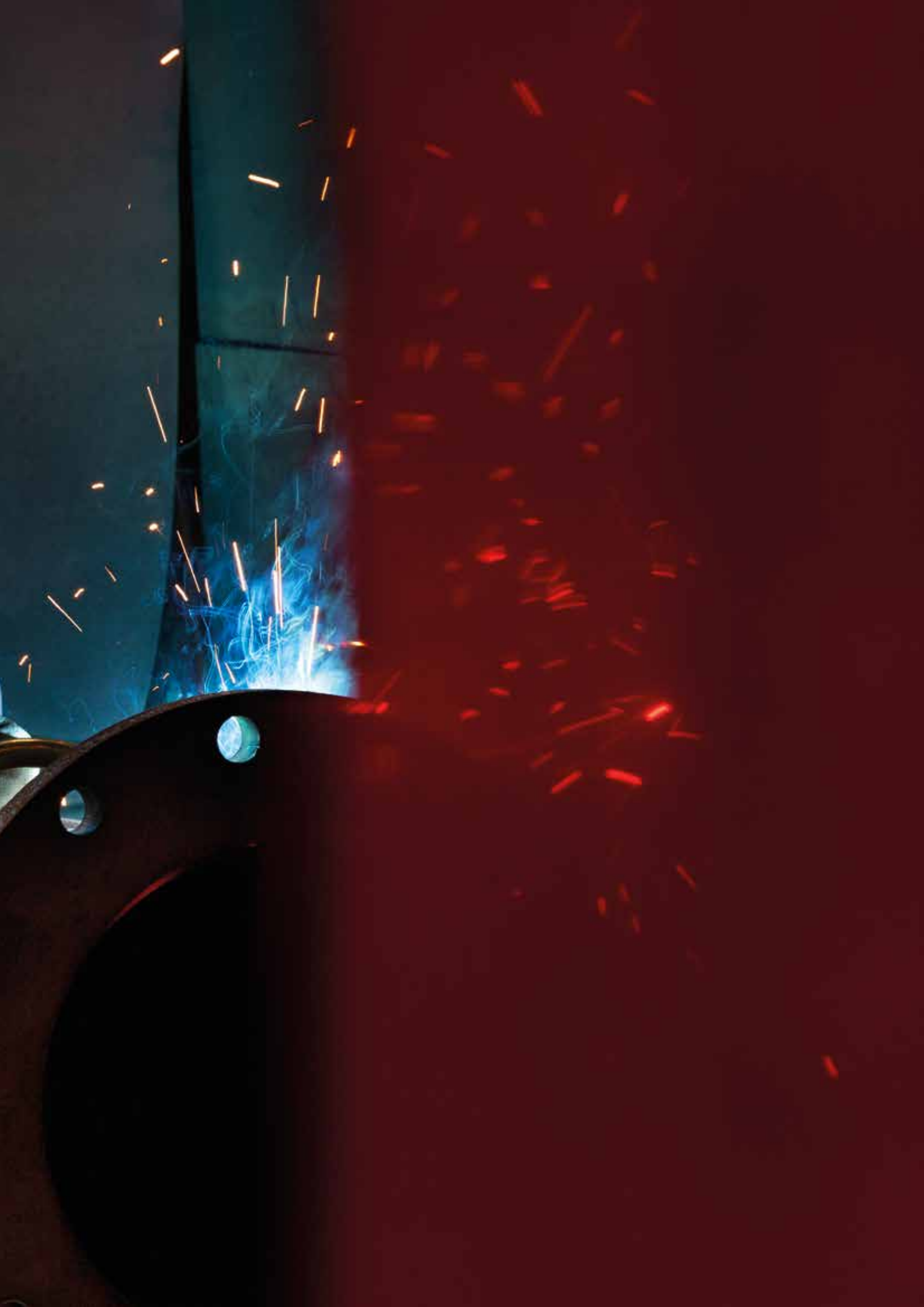











RAIN DRIVE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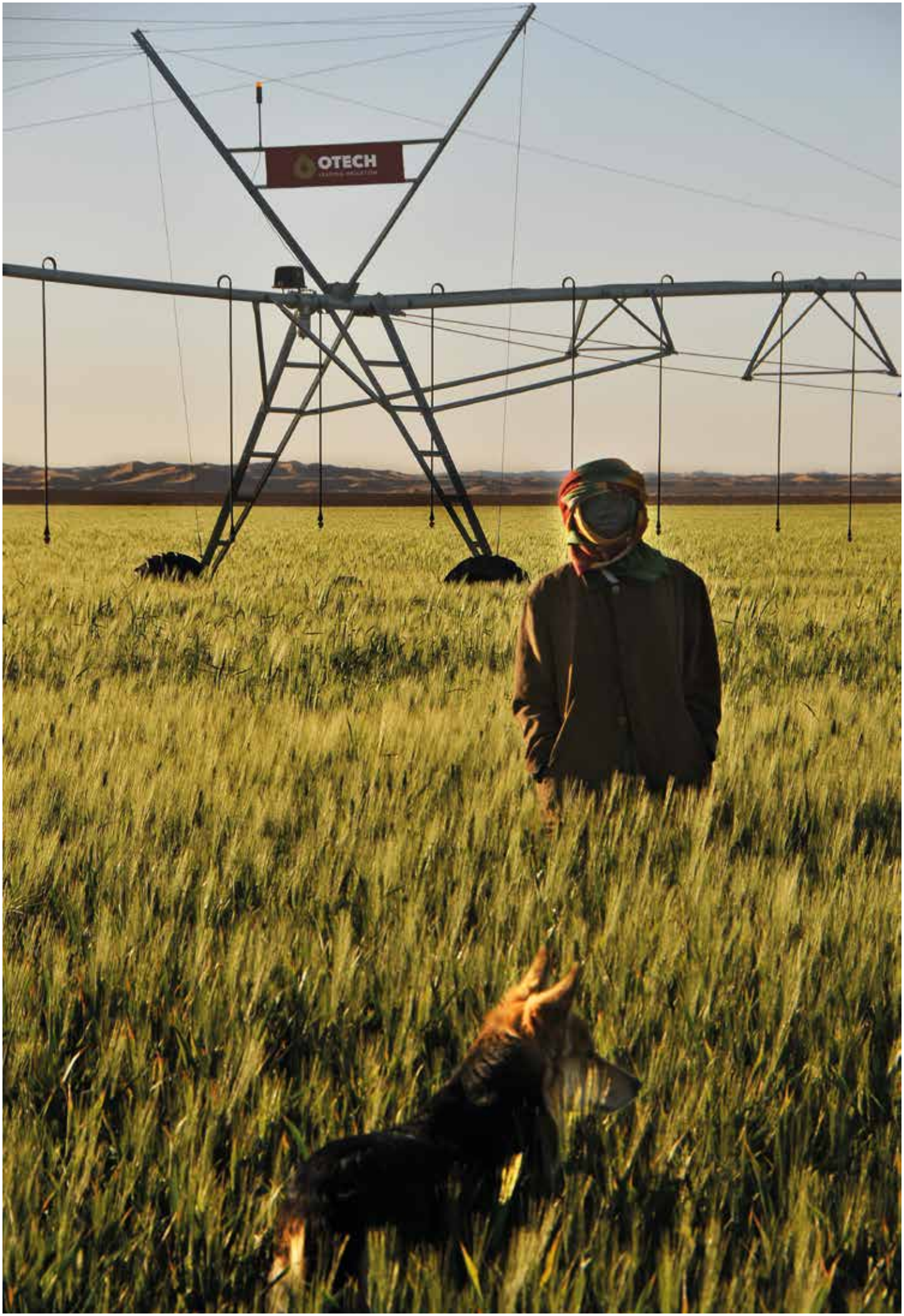
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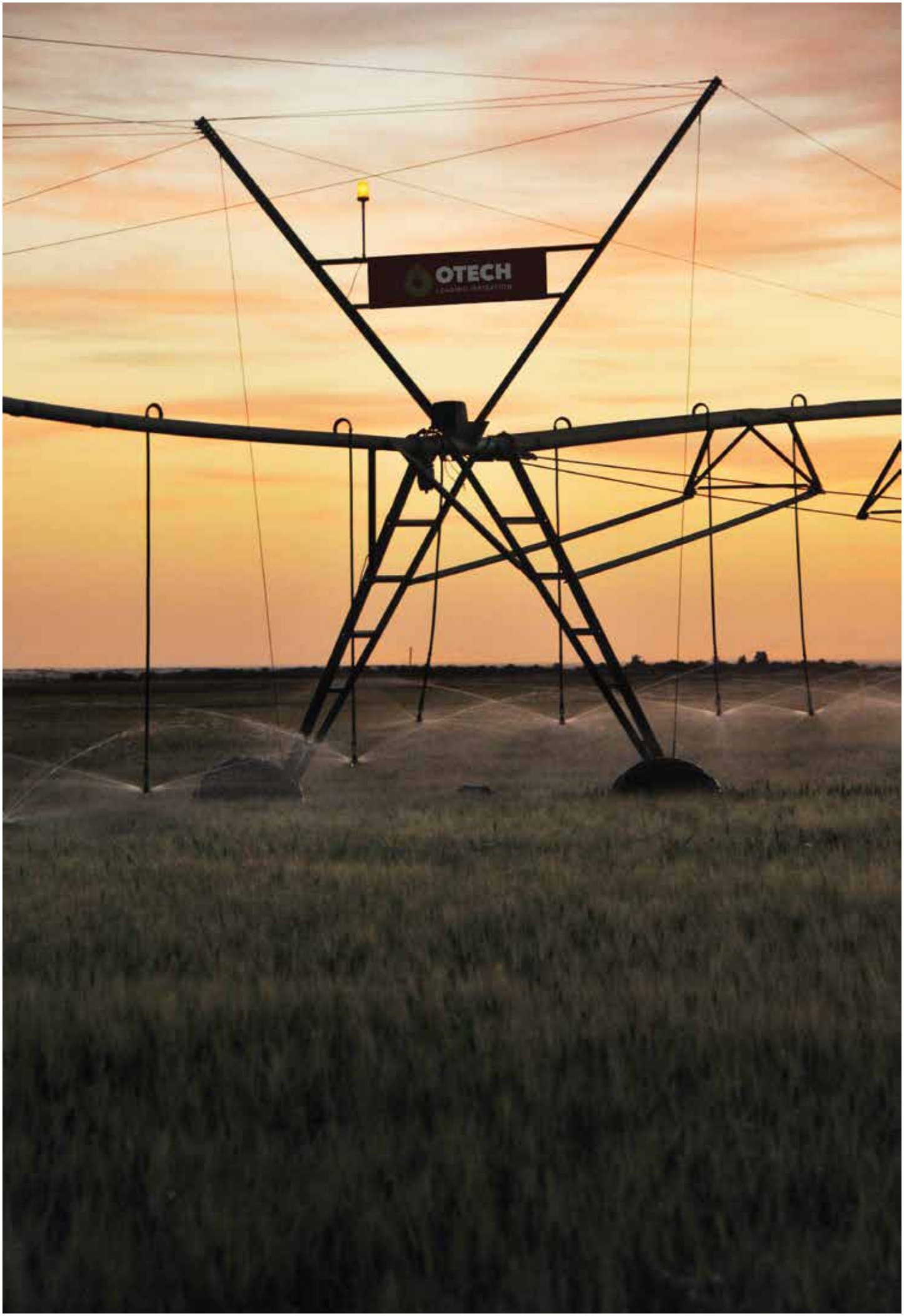
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OTECH


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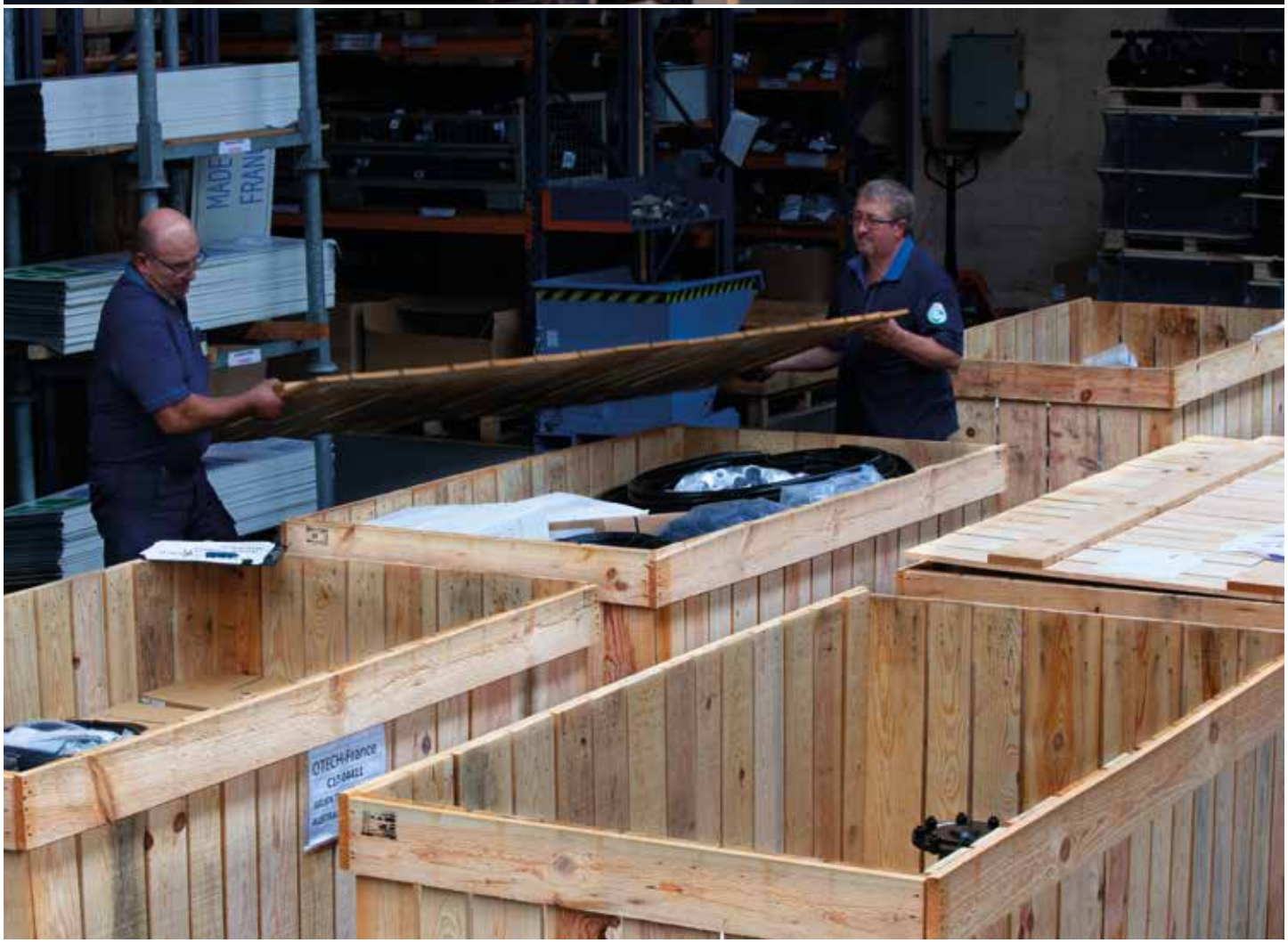
MADE
FRAN
OTECH-France


DOSITECH


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